

INCEPTION IMPACT ASSESSMENT	
<b>TITLE OF THE INITIATIVE</b>	Electronic documents for freight transport
<b>LEAD DG – RESPONSIBLE UNIT – AP NUMBER</b>	DG MOVE - UNIT D1 - 2018/MOVE/001
<b>LIKELY TYPE OF INITIATIVE</b>	Legislative (Regulation/Directive) and/or non-legislative (e.g. Guidelines, Communication)
<b>INDICATIVE PLANNING</b>	Second quarter 2018
<b>ADDITIONAL INFORMATION</b>	A specific webpage for the initiative will be created on <a href="#">DG MOVE's website</a>
<p><b>This Inception Impact Assessment aims to inform stakeholders about the Commission's work in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options. The Inception Impact Assessment is provided for information purposes only and its content may change. This Inception Impact Assessment does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content.</b></p>	

A. Context, Problem definition and Subsidiarity Check
<b>Context</b>
<p>Information and communication technologies are widely recognised as key enablers for the development of the EU economy and quality of life improvement. In the transport sector, and particularly in freight transport, this potential remains yet to be fully unlocked.</p> <p>Consignment notes, waybills, bills of lading are documents central to freight transport operations. Also generally referred to as <i>the</i> "transport documents", they constitute the contract of carriage between senders and transporters for a defined set of goods. They accompany the goods as they move, gathering signatures and keeping a paper trail of the logistics transfer<sup>1</sup>. Their content and applicable liability regime is governed by a range of international conventions.<sup>2</sup></p> <p>Moving from paper to electronic format for these documents offers a large potential to improve the efficiency, reliability and cost-effectiveness of freight transport operations. However, this opportunity is not fully seized in the entire transport chain, as not all stakeholders accept electronic documents. Therefore, they often need to be accompanied by their paper version for controls by authorities and for exchanges with the commercial partners.</p> <p>The Commission has recognised the need for measures fostering the acceptance and use of electronic transport documents in a number of policy-setting documents: the White Paper on Transport, 2011<sup>3</sup>; the Digital Single Market Strategy, 2015<sup>4</sup>; the EU eGovernment Action Plan 2016-2020, 2016<sup>5</sup>.</p>

<sup>1</sup> It should be noted here that there are a number of documents used in transport, concerning either the goods, the means of transport or the personnel/manning. However, the term "transport documents" is predominantly associated with the documents which constitute the contract of carriage (consignment notes, waybills and bills of lading). It is these transport documents that constitute the focus of this initiative.

<sup>2</sup> As there are no specific EU laws applicable to the carriage of goods, the only uniform law applicable is the framework of international carriage conventions (a comprehensive overview is included in M. Hoeks, 2009, [Multimodal Transport Law: the Law Applicable to the Multimodal Contract for the Carriage of Goods](#)). By "transport documents" (including in electronic format) is therefore understood herein any document/set of information that comply with the provisions of any of these international conventions. It is also important to note that the electronic format may not necessarily take the form of a "document", i.e. the electronic visual rendition in a word, excel or pdf document, but any structured set of data that comprise the sum of information to be contained by the "document" and as specified by a governing international convention.

<sup>3</sup> [COM/2011/0144](#), pp. 13, 19.

<sup>4</sup> [COM\(2015\) 192](#), pp. 82-84.

<sup>5</sup> [COM\(2016\) 179](#), p. 8.

