Law Commission
Reforming the law

Digital assets: electronic trade documents

A consultation paper

Consultation Paper 254

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30 April 2021

This publication is available at https://www.lawcom.gov.uk/project/electronic-trade-documents/.

THE LAW COMMISSION – HOW WE CONSULT

About the Law Commission: The Law Commission was set up by section 1 of the Law Commissions Act 1965 for the purpose of promoting the reform of the law. The Law Commissioners are: The Rt Hon Lord Justice Green, Chair, Professor Sarah Green, Professor Nicholas Hopkins, Professor Penney Lewis, and Nicholas Paines QC. The Chief Executive is Phillip Golding.

Topic of this consultation: Proposals to allow for the digitalisation of documents used in trade, the "possession" of which is significant to their operation. Examples include bills of exchange and bills of lading.

Geographical Scope: This consultation applies to the law of England and Wales.

Duration of the consultation: We invite responses from 30 April to 30 July 2021.

Responses to the consultation may be submitted using an online form at: https://consult.justice.gov.uk/law-commission/electronic-trade-documents/. Where possible, it would be helpful if this form was used.

Alternatively, comments may be sent:

By email to electronictrade@lawcommission.gov.uk

OR

By post to Commercial and Common Law Team, Law Commission, 1st Floor, Tower, 52 Queen Anne's Gate, London, SW1H 9AG.

If you send your comments by post, it would be helpful if, whenever possible, you could also send them by email.

Availability of materials: The consultation paper is available on our website at https://www.lawcom.gov.uk/project/electronic-trade-documents/.

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After the consultation: We will analyse the responses received and undertake further stakeholder engagement as appropriate. We will update the text of the draft Bill as necessary and publish it in a report together with our final recommendations for law reform. It will be for the Department for Digital, Media and Sport, along with other interested departments, to decide whether to implement the draft Bill.

Consultation Principles: The Law Commission follows the Consultation Principles set out by the Cabinet Office, which provide guidance on type and scale of consultation, duration,

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Glossary

Term	Definition
Assignment	The transfer of a right from one person to another.
Bailment	A bailment arises whenever one person (the bailee) takes voluntary possession of goods belonging to another (the bailor). The bailor retains ownership of the goods, but wholly divests themselves of possession in favour of the bailee. At the end of the bailment, the bailee must either return the goods to the bailor or deal with the goods as the bailor directs.
Bearer document	In a bearer document, the obligation is owed to whoever is in possession of the document. To transfer a bearer document, the bearer simply delivers the document to another party.
Bill of exchange	See from paragraph 3.21.
Bill of lading	See from paragraph 3.31.
Blockchain	A method of recording data in a structured way. Data (which may be recorded on a database or ledger) is usually grouped into timestamped “blocks” which are mathematically linked or “chained” to the preceding block, back to the original or “genesis” block.
Cargo insurance certificate	See from paragraph 3.60.
Carrier	The party transporting the goods by sea.
Charge	A type of non-possessory security interest that can be taken over an asset. The owner of the asset creates a proprietary interest in relation to that asset in favour of the person who takes the benefit of the charge.

Constructive possession	Where a person does not have factual possession of a thing, but the law nevertheless deems them to have possession of that thing.
Conversion	An action in tort for wrongful interference with possession.
Cryptoasset	A digital asset created or implemented using cryptographic techniques. There are many different types of cryptoassets and in this consultation paper we use the term in a broad sense.
Digitalisation	The use of digital technologies to change a business model.
Digitisation	The process by which information is converted into a digital format, in which the information is organised into bits.
Distributed ledger	A digital store of information or data (a “ledger”). A distributed ledger is shared (that is, “distributed”) among a network of computers (known as “nodes”) and may be available to other participants. Nodes approve and eventually synchronise additions to the ledger through an agreed consensus mechanism.
Distributed Ledger Technology (DLT)	Technology that enables the operation and use of a distributed ledger.
Documentary intangible	A document that entitles the holder to claim performance of the obligation recorded in the document and to transfer the right to claim performance of that obligation by transferring the document. The document is said to “embody” the obligation.
Document of title	A document used in the ordinary course of business as proof of the possession or control of goods, or authorising or purporting to authorise, either by indorsement or by delivery, the possessor of the document to transfer or receive goods thereby represented.

