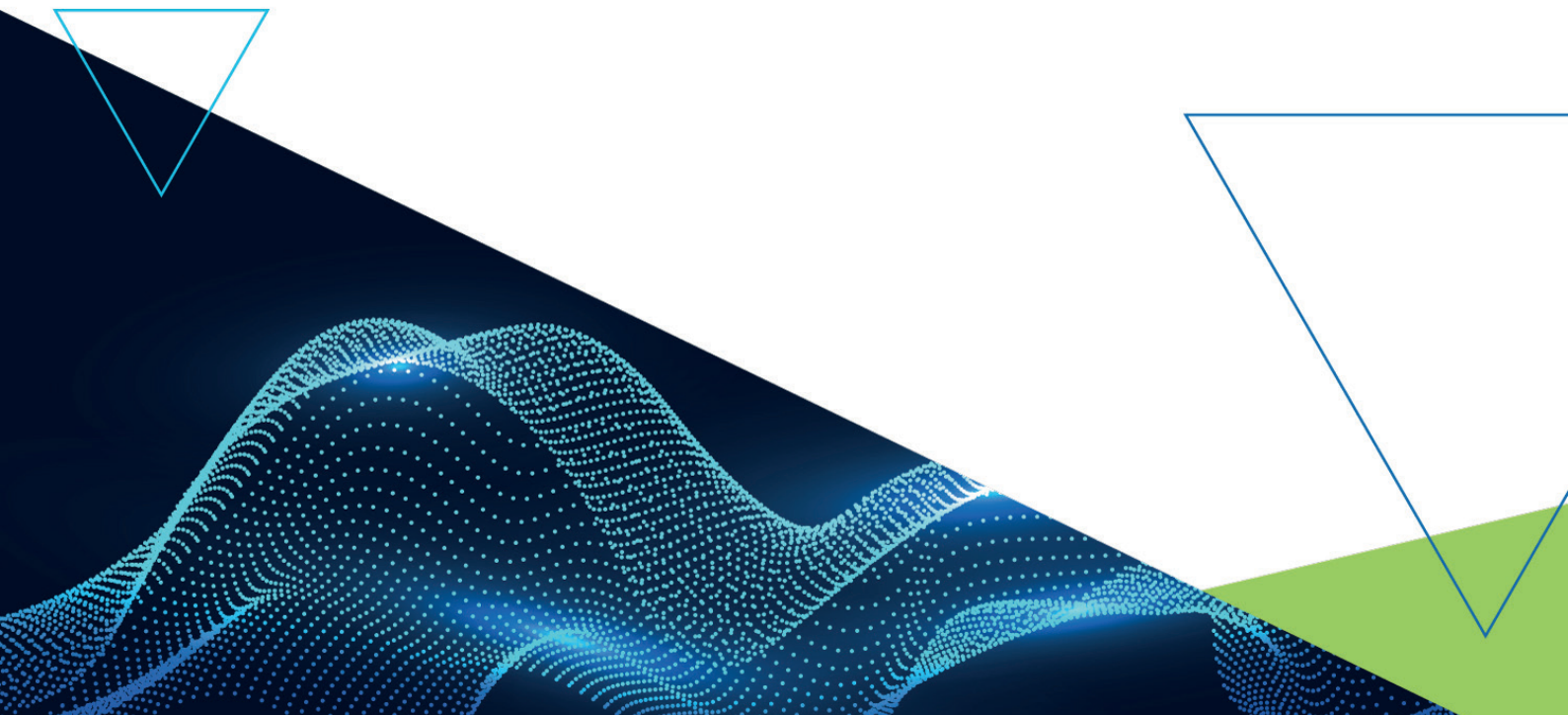


# ELECTRONIC DOCUMENTS OF TRADE IN GERMANY

## LEGAL REFORM AND DEDICATED REGULATION TO FACILITATE PAPERLESS TRADE

---

Creating a Modern Digital Trade Ecosystem;  
Cutting the Cost and Complexity of Trade



## I. Management summary

German Law generally allows the usage of electronic documents of title. Digital opening clauses for several electronic documents have been introduced into the law due to the review of the German Commercial Code in 2013.<sup>1</sup> However, there is still a need for legal reforms as not all documents of international trade are allowed to be issued electronically, and the existing regulation does not provide for clear technical guidance on how to implement legally compliant electronic documents. In general, the legal situation in Germany could be described as follows:

- » **German law allows the usage of electronic bills of lading (Konnossement), consignment notes (Ladeschein), warehouse receipts (Lagerschein), waybills and sea waybills (Frachtbriefe und Seefrachtbriefe).**
- » **However, German companies are hesitant to use electronic documents due to unclear legal wording and a lack of technical guidance.**
- » **Regarding the above mentioned documents, Germany is compliant with the ML-ETR.**
- » **German law does not allow negotiable transport insurance certificates and electronic bills of exchange and promissory notes.**
- » **German law offers straightforward opportunities to regulate the essential details of electronic documents based on existing regulatory powers. It is highly recommended to implement this regulation.**

## II. Digital opening clauses for electronic documents of transport

Germany intended to incorporate the Rotterdam Rules' attempt of digitizing international trade using the principle of functional equivalence and exclusive control. The law allows the electronic form for bills of lading (sec. 516 (2) HGB), warehouse receipts (sec. 475c (4) HGB) and consignment notes (sec. 443 (2) HGB). In addition, the usage of electronic waybills (sec. 408 (2) HGB) and sea waybills (sec. 526 (4) HGB) is allowed; however, these are not documents of title. The legislator chose the same wording for each document. All cited sections are worded alike:

An electronic record having the same functions as the document shall be deemed equivalent to the document, provided that the authenticity and integrity of the record are assured (electronic document).

However, the German legislator has - up to now - failed to adopt statutory instruments specifying the details concerning the issuance, presentation, return of electronic documents in accordance with the relevant provisions.

### III. Functional equivalence as guiding principle

The wording is technology neutral.<sup>2</sup> It only requires equivalence between the electronic record and its paper-based predecessor. However, the relevant sections do not set out an explicit guidance as to what functions the electronic record must be able to perform. Thus, statutory law must be examined to identify the legal functions of these documents. Taking the bill of lading as an example, it serves the following functions;

- » **Evidence (sec. 514, 517 HGB<sup>3</sup>):** evidence, of the contract of carriage and that the goods have the described quality and quantity when they were handed to the carrier;
- » **Legitimation (sec. 519 HGB<sup>4</sup>):** the consignee of the b/l is deemed to be its rightful holder;
- » **Blocking/exclusivity (sec. 519 HGB):** only the rightful holder may exercise the rights incorporated into the b/l;
- » **Documents of title (sec. 524 HGB):** the transfer of the bill of lading has, for the purpose of the acquisition of ownership and other rights, the same effect as the physical handover, i.e. the transfer of possession of the goods;<sup>5</sup> it should be noted that in order to transfer ownership/title of a moveable object under German law, the transferor is to pass (direct/indirect/constructive) possession to the transferee. According to sect 524 HGB: “the transfer of a bill of lading to the consignee identified therein shall have the same effects, in terms of the acquisition of rights to the goods, as does the delivery of the goods for carriage. The same shall apply to a transfer of the bill of lading to third parties.”

In addition, the electronic record of the b/l must provide authenticity and integrity – though the statute does not give further details about how this

is to be done or about the level of IT-security. The German legislator left these questions open on purpose to create a “regulatory sandbox” for companies creating their own systems meeting these requirements.

Documents of title do require a hand-written and signed document, but not necessarily an individual signature of the carrier or warehouse operator. In accordance with the specific rules for letters of credit in international trade (Art. 17 UCP 600), facsimile signatures or stamps are sufficient to accelerate modern mass transportation.<sup>6</sup> In addition, the German legislator made clear that an electronic signature did not have to be a qualified electronic signature in the meaning of Art. 3 Nr. 12 eIDAS-Regulation, as the procedure was considered too complex and cost intensive and thus would counteract the acceleration of international trade.<sup>7</sup>

Part of the functional equivalence of the electronic record is the transferability of the record itself and the incorporated rights therein. If the document has been issued in favour of a named consignee (“straight bill of lading”), a transfer of title to a third party by virtue of an endorsement of the document is not possible, but a normal assignment of the incorporated rights is. The difference between an endorsement and an assignment is that the assignee does not become legitimized holder of the document but has to prove the assignment. To transfer the incorporated right, the consignee must assign these rights to a new consignee and hand over the document itself. In this case, the document still contains the name of the old consignee which must not be altered.