<p><b>Problem the initiative aims to tackle</b></p>
<p>In spite of several initiatives in the past years to digitalise transport documents in each transport mode, the large majority of freight transport operations within the EU still involve the use of paper documents. Often, paper documents are used in parallel to or in combination with electronic information processing.</p> <p>This is particularly the case for multimodal and cross-border transport operations. Yet cross-border transport constitutes the backbone of the European single market, while facilitation of multimodal operations is a general EU transport policy goal with a view to enhance the efficiency of the transport system and reduce its environmental impact<sup>6</sup>.</p> <p>This missed digitalisation potential equates to unnecessary administrative burden and costs for both private (particularly SMEs) and public stakeholders, and inefficiencies in the entire transport and logistics chains<sup>7</sup>. Two main factors/drivers hamper the wider use of electronic transport documents:</p> <ol style="list-style-type: none"> <li>(1) The limited recognition of the legal equivalence of electronic transport documents by the Member States and/or their acceptance by the public authorities (and major private stakeholders such as banks and insurance companies)<sup>8</sup>.</li> <li>(2) The development of multiple and non-interoperable mode-specific and/or country-specific "models" or "standards" for IT solutions for electronic transport documents, which hinders the direct/automatic transfer of the cargo related data when the cargo changes mode of transport or a border is crossed.</li> </ol>
<p><b>Subsidiarity check (and legal basis)</b></p>
<p>The legal basis is provided by Article 91 of the Treaty on the Functioning of the European Union (TFEU), which must be understood in light of Article 90. The latter provides that Member States pursue a common transport policy; whereas Article 91 stipulates that common rules applicable to international transport to or from the territory of a Member State or passing across the territory of one or more Member States shall be laid down by the European Parliament and the Council.</p> <p>A Member State acting unilaterally to allow the use of electronic transport documents has limited effect in the absence of similar action being taken in other Member States whose territory is also concerned by the transport operations in question.</p> <p>At the same time, even if most EU Member States were to enact legislation allowing the use of electronic documents, there is a high risk that, legislating unilaterally, each Member State will adopt different requirements for electronic documents in order to be recognised as valid and authentic. In practice, electronic documents which fulfilled the requirements for acceptance in one Member State would not be accepted in the other(s).</p> <p>The most appropriate level to address the problem of insufficient exploitation of the potential of electronic transport documents is therefore the EU level, where a common approach and common standards for recognition of (validity and/or authenticity of) electronic documents can be set.</p>
<p style="text-align: center;"><b>B. Objectives and Policy options</b></p>
<p><b>Policy objectives</b></p> <p>The initiative aims to foster the electronic exchange of documents/information along the transport and logistic chains, particularly as regards multimodal and cross-border transport operations. This will enable the sector to better take advantage of the potential benefits of digitalisation. These benefits include improved reliability and cost-efficiency of transport operations, as well as increased competition and quality of services across the EU Member States and across modes.</p>

<sup>6</sup> [White Paper on Transport, 2011](#).

<sup>7</sup> [Digital Single Market Strategy](#), 2015, pp. 82-84.

<sup>8</sup> The limited acceptance of the electronic transport documents by banks and insurance companies has been indicated by some of the stakeholders surveyed in the context of the [Digital Transport and Logistics Forum](#). However, whether this constitutes a major barrier to the wider use of the electronic format for transport documents needs to be established during the process of impact assessment.

In a "business-as-usual" scenario, where the digitalisation agenda will be promoted horizontally in the context of EU's Digital Single Market strategy, but without a targeted EU initiative, Member States will continue the current trend of slow and selective recognition of the legal equivalence of electronic documents, by gradually and unilaterally adapting their legislative framework.

The actual acceptance of the electronic documents by the national authorities and institutions concerned (customs, police, sanitary and phytosanitary authorities, courts, etc.) will likely continue at an even slower and fragmented pace. It will require investment by these authorities in IT software and equipment capable of verifying basic requirements such as the authenticity and integrity of the e-documents received, as well as ensuring their confidentiality and security.

### **Policy measures**

The impact assessment will consider a number of policy options (mix of measures) for targeted EU level intervention with a view to address the two problem drivers identified above. A preliminary list of measures, grouped by area of intervention, is outlined below.

#### **(1) Addressing the lack of recognition and/or acceptance of electronic documents**

##### *1. Non-legislative measures*

Measures aimed at fostering voluntary recognition/acceptance by the Member States, in order to:

- (a) raise awareness among the Member States and the industry stakeholders of the benefits of the digitalisation of transport documents and the electronic exchange of the related information/data;
- (b) address potential Member States concerns regarding the acceptance of transport documents provided in electronic format (or the exchange of information/data using authoritative sources of information), such as authenticity and security guarantees of the data, overall legislative implications or acceptance by other Member States, costs of investments in IT systems; and/or
- (c) encourage high-influence private stakeholders such as banks and insurance companies to accept electronic documents, to stimulate wider use of the electronic format to become the predominant means for the information exchange in the private sector and thereby increase private stakeholder pressure on Member States authorities for acceptance.

Measures may include: organisation/support by the Commission of a range of dedicated events (workshops, seminars, conferences) in the framework of the Digital Transport and Logistics Forum (DTLF)<sup>9</sup> as well as wider; provision of financial support under relevant EU programmes to facilitate Member States authorities' transition towards use of electronic means for receiving and verifying transport documents data.