Electronic data interchange (EDI)	This refers to the exchange of digital information, where the data is structured in such a way that it can be automatically understood and acted upon by the software of the recipient system. For example, stock re-ordering systems operated by large retailers and their suppliers.
Fixed charge	A mortgage or a security over a specific asset to secure the repayment of a loan.
Floating charge	A security over a class of a company's assets or, more usually, over all of a company's assets, both present and future (for example, stock and money in bank accounts). On insolvency, the floating charge "crystallises" over the assets a company owns at that moment.
Indorsement	An annotation in writing on the back of a document of title instructing that the obligation recorded therein be performed to the order of a named person or simply "to order" (called a "blank indorsement"). This instruction must be signed and is usually completed by delivery. If the indorsement is a blank indorsement, the possessor of the document, whoever they may be, may indorse it on in their turn. If the indorsement is to a named person, any subsequent indorsement must be by that person.
Lien	A right to retain possession of a thing until a claim or debt has been satisfied.
Marine insurance policy	See from paragraph 3.56.

Negotiable/Negotiability	Negotiability converts a document from mere evidence of entitlement to claim payment of the sum recorded into an instrument that is legally deemed to *constitute* the entitlement itself. The principal feature of negotiability is that the transferee can obtain better rights to the property than the transferor had. Entitlement to claim payment is transferred by physical delivery (or, in some cases, by indorsement and delivery) of the document, provided that the transferor has the necessary intention to transfer. All documents of title are transferable, but only documents of title to money and to securities are negotiable; documents of title to goods are usually not.
Novation	A process by which the rights and obligations under a contract are taken up by a third party through the extinction and replacement of the original contract.
Obligor	The person who owes the obligation.
Order document	In an order document, the obligation is owed to a person named on the document. To transfer an order document, the person in possession of the document must indorse the document.
Permissioned DLT	A DLT system in which nodes cannot participate until they receive permission from a central administrator.
Permissionless DLT	A DLT system in which nodes do not need permission from any entity to participate in the network and propose transactions.
Pledge	A type of security interest involving a debtor (the pledgor) transferring possession of the property serving as security to a creditor (the pledgee). It is therefore a type of bailment.
Private key	Unique data that allows a participant to create digital signatures to sign transactions on a blockchain or distributed ledger system. Private keys are usually kept secret by users.
Promissory note	See from paragraph 3.27.

Shipper	The party initially in possession of goods, who is having them transported by sea (that is, having them shipped).
Ship’s delivery order	See from paragraph 3.44.
Transferable/transferability	A transferable document is one which entitles the lawful holder to claim performance of the obligation embodied in in the document. The right to claim delivery of the goods can be transferred through transfer of the document itself, but the transferee acquires no better title to the goods than the transferor had.
Warehouse receipt	See from paragraph 3.48.

List of Abbreviations

1882 Act	Bills of Exchange Act 1882
2001 Advice	Electronic Commerce: Formal Requirements in Commercial Transactions – Advice from the Law Commission (2001), https://www.lawcom.gov.uk/project/electronic-commerce-formal-requirements-in-commercial-transactions/.
ADGM	Abu Dhabi Global Market
ALI	American Law Institute
Basel III	Bank for International Settlements, *Basel III: A global regulatory framework for more resilient banks and banking systems—revised version* (June 2011), https://www.bis.org/basel_framework.
BCBS	Basel Committee on Banking Supervision
BCG	Boston Consulting Group
BIMCO	Baltic and International Maritime Council
BSI	British Standards Institute
CIF	Carriage, insurance, and freight (contract)
COGSA 1971 / 1992	Carriage of Goods by Sea Act 1971 or 1992
DCMS	Department for Digital, Culture, Media and Sport
DCSA	Digital Container Shipping Association
DLT	Distributed ledger technology
EC Report	European Commission, *State of play and barriers to the use of electronic transport documents for freight transport – final report* (Dec 2018)
ECA 2000	Electronic Communications Act 2000

