











Analysis of the eFTI Regulation 2020/1056 requirements for eFTI platforms,

service providers and data exchange with a focus on requirements on eFTI platform on electronic road transport waybills (eCMRs)

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REPORT

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CONTENTS

DEFINITIONS	5
INTRODUCTION	8
 SCOPE OF THE CURRENT ANALYSIS, TERMS OF REFERENCE, METHODOLOGY SCOPE OF THE ANALYSIS METHODOLOGY OF THIS WORK BASIS FOR DRAWING UP THE REQUIREMENTS STRUCTURE OF THE CATALOGUE OF PROPOSALS 	10 10 10 11 12
PART I. EFTI REGULATION AND THE CONTEXT OF EFTI PLATFORM DEVELOPMENT	14
 NATURE AND SCOPE OF THE EFTI REGULATION THE EFTI REGULATION (EU) 2020/1056 EXTENT AND LEVEL OF DETAIL FOR THE EFTI REGULATION FOR EFTI PLATFORMS THE DELEGATED AND IMPLEMENTING ACTS, THE EXPECTED TIMELINE OF THE ADOPTION DEVELOPMENT AND ADOPTION OF THE DELEGATED AND IMPLEMENTING ACTS 3. LEGISLATION IN SCOPE OF THE EFTI REGULATION WHICH MUST BE TAKEN INTO CONSIDERATION	15 16 16 17
WHILE ESTABLISHING AN EFTI PLATFORM	19
 3.1. LEGISTATION IN THE SCOPE OF THE EFTI 3.2. RELEVANT INTERNATIONAL CONVENTIONS 3.3. REQUIREMENTS OF THE CMR CONVENTION 3.4. OTHER IMPORTANT, BUT SEPARATE LEGISLATION 3.5. NATIONAL LAW AND RELEVANT ACTS OF ALL EU MEMBER STATES 3.6. ESTONIAN LAW AS PART OF NATIONAL LEGISLATION OF MEMBER STATES 3.7. OTHER RELEVANT LEGISLATION AND REQUIREMENTS 	19 20 20 20 21 21 21
4. EFTI PLATFORM IN THE WIDER CONTEXT OF THE IMPLEMENTATION OF EFTI 4.1. GENERAL IT SYSTEM FRAMEWORK AND EFTI ARCHITECTURE 4.2. POSITION OF THE EFTI PLATFORM IN THE EFTI ARCHITECTURE 4.3. NATURE AND ROLE OF AN ACCESS POINT (NAP), INDEXING 4.4. COMPETENT AUTHORITIES AND THE INQUIRIES MADE BY SUCH AUTHORITIES 4.5. DATA, DATASETS, AND STANDARDS 4.6. LIFE CYCLE OF AN ECMR 4.7. FUNCTIONALITIES OF THE ECMR PLATFORM IN THE LIFE CYCLE OF A CONSIGNMENT NOTE	24 25 26 27 27 27 27
PART II – THE RELEVANT PROVISIONS OF THE EFTI REGULATION	30
 5. IMMEDIATE FRAMEWORK ESTABLISHED FOR EFTI PLATFORMS BY THE EFTI REGULATION 5.1. ARTICLE 9 OF THE EFTI REGULATION: FUNCTIONAL REQUIREMENTS FOR AN EFTI PLATFORM 5.2. ARTICLE 10 OF THE REGULATION REQUIREMENTS FOR THE SERVICE PROVIDERS 5.3. ARTICLES 4, 5, AND 8 OF THE REGULATION: REQUIREMENTS FOR THE DATA EXCHANGE SERVICE 	31 31 35 36
6. DELEGATED AND IMPLEMENTING ACTS IN THE STAGE OF DRAWING UP DURING THE CURRENT PHASE OF THE REPORT 6.1. DELEGATED ACTS 6.2. IMPLEMENTING ACTS	39 39 39
PART II – REQUIREMENTS FOR THE PLATFORMS	40
7. EXPECTED CONTRACTUAL PREREQUISITES REQUIRED FOR THE FUNCTIONING OF AN (ESTONIAN) ECMR PLATFORM AND FOR THE OPERATING OF THE PLATFORM AS A SERVICE PROVIDER	41
8. THE EXPECTED FUNCTIONAL REQUIREMENTS FOR THE (ESTONIAN) FCMR FETI PLATFORM	43









9. NON-FUNCTIONAL/CROSS-FUNCTIONAL REQUIREMENTS OF AN (ESTONIAN) ECMR PLATFORM AI	ND
THE REQUIREMENTS FOR A FUNCTIONING SERVICE ENSURED BY A SERVICE PROVIDER	52
10. RECOMMENDED ROADMAP: SEQUENCE OF ACTIVITIES OF THE DEVELOPMENT OF THE EFTI	
PLATFORM AND PLANNING OF THE SERVICE	57
SUMMARY, RECOMMENDATIONS, FURTHER ACTIVITIES	60
ANNEX 1. AVAILABLE REQUIREMENTS FOR THE DATA/ DATASETS BASED ON THE EFTI REGULATION AI	ND
LINKED LEGISLATION	61
ANNEX 2. REQUIREMENTS OF THE CMR CONVENTION ON DATA	63
ANNEX 3. REQUIREMENTS OF THE ADDITIONAL PROTOCOL OF THE CMR CONVENTION	65









DEFINITIONS

The following definitions and abbreviations have been used in this work.

API	application programming interface
economic operator, economic operator concerned	a transport or logistics company or another natural or legal person in charge of making the data specified in legal provisions available to competent authorities in compliance with the notification requirements arising from the relevant legal provisions (based on the definition of the eFTI regulation, the <i>Economic Operator</i>)
CAP	common access point
DTLF	Digital Transport and Logistics Forum, an expert group of DG MOVE of the European Commission
eFTI	electronic freight transport information or eFTI means a set of data elements that are processed by electronic means for the purpose of exchanging regulatory information among the economic operators concerned or between the economic operators concerned and competent authorities
eFTI platform	electronic freight transport information exchange platform
ERP	enterprise resource planning software, business software
metadata	the key data of a freight document which make the document discoverable (document number, identifier in the form of the truck/trailer number, location of the document in the eFTI platform) (metadata)
NAP	national access point
PKI	public key infrastructure
TMS	a transport planning software or system
X-tee/ X-Road	Estonian national public key infrastructure









DEFINITIONS FROM THE eFTI REGULATION

Article 3 of the regulation highlights the definitions of the regulation used throughout this document¹

regulatory information	means information, whether or not presented in the form of a document, that is related to the transport of goods in the territory of the Union, including goods in transit, which is to be made available by an economic operator concerned in accordance with the provisions referred to in Article 2(1) to prove compliance with the relevant requirements of the acts laying down those provisions;
regulatory information requirement	means a requirement to provide regulatory information;
competent authority	means a public authority, agency, or other body which is competent to perform tasks pursuant to the legal acts referred to in Article 2(1) and for which access to regulatory information is necessary, such as checking, enforcing, validating, or monitoring compliance in the territory of a Member State;
electronic freight transport information	or 'eFTI' means a set of data elements that are processed by electronic means for the purpose of exchanging regulatory information among the economic operators concerned and between the economic operators concerned and competent authorities;
eFTI data subset	means a set of structured data elements that correspond to the regulatory information required pursuant to a specific Union legal act or national law referred to in Article 2(1);
eFTI common data set	means a comprehensive set of structured data elements that correspond to all the eFTI data subsets, where the data elements common to the different eFTI data subsets are included only once;
data element	means the smallest unit of information which has a unique definition and precise technical characteristics, such as format, length, and character type;
processing	means an operation or set of operations performed on eFTI, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making eFTI available, alignment or combination, restriction, erasure or destruction;
operation log	means an automated record of the electronic processing of eFTI;
eFTI platform	means a solution based on information and communication technology (ICT), such as an operating system, an operating environment, or a database, intended to be used for the processing of eFTI;
eFTI platform developer	means a natural or legal person which has developed or acquired an eFTI platform either for the purpose of processing regulatory information related to its own economic activity or for putting that platform on the market;
eFTI service	means a service consisting of eFTI processing by means of an eFTI platform, alone or in combination with other ICT solutions, including other eFTI platforms;

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¹ The electronic freight transport information (eFTI) regulation (EU) 2020/1056, https://eur-lex.europa.eu/eli/reg/2020/1056/oj, Article 3









eFTI service provider	means a natural or legal person which provides an eFTI service to the economic operators concerned on the basis of a contract;
economic operator concerned	means a transport or logistics operator, or any other natural or legal person, who is responsible for making regulatory information available to competent authorities in accordance with the relevant regulatory information requirements;
human-readable format	means a way of presenting data in an electronic form that can be used as information by a natural person without requiring any further processing;
machine-readable format	means a way of presenting data in an electronic form that can be used for automatic processing by a machine;
conformity assessment body	means a conformity assessment body within the meaning of Regulation (EC) No 765/2008, which is accredited in accordance with that Regulation to carry out the conformity assessment of eFTI platforms or eFTI service providers;
shipment	means the transport of a determined set of goods, including waste, between the first place of pick-up and final place of delivery under the terms of a single transport contract or of multiple consecutive transport contracts, including, where applicable, the transfer between different modes of transport, irrespective of the quantity or number of containers, packages, or pieces transported.









INTRODUCTION

This analysis was drawn up with the aim of mapping the requirements of the electronic freight transport information (eFTI) regulation 2020/1056 of the European Union² and the known extent of the future requirements that will have an impact on the development of eFTI platforms for electronic road transport consignment notes (mainly eCMR), creation of the eFTI platform services by the service providers, and setting up as well as managing the connections of such platforms with competent authorities and other relevant information systems.

The legislation under observation is the abovementioned eFTI Regulation and the legislation which falls within its area of application as well as the preparatory information for the upcoming eFTI delegated and implementing acts in the shape of the discussion content and documentation of the respective expert group Digital Transport and Logistics Forum (DTLF)³ of the European Commission. The focus of the current work is on the preparation and development of the eFTI platforms for the electronic waybills (eCMR).

The work is based upon the information available in April 2022 and the lists, suggestions, conclusions might be subject to adaptations and are foreseen to be elaborated further as specifications are further decided or published.

The content and purpose of this work consists of the following:

- analysis of the functional requirements for the eFTI platform based on the requirements laid down by the eFTI Regulation. As a result of this work, all functional requirements for the eFTI platform were described. The requirements refer to the respective articles of the eFTI regulation and explain the requirements set with the level of detail which would later enable checking the compliance of the development.
 - Furthermore, proposing an optimum sequence for the development of the functional requirements for the eFTI platform in the shape of a roadmap was proposed, the roadmap activities also based on the work performed in the earlier preparatory analysis of 2021⁴.
- Analysis of the requirements for eFTI service providers. As a result of this work, detailed requirements
 for the eFTI service providers were described, providing references to the respective legislation and
 describing the requirements set with the level of detail which would later enable checking the
 compliance of the services.
- Analysis of the requirements for the eFTI data exchange services. Analysis of the requirements based on the requirements established by the eFTI regulation (incl. the requirements for the eFTI platforms, the requirements for the service providers) from the perspective of the development of eFTI platforms and their connectivity

As the result of the work, a catalogue for the requirements for eCMR platforms as eFTI platforms within the context of the eFTI Regulation was drawn up. The **requirements' catalogue** combines different functional and non-functional (technical, cross-functional) requirements and is built up using the structure of the design decision recommendations categories developed by the DTLF to support the further monitoring of discussions and decisions.

The current report consists of an introductory part three sections of content (I, II and III), summary and three annexes. The introductory part provides an overview of the performance of the work and methodology, basis and structure of the requirements catalogue (Chapter 1).

Part I of the report describes the context of the eFTI regulation (Chapter 2), the legislation in scope within the eFTI regulation (Chapter 3), and the role of eFTI platforms in the wider environment of implementing the eFTI

² The electronic freight transport information (eFTI) Regulation (EU) 2020/1056, https://eur-lex.europa.eu/eli/reg/2020/1056/oj

³ Digital Transport and Logistics Forum (DTLF), https://transport.ec.europa.eu/transport-themes/digital-transport-and-logistics-forum-dtlf_en

⁴ Digital Logistics Centre (2021). Analysis for development of a development model for the deployment of eCMR at the national level.









(Chapter 4).

Part II of the report highlights the direct provisions of the eFTI regulation which establish the requirements for the eFTI platforms, service providers, and data exchange (Chapter 5), and provides preliminary information about the delegated and implementing acts which are still in preparatory phase (Chapter 6).

Part III of the report consolidates the requirements for the eFTI platform for the eCMRs: the contractual prerequisites (Chapter 7), the functional requirements (Chapter 8), the non-functional or cross-functional requirements (Chapter 9). As the last chapter, the roadmap - expected and suggested sequence of development activities of the eFTI platform are presented. (Chapter 10).

The summary includes suggestions for further action based on the analysis of the requirements.

The three annexes of the report cover the requirements of the main pieces of legislation in scope of the eFTI regulation (Annex 1) the most important provisions of the CMR Convention and selection of provisions from the additional protocol to the CMR Convention regarding requirements for the platforms, data exchange, and data (Annexes 2 and 3).

The analysis was performed as commissioned by the Business and Consumer Environment Department of the Ministry of Economic Affairs and Communications in the period from 23 February to 15 April 2022. The analysis was funded from the EU recovery instrument NextGenerationEU.









1. SCOPE OF THE CURRENT ANALYSIS, TERMS OF REFERENCE, METHODOLOGY

1.1. SCOPE OF THE ANALYSIS

The eFTI regulation establishes a legal framework for the electronic communication of regulatory information between the economic operators concerned and competent authorities in relation to the transport of goods in the territory of the Union.

The platforms for creating and using electronic consignment notes (eCMR platforms) will serve as a link between the economic operators (both senders and receivers as cargo owners and carriers as transport service providers), enabling them to generate eCMRs and collect the documents required to allow the parties involved to draw up, use, and retain the respective documentation during active freight transport operations, as well as after completion of the operations.

An important basis for the requirements is the capability of the platform to enable competent authorities, which may include national authorities conducting inspection of freight transport information or such authorities of other European Union (EU) Member States (the police, tax, customs, and transport authorities and agencies), to access the data based on the requirements of the eFTI regulation.

The requirements for the eCMR platforms or the future eFTI platforms within the current analysis were based on the following:

- description of the functional requirements for the eFTI platform, primarily based on Article 9 of the regulation.
- description of the requirements for eFTI service providers, primarily based on Article 10 of the regulation.
- Analysis of the requirements for the eFTI data exchange service primarily based on Articles 4, 5, and
 8:

The requirements for competent authorities and for the economic operators which will establish specifications towards eFTI platforms in regard to determining how they must be accessed by competent authorities, incl. taking into consideration an access point (or national access point) was also taken into account while evolving the lists of requirements.

The specifications concerning the dataset (based on Article 7) and conformity assessment (certification) of the platforms (based on Articles 11, 12, and 13) are also directly linked to the functioning of the eFTI platforms, but this analysis did not prioritise focussing on those articles and the dataset and conformity assessment are therefore referred to as the requirements which the eFTI platform must comply with in the future once the respective delegated and implementing acts have been adopted.