##### *2. Legislative measures*

Member States are required to accept electronic transport documents through an EU regulation/directive. Variants may include:

- (a) requirement to ratify/accede to existing international conventions and/or protocols that include relevant provisions on electronic documents;
- (b) include such requirement in separate, mode-specific legislation by amending existing relevant piece(s) of EU legislation and/or adoption of new ones, taking cue from the relevant provisions of these conventions/protocols;
- (c) include such requirement in a single multimodal EU piece of legislation, taking cue from the relevant provisions of these conventions/protocols;
- (d) in addition to Members States, banks and insurance companies and/or (d') transport and logistics operators are also required to accept electronic transport documents.

The EU regulation/directive would also specify the application of existing relevant EU legislative provisions on requirements for the digital exchange of information<sup>10</sup>; how these instruments, particularly

<sup>9</sup> The [DTLF](#) is an expert group set up by the European Commission in April 2015 (Decision C(2015)2259). It provides a platform where Member States and relevant transport and logistics stakeholders can exchange technical knowledge, cooperate and coordinate with a view to support measures aimed at promoting efficient electronic exchange of information in transport and logistics.

<sup>10</sup> Both horizontally applicable (i.e. cross-sectorial), such as the [eIDAS Regulation](#) on electronic identification and trust services for electronic transactions in the internal market or the Union Customs Code [legal package](#), and transport sector-

the horizontally applicable ones, such as the eIDAS regulation and the Union Customs Code, may foster the cross-border exchange of documents in a trusted environment; and how these instruments may be applied on a voluntary basis to data originating from private sector entities.

For each of the variants identified above, further variants concern the continuing use of paper documents which: (i) are still allowed to run in parallel; (ii) are not allowed after a determined transition period; (iii) are not allowed as of the day of the entry into force of the legislation.

## **(2) Addressing multiple non-interoperable standards<sup>11</sup> for electronic documents solutions**

### *1. Non-legislative measures*

Measures aimed at encouraging and supporting standardisation efforts by business and standardisation organisations with a view to ensure the interoperability of solutions, namely:

- (a) the harmonisation of the standards (such as on data format, definition of data elements) for the various mode-specific documents and (a') the harmonisation of the implementation of these modal e-solutions standards;
- (b) the harmonisation of the standards (such data format, definition of data elements) across the various mode-specific e-solution and (b') the harmonisation of the implementation of these standards;
- (c) the development/adoption of "translator" solutions which ensure the interoperability across the various mode-specific, organisation-specific and country-specific e-solutions;
- (d) the development/adoption of standard(s) for e-solutions for a single multimodal document.

Measures may include: continue to use the Digital Transport and Logistics Forum as a forum for dissemination of updates on ongoing standardisation work by business and standardisation organisations, and on developments at EU level as regards policies, legislation and funding in the field of digitalisation; continue to support work within the DTLF with a view to map standards, assess gaps and develop options for ensuring harmonisation of standards, including development of guidelines for implementation to be adopted by the industry; encourage industry groups to build on and complement the work carried out within the DTLF; adopt non-binding measures (such as guidelines, recommendations) to further support harmonisation efforts; provide EU funding for pilot and flagship projects as well as other coordination initiatives at EU level to support development and deployment of interoperable e-solutions.

### *2. Legislative measures*

A set of (a) standards or (b) minimum general requirements for solutions for electronic transport documents are provided through an EU regulation/directive.

Depending on the degree of standardisation and/or interoperability among existing standards, the provisions for standards/minimum general requirements may cover: (i) mode-specific solutions only for certain modes (e.g. road), with provisions for interoperability of solutions across modes; (ii) mode-specific solutions for all transport modes, with provisions for interoperability of solutions across modes; (iii) solutions for a single multimodal transport document.

The **policy options** to be considered will include different combinations of the various measures and their variants as outlined above. However, the range of measures identified here is not exhaustive, and the impact assessment study which will inform this policy initiative, and which will take into account the stakeholder consultation to be conducted in the context of the impact assessment, may lead to the identification of additional measures.

The impact assessment will take special focus on **administrative costs**, in particular for **SMEs**, and the possibilities to reduce these via the use of electronic documents. A large number of transport and logistics sector operators, particularly in the road and inland waterways transport, are SMEs<sup>12</sup>.

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specific such as the [TAF TSI specifications](#) on electronic exchange of information on freight transported by rail or the [Reporting Formalities Directive](#) on standard electronic transmission of information for maritime transport.

<sup>11</sup> By "standard" is herewith understood a set of technical specifications concerning the technology, method or format for a given electronic document solution.