ECD	Electronic Commercial Draft (China)
ECDS	Electronic Commercial Draft System (China)
EDI	Electronic data interchange
eIDAS	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
Electronic Execution Report	Electronic Execution of Documents (2019) Law Com No 386, https://www.lawcom.gov.uk/project/electronic-execution-of-documents/.
EMCRI	Electronic monetary claim recording institution (Japan)
ePU	Electronic Payment Undertaking (ITFA)
ERMC	Electronically recorded monetary claim (Japan)
ETA	Electronic Transactions Act (Chapter 88) (Singapore)
ETR	Electronic transferable record (MLETR)
FCARs	Financial Collateral Arrangements Regulations (No 2) 2003
FMLC	Financial Markets Law Committee
FOB	Free on board (contract)
ICC	International Chamber of Commerce
IGP&I	International Group of Protection and Indemnity Clubs
ITFA	International Trade and Forfaiting Association
LME	London Metal Exchange
LME Rulebook 2021	London Metal Exchange Rules and Regulations No 114 (18 March 2021), https://www.lme.com/About/Market-Regulation/Rules/Rulebook.

LME warrants	Warehouse warrants issued by the London Metal Exchange
Hague-Visby Rules	International Convention for the unification of certain rules of law relating to bills of lading signed at Brussels on 25 August 1924, as amended by the Protocol signed at Brussels on 23 February 1968 and by the Protocol signed at Brussels on 21 December 1979.
KTNET	Korea Trade Network (South Korea)
MIA	Marine Insurance Act 1906
MLETR	UNCITRAL Model Law on Electronic Transferable Records
NCCUSL	National Conference of Commissioners on Uniform State Laws
Phase 1	Our project to make recommendations to allow for the possession of trade documents in paper form, https://www.lawcom.gov.uk/project/electronic-trade-documents/.
Phase 2	Our project to review the law on cryptoassets and other digital assets more generally, https://www.lawcom.gov.uk/project/digital-assets/.
Rotterdam Rules	United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea
Singapore Act	Electronic Transactions (Amendment) Act (No 5/2021)
SMEs	Small and medium-sized enterprises
SOGA	Sale of Goods Act 1979
TEU	Twenty-foot equivalent unit
TFG	Trade Finance Global
UCC	Uniform Commercial Code (US)
UKJT	UK Jurisdiction Taskforce of the LawTech Delivery Panel
UKJT Legal Statement	UKJT, *Legal Statement on cryptoassets and smart contracts* (2019)
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business

UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
WTO	World Trade Organisation

WEBSITES

All websites referenced in this document were last visited on 27 April 2021.

Chapter 1: Introduction

1.1 International trade is worth £1.153 trillion to the UK.[1] The process of moving goods across borders in order to get them from the seller to the buyer typically involves a large multiplicity of actors including transportation, insurance, trade and/or supply chain finance and logistics service providers.[2] One transaction typically involves 20 entities and between 10 and 20 paper documents, totalling over 100 pages.[3]

1.2 Despite the size and sophistication of this market, many of its processes, and the laws underlying them, are based on practices developed by merchants hundreds of years ago. In particular, international trade still relies to a large extent on a category of documents called "documentary intangibles". Documentary intangibles are unique because transfer of the document can be sufficient to transfer the right to claim performance of the obligation which the document embodies, whether that is an obligation to pay money or an obligation to deliver goods. For example, simply handing over a bill of lading can be sufficient to give the new holder a right to the goods described in the bill.[4]

1.3 The legal rules governing these documents are premised on the idea that they are physical documents which can be physically held or "possessed". The current law in England and Wales does not recognise the possibility of possessing electronic documents; possession is associated only with tangible assets.[5] Industries using these documents are therefore prevented by law from moving to a fully paperless process. To give a sense of the enormous amount of paperwork global trade generates, consider that the world's largest containerships can carry 24,000 twenty-foot containers at any one time on any one voyage.[6] For each one of those cargoes a paper transport document is issued, and has to be processed manually to go from the shipper of the goods to the ultimate buyer at destination, sometimes through numerous intermediaries. This needs to be done using paper because the buyer is required to present the paper document when claiming the goods at the port of

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1 Department of International Trade, *UK Trade in Numbers* (February 2021), https://www.gov.uk/government/statistics/uk-trade-in-numbers; Office of National Statistics, *UK Trade: December 2020*, https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/bulletins/uktrade/december2020.

2 WTO, *Can Blockchain revolutionize international trade?* (2018) from p 17.

3 S Ramachandran, J Porter, R Kort, R Hanspal, and H Garg, *SIBOS 2017: Digital Innovation in Trade Finance: Have We Reached a Tipping Point?* (October 2017) p 3, https://www.swift.com/news-events/news/digital-innovation-trade-finance-have-we-reached-tipping-point.