The work is expected to have follow-up analysis works as soon as there implementing and delegated acts have been adopted and requirements lists can be upgraded.

The work is provided as the background information on funding measures on development of eCMR platforms and connecting the eFTI platforms to the carriers' platforms/systems during 2022 -2025.

1.2. METHODOLOGY OF THIS WORK

The analysis consisted of the following stages:

- Detailed analysis of the eFTI regulation and additional legislation with explanations and with the categorisation required to ensure that the requirements are easy to find in the future.
- Categorisation of the requirements into groups based on the categories of functional and nonfunctional requirements which have been used so far.









- Establishing functional requirements based on the life cycle of the eCMR and the expectations for the regulation.
- Drawing up a description of the non-functional requirements based on the eFTI regulation and the requirements of other legislation.

The follow-up activities after completion of the work:

- The validation with the members of the respective working group of the DTLF is completed in the course of the work as well as after the completion of the work.
- The validation with economic operators and wider groups of stakeholders is scheduled to be conducted after completion of the work.

As all information, decisions and all legislation were not yet available for a comprehensive analysis in the period of drawing up this document (between February and April 2022), the work could only be based on the existing framework and the analysis of the legal space of the eFTI drawn up by the DTLF⁵, the documents on the architecture principles, possible eFTI building blocks, functional and technical build-up of eFTI architecture, documents for the design decision recommendations and the other information gathered for the delegated and implementing acts in the preliminary work stage.

The following sources were used in this work for the consolidation of the requirements:

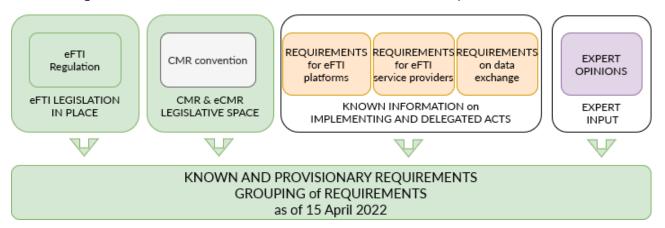


Figure 3. The methodology for filtering and consolidating the requirements for eFTI platforms (Source: the authors)

The requirements listed in the current document are subject to further technical specification.

1.3. BASIS FOR DRAWING UP THE REQUIREMENTS

The requirements are established as sets of functional and non-functional requirements which consolidate the information on the requirements for the eFTI platforms, eCMR platforms and further requirements which have not yet been decided upon, but have been negotiated and listed as enablers of the eFTI architecture principles. The requirements have been evolved based on the specifics of the best practices already developed and tested in Estonia and the Baltics. The analysis also included the use of the results of the specific study on the operational model of the National Access Point conducted between August 2021-March 2022. Also in Estonia, the requirement for connections to the X-tee/XRoad⁶ has been included which the eFTI regulation cannot and will not be directly regulating at the national level, but will need to be feature nationally.

The work was also drawn up based on the preliminary assumption that an access point (possibly National Access Point) will be developed and involved in the eFTI data exchange in Estonia, serving as an information

⁵ European Commission DTLF (2021) Mapping of eFTI Legal Requirements for the eFTI Architecture and eFTI exchange environment

⁶ State Information System Agency, x-tee/ X-Road Data Exchange layer, LINK









system representing the national data inquiries directed towards the eFTI platforms, as well as the inquiries originating from the competent authorities of other countries (other EU member states).

It is important to highlight that the description of the requirements was drawn up in the extent and at the level of generalisation of the information available at the time of conducting the analysis (April 2022) and taking into account the current, but also limitedly the prospective legal space. The direct development and implementation of all the requirements are hindered by some of the legal acts still missing. The requirements will be specified upon adoption and entry into force of the delegated and implementation acts established by the eFTI regulation and foreseen by the European Commission in 2023 and the developers of the eFTI platforms should look out for the specifying legislation to also be adopted by the member states.

The functional and non-functional requirements for the eFTI platforms dedicated to operate eCMRs were developed by combining the information used in the preparation of the eFTI regulation and the delegated and implementing acts thereof, as well as the content of the CMR convention and the additional protocol on eCMR, as well as the experiences, expert opinions and test results on the possible functional eCMR platform collected within the current study and within the framework of other projects.

The lists of the requirements in the catalogue of requirements are not exhaustive but is sufficient for preparations for the development of the platform as of April 2022 and will allow a preparatory work being done by the platform developers and service providers well in time.

The requirements described were validated with members of the respective working group of the European Commission, the Digital Transport and Logistics Forum (DTLF)⁷ and will be further validated during the next steps of similar work needing to be carried out by the Commission itself.

Formulating the requirements was based on the current results of the work of the working group, the expert opinions and advice of the members, and the materials submitted to the Commission as proposals which have not yet been approved.

1.4. STRUCTURE OF THE CATALOGUE OF PROPOSALS

The requirements were structured in the form of a separate methodical work⁸ based on the logic of business processes and the technical functional requirements for eFTI platforms based on their position in the general framework of eFTI information exchange.

The functional requirements are described based on the business processes designed for ensuing the accessibility of the eCMR or the eFTI data and the life cycle of the freight transport documentation. The requirements were developed taking into consideration the working documents of the principles of eFTI architecture⁹, the input from the delegated and implementing acts which is already known, the analyses conducted in Estonia so far (incl. the analysis of the operating model of an access point¹⁰ and the analysis of the national/regional implementation of an eCMR¹¹), as well as the functioning of transport documents and access points (NAP) considered therein. The requirements were categorised based on the DTLF Design Decisions categories¹² to ensure better comparability of further DTLF developments.

⁷ Digital Transport and Logistics Forum (DTLF), https://www.dtlf.eu

⁸ The projects and doctoral thesis materials of Hurt et al. (2021–2022).

⁹ DTLF SubGroup 1, Team 3, Hemeleers, Hurt, Lüpges, Garcia Escallon et al., 'eFTI Architecture Principles' 2022

¹⁰ Hurt, Helilaid, Mering et al. (2022), 'Eesti riigi keskse elektroonilise maanteetranspordi veoselehe juurdepääsupunkti toimimismudeli analüüs' (Analysis of the operating model the access point of the central electronic road transport consignment note of Estonia).

¹¹ Digital Logistics Centre (2021), 'Analüüs e-veoselehe riigisiseseks kasutuselevõtuks arendusmudeli väljatöötamiseks' (Analysis for development of a development model for the deployment of eCMR at the national level).

¹² DTLF SubGroup 1, Team 3, 'Design Decisions'.









The functional requirements are presented in the following groups:

- F1 functionalities related to the preparation of the eCMR
- F2 functionalities related to the creation, activation of the eCMR
- F3 functionalities related to the operations and availability of eCMR during the transport of goods
- F4 functionalities related to the closing and deactivation of an eCMR
- F5 functionalities related to the follow-up activities
- F6 functionalities related to the follow-up inspection

The cross-functional, technical, non-functional requirements are presented in the following groups:

- CF1 general requirements on functional structure, data exchange architecture
- CF2 data distribution/sharing and data attributes
- CF3 availability of data, access to the data, data delivery
- CF4 interoperability, compatibility, integration
- CF5 authentication and identification of users
- CF6 access control, organising of accesses, roles
- CF7 evidence and logs
- CF8 data security, cyber security
- CF9 the data models, data standards, semantics, technical specifications of the messages
- CF10 other general IT aspects
- CF11 other cross-functional aspects

The level of description is compliant with the legal framework currently in force and is combined with the currently available information on the architecture of the implementation of eFTI.









PART I. eFTI REGULATION AND THE CONTEXT OF **eFTI PLATFORM DEVELOPMENT**









2. NATURE AND SCOPE OF THE eFTI REGULATION

2.1. THE eFTI REGULATION (EU) 2020/1056

The eFTI regulation:

- establishes a legal framework for the electronic communication of regulatory information between the economic operators and competent authorities in relation to the transport of goods in the territory of the Union:
- defines 'the regulatory information' by the information requirements specified in Article 2 (1) of the regulation.
- enables considering creating access points with the main purpose of enabling efficient exchange of electronic freight transport information between competent authorities and eFTI platforms.

The regulation is directly applicable and will enter into force on 21 August 2024; the first delegated acts will be established on 21 February 2023 at the latest and the implementing acts on 21 August 2023 at the latest and all provisions will become fully applicable as of 21 August 2025.

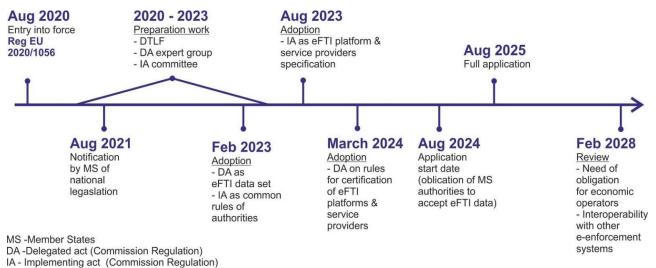


Figure 1. The schedule of the implementation of eFTI Source: The European Commission

Table. The estimated timeline of the eFTI regulation and the delegated and implementing acts and the planned timeline of the measures

unienne or the measures										
ACT// ESTIMATED TIMELINE	2	022	2	20	23	:	202	24	20	25
The delegated acts of the EU on the eFTI datasets										
The delegated acts of the EU on common procedures and rules for access										
The implementing act on the requirements for eFTI platforms and eFTI service providers										
Full entry into force of the eFTI regulation										
Full application of the eFTI regulation requirements										
FUNDING MEASURE: development of eCMR platforms										
FUNDING MEASURE: connecting the eFTI platforms to the carriers' platforms/systems										









2.2. EXTENT AND LEVEL OF DETAIL FOR THE eFTI REGULATION FOR eFTI PLATFORMS

The regulation provides general instructions for the functioning of eFTI platforms but does not establish any detailed technical requirements. The main part of the regulation which has already entered into force specifies the functional requirements for eFTI platforms as groups of requirements without providing detailed technical specifications.

The eFTI regulation primarily regulates in the context of eFTI platforms how the data must be held and made available to the competent authorities during the regulatory checks and information queries. For now, this is done at the level of conceptual principles, not technical specifications.

The eFTI regulation does not yet regulate in detail how the data exchange between the economic operators and an eFTI platform must be organised or what the user interface should be like. The eFTI regulation also does not specify any other services or connections of the eFTI platform and does not restrict any connections between different eFTI platforms, connections between access points or national registries or other services or establish any such obligations. Some of those services will be specified in detail, some of those remain optional for eFTI platforms.

As the delegated and implementing acts, which are at the stage of drawing up and will be available during 2023 and 2024, will define the operating of eFTI platforms at a higher level of detail. Further work on the requirements may be required to specify the technical rules once the respective pieces of legislation have been adopted.

The delegated and implementing acts will probably also not establish highly detailed technical requirements, but they will primarily bring more clarity to the requirements for exchanging data with competent authorities, incl. authentication of systems, datasets, and the requirements for the assessment of the compliance of the datasets, logs, and systems as well as connections with access points.

The eFTI regulation will probably not define how and with what means, or which standard should be exclusively used between an eFTI platform and the economic operators (i.e., owners of goods and freight transport companies, other partners) must exchange data with one another.

Thereat, the European Commission and the eFTI regulation stress that technological autonomy must be ensured as much as possible, i.e., opportunities to use different IT solutions or programming languages will left open as much as possible to avoid preferential treatment of a certain solution or service provider.

Further information about the background of the eFTI regulation can be found from the proposal for the regulation (17 May 2018)¹³ and additional documents via dedicated European Commission expert group website

2.3. THE DELEGATED AND IMPLEMENTING ACTS, THE EXPECTED TIMELINE OF THE ADOPTION

The delegated and implementing acts which are currently still being drawn up will provide important information for creating eFTI platforms or developing existing services into eFTI platforms.

There are following delegated acts about to be adopted:

 The information requirements arising from different legislation, incl. the national legislation of the Member States (to specify Article 2 (3)). The respective delegated act will be adopted in February 2023, with further legislation adopted as and when required, with a specified date, and with the regulation

¹³ Proposal for the eFTI regulation, COM/2018/279 final – 2018/0140 (COD), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018PC0279









specified further, if necessary and will be referred to in Annex 1 of the regulation

- On the common eFTI dataset and the eFTI data subsets (to specify Article 7)
 The respective delegated act will probably be adopted not later than by 21 February 2023.

 Date mentioned: (Article 7 (3)) the first such act will be adopted by 21 February 2023 at the latest.
- On the conformity assessment (certification) of eFTI platforms and on the use of the certification mark, and the renewal, suspension, and cancellation of the certificate (to specify Article 12 (5), Article 13 (3));
 - The act will be adopted if necessary and no date has been specified, as the act will be drawn up 'if specification is required'.
- The requirements for the assessment of the conformity of eFTI platforms (based on Articles 11, 12, and 13). The respective delegated act is expected to be adopted in March 2024.

There are following implementing acts about to be adopted:

- General procedures and detailed standards, technical specifications for granting access for competent authorities to eFTI platforms, incl. the procedures for the processing of the information prescribed by legislation and for the exchange of this information between competent authorities and the economic operators (to specify Article 8 (1)).
 - The first such act will be adopted by 21 February 2023 at the latest.
- The functional requirements for eFTI platforms (to specify Article 9 (1)). The first such implementing act will be adopted by 21 August 2023.
- The requirements for eFTI service providers (to specify Article 10 (1)). The first such act will be adopted by 21 August 2023 at the latest.

The schedule of implementation:

• The legislation related to the dataset and the procedure will enter into force 30 months after 21 February 2023 – thus, on 21 August 2025 (dataset based on Article 7, procedure based on Article 8), (based on Article 5 (1)).

2.4. DEVELOPMENT AND ADOPTION OF THE DELEGATED AND IMPLEMENTING ACTS

The input into the legislation will mainly come from the DTLF, the work of which is introduced further on the website of the European Commission¹⁴ and which is registered as an official expert group in the transparency register of the European Commission¹⁵.

The work for the functional requirements and technical specifications will be conducted in the DTLF in several stages:

¹⁴ European Commission, the website introducing the DTLF, https://transport.ec.europa.eu/transport-themes/digital-transport-and-logistics-forum-dtlf_et

¹⁵ European Commission, Register of Commission Expert Groups, the Transparency website, the DTLF working group, its members, schedule, documentation, https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups-









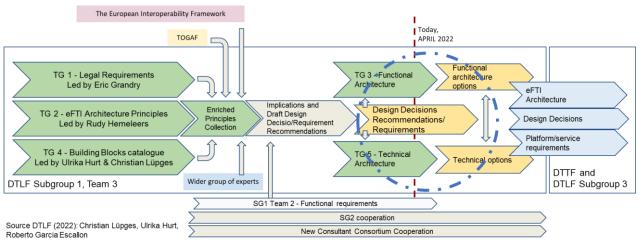


Figure 2: The methods and expert groups of developing platformdelegated and implementing acts at the DTLF (Source: DTLF 2022)

The delegated and implementing acts will be fully developed and approved by special expert groups. The working group of delegated acts was created exceptionally as the third subgroup (SubGroup 3) of the DTLF but consists of officials appointed by the Member States and observers. The committee of implementing acts was formed based on the regular procedure as an expert group of the Member States.