If the document has been issued in favour of the possessor, transfer of title is achieved by following the ordinary rules of Germanys property law. One

<sup>1</sup> BT-Drs. 17/10309.

<sup>2</sup> See for a detailed analysis: Saive, *Das elektronische Konnossement*, 2020.

<sup>3</sup> **Section 514 „Shipped“ bill of lading and „received-for-shipment“ bill of lading**

(1) A bill of lading shall be issued as soon as the Contractual Carrier<sup>65</sup> has received the goods. By virtue of the bill of lading, the Contractual Carrier confirms receipt of the goods and accepts the obligation to carry them to their destination and to deliver them to the person entitled to claim under the bill of lading against surrender of the bill of lading. [...]

**Section 517 Evidentiary effect of the bill of lading**

(1) A bill of lading shall establish the presumption that the Contractual Carrier has received the goods in the state described pursuant to Section 515 (1) numbers 7 and 8. If the description given therein refers to the contents of a closed load device, then the bill of lading shall establish the presumption set out in the first sentence only if the Contractual Carrier has inspected the contents and the results of said inspection have been recorded in the bill of lading. If the bill of lading does not provide any information regarding the apparent order and condition of the goods, then the bill of lading shall establish the presumption that the apparent order and condition of the goods were satisfactory at the time the Contractual Carrier received them.

<sup>4</sup> **Section 519 Entitlement to claim under a bill of lading; legitimation**

[...] The legitimate holder of a bill of lading is, for his benefit, presumed to be the person entitled to claim under the bill of lading. [...]

<sup>5</sup> It has long been disputed in jurisprudence how exactly the document of title- function is integrated into the existing structure of property law; see Eckardt, *The Bolero Bill of Lading under German and English Law*, 2004, p. 101 et seq. and Saive, *Das elektronische Konnossement*, 2020, p. 18-20 for an overview of the theories. However, the dispute is of little relevance to the question of digitization, so that it will not be presented here.

<sup>6</sup> BT-Drs. 17/10309, S. 93.

<sup>7</sup> BT-Drs. 17/10309, S. 93.

could say that the incorporated rights in the document follow the rights to the paper. To transfer the ownership of the paper (and the incorporated rights) parties must agree on the transfer of ownership and pass over the document physically so that the old consignee loses all possessory rights, and the new consignee receives possessory rights on the document itself.

If the document has been issued to the order of the shipper or the consignee – which is the most common way – sec. 363 ff. HGB apply which say that the rights under the document can be transferred by endorsement. However, these provisions do not contain own rules about the technical aspects of the transfer by endorsement but refer to the Art. 13, 14, 15 and 40 of the German Bills of Exchange Act (Wechselgesetz – WG).

The digital opening clauses allow the usage of electronic documents of title if the electronic record is deemed to be functionally equivalent. As the title-function is part of the functions to be recreated, the transfer of title must also be possible. However, neither the German property law nor the German Bills of Exchange Act have been amended accordingly in 2013 or thereafter. Given that the legislator did not want to preempt technological development and thus only stipulated the opening clause discussed above, not amending the Bills of Exchange Act was a logical step. However, the un-amended act is a hurdle to the use of electronic documents of title issued to order. Therefore, an analogous application of the Bills of Exchange Act is necessary to allow at least for electronic documents of title to be issued “to order”.<sup>8</sup> Key part of the analogous application is the replacement of “possession” of the physical paper by “exclusive control” over the electronic record and the replacement of the written form of the endorsement by advanced electronic signatures.<sup>9</sup>

## **IV. Compliance with ML-ETR**

Regarding bills of lading, warehouse receipts and consignment notes, the German principle of functional equivalence is in line with the provisions of the ML-ETR. Without expressly saying, it covers all requirements set out in Art. 10 and 11 ML-ETR:

1. The German approach is as technology neutral, as the ML-ETR itself.

<sup>8</sup> See in detail: Saive, *Das elektronische Konnossement*, 2020, S. 59 ff; cf. Eckardt, *The Bolero Bill of Lading under German and English Law*, 2004, p. 159.

<sup>9</sup> See in detail: Saive, *Das elektronische Konnossement*, S. 59 ff and Eckardt, *The Bolero Bill of Lading under German and English Law*, p. 140-162.