4 We describe the relevant documents in more detail in Chapter 3 below.

5 See for example *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 and *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41. See further in Chapter 2 below.

6 See "Top 10 World Largest Containerships in 2021", Marine Insight News Network, 12 February 2021, https://www.marineinsight.com/know-more/top-10-worlds-largest-container-ships-in-2019/.

discharge. It has been estimated that the international trade industry generates four billion paper documents per year.[7]

1.4 This is clearly archaic, inefficient, and wholly unsuited to a world in which processes and transactions are increasingly in digital form. Allowing for electronic versions of documentary intangibles could lead to significant cost savings and efficiencies, together with improvements in information management and security.

1.5 The development of technologies such as distributed ledger technology ("**DLT**") over the past decade has made paperless trade increasingly feasible. The push for digitalisation became particularly acute in 2020 with the introduction of global restrictions on movement and human-to-human contact in response to the COVID-19 pandemic. Stakeholders pointed to the risk of delays in receipt of paper documents disrupting supply chains for essential goods such as food and medical equipment.[8]

1.6 While the pandemic forced businesses to develop rapid technical solutions, the law continues to lag behind. In a survey undertaken by the World Trade Organisation ("**WTO**") and Trade Finance Global ("**TFG**") on the impact of COVID-19 on DLT and trade,[9] they noted that "legal challenges were rated as posing a more pressing challenge than any of the other challenges". They pointed to the "lack of legal clarity and enabling regulatory framework".[10] The law of England and Wales currently enjoys a pre-eminent status as the law of choice in global commerce, but if it fails to evolve to reflect new technological possibilities, it risks losing this pre-eminence.

1.7 In this consultation paper, we set out provisional proposals for law reform to allow for electronic trade documents to have the same legal effects as their paper equivalents, provided that they meet certain requirements to enable their possession in a digital context. We include a draft Bill which would implement those proposals and provide commentary on that draft Bill. We ask consultees for their views on the provisional proposals. We also welcome views as to the way in which the draft Bill implements them. The consultation closes on 30 July 2021.

INTERNATIONAL TRADE AND TRADE FINANCE

1.8 Dr Burcu Yüksel Ripley gives a helpful overview of the parties and documentation involved in a "typical" transaction, and the involvement of paper documents:

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7 ICC, *Global Trade – Securing Future Growth* (2018) p 17, https://iccwbo.org/publication/global-survey-2018-securing-future-growth/; S Ramachandran, J Porter, R Kort, R Hanspal, and H Garg, *SIBOS 2017: Digital Innovation in Trade Finance: Have We Reached a Tipping Point?* (October 2017) p 2, https://www.swift.com/news-events/news/digital-innovation-trade-finance-have-we-reached-tipping-point.

8 ICC, *ICC memo to governments and central banks on essential steps to safeguard trade finance operations* (6 April 2020), https://iccwbo.org/content/uploads/sites/3/2020/04/icc-memo-on-essential-steps-to-safeguard-trade-finance-operations.pdf. COVID-19 restrictions could hamper the transfer between parties of paper documents due to a reduction in postal services or couriers. Staff not being physically in offices to receive, check, and process the documentation could also lead to delays.

9 WTO and TFG, *Blockchain & DLT in Trade: Where do we stand?* (October 2020), https://www.wto.org/english/res_e/booksp_e/blockchainanddlt_e.pdf.

10 WTO and TFG, *Blockchain & DLT in Trade: Where do we stand?* (October 2020) p 21, https://www.wto.org/english/res_e/booksp_e/blockchainanddlt_e.pdf.

> Export-import transactions have several interconnected phases involving international sales (as the underlying deal between exporting seller and importing buyer of the goods), transportation, insurance, payment and finance, and customs. In each of these phases, a huge amount of international trade paperwork is often issued which typically involves sale of goods contracts, commercial invoices, packing lists, certificates of inspection, export and import licenses, bills of lading, insurance policies, letters of credit and customs declarations. In the way that international trade traditionally operates, this paperwork is required to be exchanged in a physical format among several parties from different countries involved in one or more phases of transactions, such as exporting seller, importing buyer, freight forwarder, carrier, insurer, bank and custom authority. It is crucial not only to get the paperwork right but also to get the right paperwork physically delivered on time to the right party or parties.[11]

1.9 These documents are also used widely in trade finance transactions, for example using documentary credit arrangements, under which credit is advanced on the security of a documentary intangible. A letter of credit is issued in favour of the seller (the beneficiary) by an issuing bank acting on the instructions of the buyer (the applicant). Payment takes place through a nominated bank in the seller's jurisdiction. The seller is paid by the bank upon presentation of documents stipulated in the credit, if they are "conforming". Where a documentary credit is used to finance a sale, all 100+ pages of documentation generated by the transaction need to be checked for compliance manually, a highly labour- and time-intensive activity which increases the cost of credit.