Table. The procedure of adoption and the connections between the working groups with an input from the DTLF in different working groups:(Source: European Commission).

ENTITY	COMPOSITION	ROLE	SCOPE
Digital Transport and Logistics Forum (DTLF)	 Industry representatives (majority) Member States experts (≈12 MS currently actively represented) 	Advise the European Commission (EC) in considering different implementation options Recommendations	All aspects covered by eFTI secondary acts (eFTI data (sub)set(s), functional & technical specifications for authorities and private sector systems, certification) + uptake
Delegated Act (DA) Expert Group (DTLF Subgroup 3)	 Member States experts (all MS should be represented) European Parliament experts Industry representatives (selected DTLF representatives) 	Assist the EC in defining the implementation specifications • Consultation • EP & Council 2 months to formulate any objections after EC adoption	 National legislation requirements (Art. 2) eFTI common dataset and subsets (Art. 7) Certification rules for eFTI platforms & service providers (Art. 12 & 13)
Implementing Act (IA) Committee (Digital Transport and Trade Facilitation Committee)	Member States experts (only!)	Assist the EC in defining the implementation specifications Vote before EC can adopt the IA	 Functional & technical specifications for authorities' systems (Art. 8) Functional & technical specifications for eFTI platforms & service providers (Art. 9 & 10)









3. LEGISLATION IN SCOPE OF THE eFTI REGULATION WHICH MUST BE TAKEN INTO CONSIDERATION WHILE ESTABLISHING AN eFTI PLATFORM

3.1. LEGISTATION IN THE SCOPE OF THE eFTI

In the case of the eFTI regulation, it is important to keep in mind that the legal context thereof is wider than the regulation itself.

The legislation in the scope of the regulation:

- The Waste Shipment Regulation Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste¹⁶
- ECE/TRANS/WP.15/AC.1/2019/44, transport of dangerous goods Guidelines for the use of RID/ADR/ADN 5.4.0.2- use of the data model in the context of the eFTI-regulation¹⁷
- Combined transport of goods Council Directive 92/106/EEC of 7 December 1992 on the establishment of common rules for certain types of combined transport of goods between Member States¹⁸
- Telematics Application for Rail Freight (TAF-TSI Commission Regulation (EU) No 1305/2014 of 11
 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union¹⁹
- Rates 11/1960, Transport rates and conditions²⁰
- Access to the international road freight transport market Regulation (EC) No 1072/2009 of the European Parliament and of the Council of 21 October 2009 on common rules for access to the international road freight transport market²¹
- Civil aviation security regulation Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 on common rules in the field of civil aviation security²²
- Rail interoperability directive Directive (EU) 2016/797 of the European Parliament and of the Council
 of 11 May 2016 on the interoperability of the rail system within the European Union²³
- Aviation security basic standards Commission Implementing Regulation (EU) 2015/1998 of 5
 November 2015 laying down detailed measures for the implementation of the common basic standards
 on aviation security²⁴
- Inland transport of dangerous goods Directive 2008/68/EC of the European Parliament and of the

¹⁶ Waste shipment 1013/2006, Waste shipment regulation – WSR (Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste), <u>LINK</u>

 $^{^{17}}$ Transport of Dangerous Goods – Guidelines for the use of RID/ADR/ADN 5.4.0.2- use of the data model in the context of the eFTI-regulation, <u>LINK</u>

¹⁸ Combined transport 92/106, Common rules for combined transport of goods – Council Directive 92/106/EEC of 7 December 1992 on the establishment of common rules for certain types of combined transport of goods between Member States, <u>LINK</u>

¹⁹ TAF TSI 1305/2014, Telematics Application for Rail Freight – Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union, <u>LINK</u>

²⁰ Transport rates and conditions

²¹ Cabotage 1072/2009, Access to the international road haulage market – Regulation (EC) No 1072/2009 of the European Parliament and of the Council of 21 October 2009 on common rules for access to the international road haulage market, LINK

²² Air security 300/2008, civil aviation security regulation – Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 on common rules in the field of civil aviation security, <u>LINK</u>

²³ Rail IOP 2016/797, rail interoperability directive – Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union, LINK

 $^{^{24}}$ Aviation security 2015/1998, aviation security basic standards – Commission Implementing Regulation (EU) 2015/1998 of 5 November 2015 laying down detailed measures for the implementation of the common basic standards on aviation security, <u>LINK</u>









Council of 24 September 2008 on the inland transport of dangerous goods²⁵

- Agreement concerning the International Carriage of Dangerous Goods by Road, ²⁶
- European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways²⁷
- Regulation concerning the international carriage of dangerous goods by rail 28

3.2. RELEVANT INTERNATIONAL CONVENTIONS

As per Recital 6 of the eFTI regulation: 'The obligation for competent authorities to accept information made available electronically by economic operators should also apply whenever provisions of Union legal acts or national law falling within the scope of this Regulation require information that is also referred to in relevant international conventions such as the conventions governing the international contracts of carriage in the different transport modes, for example the UN Convention on the Contract for the International Carriage of Goods by Road (CMR)²⁹, the Convention concerning International Carriage by Rail (COTIF)³⁰, the IATA Resolution 672 on E-air Waybill³¹, the Convention for the Unification of Certain Rules for International Carriage by Air (Montreal Convention)³², and the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterways (CMNI)33.'

3.3. REQUIREMENTS OF THE CMR CONVENTION

The Convention on the Contract for the International Carriage of Goods by Road or the CMR Convention has been in force in Estonia as of 1 August 1993³⁴ and the additional protocol thereof concerning the electronic consignment note (the eCMR protocol)³⁵ as of 31 January 2017³⁶.

As of March 2022, the additional protocol has been enforced in thirty-one countries, twenty of which are EU Member States³⁷.

The information on the functional and non-functional requirements for the platform enabling generation and submission of CMR documents which is used as an eFTI platform can be found in Articles 4-8 of the Convention and in Articles 2-6 of the Additional Protocol, which also include information of electronic signatures, among other aspects.

3.4. OTHER IMPORTANT, BUT SEPARATE LEGISLATION

Based on recital 7 of the eFTI regulation, the regulation should be without prejudice to the provisions of Regulation (EC) No 1013/2006³⁸ of the European Parliament and of the Council concerning procedural requirements for shipments of waste and to the provisions referring to controls by customs offices.

²⁵ Dangerous Goods 2008/68, inland transport of dangerous goods – Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods, LINK

²⁶ ADR 2021, Agreement concerning the International Carriage of Dangerous Goods by Road, <u>LINK</u>

 $^{^{27}}$ ADN 2021, European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, <u>LINK</u>

²⁸ RID 2021, The Regulation concerning the International Carriage of Dangerous Goods by Rail, <u>LINK</u> ²⁹ United Nations (1956), Convention on the Contract for the International Carriage of Goods by Road (CMR) (un.org), LINK

³⁰ The COTIF Convention, LINK

³¹ IATA Resolution 672, LINK

³² IATA Montreal Convention, LINK

³³ UNECE, LINK

³⁴ Riigi Teataja (1993), The Convention on the Contract for the International Carriage of Goods by Road (CMR), <u>LINK</u>

³⁵ UNECE (2008), Additional Protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR) Concerning the Electronic Consignment Note, LINK

³⁶ Riigi Teataja (2017), The eCMR Protocol of the Convention on the Contract for the International Carriage of Goods by Road (CMR), LINK

³⁷ Website of the additional protocol to the UN Convention and implementation thereof, UNTC

³⁸ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on waste shipments, LINK









The eFTI regulation should also be without prejudice to Regulation (EU) No. 952/2013 of the European Parliament and of the Council³⁹ or the implementing or delegated acts adopted on the basis thereof or the work of the customs information system⁴⁰.

Thirdly, the eFTI regulation should be without prejudice to the provisions on the reporting obligation of the Regulation (EU) 2019/1239 of the European Parliament and of the Council of 20 June 2019 establishing a European Maritime Single Window environment⁴¹, including those related to the competence of customs or other authorities. This also includes the national maritime information systems, e.g., the EMDE in Estonia⁴²

It is therefore not mandatory for eFTI platforms to be connected to the aforementioned information systems, but they should keep in mind the expectation of businesses that the information systems created for organising maritime and customs affairs and waste removal and for providing freight transport and other information should also be available to the clients via the same platform. Thus, those systems could be logically accessible for businesses in the business processes in the eFTI platforms.

This means that those systems can function independently, but the eFTI platforms could also be the parties to the exchange of the data.

3.5. NATIONAL LAW AND RELEVANT ACTS OF ALL EU MEMBER STATES

The regulatory information requirements set out in the provisions of the Member States listed in Part B of Annex I to this Regulation of the eFTI regulation based on Article 2 (3) of the regulation (referred to in Article 9 (1) (i)) and specification thereof are part of eFTI application.

The respective delegated act is in the phase of drawing up and will be adopted in 2023.

Pursuant to Article 2 (1) (c), the regulatory information requirements set out in the provisions of national law listed in Part B of Annex I to this Regulation.

Pursuant to Article 2 (2), by 21 August 2021, Member States shall notify the Commission of the provisions of national law and corresponding regulatory information requirements that require the provision of information identical, in whole or in part, to the information to be provided pursuant to the regulatory information requirements referred to in points (a) and (b) of paragraph 1. Subsequent to that notification, the Member States shall notify the Commission of any provisions of national law that: a) introduce changes to regulatory information requirements set out in the provisions of national law listed in Part B of Annex I; or b) lay down new relevant regulatory information requirements that require the provision of information identical, in whole or in part, to the information to be provided pursuant to the regulatory information requirements referred to in points (a) and (b) of paragraph 1. Member States shall make such notifications within one month from the adoption of such provisions.

Pursuant to Article 2 (3), the Commission shall adopt delegated acts in accordance with Article 14, amending:

- a) Part A of Annex I to incorporate references to any regulatory information requirements referred to in point (b) of paragraph 1 of this Article;
- b) Part B of Annex I to incorporate or delete references to national law and regulatory information requirements in accordance with the notifications made pursuant to paragraph 2 of this Article.

3.6. ESTONIAN LAW AS PART OF NATIONAL LEGISLATION OF MEMBER STATES

Estonian freight transport -related legislation and its further adoptions are and will be an integral part the application of the eFTI regulation.

21

 $^{^{39}}$ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code, LINK

⁴⁰ The Customs Information System, LINK

 $^{^{41}}$ Regulation (EU) 2019/1239 of the European Parliament and of the Council of 20 June 2019 establishing a European Maritime Single Window environment and repealing Directive 2010/65/EU, LINK

⁴² The Maritime Information System, <u>LINK</u>









All international conventions/external agreements in the scope of the eFTI regulation (except the international law applied on internal water ways) have been implemented in Estonia by acts on enforcement of the Convention.

In the context of this analysis, international contracts in scope are the CMR Convention and the Additional Protocol to the CMR Convention.

Freight transport is organised based on the Road Transport Act, unless specified otherwise in Regulations 1071/2009 and 1072/2009 of the European Parliament and of the Council or an international contract.

The contractual relationship between the consignor and the organiser of the freight transport operation is subject to the provisions of the Law of Obligations Act on the contract for the carriage of goods.

The most important relevant pieces of legislation of Estonia include the following:

The Road Transport Act⁴³ (Autoveoseadus) establishes various obligations and specifies the grounds for road transport, the duties of road freight transport undertakings and senders of goods, requirements for cargo safety, requirements for road transport drivers, liability for infringement of the requirements, and the organisation of state supervision. It also specifies the information which must be provided in a consignment note in the paper as well as digital format.

The Law of Obligations Act⁴⁴ (Võlaõigusseadus) establishes the obligations in connection with the documents as a contract. Pursuant to the act, for example, before the delivery of the goods to the carrier, the sender shall place the documents which are necessary for customs clearance or other formalities to be conducted (accompanying documents) at the disposal of the carrier and shall also provide the carrier with information which is necessary for this purpose. The law also establishes various obligations concerned with certificates.

The Road Traffic Act⁴⁵.(Liiklusseadus) The following provision is the most important from the perspective of documentation: § 88 regulates the documents which the driver must have during a freight transport operation. Pursuant to the text of subsection 88 (6) of the Road Traffic Act, which was in force until April 2022, the driver had to carry the delivery documents of the consignment during freight transport, in addition to the documents referred to in this section, and such documents could be electronic.

The Waste Act⁴⁶ (Jäätmeseadus) establishes and implements the international law and specifies the national requirements on waste shipments.

Further details and specific articles of the Acts will be needed to be taken into account by the eFTI platform developers to operate and to process, exchange and present the required economic operator data to competent authorities.

3.7. OTHER RELEVANT LEGISLATION AND REQUIREMENTS

The EU Mobility Package⁴⁷ establishes the circumstances which must be prioritised in the functioning of the future eFTI platforms and are necessary in the performance of the reporting obligation by economic operators, as well as the relevant additional services, even though implementation and linking thereof is not mandatory for eFTI platforms based on the eFTI regulation.

⁴³ The Road Transport Act LINK

⁴⁴ The Law of Obligations Act, <u>LINK</u>

⁴⁵ The Road Traffic Act, <u>LINK</u>

⁴⁶ The Waste Act, LINK

⁴⁷ The European Mobility Package, <u>LINK</u>









The elDAS regulation⁴⁸ and the amendment proposal thereof⁴⁹ are concerned with the implementation in the extent to which is concerned with identification and authorisation of persons, digital signature, digital stamps of economic operators.

The GDPR⁵⁰ on the protection of natural persons in the processing of personal data can be applied to a certain extent and must be taken into consideration. Although the details of a driver are not personal data but business information, for example. On the other hand, it should be highlighted that the Estonian Road Transport Act (the wording which entered into force on 1 April 2022) requires specifying the name of the driver and, in the case of a contract with an Estonian haulier, the personal identification code or date of birth on the freight document.

A considerable number of pieces of legislation related to data management are currently being drawn up due to the **proposal for the Data Governance Act**⁵¹.

⁴⁸ The eIDAS regulation, LINK

⁴⁹ The proposal for the amendment of the eIDAS regulation, LINK

⁵⁰ Regulation 2016/679, LINK

⁵¹ The proposal for the Data Governance Act, <u>LINK</u>









4. eFTI PLATFORM IN THE WIDER CONTEXT OF THE IMPLEMENTATION OF eFTI

This chapter discusses in detail the place and role of the eCMR platforms as the future eFTI platforms in the general framework of the functioning of the eFTI after entry into force of all requirements of the eFTI regulation in August 2025.

4.1. GENERAL IT SYSTEM FRAMEWORK AND eFTI ARCHITECTURE

An eFTI platform is multilaterally connected to different services, information systems or databases.

The eFTI architecture has four groups of interfaces and connections:

- the connections/interfacing between the economic operators and eFTI platforms
- the connections/interfacing between eFTI platforms and access points
- the connections/interfacing between competent authorities and access points (NAP or CAP)
- the connections/interfacing between access points within the network of access points.