2. All electronic records under German law must contain the **relevant information** as it would be required in a transferable document, Art. 10 lit. a ML-ETR. If they fail to do so, the electronic record does not meet the minimum requirement of German law.
3. The **reliable method** described in Art. 10 lit. b and Art. 11 ML-ETR corresponds with the German requirement of authenticity and integrity of the record. In this context, it must be always ensured, in accordance with the current state of the art, by means of advanced electronic signatures as defined in Art. 26 of the eIDAS Regulation, that only one legal entity or natural person is authorized to use the electronic bill of lading and that the information contained therein cannot be changed without authorization.<sup>10</sup>
4. The **electronic endorsement** of bills of lading, warehouse receipts and consignment notes as it is required by Art. 15 ML-ETR is allowed under German law.
5. German law does allow the **change of medium** (switch from electronic record to paper and vice versa) as long as it is ensured, that only one legally valid and binding copy of the document exists.

## V. Non-compliance regarding transferable electronic transport insurance certificates

German law does not allow the issuance of transferable electronic transport insurance certificates. In general, insurance certificates (or insurance policies) fall under the scope of sec. 55 (1) of the German Insurance Contract Act (Versicherungsvertragsgesetz – VVG). While sec. 209 of the VVG states that the VVG does not apply to marine insurance, the marine insurance contract is equivalent to the marine insurance policy within the meaning of Section 55 of the VVG.<sup>11</sup>

Pursuant to § 363 (2) HGB, only the transport insurance certificate may be issued to order, thus being negotiable or transferable. However, the German Commercial Code lacks specific rules corresponding to the aforementioned digital opening clauses for the transport documents of title which would allow the digitalization of transport insurance certificates. Sec. 363 (2) HGB provides an exhaustive list of documents which may be issued to order. This stipulates the *numerus clausus* of transferable documents of transport:<sup>12</sup> Bills of lading, consignment bills, warehouse receipts and transport insurance policies can be issued to the order. It is

<sup>10</sup> Saive, *Das elektronische Konnossement*, S. 39.

<sup>11</sup> BGH, Urt. v. 24.5.1962 – II ZR 199/60, NJW 1962, 1436.

noteworthy that in the course of the reform of the maritime trade law in 2013, the legislator introduced the electronic issuance of consignment notes in § 443 para. 3 HGB, warehouse receipts in § 475c para. 4 HGB and bills of lading in § 516 para. 2 HGB as well as waybills and sea-waybills (§ 408 para. 3 HGB and § 526 para. 4 HGB). The lack of a special regulation for electronic transport insurance certificates therefore speaks for a deliberate decision by the legislator to forego their digitalization. An (overall) analogy of sections 443 (3), 475c (4) and 516 (2) of the German Commercial Code (HGB) is probably ruled out for the simple reason that these are special provisions that cannot be used by way of analogy.

## **VI. Non-compliance regarding bills of exchange and promissory notes**

German law does not permit the usage of electronic bills of exchange and promissory notes. These documents must still be produced in writing. Both documents fall under the scope of the German Bills of Exchange Act (Art. 3 (1) and (2) Bills of Exchange Act).

Art. 1 Nr. 1 WG requires a deed, (“Urkunde”) to be issued. German statutory law does not further define this term, but it is agreed that a deed requires written form and excludes the usage of electronic means.<sup>13</sup>

## **VII. Legal reform and dedicated regulation**

To enable the digitization of all the documents mentioned and to overcome the legal unclarities and to simplify the use of electronic documents, three regulatory measures are necessary.

1. Issue the dedicated regulation to govern the details of electronic documents of transport;
2. Allow the usage of negotiable electronic transport insurance certificates and
3. Allow the usage of electronic bills of exchange and promissory notes.

### **1. Enact the dedicated regulation on electronic documents of transport**

<sup>12</sup> Moussa, in: BeckOK BGB, Stand: 15.7.2021, § 363, Rn. 1.

<sup>13</sup> Baumbach/Hefermehl/Casper, in: Baumbach/Hefermehl/Casper, Wechselgesetz, Scheckgesetz, Recht des Zahlungsverkehrs, 24. Aufl. 2020, Art. 1 WG, Rn. 1; Werner, in: Hoeren/Sieber/Holznagel, Handbuch Multimedia-Recht, 56. Ergänzungslieferung Mai 2021, Teil 13.5, Rn. 121; Peters, in: Schimansky/Bunte/Lwowski, Bankrechts-Handbuch, 5. Aufl. 2017, Rn. 1.