THIS PROJECT

History of the project

1.10 The Law Commission published its 13th programme of law reform in 2017. This included a project on smart contracts, which we began in 2018. Our early research suggested that we would need to consider cryptoassets and other digital assets as part of this work. We identified the law's treatment of electronic documents, such as the Bills of Exchange Act 1882 ("**1882 Act**"), as a blocker to digitalisation.[12] A review of the 1882 Act and related laws was also suggested as a separate project by stakeholders.[13]

1.11 We paused our work on smart contracts pending the outcome of similar work being done by the LawTech Delivery Panel's UK Jurisdiction Taskforce ("**UKJT**"), set up in conjunction with the Ministry of Justice and chaired by the (then) Chancellor Sir Geoffrey Vos. The Law Commission's position was that once the outcome of the

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11 B Yüksel Ripley, *Transition to Paperless Trade to Mitigate COVID-19 Impact on International Trade* (2020), https://www.abdn.ac.uk/law/blog/transition-to-paperless-trade-to-mitigate-covid19-impact-on-international-trade/.

12 See the Law Commission's appearance at the All-Party Parliamentary Group on Blockchain, *Evidence meeting 6: Smart and intelligent contract overview*, 20 November 2018.

13 The Chancery Bar Association and Professor Duncan Sheehan both suggested a project to review the Bills of Exchange Act 1882 in response to our 13th programme consultation in 2016.

UKJT work was known, we would be on hand to develop that work if there was a need for law reform.

1.12 The UKJT published a Legal Statement on cryptoassets and smart contracts in November 2019 ("**UKJT Legal Statement**").[14] The UKJT concluded that, since cryptoassets are a purely "virtual" form of property, they are not capable of being "possessed" under the current law.[15] While their focus was cryptoassets, a sub-category of digital assets, their analysis and conclusions – with which we agree – are equally applicable to digital assets more generally, including the electronic documents with which we are concerned.

1.13 As we say above, this represents a significant impediment to electronic trade documents and to the broader fundamental digitalisation of the commercial and financial world including as regards cryptoassets and other digital assets. A roundtable convened by the International Chamber of Commerce ("**ICC**") in March 2020 confirmed that this was a particular area of concern for the trade and trade finance industries, and that there was a need to work to a more urgent timetable in that context.

1.14 As well as asking us to recommence our work on smart contracts,[16] Government subsequently asked the Law Commission to undertake two separate pieces of related work on digital assets:

(1) to make recommendations to allow for the possession of trade documents in electronic form ("**phase 1**"); and

(2) to review the law on cryptoassets and other digital assets more generally, including with regard to their possessibility, and consider what reforms are needed to ensure that the law of England and Wales can accommodate such assets ("**phase 2**").

1.15 This consultation paper relates only to phase 1. The two phases of our work, while distinct, involve similar legal concepts; our phase 2 work will expand upon the work undertaken in the particular context of electronic trade documents.

1.16 Given this alignment, we have published a short call for evidence on our phase 2 work at the same time as this consultation paper.[17] Consultees interested in digital assets more generally may wish also to contribute to that call, which seeks information on how cryptoassets and other digital assets are being used and dealt with and about how the law might accommodate them now and in the future. We also ask where the law might be inhibiting particular use cases, innovation, or development.

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14 UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019), https://technation.io/lawtechukpanel/.

15 UKJT Legal Statement, para 17.

16 We published a call for evidence on smart contracts in December 2020. To read the call for evidence and for more details about the current status of that project, see https://www.lawcom.gov.uk/project/smart-contracts/.

17 Digital assets call for evidence (2021), https://www.lawcom.gov.uk/project/digital-assets/. The sponsoring department for this work is the Ministry of Justice.