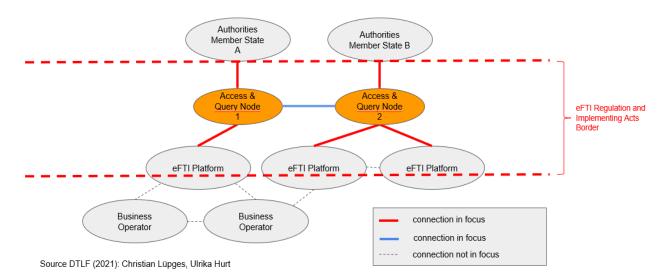


Figure 3. The general cross-border model of the eFTI architecture (Source: The DTLF)

The data exchange between business operators/economic operators and eFTI platforms will have guidelines, yet the exchange and business performance will have technical and functional flexibility.

The data exchange between eFTI platforms and competent authorities will take place with the support of an access point (possibly a national access point - NAP). The eFTI platforms of each Member State will be connected to such national or regional access point (NAP).

One connection to one NAP is in general also enough for an eFTI platform for exchanging data with competent authorities, including to ensure access to information in the case of international (other Member State authority) inquiries and queries.

At the other side, the competent authorities are also connected to the NAP. Each competent authority will presumably have one single interface/connection with one (national or regional) NAP. The NAPs ensure mutual exchange of queries.



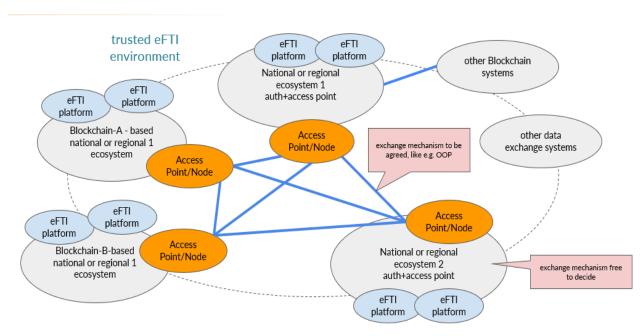






Each Member State may organise the structure of their national connections differently and the eFTI platform connection rules to connect to competent authorities or access points to comply with national IT requirements might vary across EU.

The NAPs are connected to each other in a network and pass on as well as validate the queries towards the eFTI platforms.



Source: European Commission, DTLF, Christian Lüpges, Ulrika Hurt, Roberto Garcia Escallon (2021)

Figure 4. The ecosystem of eFTI platforms and access points in the eFTI architecture

(Source: DTLF, 2021)

4.2. POSITION OF THE eFTI PLATFORM IN THE eFTI ARCHITECTURE

An eFTI platform is multilaterally linked with different services and IT systems. The following information systems are required for competent authorities to inquire data from the eFTI platform:

- The information systems and software of the economic operators
- An index registry and access point (presumably in one service)

The data exchange structure of an eFTI platform will presumably be more diverse in the wider context (i.e., include connections to other eFTI platforms, service platforms, registries etc), but this work was mainly focussed on the architecture which ensures responses to the queries made by competent authorities. The eFTI platform and the links thereof in this context are described in the figure below.

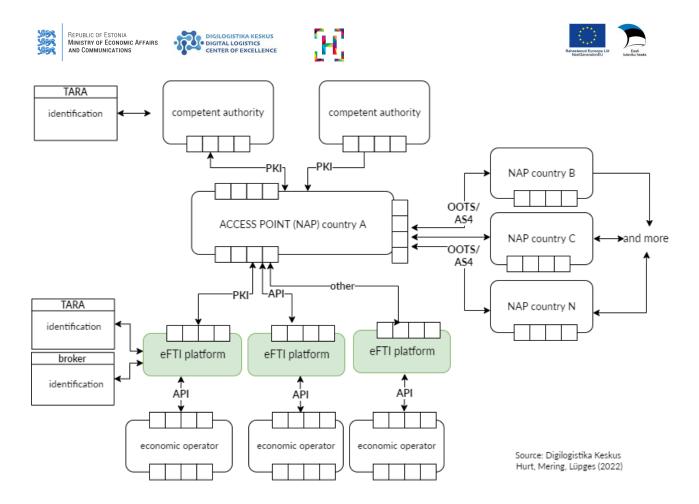


Figure 5. The position of eFTI platforms in the eFTI architecture (Source: Digital Logistics Centre (2022)).

To provide other services of the eFTI platform, there may be connections to the following services, but those connections are not mandatory:

- Other eFTI platforms
- Business software applications
- E-services various-real-time economy transaction environments/services
- National registries, databases, services
- Other large-scale environments for exchanging national or international freight or freight transport information (incl. customs and maritime information systems)

4.3. NATURE AND ROLE OF AN ACCESS POINT (NAP), INDEXING

Connections with access points are the key in the development of eFTI platforms for exchanging the data with competent authorities. A common or national access point (CAP or NAP) or a platform serving the purpose is regulated in the eFTI regulation as a solution which may be established by a Member State if necessary. Estonia and several other Member States have mapped the need for using NAPs for the mediation of inquiries and administering the inquiries from competent authorities during the controlling activities. Access Points are seen as solutions for increasing the availability of the information in the eFTI platforms via one secure and validated connection mediating the inquiries from national competent authorities, as well as those of other Member States.

An access point should be preferably established for each member state or a group of member states. In addition, the access points would operate consignment note index registries. An index registry is a solution which will enable an eFTI platform to register (index) the consignment notes generated and activated and make them available and accessible for inquiries from competent authorities. The metadata of freight transport operations and consignments notes are used for indexing. For details, separate studies, and information streams available.









Connecting to the index register and access point will be regulated by separate guidelines once the requirements for this have been described in detail in the further legal space and the connections will be possible once the access points have been created.

4.4. COMPETENT AUTHORITIES AND THE INQUIRIES MADE BY SUCH AUTHORITIES

The competent authorities which run controlling activities and can submit inquiries in the context of the eFTI regulation are defined in Article 3 of the regulation and they can exercise supervision concerning the existence and the content of the information required by the legislation specified in Article 2.

Competent authorities include the competent authorities of all EU Member States, i.e., an eFTI platform must be accessible for the inquiries of the national competent authorities, as well as for those from the competent authorities of other EU Member States.

The following authorities are competent authorities in Estonia: The Police and Border Guard Board, the Tax and Customs Board, the Transport Administration.

4.5. DATA, DATASETS, AND STANDARDS

The European Commission will be setting clear rules for data and datasets and establish or confirm standards.

The recommendation of the European Commission and several projects to apply already existing standards, including where relevant UNECE standards as eFTI datasets is also important preliminary information. In the case of road freight transport or the eCMR, the standard in question of the UNECE reference models would be⁵² the Multimodal Transport Reference Model (MMT)⁵³.

The following concerning the data is also important:

- a functional dataset for identifying the origin of the consignment note and enabling access to the consignment note.
- the identifiers of the freight transport operation and datasets, i.e., the metadata (incl. the identifiers of the document transmitted in addition to the content of the bill of lading).

4.6. LIFE CYCLE OF AN eCMR

The development of the eFTI platform must be based on the key aim and principle that the platform must support the business processes of the economic operators as a whole and enable them to generate proper international documents and datasets (eCMRs and alike), fulfil their contractual and reporting obligations, manage and supervise the work, support archiving, and as key part of the new requirement within the regulatory space created by the eFTI Regulation, support the functionality of making datasets and documents available to competent authorities during and after a freight transport operation.

The processes around an eCMR can be viewed in the context of a CMR and eCMR life-cycle view. The life cycle of a CMR and of an eCMR is often viewed in limitation only between the moment of creating of the document with the signatures in the beginning of the freight transport operation until signature at the end of the freight transport operation. As part of the full lifecycle of the CMR and eCMR, also the preparatory phases (as collection of data) and the follow-up activities (as dissemination of copies or information as well as archiving and use of the archive) should be included. In the digital format and in the context of the eFTI regulation, the collection, retention, displaying, and later archiving of consignment note data is an integral cycle carried out with the support of the eCMR eFTI platform and all the cycle components must be available.

The important processes within the lifecycle are also the document checks by the competent authorities, both during the ride as well as after the operations have been completed. In the eFTI environment, the checks can

⁵² UNECE, Business Requirement Specifications (BRS), LINK

⁵³ UNECE, Reference Data Models (RDM), <u>LINK</u>









be performed electronically by the competent authorities via a regulated query and the information will be made available electronically via the eCMR/eFTI platform.

The life cycle of CMR including the competent authority controls is expressed in the Figure 6 and the life cycle for eCMR in the Figure 7.:

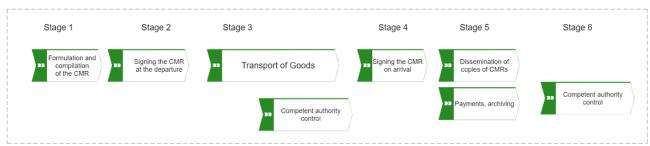


FIGURE. CMR and waybill life cycle stages (AS-IS)

Figure 6. The life cycle processes of a CMR (Source: The Digital Logistics Centre)

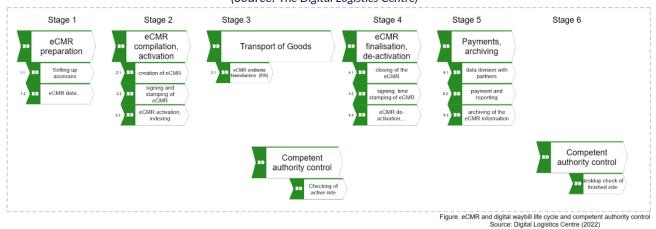


Figure 7. The life cycle of an eCMR with sub-processes (Source: The Digital Logistics Centre 2022)









4.7. FUNCTIONALITIES OF THE eCMR PLATFORM IN THE LIFE CYCLE OF A CONSIGNMENT NOTE

The functions and the structure of data exchange required for the functioning of the life cycle are expressed in the following sequence diagram:

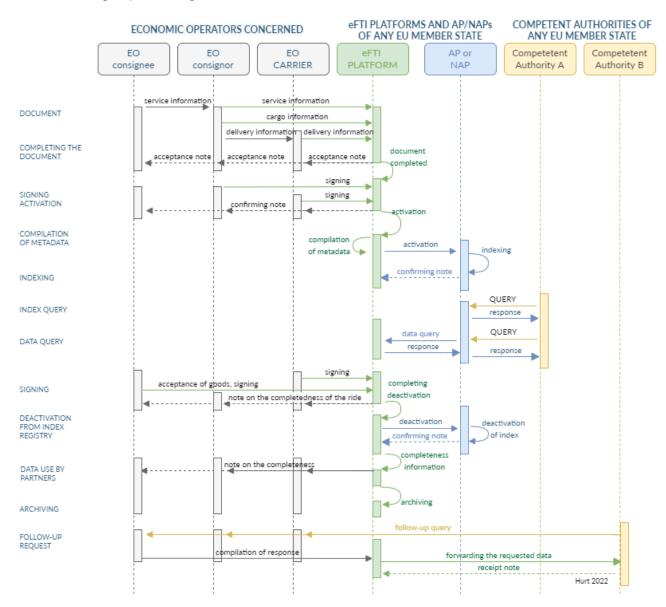


Figure 8. The sequence diagram of the functional model of application of an eCMR (Source: Hurt, 2022)









PART II - THE RELEVANT PROVISIONS OF THE eFTI REGULATION









5. IMMEDIATE FRAMEWORK ESTABLISHED FOR eFTI PLATFORMS BY THE eFTI REGULATION

This chapter provides an overview of which requirements are established for the eFTI platforms, eFTI service providers, and the data exchange thereof by the eFTI regulation. The provisions described here will later form the basis for a consolidated catalogue of requirements (see part II of this document on requirements).

The terms used are defined under definitions.

5.1. ARTICLE 9 OF THE eFTI REGULATION: FUNCTIONAL REQUIREMENTS FOR AN eFTI PLATFORM

PROVISIONS OF THE eFTI REGULATION	SPECIFYING MEASURES	EXCPECTATIONS AND THE BASIS FOR THE REQUIREMENT SET FOR THE PLATFORM	The category of cross-functional requirements
Art 9 (1) a) personal data can be processed in accordance with Regulation (EU) 2016/679;	[2016/679 ⁵⁴ concerns the protection of natural persons in the processing of personal data and the free movement of such data (the General Data Protection Regulation).]	 'processing of personal data' protection of the fundamental rights and freedoms of natural persons must be ensured in the processing of personal data by competent authorities. The data of the driver is not personal data as it is treated as part of commercial trade information. The latter applies to the field of hazardous goods, among others. 	11 – other non- functional requirements
Art 9 (1) b) commercial data can be processed in accordance with Article 6;	[Art 6. Confidential commercial information Competent authorities, eFTI service providers and the economic operators shall take measures to ensure the confidentiality of commercial information that is processed and exchanged in accordance with this Regulation and ensure that such information may be accessed and processed only when authorised.]	 'processing', 'exchange', 'when authorised', 'accessed' ensuring secure retention of data in compliance with the generally acknowledged, as well as national security standards 'appropriate measures' will be specified by implementing acts 	8 - system and data security 11 - other non-functional requirements 3 - data availability, access to the data, data delivery 8 - data security
Art 9 (1) c) competent authorities can access and process data in accordance with the specifications adopted by means of delegated and implementing acts referred to in Articles 7 and 8;	[Art 7 (1). The Commission shall adopt delegated acts in accordance with Article 14 to supplement this Regulation by establishing and amending the eFTI common data set and eFTI data subsets in relation to the respective regulatory information requirements referred to in Article 2(1), including corresponding specifications on the definition and technical characteristics for each	 'for the access of competent authorities to eFTI platforms' dataset and subsets 	3 – data availability, access to the data; data delivery 6 – accesses 9 – data model, semantics