Unfortunately, Germany's legislative sandbox for electronic documents of transport did not have the desired effect. Instead of facilitating the introduction of electronic documents the law's lacking clarity of "how-to" create and use electronic records created a big hurdle for digitization. Companies coming up with their own systems for the risk of a court decision dismissing functional equivalence of the used method, thus failing to meet the requirements of an electronic record. If a system fails functional equivalence, it cannot create valid documents of title. Thereby the companies' investments would be wasted.

This situation could be overcome by the legislator using its power to adopt a specific regulation for electronic transport documents to lay down the details of these electronic records:<sup>14</sup>

The Federal Ministry of Justice and Consumer Protection is hereby empowered to determine by regulation, issued in agreement with the Federal Ministry of the Interior and not requiring the consent of the Federal Council (Bundesrat), the details of issuing, presenting, returning and transmitting an electronic document, as well as the particulars of the process of posting retroactive entries to a document.

### **a) Define legal terms using the MLETR**

The Regulation should regulate the requirements for all transport documents in a uniform manner, regardless of whether they are documents of title or not. This way, one technical solution can be used equally for all electronic records. Besides, this creates interoperability between different documents and different technologies. Uncertainties remain as to which legal requirements exist at all through the electronic recording of such an electronic transport document. Even the pairs of terms used, "electronic record", "the same functions" and "authenticity and integrity", are open to interpretation. This interpretation should be anticipated in a unified way by the draft regulation. First and foremost, the UNCITRAL Model Law on Electronic Transferable Records (MLETR) requirements should be considered. Where the MLETR contains more detailed provisions, for example, the definition of an electronic record in Art. 2 MLETR, reference should be made to these concepts. The same applies to the requirements

<sup>14</sup> See sec. 408 (3); 443 (3); 475c (4); 516 (3) and 526 (4) German Commercial Code.



for transferring an electronic document and how to achieve control over it. Here, recourse should be made to Art. 10 and Art. 11 MLETR.

## **b) Provide technical minimum requirements**

However, where the MLETR leaves it at vague requirements, recourse should be made to other harmonized international trade rules. In particular, the requirements of the documentary credit, especially UCP 600 and eUCP v. 2.0, of the insurance industry, and general transport law should be considered. Especially waybills are increasingly being used for cabotage controls. Thus, there should be anticipatory harmonization with the eFTI Regulation (EU) governing the mandatory electronic information exchange between transport companies and public authorities in the EU.

In addition, the requirements for a technology that seeks to implement functional equivalence are unclear. Specifically, this involves the question of file formats, encryption methodologies and access authorization. The regulation must manage the balancing act of providing clarity without compromising the legislator's technology-neutral approach. For example, a referral could be made in that way, that the usage of advanced electronic signatures in the meaning of Art. 26 eIDAS<sup>15</sup> is sufficient to fulfil the formal requirements of authenticity and integrity of the electronic record. Nevertheless, the regulation should only set minimum standards. The party that bears the burden of proof in court should thereby be facilitated without restricting the legislator's technology-neutral approach.

## **2. Introduce electronic insurance certificates**

Paperless trade calls for electronic insurance certificates. These are an elementary part of the letter of credit business. When introducing electronic transport insurance certificates to the German Law, it is, therefore, essential to consider the requirements of Art. 28 UCP 600 and the provisions of the eUCP. In addition, care must be taken to ensure that this electronic record is oriented towards the realities of international insurance law.

<sup>15</sup> REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

### **3. Amend the Bills of Exchange Act**

The general extension of the Bills of Exchange Act to electronic records would achieve two things. On the one hand, it would allow the use of electronic bills of exchange and promissory notes and on the other hand, the transfer of all electronic documents of title would be permitted without further ado.

# ACKNOWLEDGEMENTS

The paper was commissioned by ICC Germany with support from ICC United Kingdom and drafted by Dr. iur. David Saive, Research Associate at the Interdisciplinary Centre for Law of the Information Society, University of Oldenburg. The paper supports, 'Germany - Creating a Modern Digital Trade Ecosystem, Cutting the Cost and Complexity of Trade, Reforming Laws and Harmonising Legal Frameworks'.

We would like to thank the following organisations for supporting this project.



A special thank you to Huawei Technologies Ltd. for funding the project.



## NOTE:

*This project is part of wider, ICC global programme making the case for legal reform. The programme has multiple research commissioners, project funders and institutional partners.*