Terms of reference

1.17 In September 2020, the Department for Digital, Culture, Media and Sport ("**DCMS**") asked the Law Commission to make recommendations to solve the problems caused by the law's approach to the "possession" and transfer of electronic documents, and to prepare draft legislation to implement those recommendations.

1.18 Our full terms of reference are included at Appendix 1.

Territorial extent

1.19 As the Law Commission for England and Wales, we can make recommendations only for that jurisdiction and not for Scotland or Northern Ireland. There is a particular impetus for change to the law of England and Wales given its widespread use internationally.

1.20 However, much of the relevant legislation, including the 1882 Act and the Carriage of Goods by Sea Act 1992 ("**COGSA 1992**"), extends to the whole of the UK. We hope that the Government will consider implementing our proposed rules throughout the UK, after appropriate engagement with the devolved administrations.

1.21 We would be interested to hear from stakeholders if they are aware of differences in the law in either of those jurisdictions which would affect the application of our proposals, if a decision were taken to extend them to the UK as a whole.

Next steps

1.22 We seek views on our proposals and replies to our questions by 30 July 2021. Our aim is to publish final recommendations and draft legislation in early 2022. It will thereafter be for Government to decide whether or not to implement our recommendations.

1.23 We will be publishing material on our phase 2 digital assets work separately. Our aim is to publish a short call for evidence in the summer with a consultation paper, including proposals for reform, at the end of 2021.

INTERNATIONAL PERSPECTIVE AND OTHER INITIATIVES

1.24 Of course, international trade is a global concern in every sense. The transfer of goods and money across borders demands a shared recognition of the supporting processes and documentation. Almost every jurisdiction recognises the effect of paper documentary intangibles such as bills of lading (for goods) and bills of exchange (for money), together with a plethora of ancillary documentation. But few have adapted their laws to extend such recognition to electronic documents.[18]

1.25 As the WTO said in a recent paper on DLT:

> The promising potential of DLT to facilitate international trade, from customs procedures to trade finance, will only be realized if regulation evolves to support the

[18] We discuss the approaches of other jurisdictions and international organisations in Chapter 4 below.

large-scale deployment of the technology and if a globally harmonized, digitized trade environment is put in place. [19]

1.26 The WTO's paper references a range of technology projects being carried out by organisations worldwide to facilitate the digitalisation of trade documentation, from domestic and international standards bodies to private companies. While our proposals are designed to be technology-neutral,[20] it is important to be aware of the technological solutions currently in existence and in development.

1.27 In terms of the legal framework, the WTO highlights the important work done by the United Nations Commission on International Trade Law ("**UNCITRAL**"). UNCITRAL's Model Law on the Electronic Transferable Records ("**MLETR**") is an international attempt to provide a legal framework for electronic trade documentation which can be adapted and adopted by individual jurisdictions.[21]

1.28 In response to the COVID-19 pandemic and subsequent impact on trade finance, the ICC called on all governments to remove, as an emergency measure, any legal requirements for hard-copy trade documentation.[22] They further encouraged all governments to make longer-term changes to their legal frameworks to provide for electronic documents, including to consider adoption of the MLETR.

1.29 We are aware of calls for international harmonisation of laws and of the need for global recognition of electronic documents. While our proposals relate to domestic law and are designed to fit within the existing ecosystem of the law of England and Wales, we do not make them in a vacuum: our work is informed by the activities and initiatives elsewhere and intended to be compatible with them.

1.30 The law of England and Wales is a global centre for finance, innovation, and international business. It has been suggested that "if the UK can fully digitise trade documentation, it sets an important precedent across all 54 Commonwealth countries and all contracts that use English law".[23]

ACKNOWLEDGEMENTS AND THANKS

1.31 In preparing this consultation paper, we have met or corresponded with the individuals and organisations listed in Appendix 2. We are grateful to them all for allowing us to draw on their experience and expertise.

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19 WTO and TFG, *Blockchain & DLT in Trade: Where do we stand?* (October 2020) https://www.wto.org/english/res_e/booksp_e/blockchainanddlt_e.pdf.

20 We discuss this approach from para 2.58 below.

21 We explain the MLETR in more detail in Chapters 2 and 4 below.

22 ICC, *ICC memo to governments and central banks on essential steps to safeguard trade finance operations* (6 April 2020) https://iccwbo.org/content/uploads/sites/3/2020/04/icc-memo-on-essential-steps-to-safeguard-trade-finance-operations.pdf.