31

Galation 2010/07/7, <u>Envir</u>

⁵⁴ Regulation 2016/679, LINK







	data element included in the eFTI common data set and eFTI data subsets. [regulatory information].]		
	Art 7 (2). When adopting the delegated acts referred to in paragraph 1, the Commission shall: a) take into account relevant international conventions and Union law; and b) seek to ensure the interoperability of the eFTI common data set and eFTI data subsets with relevant data models that are accepted internationally or at the Union level, including multimodal data models.	 implementation of the requirements of the eCMR Convention; support of the use of the datasets and data models of eFTI, still in the process of drawing up and specifying 	9 – data model
	Art 8 (1). The Commission shall adopt implementing acts laying down common procedures and detailed rules, including common technical specifications, for access by competent authorities to eFTI platforms, including procedures for the processing of regulatory information and for communication between competent authorities and the economic operators in relation to that information.	 The access of competent authorities based on the requirements to be agreed. Those requirements have not yet been determined but will be specified by delegated and implementing acts. the 'procedures' will be specified by technical instructions for the access of competent authorities to eFTI platforms 	3 – data availability, access to the data, data delivery 6 – access control
Art 9 (1). d) the economic operators can make information available to competent authorities in accordance with Article 4.		 machine-to-machine connections to the parties electronic data transmission machine-readable information of economic operators electronic data from a certified eFTI platform 	9 – data model 3 – availability of the data 6 – accesses
	Art 4 (2). Where the economic operators make regulatory information available electronically to a competent authority, they shall do so on the basis of data processed on a certified eFTI platform and, if applicable, by a certified eFTI service provider. That regulatory information shall be made available by the economic operators in machine-readable format and, at the request of the competent authority, in human-readable format.	on a certified eFTI platform,	11 – requirement for the certification of the platform
	Art 4 (3). Information in machine- readable format shall be made available via an authenticated and secure connection to the data source of an eFTI platform. The	authentication and establishing a secure link	2 – the structure of data exchange 3 – data availability access to the data







	economic operators shall communicate the unique electronic identifying link referred to in point (e) of Article 9(1) that enables the competent authority to uniquely identify the regulatory information related to the shipment. Art 4 (4) Information in human-	submission of data in a	3 - data
	readable format requested by competent authorities shall be made available on the spot, on the screen of an electronic device owned by the economic operator concerned	human-readable format (on the screen of the device of the carrier), other manners, incl. the paper format is not presumed here	availability, access to the data 9 – data model, semantics
Art 9 (1) e) a unique electronic identifying link can be established between a shipment and the related data elements, including a structured reference to the eFTI platform where the data is made available, such as a unique reference identifier;		 keywords: 'unique identifying link' a unique identifying link/address has been created for the dataset 	2 – the structure of data exchange 3 – data availability, access to the data, transmission
Art 9 (1) f) data can be processed solely on the basis of authorised and authenticated access;		 The eFTI data can only be accessed by a contractual transaction partner – an economic operator which can change the data, but also a competent authority which may inquire the data must be contractual partners of the eFTI platform keywords: 'data processing solely on the basis of an authorised and authenticated access' will be specified in further legislation 	3 – data availability, data access 6 – access control
Art 9 (1) g) all data processing is duly recorded in operation logs to allow, as a minimum, the identification of each distinct processing operation, the natural or legal person having made the operation and the sequencing of the operations on each individual data element; if an operation involves modifying or erasing an existing data element, the original data element shall		 'registered work logs' all parties, incl. the eFTI platform, must log transactions retention of the original data element in the situation of the existing data element being changed 	7 – logs and certificates







be preserved;		
Art 9 (1) h) data can be archived and remain accessible for competent authorities in accordance with the relevant Union legal acts and national law laying down the respective regulatory information requirements;	 'archiving' 'availability of the data' 'information requirements' 	2 – the structure of data retention and exchange 3 – access to the data 6 – access control 8 – data security
Art 9 (1) i) the operation logs referred to in point (g) of this paragraph are archived and remain accessible for competent authorities for auditing purposes for the period of time specified in the relevant Union legal acts and national law laying down the respective regulatory information requirements and, for monitoring purposes, for the periods of time referred to in Article 17;	 'accessibility of archived logs' operation logs must be retained based on the requirements of the regulation, will be specified further 	7 – certificates and logs
Art 9 (1) j) data is protected against corruption and theft;	'protection against corruption and theft', i.e. ensuring the retention of the data	8 – security
Art 9 (1) k) the data elements processed correspond to the eFTI common data set and to eFTI data subsets as established by the delegated acts referred to in Article 7 and can be processed in any of the official languages of the Union as provided for by the relevant Union legal acts and national law laying down the respective regulatory information requirements.	 following the requirements set for the dataset and for the eFTI data subsets 'ensuring the compliance requirement of the eFTI data' fitness for processing and displaying in the official languages of the EU 	9 – data model and semantics









5.2. ARTICLE 10 OF THE REGULATION REQUIREMENTS FOR THE SERVICE PROVIDERS

The requirements for service providers are mainly designed to define the obligations of the service provider as similar to those applicable to platforms, but also applied if the platform provider and service provider are different companies.

Service providers must ensure the functioning of the platforms and, if they are not developers of the platforms, the implementation of the functionalities of the platform as service providers.

Provision of the eFTI regulation	EXCPECTATIONS AND THE BASIS FOR THE REQUIREMENT SET FOR THE PLATFORM	CATEGORY OF THE REQUIREMENT
Art 10 (1) a) data is processed only by authorised users and in accordance with clearly defined and assigned processing rights within the eFTI platform, in accordance with the relevant regulatory information requirements;	• processing rights	3 – access to the data, 8 - security 6 – access control
Art 10 (1) b) data is stored and accessible in accordance with the Union legal acts and national law laying down the respective regulatory information requirements;	 the data from an economic operator (M2M or entered) are saved in the eFTI platform national law applies to the datasets 	8 – security of the data 6 – access control
Art 10 (1) c) competent authorities have immediate access to regulatory information concerning a freight transport operation processed by means of their eFTI platforms, free of any charges or fees ;	 immediate access of competent authorities no fees or charges are applied for competent authorities for access to the freight transport information prescribed by legislation which is processed with the help of those eFTI platforms 	3 – access to the data 6 –access control
Art 10 (1) d) data is appropriately secured, including against unauthorised or unlawful processing and against accidental loss, destruction or damage.	 'appropriately secured' 'including against unauthorised or unlawful processing' 'accidental loss, destruction or damage' 	8 – data security









5.3. ARTICLES 4, 5, AND 8 OF THE REGULATION: REQUIREMENTS FOR THE DATA EXCHANGE SERVICE

Those requirements are based on the following articles of the regulation:

- Article 4 requirements for the economic operators
- Article 5 requirements for competent authorities
- Article 8 common access procedure and common access standards

PROVISION OF THE eFTI REGULATION	Legislation referred	EXCPECTATIONS AND THE BASIS FOR THE REQUIREMENT SET FOR THE PLATFORM	Category of the requirement
Article 4 (1) For the purposes of Article 5(1), (2) and (3), the economic operators shall comply with the requirements set out in this Article.	Article 5 (1), (2) and (3)	the economic operators must submit their information through the eFTI platform, and the data must be constantly accessible on the eFTI platform (uploaded there)	3 – data availability, access to the data 6 – access control 9 – data models, semantics
Article 4 (2) Where the economic operators make regulatory information available electronically to a competent authority, they shall do so on the basis of data processed on a certified eFTI platform and, if applicable, by a certified eFTI service provider. That regulatory information shall be made available by the economic operators in machine-readable format and, at the request of the competent authority, in human-readable format.		the certification procedures required by Articles 11, 12, and 13 must be completed for an eFTI platform to provide the service	9 – data models, semantics
Article 4 (3) Information in machine-readable format shall be made available via an authenticated and secure connection to the data source of an eFTI platform. The economic operators shall communicate the unique electronic identifying link referred to in point (e) of Article 9(1) that enables the competent authority to uniquely identify the regulatory information related to the shipment.	Article 9 (1) (e) of the eFTI	 an eFTI platform must be capable to display the data to competent authorities in a machine-readable format a dataset must have a unique identifier (to be specified which URL, document number, or hash must be created) the information related to one freight transport operation must be clearly identified 	2 - distribution/ sharing of the data and the data attributes 3 - data availability, access to the data / data exchange 5 - authentication and identification of users 8 - data security / cyber security







Article 4 (4) Information in human-readable format requested by competent authorities shall be made available on the spot, on the screen of an electronic device owned by the economic operator concerned.		it must be possible to display data on the screen of an electronic device in a human- readable format	2 - distribution/ sharing of the data and the data attributes 3 - data availability, access to the data / data exchange
Requirements for competent authorities Article 5 (1) As from 30 months after the date of entry into force of the first of the delegated and implementing acts referred to in Articles 7 and 8, competent authorities shall accept regulatory information made available electronically by the economic operators in accordance with Article 4, including where such regulatory information is requested by competent authorities as additional information.	Articles 7 and 8 of the eFTI	it must also be possible to transmit additional data through the eFTI platform	3 – data availability, access to the data / data exchange 6 – Access control 9 – data models, semantics
Art 5 (2) Where the economic operator concerned has made, regulatory information required pursuant to Regulation (EC) No 1013/2006 available electronically in accordance with Article 4 of this Regulation, the competent authorities concerned shall also accept such regulatory information without the agreement referred to in Article 26(3) and (4) of Regulation (EC) No 1013/2006.	Regulation (EC) no. 1013/2006, Article 4	economic operators must make the data available	9 – data models, semantics
Art 5 (3) Where regulatory information required pursuant to a specific Union legal act or national law referred to in Article 2(1) includes official validation, such as stamps or certificates, the respective authority shall provide that validation electronically, in accordance with the requirements established by the delegated and implementing acts referred to in Articles 7 and 8.	Article 7 and Article 8	• the use of electronic stamps	3 – Access to the data 6 – Access control 9 – data models, semantics







Article 5 (4) In order to comply with the requirements set out in paragraphs 1 to 3 of this Article, Member States shall take measures to enable all their competent authorities to access and process regulatory information made available by the economic operators in accordance with Article 4. Those measures shall comply with delegated and implementing acts referred to in Articles 7 and 8.		the information of the economic operators is saved in eFTI platforms, and the information can only be accessed via the eFTI platforms	2 – the structure of data exchange 3 – Access to the data / data exchange
Common access procedure and common access standards Article 8 (1) The Commission shall adopt implementing acts laying down common procedures and detailed rules, including common technical specifications, for access by competent authorities to eFTI platforms, including procedures for the processing of regulatory information and for communication between competent authorities and the economic operators in relation to that information.		the access procedure establishes detailed requirements for authorisation, incl. the instructions for M2M connections and the authorisation of users or systems, delegation of rights	2 – distribution/ sharing of the data and the data attributes 3 – Access to the data / data exchange 5 – identification, authorisation 6 – Access control
Article 8 (2) When adopting the implementing acts referred to in paragraph 1, the Commission shall seek to enhance the efficiency of the administrative procedures and to minimise compliance costs both for the economic operators and competent authorities.		expectation that the costs are minimised, and the most optimum solutions are found	2 – the structure of data exchange 3 – access to the data / data exchange 10 – other IT aspects
Article 8 (3) Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 15(2). The first such implementing act shall cover all the elements referred to in paragraph 1 of this Article and shall be adopted no later than 21 February 2023.	Article 15 (2), Article 5 of Regulation (EU) no. 182/2011	the data elements are established as common and central elements	11 – general non- functional aspects









DELEGATED AND IMPLEMENTING ACTS IN THE STAGE OF DRAWING UP DURING THE CURRENT PHASE OF THE REPORT

6.1. DELEGATED ACTS

The delegated acts which will be adopted and specify the requirements for eFTI platforms and service providers include the following:

- the information requirements arising from the national legislation of the Member States, the legislation of the Member States referred to in Annex 1,
- the common eFTI dataset and the eFTI data subsets,
- conformity assessment (certification) of eFTI platforms and the use of the certification mark, the renewal, suspension, and cancellation of the conformity mark,
- requirements for the assessment of conformity (certification) of eFTI platforms.

See the eFTI Regulation or Chapter 2 of this report for further details on the schedule of adoption and implementation.

6.2. IMPLEMENTING ACTS

The implementing acts which will be adopted and specify the requirements for eFTI platforms include the following:

- uniform processes and detailed standards, technical descriptions for the access of competent authorities to the eFTI platforms, incl. the processes for the processing of the information prescribed by the law and exchange of such data between competent authorities and relevant businesses,
- requirements for the functionality of eFTI platforms,
- requirements for the eFTI service providers.

See the eFTI Regulation or Chapter 2 of this report for further details on the schedule of adoption and implementation.









PART II - REQUIREMENTS FOR THE **PLATFORMS**









7. EXPECTED CONTRACTUAL PREREQUISITES REQUIRED FOR THE FUNCTIONING OF AN (ESTONIAN) eCMR PLATFORM AND FOR THE OPERATING OF THE PLATFORM AS A SERVICE **PROVIDER**

CONTRACTUAL PREREQ	UISITES GROUP 1.			
MUST HAVE SERVICES:				
PREREQUISITE	EXPLANATION	eFTI	eFTI to be speci- fied	EE or others optiona I
-	DRMITY ASSESSMENT/ CERTIFICATION AND PLATFORM TO PROVIDE SERVICES)		
Assessment of conformity	 Assessment of conformity based on Articles 10, 11, 12 of the regulation 	YES		
PREREQUISITE 2: CONNECTIONS TO THE I AUTHORITIES	NAP OR ANOTHER LINKING SERVICE FOR C	OMPE	TENT	
Based on a contract, will be connected to the NAP if there is a NAP	The platform must be a connected and contractual member		YES	
The NAP connection in Estonia	 The service is an X-Road member plus a service contract with the NAP and technical connections 			
PREREQUISITE 3: CLIENT CONTRACTS ANI	D CONNECTIONS			
Valid client contracts	The data are displayed via the eFTI platform and thus, economic operators must have a contractual relationship with the eFTI platform	YES		
Connections with the IT systems of the economic operators (ERP, TMS, CRM)	 One important aspect is that the consignment note system must enable connections by different economic operators instead of manual entry of information into the eCMR system via a user interface. The latter may be provided as an option but may not serve as the main method of operation. 	NO		optiona
Connections with e- invoice environments	Connections with e-invoice environments	NO		optiona I
Connections with business software	Connections with business software	NO		optiona I
Connections with TMSs	 Connections with transport management software (TMS) The data of the economic operator must be displayed by the eFTI platform 	NO		optiona
User interface	 A user interfaces is required for reviewing the data, adding a signature, etc. May be provided as an option but may not serve as the main method of operation. 	NO		optiona I









CONTRACTUAL PREREQUISITES GROUP 2.						
OPTIONAL SERVICES						
PREREQUISITE	EXPLANATION	EFTI	eFTI to be speci fied	EE optional		
	AL) FOR SERVICES STREAM 1:					
CONNECTIONS WITH NATIONAL REGISTRIES						
Connections with national registries	Commercial registerRegister of economic activities	NO		optional		
Exchange of customs documents	If possible, connections to the Tax and Customs Board for exchange of customs documents	NO		optional		
PREREQUISITE (OPTION)	AL) FOR SERVICES STREAM 2:					
CONNECTIONS WITH O	THER DATASETS AND SERVICES FOR THE SU	JBMISS	ION	OF		
FREIGHT TRANSPORT IN	IFORMATION					
Connections with other EU information systems	Connections to the maritime information system	NO		optional		
	Connecting the customs information system	NO		optional		
PREREQUISITE (OPTION)	AL) FOR SERVICES STREAM 3:					
CONNECTIONS/INTERFACING TO OTHER eFTI PLATFORMS						
Connections to other eFTI platforms	Connections to other eFTI platforms	NO		optional		
Connections to potential access points	Potential connections to B2B access points	NO		optional		









8. THE EXPECTED FUNCTIONAL REQUIREMENTS FOR THE (ESTONIAN) eCMR eFTI PLATFORM

The functional requirements are drawn up based on the road consignment note life cycle model, which contains the entire chain of information exchange from preparations to follow-up activities and archiving.