## C. Preliminary Assessment of Expected Impacts

### Likely economic impacts

- *Sectoral competitiveness*

The use of digital rather than paper documents is estimated to have a number of benefits with a direct impact on a transport and logistics company's costs and quality of its services, and therefore its competitiveness. Such impacts include: lower handling costs (up to three to four times less); faster administration (thanks to reduced data entry, no paper handling, no fax/scan/letter exchanges, no paper archiving, etc.); faster invoicing; data accuracy; real-time access to the information and to proof of pick-up and delivery; automatic translation; etc.<sup>13</sup>

Moving to electronic transport documents will involve costs for the companies (as well as for the public authorities), insofar as they need to acquire the supporting IT software and services, possibly, hardware equipment. As regards hardware, costs can be anticipated to be limited insofar as, in most cases, existing hardware equipment can be used (computers, tablets, smartphones); and even when the acquisition of new/additional ones would be needed, their use will not be limited to the management of electronic transport documents.

- *Technological development / Digital economy*

The EU wide recognition and acceptance of electronic transport documents will significantly boost their uptake by the private stakeholders, generating an EU-wide market for e-documents digital solutions and related services.

- *Competition*

In addition, the establishment of EU-wide standards/requirements ensuring the interoperability of the various e-transport documents solutions will allow for higher competition among the solutions providers and further drive down the costs for acquiring and maintaining the underlying systems. This will eventually enable even the smallest companies to afford acquiring them, thus ensuring a higher level playing field among the transport operators and logistics services providers.

- *Increased innovation and research*

Likewise, this markedly enlarged market for interoperable e-documents solutions will further encourage the use of innovative technologies such as blockchain and artificial intelligence to generate higher quality solutions. It will also encourage the development of innovative services drawing on the larger availability of digital data, as well as innovative infrastructure solutions to enable efficient, secure and reliable digital information exchange, including with the implementation of the "once-only" principle. This should generate increased start-up activity and research projects.

- *Impacts on SMEs and SMEs' growth*

As highlighted above, the SMEs are likely to be proportionally more positively impacted by measures that would foster the use of transport documents in electronic format. That would be particularly the case for the impacts on the reduction of company administrative costs, as administrative costs tend to represent a higher percentage of total costs for the smaller businesses. Furthermore, it would boost their competitiveness, as the ease of reuse of higher accuracy data would enable them to offer a wider array of services and higher service quality. Currently, the large majority of SMEs do not use digital solutions.

<sup>12</sup> Calculations based on Eurostat data suggest that more than 99% of all enterprises in the road haulage and inland waterway transport business are SMEs.

<sup>13</sup> As reported in a [joint paper](#) by the Association of European Vehicle Logistics (ECG) and International Road Union (IRU), the global industry association for road transport. According to the same paper, BLG Automotive Logistics (a large German logistics company) estimates that costs related to paper consignment notes constitute 1.5% of the company's total costs. The switch to a digital CMR bring about EUR4.50 savings in administrative costs per road consignment note (CMR), according to independent studies in the Netherlands. According to estimates by Netherlands' leading association for road transport companies and logistics service providers (Transport en Logistiek Nederland), the use of e-CMR instead of the 40 million paper CMR consignment notes currently used each year in the Netherlands for cross-border road transport, could generate saving on the administrative costs alone up to EUR 180 million annually with e-CMR.