23 ICC, *2020 ICC Global Survey on Trade Finance* (July 2020) p 97, https://iccwbo.org/publication/global-survey/.

STRUCTURE OF THIS CONSULTATION PAPER

1.32 This consultation paper comprises seven further chapters and four appendices.

(1) In Chapter 2, we explain that the nature of the legal problem is the inability to possess intangible assets (including electronic documents) in the eyes of the law. We outline the need for reform, including a short description of the developments in technology which have made electronic trade documentation particularly viable.

(2) In Chapter 3, we explain the concept of documentary intangibles, and the different types of documents to which our provisional proposals relate.

(3) In Chapter 4, we provide an overview of international initiatives and initiatives in other jurisdictions which address the same issues.[24]

(4) In Chapter 5, we discuss in more detail the development of the concept of possession under the law of England and Wales. We then set out our central proposals for law reform: widening the applicability of possession so as to encompass electronic documents which fulfil certain criteria. The criteria are based on a review of the legal characteristics currently associated with possessable things. We also introduce the key clauses from the draft Bill.

(5) In Chapter 6, we consider the detail of how electronic trade documents could work in practice within the legal framework and identify other incidental issues in need of reform in order to facilitate their use.

(6) In Chapter 7, we consider the potential impact of our provisional proposals. We set out some of the costs and benefits, and ask consultees for more detail.

(7) In Chapter 8, we include a full list of all the consultation questions asked throughout the paper.

1.33 Appendix 1 sets out our full terms of reference for both phases of our digital assets work. Appendix 2 includes a list of all the stakeholders we have met with in the development of this consultation paper. We include an explanation of DLT in Appendix 3. Our full draft Bill is set out in Appendix 4.

THE TEAM WORKING ON THE PROJECT

1.34 The following members of the Commercial and Common Law team have contributed to this consultation paper: Laura Burgoyne (team manager); Hugo Dupree (team lawyer); William Vaudry (research assistant); and Weishi Yang (research assistant). Professor Miriam Goldby has been seconded to us from Queen Mary University of London on a part-time basis to work on phase 1 and is also a contributor to this consultation paper.

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[24] By “international initiatives” we refer to initiatives by international bodies, such as UNCITRAL. By “initiatives in other jurisdictions” we refer to initiatives taken by individual jurisdictions to reform their own law.

Chapter 2: The nature of the problem

2.1 The subject matter of this consultation paper is documents used in trade whose functionality depends on their being possessed as a matter of law.[1] There are several large-scale benefits to digitalising such documents, including significantly lower costs, increased efficiency, increased transparency, increased security, reduced errors, and greater resilience to the impact of sudden shocks such as COVID-19.[2] The problem that prevents widespread digitalisation of these documents is that the law of England and Wales – like that of many other significant trade jurisdictions around the world – does not recognise intangible things as amenable to possession. This means that electronic trade documents, which are considered to be intangible, cannot be possessed and therefore cannot presently function in the same way as their paper counterparts. We refer to this as the "possession problem".

2.2 This chapter is in four parts. First, we introduce the possession problem and explain its significant practical impact on international trade and documents. Second, we note the existence of contractual workarounds to circumvent the possession problem, but explain the deficiencies and shortcomings of these multipartite contractual frameworks. Third, and to illustrate the possibility of digitalised trade, we provide an overview of the most prominent current means of creating electronic trade documents: DLT. Finally, we set out what our provisional proposals aim to achieve, as well as the principles by which we have been guided in formulating them.

2.3 Throughout this consultation paper, and in our draft Bill, we refer to electronic versions of paper trade documents as "electronic documents" or as being in "electronic form", in preference to the terms "digital documents" and "digital form". We do so for the following reasons. First, this accords with the widespread use of the adjective "electronic" (and specifically the phrase "electronic form") in other pieces of legislation.[3] Second, it is consistent with the broad international preference to speak in terms of "electronic", rather than "digital" documents.[4] Third, "electronic" is a broader term than "digital". Whilst the latter may, strictly speaking, be a more accurate term for the types of document that we envisage meeting our provisional proposals at present, we think that a broader term is preferable given the pace of technological development. Looking to the future of documentation, the term "digital" may well be rendered outdated before the term "electronic" will be.