	FUNCTIONALITY	CONTENT	eFTI	eFTI upco ming	EE op tio nal	tzo be spec ified
ST	AGE I. PREPARATIONS FOR	THE COMPLATION OF eCMRs				
	CONFIGURATION OF ACCESSES					
	The platform enables configuration of accesses	 the economic operator concerned must be able to add users for adding their information configuration of accesses to the service (creating links between the user accounts of business entities, individuals, and their legally valid representatives) 		from 2023		
	The platform enables allowing other businesses to access the data	the respective business must be able to add users and businesses and individuals with access rights to the data, who can view, add, and use the information of a specific document/dataset		from 2023		to be specified
	The option of simultaneous use of different connected systems	 enabling simultaneous use of different systems, synchronisation 		from 2023		
		TA INTO A DATASET/ A DOCUMENT				
	The platform enables accessing data from the information systems of the partners	 the capability of 'downloading' or receiving data via an API or another technical solution 			option al	to be specified
	The possibility to enter data via a user interface	 for manual entry or specification of data 			option al	to be specified
	The platform ensures trilateral (multilateral) access to all parties of an eCMR during the entire period	 trilateral (multilateral) access for the entire period when the document exists for the purposes of activation and supervision at a later date an access granted can be removed/revoked/changed until activation of the consignment note (e.g., if the carrier changes or the carrier who initially had access is no longer involved with the transaction) 	eFTI Art 9, as well as Art 4, 5, 8	to be specified in 2023		to be specified
ST	AGE II. COMPLIATION OF A					
	GENERATION AND COMPLETION	OF AN eCMR, VALIDATION OF THE INTE	EGRITY 1	ΓHEREO	F	
	The platform enables the user to initiate the generation of a consignment note /dataset	 initiation of a consignment note by the sender on the eCMR platform; alternatively, the consignment note may be initiated by the carrier 		to be specified in 2023		









The platform issues unique identifiers to the eCMR and specific set of documents The platform enables pulling	 the platform confirms the unique number of the dataset and eCMR document and creates a unique identifying link the platform enables drawing up a 	eFTI Art 9, as well as Art 4, 5, 8		
together the documents of one freight transport operation in a uniform and comprehensive manner	dataset in the context of one freight transport operation in a simple manner and using different data flows, data submission, interfaces and connections it must be possible to check the drawing up of a document set in a human-readable manner/format, i.e., through a user interface and screen views	9, as well as Art 4, 5, 8		
The platform checks that all eFTI datasets include the data required	 the platform is prepared in a manner which enables the collection of data required based on all eFTI datasets and sub-sets and the monitoring of the accumulation/absence of the data 	eFTI Art 9, as well as Art 4, 5, 8		to be specified
The platform checks the integrity of the dataset	 the platform must check the validity and integrity of the dataset based on the eFTI requirements 	eFTI Art 9, as well as Art 4, 5, 8		to be specified
The platform is capable of managing the links to additional documents required and the accessibility and integrity thereof	 the platform is capable of managing the holding or linking of additional documents the platform enables the registration of documents and datasets 	eFTI Art 9, as well as Art 4, 5, 8		
The platform is capable of checking the validity of the general data entered	 the platform enables checking the existence/registry number of an economic operator an entry in the register of economic activities The existence of a physical address 	NO	NO	to be specified
VALIDATION AND ACTIVATION C				
The platform prepares an eCMR for sharing based on the prescribed standard	 an agreed standard eCMR must be a required dataset in an easy-to-find location and in the dataset format prescribed by the eFTI legal framework⁵⁵ 	eFTI Art 9, as well as Art 4, 5, 8	from 2023	
The platform prepares an eCMR in a human-readable format	 the functionalities of the platform include the capability of displaying information on the screen on the electronic device of the carrier (driver) 	eFTI Art 9, as well as Art 4, 5, 8	to be specified in 2023	

 $^{^{55}}$ The respective requirements will be formalised as a delegated act in February 2023 $\,$ 44 $\,$









The platform adds to the consignment note all the unique identifiers agreed / confirms any identifiers which have already been issued	 an eCMR is equipped with a timestamp of the creation the consignment note is equipped with a unique identifier of the system internal and additionally agreed identifiers a unique location (either the final location of online documents or mirrored/synchronised), i.e. the location which can be used to make external inquiries 			to be pecified n 2023
The platform must enable the sender of the goods to initiate the activation of an eCMR by signing the document	 signing of the consignment note dataset by the sender of the goods and the carrier (driver) must be ensured The signature may be provided by using a valid electronic stamp or seal 		rom 2023	
The platform must enable the carrier to initiate the activation of an eCMR by signing the document	 Signing of the consignment note dataset by the carrier (driver) must be ensured The signature may be provided by using a valid electronic stamp or seal 		rom 2023	
The platform records the generation of a consignment note by a timestamp	 allocating an internal time stamp or identifier of the system the consignment note will become active 	2	rom 2023	
If necessary, the platform quickly generates visual, readable additional identifiers	 the platform generates (if agreed) a tool for the driver and the recipient of the goods for quick access to the eCMR in the information systems (QR code, barcode, programmed NFC etc) the code may be accessible in the electronic device of the driver or separately 		rom 2023	
PUBLISHING OF THE eCMR IN TH	HE INDEX REGISTER / INDEXING OF THE	eCMR ⁵⁶	,	
	 the dataset about the eCMR and the freight transport operation used in the publishing, i.e., indexing of the eCMR the set of the metadata of the freight transport operation includes the identifier of the document, the truck number, the trailer number, confirmation of the existence of valid signatures, the link (the URL/URI of the location of the eCMR data on the platform of the eCMR service provider), the reference to hazardous goods, if necessary, and the reference to the ADR or other documents/registry records 	f	Prom 2023	

 $^{^{\}rm 56}$ The exact procedure of this indexing will be specified.









The platform sends the metadata to the index register The platform registers the confirmation response to the indexing	 The platform sends the metadata to the index registry to activate the information of the launched freight transport operation The platform accepts and records the confirmation from the index registry about successful 		from 2023 from 2023	
	registration of the dataset			
STAGE III. THE ACTIVE PERIOD	O OF AN eCMR CONSIGNMENT NO	OTE		
AVAILABILITY OF A CONSIGNME	NT NOTE			
The platform ensures trilateral (multilateral) access to all parties of an eCMR during the entire period	trilateral access during the entire freight transport operation	eFTI Art 9, as well as Art 4, 5, 8	from 2023	
The platform must be connected to a NAP	 the platform must be connected to a NAP which will be forwarding/ mediating the inquiries of competent authorities to provide access and display the indexed consignment note depending on the functional requirements for NAPs and instructions which have not yet been enforced and the requirements for the links, the eFTI platform might also need to be connected to a NAP via a public key infrastructure (PKI, the X-Road in Estonia) or through an API connection 	eFTI Art 9, as well as Art 4, 5, 8	from 2023	
The platform must always be prepared for an inquiry from a competent authority	 The platform or the data on active rides must be accessible for inquiries 100% of the time (maximum availability) 	eFTI Art 9, as well as Art 4, 5, 8		
Identification of an eFTI platform	 access through an access point (NAP) required 		from 2023	
DISPLAYING OF A DATASET DUR			2023	
The platform is capable of passing on or displaying information in the eFTI platform in case of inquiry on a freight transport operation or an eCMR as a response to the metadata-or unique identifier-based query	 the set of metadata about the eCMR and the freight transport operation used in the publishing, i.e., indexing the eCMR serves as the value searched in displaying the data the dataset includes the unique identifier(s) of the document, the truck number, the trailer number, confirmation of the existence of valid signatures, the link (the URL/URI of the location of the eCMR data in the service of the eCMR service provider), the reference to hazardous goods, if necessary, and the reference to the dangerous goods (ADR) or other document 	eFTI Art 9, as well as Art 4, 5, 8		to be specific







Receipt of an inquiry of a competent authority	 the inquiry may be originating from a national or a foreign (other EU member state) competent authority and, in the case of an inquiry from a foreign competent authority, the inquiry arrives via the Estonian NAP for connections to the NAP and transmission of data, the platform must have a system enabling authorised machine-to-machine accesses 	eFTI Art 9, as well as Art 4, 5, 8		
Logging of an inquiry of a competent authority	 a record log is retained about the inquiry of a competent authority with the information about the country of origin, type of the authority, and time the NAP must provide the respective information to the eFTI platform the platform can store the document set as well as history and relevant other information in the log 	eFTI Art 9, as well as Art 4, 5, 8		to be specified
It must be possible to launch a data inquiry to the platform based on one of selected agreed identifiers (truck number, trailer number, document number, unique link etc) by also using the supporting tools provided (QR codes etc)	 the inquiry may be based on an identifier sent with the metadata or an additional tool, e.g., a direct link opening when a QR code is presented the eFTI platform must always authenticate any incoming inquiries solutions like oAuth that enable the delegation of the right of representation and the logging of the delegation are used for machine-to-machine authentication 	eFTI Art 9, as well as Art 4, 5, 8		to be specified
AMENDMENT AND SUPPLEMENT	TING OF THE DATA DURING A FREIGHT	TRANSPO	ORT OPE	RATION
The platform enables amendment of the data in an extent permitted by law	 the platform enables amendment of agreed and predefined data during the freight transport operation each amendment and change must be logged 		from 2023	to be specified
The platform logs all amendments, logging the previous entry and adding a time stamp	 each amendment and change must be logged with a time stamp all previous entries before the amendment are retained and remain accessible as historical record of the data 		from 2023	







The platform enables replacing the driver and the truck during a freight transport operation (handing over of the responsibility) and the platform has a respective function for this purpose with operations for adding additional signatures	 to enable the replacement of the driver or truck, the platform must have separate fields for describing the changes and no fields may be overwritten each change must be logged and time stamped, specifying the individual who made the change if the driver is replaced, the signatures of both drivers (the one handing over and the one accepting) are required with the geographic coordinates of the event and time stamps of the event if the truck is replaced, information is entered and stored to the eFTI platform 	from 2023	
The platform sends a message on the change of the information of the freight transport operation and the updated metadata to index register STAGE IV. CLOSING AND DEA	the platform sends updated metadata to the index register in case the truck is replaced, metadata is updated with a note on changed truck/vehicle and historical record is kept on the previous transport CTIVATION OF AN eCMR CONSIG	from 2023	
CLOSING AND DEACTIVATION O		from	
The platform enables the driver to initiate the closing of the consignment note as conveniently as possible	 upon the completion of the freight transport operation and the delivery of the goods, the closing of the consignment note is initiated the aforementioned QR code in the device of the carrier (driver) may (but does not have to) be used (it creates a link for the recipient of the goods to the platform based on their own access information) 	2023	
The platform registers the time and geographical coordinates of the completion of the freight transport operation	 the platform registers the time and geographical coordinates of the completion of the freight transport operation 	from 2023	
The platform enables the carrier to initiate the completion of the freight transport operation and the closing and deactivation of the eCMR by signature	 (electronic) signing of the consignment of the consignment note dataset by the carrier (driver) to confirm the delivery of the goods must be ensured the signatures may be provided using a valid electronic stamp the event of the completion of the freight transport operation and delivering the goods is the basis for ending the active period of the eCMR and the condition for the initiation of the deactivation (the (electronic) signature of the driver is one of the two required signature-related conditions) 	from 2023	to be specified









The platform enables the recipient of the goods (consignee) to confirm the receipt of the goods by (digital) signature The platform must enable adding comments and reclamations	 signing of the consignment note dataset by the recipient of the goods and the carrier (driver) must be ensured the signature may be provided by a valid electronic stamp the event of completion of the freight transport operation and delivering the goods is the basis for ending the active period of the eCMR and the condition for the initiation of the deactivation (the (digital) signature of the recipient of the goods is one of the two required signature-related conditions) the platform and the user interface view of the driver and the recipient of the goods must enable adding comments and reclamations both the driver and the recipient 	from 2023	to be specified
The platform records the closing of the consignment note by a	 must be able to confirm the reclamations by a digital note in cases there are considerations, the eCMR can be deactivated in the sense of active transport, but can remain open for business reasons allocating an internal time stamp or identifier of the system 	from 2023	to be specified
If necessary, the platform generates the messages on closing the note	 the consignment note becomes a deactivated (closed) consignment note the platform generates further messages to the parties who have ordered such messages 	from 2023	
PUBLISHING OF THE CLOSING OF	AN eCMR IN THE INDEX REGISTER / CLO	OSING THE INDE	EXING ⁵⁷
The platform sends the metadata of the completion of the freight transport operation to the index register		from 2023	
The platform registers the confirmation response to the indexing	 the platform accepts and records the confirmation from the index register about the deactivation from the indexing 	from 2023	
The platform retains the link between the completed freight transport operation and the index entry	 the platform must ensure the availability of the information on the history of the indexing this information is required to ensure compliance with the provisions on cabotage based on other legislation and with the provisions of the Mobility Package 	from 2023	

eCMR AND DISTRIBUTION OF INFORMATION TO THE PARTIES

 $^{^{\}rm 57}$ The exact procedure of this indexing will be specified.