<p><b>Likely social impacts</b></p> <ul style="list-style-type: none"> <li>• <i>Employment</i> Direct job creation or reduction in the transport and logistics sector is likely to be limited, insofar as digitalisation of transport documents aims at rendering existing processes and operations more efficient, safer and reliable. Nonetheless, insofar as it is expected to generate higher competitiveness and enable new services, a certain degree of new job creation can be expected.</li> <li>• <i>Working conditions</i> Improvement in working conditions can also be expected, insofar as tedious and repetitive tasks such as manual copying of data for either paper or digital form filling, paper filing and archiving will be markedly simplified with significant impact particularly on the workload.</li> <li>• <i>Crime, Terrorism and Security</i> Digital storage and exchange of cargo information allows for easier tracking and tracing and facilitates checking by the authorities. The latter would, for example, have access at any time to information regarding what cargo is transported, from whom to whom, by whom and on what routes. This will facilitate their decision to check what may look as suspicious operations, while being able to choose to skip controls for those operations ordered/conducted by shippers/operators with a good track record. Another benefit that can be envisaged already at this point is the possibility of immediate transmission of the cargo data to the safe and rescue brigade in case of accident, which could thus arrive at the place of accident with better awareness of and preparedness for what they might be faced with.</li> </ul>
<p><b>Likely environmental impacts</b></p> <p>Two major industry associations estimate that, only in the road sector, about 16.5 million vehicles transported 33 million sheets of paper used for road consignment notes alone, representing 135 tonnes of wood each year<sup>14</sup>. Even when assuming that, in the context of the other transport modes, the amount of paper documents involved (i.e. physically filled-in, carried on-board of vehicles and or/circulated among the various actors involved in the logistics chain, scanned/copied, archived and eventually binned) is no greater or smaller than in road transport, the impacts in natural resources saving, as well as the reduction in related greenhouse gases can nonetheless be considered as significant.</p>
<p><b>Likely impacts on fundamental rights</b></p> <p>Transport documents contain both personal data and commercially (but also security – as for dangerous or special cargo) sensitive data related to the cargo transported and its route. Therefore, any standards/technical requirements that would be promoted under this initiative would need to take into account also the need for adequate levels of protection. The impact assessment will therefore address in this context issues such as data security, governance, and access.</p>
<p><b>Likely impacts on simplification and/or administrative burden</b></p> <p>The use of electronic instead of paper transport document is expected to have significant impact on the reduction of administrative burden for the private stakeholders, and particularly for SMEs. As highlighted earlier, digital management and transmission of data/documents greatly facilitates their administration, including responding to verification requirements by public authorities. The same positive impacts on administrative costs reduction due to simplified document management are expected for the public authorities as for the private actors.</p>
<p style="text-align: center;"><b>D. Data Collection and Better Regulation Instruments</b></p>
<p><b>Impact assessment</b></p> <p>An impact assessment analysis will inform the Commission's decision on the preferred policy option for the initiative.</p>
<p><b>Data collection</b></p> <p>Information and data are already available from previous and on-going R&amp;D projects such as e-<a href="#">Freight</a>,</p>

<sup>14</sup> ECG-IRU [joint paper](#) on e-CMR.

[FreightWise](#), [DiscWise](#), [Integrity](#), [Cassandra](#), [iCargo](#), [Comcis](#), [e-Manifest](#), [Aeolix](#), [e-CMR](#), [TOOP](#), [TransformingTransport](#).

Further information was collected in the frame of the e-Freight initiative public consultation and impact assessment report. In addition, data has also been collected in the framework of the [Digital Transport and Logistics Forum](#) expert group activity, which is also expected to continue to support the Commission in gathering necessary data in the context of this impact assessment.

A contract will be launched to support the impact assessment process, with a tendering process during the second quarter of 2017.

#### **Consultation strategy**

The consultation will aim to provide the transport and logistics stakeholders and the wider public with the opportunity to express their views on all elements covered by the impact assessment, as well as gather specialised input on barriers to use of electronic transport.

Among the stakeholders, the following groups can be distinguished: national authorities (ministries and their agencies, courts) in Member States, European Economic Area countries (Iceland, Liechtenstein and Norway), EU candidate countries and Switzerland; freight transport and logistics operators, and as represented by national, European and/or international associations; shippers (i.e. companies and groups shipping the goods) and as represented by national, European and/or international trade and business associations; banks; insurance companies; professional consultancies; software providers (companies and groups); academia, research institutes and think tanks; NGOs; citizens.

In order to achieve a balanced and comprehensive coverage of stakeholders, both open and targeted consultation methods will be used. Different sets of consultation tools will be used to target different type of stakeholders (i.e. organised and non-organised).

Large groups of stakeholders have already been consulted on different occasions including freight transport clients, logistic service providers, transport operators, freight forwarders, infrastructure and network managers, regulators, national authorities, in the context of the e-Freight initiative (public online consultation and stakeholder workshop, 2013), the eMaritime conference (2012), the Logistics conference (2013), the Digital Transport and Logistics Forum (2016, 2017).

An open public consultation as well as targeted consultations and stakeholder workshops (dedicated to the private stakeholders, and respectively, Member States) are foreseen to be conducted, starting from the last quarter of 2017. The open public consultation will be open for at least 12 weeks, and it will be accessible in all EU official languages both via [DG MOVE's consultation webpage](#) and Commission's central [Contribute to Law-making](#) page.

Impact on SMEs is an important aspect of this initiative. They will have the opportunity to provide their views both through the open public consultation and targeted consultation activities, including an SME panel with the assistance of the [European Enterprise Network](#). Stakeholders will also continue being consulted and informed in the framework of the [Digital Transport and Logistics Forum](#).

The results of all consultation activities will be summarised in a synopsis report, to be made publicly available.

#### **Will an Implementation plan be established?**

An implementation plan will be considered, in relation to the preferred option identified.