The platform sends the messages on the completion of the freight transport operation to the carrier, the sender, and the recipient of the goods, as well as to their information systems	 the platform ensures distribution of the information for the reporting between the partners the platform sends messages about events, further information, or other information based on the agreed business processes 	eFTI Art 9, as well as Art 4, 5, 8			to be
The platform enables filtering of the archive	 the platform enables access for the parties to the documents generated and used by document as well as by set of entries the platform enables reporting and filtering of the archive and excerpts from documents for different reports or transactions based on different features (carrier, partner, truck, driver, etc.) 	eFITART 9, as well as Art 4, 5, 8			to be specified
The platform enables drawing up statistical data of the freight transport operations for the purposes of the eFTI regulation or the mandatory reports of the economic operators or for the reporting submitted to Statistics Estonia	 drawing up statistical reports within the eFTI framework (based on the forms) 	eFTI Art 9, as well as Art 4, 5, 8		X	
The platform enables obtaining statistical information of the freight transport operations for voluntary or additional reporting TRANSACTION TOOL	 support for drawing up reports for Statistics Estonia, Eurostat, or other reports (based on the forms) 		from 2023	option al	to be specified
The platform may be linked with an e-invoice platform	 the platform may be linked with e- invoice platforms to allow the parties to use e-invoice solutions with the eCMR 			option al	to be specified
ARCHIVING The platform may leave the eCMR accessible for all related parties The platform performs the entire archiving of the eCMRs required by the law and the use of the archive	 the platform leaves for all related parties an access to the documents generated and used the platform ensures archiving of the eCMRs required by the law the archiving is usually based on the generally acknowledged rules of archiving and must enable reopening, use, and transmission of documents it must be possible to relocate the archive to other platforms or open it in another manner than through a specific platform the archiving must be ensured for the period prescribed by the law (for 	eFTI Art 9, as well as Art 4, 5, 8	from 2023		to be specified
	example, in the case of some documents for five years, or in the case of eCMRs in Estonia for seven years)				



transmission of an inquiry





not required



STAGE VI. ACTIVITIES DURING A FOLLOW-UP INSPECTION BY A COMPETENT **AUTHORITY** FOLLOW-UP INSPECTION OF AN eCMR BY A COMPETENT AUTHORITY the platform enables filtering and eFTI Art The platform enables the from to be searches of and excerpts from the 9, as well as Art 2023 specified economic operators to provide documents and entries archived the documents inquired by a competent authority through the the platform ensures that all the required confirmations and logs are enclosed to the entries the platform adds digital stamps to the excerpts as required It is not necessary for the there are currently no legal grounds for option platform to be connected to any the respective inquiries for the competent authorities for transmission of the dataset over an

interface and this development is thus









9. NON-FUNCTIONAL/CROSS-FUNCTIONAL REQUIREMENTS OF AN (ESTONIAN) eCMR PLATFORM AND THE REQUIREMENTS FOR A FUNCTIONING SERVICE ENSURED BY A SERVICE PROVIDER

The table below presents the outcome of the work in the consolidated form by using the categories described in Chapter 1

REQUIREMENT	CONTENT OF THE REQUIREMENT keywords	MAN DAT ORY IN THE eFTI	other legislat ion referre d to in the eFTI	eFTI upco ming	To be specif ied
CF1: Functional structure, archite General requirements related to t		ange ar	nd contr	nection	c
The eFTI information of the ecor operators is made available to comp authorities electronically via a certified platform	omic • a certified eFTI platform	eFTI Art. 4(2)	<u>14 COIII</u>	TCCTION .	
The eFTI platform must display information together if requested competent authorities	the by the eFTI platform is a source of consolidated information of the economic operators	eFTI			
The eFTI service provider must electronic eFTI information available competent authority in a machine-rea format	to a a machine-readable	eFTI Art. 4(2)			
If requested by a competent authority eFTI platform (which retains the inform of the respective economic operator) also issue the information in a hureadable format (on the screen of a dev	readable format (on the must screen of the electronic nan- device of the driver)	eFTI Art. 4(2)			
The operator of the eFTI platform service provider or a company operatine eFTI platform or providing the respesservice) must ensure that only authousers with appropriate rights for the enprocessing of such information processed the data on the platform	 the data processing must be authorised and ensured in the phase of entering information in the eFTI platform 	eFTI Art. 10(1); eFTI Art. 9			
If necessary, confirmation (a certificate) be provided to competent authorities the economic operators are the oper that they claim to be and that they have right to provide the respective informat	that data submitter to identify themselves the		WSR ⁵⁸		
CF2: Data management, Data Dis		tributes			
The eFTI platform must ensure the cre of a unique identification link betwee freight transport operation and the elements/dataset	the identifier, ID	eFTI Art.			

⁵⁸ WSR Annex IC(III)(9)







	The eFTI platform must ensure that the unique identifying link includes a structured reference to the eFTI platform from which the information is made available	accessibility of the eFTI data, data structure, and indexing	
	The economic operators must validate themselves and the information submitted by them and be prepared to validate the information submitted by their partners or a notification service or the previous carriers of the same freight transport operation, if necessary	validation of information by the economic operator concerned WSR ⁵⁹ WSR ⁵⁹	
	The information submitted in a human- readable format which is required by competent authorities must be provided on- site and immediately by presenting it on the screen of an electronic device at the disposal of, owned by, or used by the economic operator concerned	 a human-readable dataset presentation of data on the screen of an electronic device capability of electronic displaying and the user interface of the respective tool 	
	Competent authorities must have access on the eFTI platform to the information required by the legislation that different parties have generated, submitted, or used during the freight transport operation before the freight transport operation, to launch the operation, or during the operation	presentation of common information of economic operators WSR ⁶⁰ WSR ⁶⁰	
	If requested by a competent authority, the economic operator concerned must submit further information through the eFTI platform within the required period	 additional information further information or submission of information within a certain period of time at a later date, for example, if there is no connection with the eFTI platform at the time of the inspection 	
	An eFTI platform and the service provider must ensure that the eFTI dataset will remain linked to the transport operation for the entire duration of the freight transport operation	the eFTI dataset remains linked to the transport operation for the entire period of the goods being on the road, even if the carrier or the mode of transport changes ADN ⁶¹ ADN ⁶¹	
	The eFTI platform and the service providers must ensure that the information remains available for the entire duration of the freight transport operation	availability of the data availability of the platform for inquiries ADN 62 ADN 62	
CF	3: Data access/delivery		

⁵⁹ WSR Annex IC(II)(6); WSR Annex IC(V)(Block 8); Road Art. 8(3)

⁶⁰ WSR Art. 16(c); WSR Annex IC(II)(6); WSR Art. 18(1); WSR Art. 50(4); CTD Art. 3; WSR Annex IC(V)(Block 8); Road Art. 8(3)

⁶¹ ADN Art. 8.1.2; ADR Art. 8.1.2; ADR Art. 7.5.2; RID Art. 7.5.2.

⁶² ADN Art. 5.4.0.2; ADR Art. 5.4.0.2; RID Art. 5.4.0.2;







Competent authorities have the right to access the data for a specified period of time even after the completion of the freight transport operation The economic operators must update the required information on the eFTI platforms on each occasion when the information changes The eFTI platform must ensure that there are a functioning and accessible unique identifying link and other identifiers created to enable access to the data (the dataset or	 access of competent authorities to the information after the completion of the freight transport operation obligation to keep the information updated a unique identifying link 	eFTI	WSR ⁶³		
individual elements) CF4: Interoperability, compatibility, in	 tegration_availability_of	system	าร		
The eFTI platform must enable submitting data immediately and with the shortest possible delay (if the inquiry allows a delay) when requested by a competent authority	speed of submission and availability	eFTI Art. 10(1)			
CF5: Authentication and identification	of users (individuals an	d syste	ms)		
The economic operators must have access to all datasets via and with the help of the eFTI platform, even to those issued and drawn up and submitted about a freight transport operation by other economic operators	access to the data of the economic operators		WSR ⁶⁵	upcoming	
CF6: Access control, organisation of ac	ccesses and roles		'		
Competent authorities, eFTI service providers, and economic operators must ensure that the data can be processed, used, and accessed only by properly authorised individuals, economic operators, or systems	authorised processing	eFTI Art. 6			
CF7: Evidence and Logs					
The eFTI platform must register and retain all operations which an economic operator concerned has entered, edited, stored, or deleted from the platform and also ensure confirmation to the economic operator concerned of the entry of such data	for an economic operator concerned, the eFTI platform is a tool for ensuring the existence of information		WSR, ADR, RID, Aviation ⁶⁶		
The reliability of the evidence is ensured by the eFTI platform	for accepting and the submission of confirmations and certificates, a level of comparability comparable to paper documents is required		WSR ⁶⁷		

65 WSR Annex IC(II)(6); WSR Annex IC(V)(Block 8)

 $^{^{63}}$ WSR Art. 16(d); Reg 11 Art. 6; CTD Art. 5(2); Aviation Security 6.3.2.5; Aviation Security 6.3.2.6

⁶⁴ WSR Art. 17; WSR Art. 50(4c)

⁶⁶ WSR Annex IC(II)(6), WSR Annex IC(V)(Block 8); , Reg 11 Art. 6; , ADN Art. 1.4.2.2; ADR Art. 1.4.2.2; , RID Art. 1.4.2.2; Aviation Security 6.3.2.5; , Aviation Security 6.3.2.6

⁶⁷ WSR Art. 26(3); WSR Art. 26(4); Road Art. 8(3)









The eFTI service provider (the operator of the eFTI platform, the service provider or the economic operator concerned) must ensure that the information on the rights of the economic operator concerned to manage and submit data on the eFTI platform is provided unambiguously so that it can be checked by a competent authority The eFTI platform must ensure that the	traceability of the creation of eFTI data logs eFTI	WSR ⁶⁸
processing of the data is supported by appropriate logs and that at least the operations and the individual or company that performed the operations are logged, as well as the sequence of the changes made concerning each data element.	• log of amendment of the data	
In addition to keeping a log of operations, the eFTI platform also ensures that if an amendment of the data includes deletion of the data, the initial information remains accessible in the history	 log of amendment of the data history of the data 	
If the information required by legislation calls for official verification (a stamp or certificate), the respective competent authority must issue it electronically	 official stamp in the digital format electronic stamp 	
CF8: Data security, cybersecurity		
The competent authorities, eFTI service providers, and economic operators ensure confidentiality in the generation, entry, management, processing, retention, and accessing the eFTI data	• confidentiality eFTI	
The competent authorities, eFTI service providers, and economic operators ensure that only entitled users can access eFTI platforms and eFTI data	• only authorised accesses eFTI	
Within a certain period of time, competent authorities have access to and the right to access some logs of the eFTI platform to audit the operations of eFTI platforms from a legal perspective	Access to logs eFTI 9	
The service provider of the eFTI platform (the service provider or the economic operator concerned) ensures the logging and monitoring of the accesses to the eFTI platform and the number of uses and retain the entries for a certain period of time	Monitoring and logging monitoring how many and which inquiries from competent authorities have been received by the eFTI platform	7; Art.
The data are protected against theft, destruction, accidental loss, destruction, and damage	Art 9 j; Art (1	10
The data are protected against unauthorised and unlawful processing	Art (1	10
CF9: Data models, standards, semantic		
The economic operators must notify via the	the use of the unique eFTI	Art.
eFTI platform and use the unique identifying link of the freight transport operation and other identifiers concerning the entire transport and freight transport operation	identifying link 40	3)

⁶⁸ WSR Art. 18(1); WSR Annex IC(III)(9); WSR Annex IC(II)(6); WSR Annex IC(V)(Block 8); WSR Art. 16(c) (RP01); WSR Art. 16(c) (RP01); WSR Art. 16(d); Road Art. 8(3);









The eFTI platforms must process, compile, and distribute common eFTI datasets and eFTI data subsets	 Processing of agreed eFTI datasets at the level of an agreed standard 	eFTI Art 9
CF10: Other general functional/IT aspe	ects	
The eFTI service provider (the service provider or the economic operator concerned) must archive the entire information about each transport operation and make it available retrospectively for the prescribed period of time	eFTI archiving	eFTI Art. 9; eFTI Art. 10(1)
The eFTI platform ensures the function of organising archiving	eFTI archiving	
CF11: Other/general non-functional/c	ross-functional aspects)	
The eFTI platform and the service provider must ensure the application of the principles of the GDPR	 processing of personal data 	eFTI Art









10. RECOMMENDED ROADMAP: SEQUENCE OF ACTIVITIES OF THE DEVELOPMENT OF THE eFTI PLATFORM AND PLANNING OF THE SERVICE

The sequence of activities, the roadmap with the schedule of entry into force of the delegated and implementing acts of the eFTI.

acts of the eFTI.														
ACTIVITIES	2022 202		2022 202			2022			3	20	24	2	2025	
May 2022, the beginning of the drafting June 2022, the expected opening of the application round														
A training on the eFTI legislation and requirements to set further directions. A training for the management of the company and the development team for the preparation of the service and the certification of conformity with the eFTI as of 2024 (a forward-looking view of the information available).														
Consultation as a purchased service (legal consultation, sector-specific expert consultation, etc.) Advising of the management of the company on the legislation, technology, or the eCMR services implemented in the case of changing the processes or planning developments.														
Consultation for drawing up a roadmap for the development of the product/service and analysis of the process (mapping).														
Further analysis of the eFTI requirements.														
Drawing up a roadmap of the developments required, process analysis. The preliminary mapping required for planning the changes and activities of the processes.						П								
Drawing up a roadmap for the development of the product/service (incl. the IT product development plan – the IT-focussed terms of reference, analysis of the requirements, and roadmap of the development).														
Drawing up the product and/or service development plan compliant with the eFTI requirements or conditions established at the national level (e.g., the technical specifications of creating the connections, expanding the identification options and/or signing documents and events, adjustment of the online services).														
Planning of connections to public registers and implementation of eCMR services (use of the data provided by registers through an API, incl. paid data inquiries) (e.g., the national motor vehicle register, the register of enterprises, agencies, and organisations).														
Planning of connections to an access point (NAP) to enable competent authorities to make inquiries or to ensure access to the data (via API or X-Road).														
Planning of connections to the relevant EDI, ERP, and TMS software applications for reading and returning data. Negotiations and drawing up of roadmaps.														
Planning of connections to business and accounting software.														
Planning of connections to e-invoice environments and services.						П								
	20	22	2 2	202	3	20	24	2	025					
Adoption of implementing acts on the requirements for data exchange, links, and datasets (21 February 2023)														
Legal analysis of the connections and advice on contracts														
Consultation, preparation of connection contracts						П								
Analysis of the implementation of the data standard, implementation of the standard Consultation on the implementation of the data standard, standard fees (configuration fees as the MMT)														









Implementation of the data standard. Configuration of the message exchange.											
Configuration of the machine-to-machine authentication service											
Development, configuration, documentation of the APIs required.							П				
Development and deployment of authentication and signature solutions. Implementation of a higher-level authentication service for digital signature of documents or for authentication of users (software development).											
Development of the internal function of the platform in connection with the unique identifiers, locations of the documents, and implementation of the data standard.											
Developments for the preparation of the functionalities related to displaying the data to competent authorities, authentication of systems, and processing of inquiries											
Development and deployment of connections with the relevant EDI, ERP software applications and solutions (for reading and returning data) ⁶⁹											
Development and deployment of connections with the relevant TMS software applications (for reading and returning data) ⁷⁰											
Development and deployment of connections with the software applications of the carriers concerned (for reading and returning data) 71							П		Ш		
Development and deployment of connections with public registers for using public e-services.											
Trainings (expenses on the instructor, costs on organising the training, personnel costs for the duration of the training)											
Development of user instructions, API descriptions, drawing up the deployment documentation. Documentation of the changes made in the information system and drawing up instructions											
Trainings for the user support of the information system, incl. administrators, the individuals fulfilling data supervision-related and other roles.											
	2	02	22	20	23	2	202	24	20)25	5
The delegated and implementation acts of the eFTI for specifying the functional requirements for eFTI platforms (August 2023)											
Planning and configuration of the link with the access point (national (NAP) or another access point serving the same purpose (CAP)) to enable competent authorities to inquire data or to grant access to the data.											
Development of connections with other software applications or information exchange platforms, registers, or services required to amplify the magnitude of the service and to add value.											
Testing and validation of the developments made in appropriate test environments											
Deployment and introduction of the service (validation and going live of the service).											
Expert support for the marketing of the service (raising of awareness at the national level).											

⁶⁹ Some of those connections must be planned as activities which are funded through the projects in the funding measure for connectivity of the carriers to the eFTI platforms

 70 Some of those connections must be planned as activities which are funded through projects in the funding measure for connectivity of the carriers to the eFTI platforms

⁷¹ Some of those connections must be planned as activities which are funded through projects in the funding measure for connectivity of the carriers to the eFTI platforms









Advising and preparations on the contification of aFTI platforms				П		П				ı	
Advising and preparations on the certification of eFTI platforms		Ц		Щ						Ц	
Feedback collection and processing											
Raising of awareness about the project, costs on marketing (advertising materials, notifying, activities on the national level in Estonia, communication of changes in the services to the clients and cooperation partners)											
The follow-up activities concerned with the quality of the project											
Project management. May include the entire project management, consultation for the ourposes of advising.											
Support/expert assessment for the deployment of the service, expert assessment by the implementing unit. Support from the implementing unit for the entire duration of the project, expert assessment with an aim of ensuring the supervision of the activities and making suggestions for better implementation of the project, if necessary.	1										
	_	Ц	_	Щ			ļ		L	Ц	_
	2	20:	22	2 2	202	23	2	024	4	20)
Ending of the funding period and activities of the support measure for the development of the eFTI service (June 2024)			T					Ī			
Connecting the platforms of carriers during the period of the measure of connecting the nformation systems of carriers.											
Connecting to TMS platforms.											
Development of connections with other software applications or information exchange platforms, registers, or services required to amplify the magnitude of the service and to add value.											
Certification as an eFTI platform (optional, but inevitable if the provider wishes to continue to provide the service without using an additional eFTI platform for displaying the data field)											
Ending of the funding period and activities of the support measure for connecting the eFTI freight transport operators (June 2025)											
	2	20:	22	2 2	202	23	2	024	4	20)
Entry into force of the eFTI regulation (August 2025)							İ				
Provision of the service		Ī	Ī	I				T			
Creation of additional connections	1	T	T								-
Development of the service	1	T	T								
Feedback to the service and requirements and the implementation of the legislation to provide	T	T	Ť	T						П	









SUMMARY, RECOMMENDATIONS, FURTHER ACTIVITIES

This analysis work consists of description of the eFTI requirements for eFTI platforms and service providers at a time-moment in which the delegated and implementing acts of the eFTI regulation are still being prepared and the structure for them still to be drawn up.

Yet, the eFTI Regulation and the preparatory material of the DTLF provide a solid framework to formulate a preliminary structure and guidelines for the platform developers and service providers. The specifications that will follow in the shape of regulatory provisions will be in the foreseen range of requirements and can therefore be taken onboard based on the initial lists and requirements lists.

Regarding better comparability of the evolution of the requirements and for following the work progress compliance with the eFTI requirements, it would be advisable to continue using the structure of DTLF working documents (as used and described above) in describing the technical/non-functional requirements, as it enables comparing the further developments of the eFTI through the supporting documents.

To coordinate one's own work in the development of an eFTI platform, however, it would be advisable to describe the requirements in detail based on the preferences of the company itself and the development company's requirements description models as for preferences of the teams performing the works and their analysis team.

The follow-up activities concerned with the functional requirements include the following:

- further description of service use cases,
- further description of the structure of message exchange.

The follow-up activities concerned with the non-functional requirements include the following:

- In the structure of the requirements for the IT system preferred by the developers of the service,
- In the structure of the cross-functional requirements of a digital state⁷² (development, deployment, architecture, quality, security, data),
- specified description of other customary technical requirements (incl. GOAL, etc.)⁷³,
- in the structure of the requirements for the information systems commissioned by the state, incl. in the structure of the technical specification recommended by the RIA.
- in the structure of the requirements for a software product / information system and the quality of the data based on ISO/EIC 25020:201174.

Concerning the structure and standards of datasets and data messages:

in the modelling of data, based on the work of the UNECE and the European Commission with data models and standards.

Concerning data and cyber security:

- for Estonia, the requirements should be based on the ISKE instructions⁷⁵,
- for other EU member states, the requirements should be based on national e-government and generally accepted instructions

The following is an important part of the follow-up activities of the current work:

- Cooperation with the relevant working groups of the DTLF,
- Further contribution from the ministry to the analysis of the requirements and to the input provided to the European Commission based on the interests of Estonia and of the Nordic-Baltic region,
- Validation of the requirements with economic operators and eFTI platform developers in the summer of 2022, winter of 2023, and summer of 2023,
- Notifying economic operators and potential eFTI platform developers of the requirements and nature of the eFTI and the structure of data exchange.

⁷² Requirements for the cross-functionality of a digital state, https://koodivaramu.eesti.ee/e-gov/cfr and https://koodivaramu.eesti.ee/e-gov/cfr/-/blob/master/cfr.xml

⁷³ Referred via Wikipedia – https://en.wikipedia.org/wiki/Requirements_analysis

⁷⁴ The ISO/EIC 2501:2011 standard

⁷⁵ RIA, ISKE, https://www.ria.ee/et/kuberturvalisus/iske/juhendid-ja-materjalid.html









ANNEX 1. AVAILABLE REQUIREMENTS FOR THE DATA/ DATASETS BASED ON THE eFTI REGULATION AND LINKED LEGISLATION

The main requirements based on the main legislation in the scope of the eFTI concerning the data:

An eFTI platform must be capable of processing the data related to freight transport in the territory of the union described within the framework of the 'scope' of the eFTI regulation and the information prescribed by the following legal provisions⁷⁶, which include:

- freight transport information accepted by competent authorities in an electronic format;
- Common specifications on the definition and technical characteristics of data elements should ensure data interoperability by establishing a single comprehensive data set to be used for the electronic communication of the information. This comprehensive data set should contain all the data elements corresponding to the information requirements contained in the relevant provisions of Union legal acts and national law, where each data element that is common to one or more subsets is included only once. When laying down those common specifications, due account should be taken of relevant data exchange specifications laid down in relevant Union legal acts and contained in relevant European and international standards for data exchange, including multimodal standards, and of the principles and recommendations set out in the Commission's Communication of 23 March 2017 entitled the 'European Interoperability Framework Implementation Strategy';
- the detailed standards and technical specifications and certification systems describing the functional requirements for eFTI platforms;

A transport document giving the following details shall be required for each consignment of goods within the Community:⁷⁷:

- name, address, and signature of the consignor;
- nature and weight of the goods;
- place and date of acceptance of the goods for transport;
- place at which the goods are to be delivered;
- route to be taken, or distance to be travelled if these factors justify a rate different from that normally applicable;
- frontier crossing points, where appropriate.

In the case of combined transport for hire or reward, a transport document⁷⁸ shall also specify the rail loading and unloading stations relating to the rail leg, or the inland waterway loading and unloading ports relating to the inland waterway leg, or the maritime loading and unloading ports relating to the maritime section of the journey. These details shall be recorded before the transport operation is carried out and shall be confirmed by means of a stamp affixed by the rail or port authorities in the railway stations or inland waterway or seaports concerned when that part of the journey carried out by rail or inland waterway or by sea has been completed.

Evidence referred to in the first subparagraph shall comprise the following details for each operation:⁷⁹

- the name, address, and signature of the sender;
- the name, address, and signature of the carrier;
- the name and address of the consignee as well as his signature and the date of delivery once the goods have been delivered;
- the place and the date of taking over of the goods and the place designated for delivery;
- the description in common use of the nature of the goods;
- the method of packing, and, in the case of dangerous goods, their generally recognised description;
- the number of packages and their special marks and numbers;

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⁷⁶ The eFTI regulation (2020/1056), Article 2

⁷⁷ EEC Council: Regulation No 11, Article 6 (1)

⁷⁸ Directive 92/106/EEC, Article 3

⁷⁹ Regulation (EU) No. 1072/2009 of the European Parliament and of the Council, Article 8 (3)









- the gross mass of the goods or their quantity otherwise expressed;
- the number plates of the motor vehicle and trailer.

Documents to accompany each transport: the notifier shall retain a copy of the movement document. The movement document and copies of the notification document containing the written consents and the conditions of the competent authorities concerned shall accompany each transport. The movement document shall be retained by the facility which receives the waste⁸⁰;

The following procedural requirements apply to waste:

- to assist the tracking of shipments of such waste, the person under the jurisdiction of the country of dispatch who arranges the shipment shall ensure that the waste is accompanied by the document contained in Annex VII;
- the document contained in Annex VII shall be signed by the person who arranges the shipment before the shipment takes place and shall be signed by the recovery facility or the laboratory and the consignee when the waste in question is received.

⁸⁰ Article 16 (c) and Article 18 (1) of Regulation (EC) No. 1013/2006









ANNEX 2. REQUIREMENTS OF THE CMR CONVENTION ON DATA

An excerpt from the CMR Convention⁸¹

Article 4

The contract of carriage shall be confirmed by the making out of a consignment note. The absence, irregularity or loss of the consignment note shall not affect the existence or the validity of the contract of carriage which shall remain subject to the provisions of this Convention.

Article 5

- 1. The consignment note shall be made out in three original copies signed by the sender and by the carrier. These signatures may be printed or replaced by the stamps of the sender and the carrier if the law of the country in which the consignment note has been made out so permits. The first copy shall be handed to the sender, the second shall accompany the goods and the third shall be retained by the carrier.
- 2. When the goods which are to be carried have to be loaded in different vehicles or are of different kinds or are divided into different lots, the sender or the carrier shall have the right to require a separate consignment note to be made out for each vehicle used, or for each kind or lot of goods.

Article 6

- 1. The consignment note shall contain the following particulars:
 - The date of the consignment note and the place at which it is made out;
 - The name and address of the sender;
 - The name and address of the carrier;
 - The place and the date of taking over of the goods and the place designated for delivery
 - The name and address of the consignee;
 - The description in common use of the nature of the goods and the method of packing, and, in the case of dangerous goods, their generally recognized description;
 - The number of packages and their special marks and numbers;
 - The gross weight of the goods or their quantity otherwise expressed;
 - Charges relating to the carriage (carriage charges, supplementary charges, customs duties and other charges incurred from the making of the contract to the time of delivery);
 - The requisite instructions for Customs and other formalities;
 - A statement that the carriage is subject, notwithstanding any clause to the contrary, to the provisions of this Convention.
- 2. Where applicable, the consignment note shall also contain the following particulars:
 - a) A statement that trans-shipment is not allowed;
 - b) The charges which the sender undertakes to pay;
 - c) The amount of "cash on delivery" charges;
 - d) A declaration of the value of the goods and the amount representing special interest in delivery;
 - e) The sender's instructions to the carrier regarding insurance of the goods;
 - f) The agreed time-limit within which the carriage is to be carried out;
 - g) A list of the documents handed to the carrier.
- 3. The parties may enter in the consignment note any other particulars which they may deem useful.

Article 7

- 1. The sender shall be responsible for all costs, loss and damage sustained by the carrier by reason of the inaccuracy or inadequacy of:
- a) The particulars specified in article 6, paragraph 1 (b), (d), (e), (f), (g), (h) and (j);
- b) The particulars specified in article 6, paragraph 2;
- c) Any other particulars or instructions given by him to enable the consignment note to be made out or for the purpose of their being entered therein.
- 2. If, at the request of the sender, the carrier enters in the consignment note the particulars referred to in paragraph 1 of this article, he shall be deemed, unless the contrary is proved, to have done so on behalf of the sender.

⁸¹ United Nations (1956), Convention on the Contract for the International Carriage of Goods by Road (CMR) (un.org)









3. If the consignment note does not contain the statement specified in article 6, paragraph 1 (&), the carrier shall be liable for all costs, loss and damage sustained through such omission by the person entitled to dispose of the goods.

Article 8

- 1. On taking over the goods, the carrier shall check:
- a) The accuracy of the statements in the consignment note as to the number of packages and their marks and numbers, and
- b) The apparent condition of the goods and their packaging.
- 2. Where the carrier has no reasonable means of checking the accuracy of the statements referred to in paragraph 1 (a) of this article, he shall enter his reservations in the consignment note together with the grounds on which they are based. He shall likewise specify the grounds for any reservations which he makes with regard to the apparent condition of the goods and their packaging. Such reservations shall not bind the sender unless he has expressly agreed to be bound by them in the consignment note.
- 3. The sender shall be entitled to require the carrier to check the gross weight of the goods or their quantity otherwise expressed. He may also require the contents of the packages to be checked. The carrier shall be entitled to claim the cost of such checking. The result of the checks shall be entered in the consignment note.









ANNEX 3. REQUIREMENTS OF THE ADDITIONAL PROTOCOL OF THE CMR CONVENTION

An excerpt from the requirements for eCMRs (the Additional Protocol)82

Article 2. Scope and effect of the electronic consignment note

- 1. Subject to the provisions of this Protocol, the consignment note referred to in the Convention, as well as any demand, declaration, instruction, request, reservation or other communication relating to the performance of a contract of carriage to which the Convention applies, may be made out by electronic communication.
- 2. An electronic consignment note that complies with the provisions of this Protocol shall be considered to be equivalent to the consignment note referred to in the Convention and shall therefore have the same evidentiary value and produce the same effects as that consignment note.

Article 3. Authentication of the electronic consignment note

- 1. The electronic consignment note shall be authenticated by the parties to the contract of carriage by means of a reliable electronic signature that ensures its link with the electronic consignment note. The reliability of an electronic signature method is presumed, unless otherwise proved, if the electronic signature:
 - a) is uniquely linked to the signatory;
 - b) is capable of identifying the signatory;
 - c) is created using means that the signatory can maintain under his sole control; and
- d) is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable.
- 2. The electronic consignment note may also be authenticated by any other electronic authentication method permitted by the law of the country in which the electronic consignment note has been made out.
- 3. The particulars contained in the electronic consignment note shall be accessible to any party entitled thereto.

<u>Article 4.</u> Conditions for the establishment of the electronic consignment note

- 1. The electronic consignment note shall contain the same particulars as the consignment note referred to in the Convention.
- 2. The procedure used to issue the electronic consignment note shall ensure **the integrity of the particulars contained therein from the time when it was first generated in its final form**. There is integrity when the particulars have remained complete and unaltered, apart from any addition or change which arises in the normal course of communication, storage and display.
- 3. The particulars contained in the electronic consignment note may be supplemented or amended in the cases authorized by the Convention.

The procedure used for supplementing or amending the electronic consignment note shall make it possible to detect as such any supplement or amendment to the electronic consignment note and shall preserve the particulars originally contained therein.

<u>Article 5.</u> Implementation of the electronic consignment note

- 1. The parties interested in the performance of the contract of carriage shall agree on the procedures and their implementation to comply with the requirements of this Protocol and the Convention, in particular as regards:
- a) The method for the issuance and the delivery of the electronic consignment note to the entitled party;
- b) An assurance that the electronic consignment note retains its integrity;
- c) The manner in which the party entitled to the rights arising out of the electronic consignment note is able to demonstrate that entitlement;
- d) The way in which confirmation is given that delivery to the consignee has been effected;
- e) The procedures for supplementing or amending the electronic consignment note; and
- f) The procedures for the possible replacement of the electronic consignment note by a consignment note issued by different means.
- 2. The procedures in paragraph 1 must be referred to in the electronic consignment note and shall be readily

⁸² Additional protocol of the CMR convention, https://www.riigiteataja.ee/akt/208112016001









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<u>Article 6.</u> Documents supplementing the electronic consignment note

- 1. The carrier shall hand over to the sender, at the latter's request, a receipt for the goods and all information necessary for identifying the shipment and for access to the electronic consignment note to which this Protocol refers.
- 2. The documents referred to in Article 6, paragraph 2 (g) and Article 11 of the Convention may be furnished by the sender to the carrier in the form of an electronic communication if the documents exist in this form and if the parties have agreed to procedures enabling a link to be established between these documents and the electronic consignment note to which this Protocol refers in a manner that assures their integrity.