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1 The categories of documents with which this consultation paper is concerned are discussed in detail in Chapter 3 below.

2 These benefits and associated costs are examined in Chapter 7 below.

3 To give a broad cross-section of examples: Marriage Act 1949, s 74; Copyright, Designs and Patents Act 1988, s 56; Carriage of Goods by Sea Act 1992, s 1(5); Value Added Tax Act 1994, sch 10B; Electronic Communications Act 2000, Part II; Companies Act 2006, sch 4, Part 3; Wireless Telegraphy Act 2006, s 113; Immigration Act 2016, s 17; Taxation (Cross-border Trade) Act 2018, s 37(1).

4 For example, in the MLETR these types of document are referred to as *electronic* transferable records. Similarly, the UCC speaks of *electronic* documents of title: see §1-201(b)(16) UCC.

THE CURRENT LAW

Categories of property: the distinction between "things in action" and "things in possession"

2.4 Property can be divided into two categories: real property (interests in land) and personal property. Personal property is further divided into:

(1) things in action; and

(2) things in possession.

2.5 Under the current law a "thing in possession" is, simply, any object which the law considers capable of possession. This category includes assets which are "tangible, moveable and visible and of which possession can be taken".[5]

2.6 A "thing in action" originally described any personal property that could only be claimed or enforced through a court action.[6] Common examples of "things in action" are debts, rights to sue for breach of contract, and shares in a company.

2.7 In *Colonial Bank v Whinney*, Lord Justice Fry said: "all personal things are either in possession or action. The law knows no *tertium quid* ["third thing"] between the two".[7] As a result, the current law traditionally assumes that all objects must fall within one or other of the two categories.[8]

2.8 The authors of *The Law of Personal Property* point out that this makes things in action something of a residual category, and that:

> residual categories have a tendency to harbour miscellaneous elements and therefore to repel systematic definition. Things in action are, therefore, most accurately defined as items of personal property that are not things in possession.[9]

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5 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 1-016; and *Armstrong DLW GmbH v Winnington Networks Ltd* [2012] EWHC 10 (Ch), [2013] Ch 156 at [44]. See also Financial Markets Law Committee, *Issues of legal uncertainty arising in the context of virtual currencies* (July 2016) p 6, http://fmlc.org/wp-content/uploads/2018/03/virtual_currencies_paper_-_edited_january_2017.pdf.

6 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 4-002, citing *Torkington v Magee* [1902] 2 KB 427, 430.

7 (1885) 30 Ch D 261, 285, referring to Sir William Blackstone, *Commentaries on the Laws of England* (vol 2) p 389.

8 M Bridge, L Gullifer, K Low, and G McMeel *The Law of Personal Property* (2nd ed 2019) para 4-002. In this consultation paper, we use the terms "thing in action" and "thing in possession" instead of "chose in action" and "chose in possession". The meaning is identical. We note that some judgments have recognised a potential third category of property, such as *Armstrong v Winnington* [2012] EWHC 10, [2013] Ch 156, which held that EU carbon emission allowances could be characterised as "other intangible property", distinct from a thing in action or thing in possession. See also *A-G of Hong Kong v Chan Nai-Keung* [1987] 1 WLR 1339. 1342 where the Privy Council said: "Their Lordships have no hesitation in concluding that export quotas in Hong Kong although not 'things in action' are a form of 'other intangible property.'"

9 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 4-005.

2.9 The UKJT Legal Statement refers to the category of things in action in similar terms. Its specific focus was on cryptoassets,[10] a subclass of digital assets, which we will consider in detail in phase 2 of our work on cryptoassets and other digital assets. However, the reasoning and analysis in the UKJT Legal Statement applies to digital material in general, including electronic documents.

2.10 The UKJT Legal Statement drew a number of conclusions which are of particular relevance to the question being considered here, namely:

(1) the intangible nature of cryptoassets does not prevent them from being considered property under the current law; and

(2) as they are a purely "virtual" form of property, cryptoassets are not capable of being possessed.[11]

2.11 We agree that the UKJT's conclusion on these two points represents the current law. We also note that in the recent case of *AA v Persons Unknown,* the High Court of England and Wales adopted the reasoning of the UKJT Legal Statement, but said that "[cryptocurrencies] are neither [things] in possession nor are they [things] in action."[12] Nonetheless, in that case the court held that cryptocurrencies were a form of property.[13]

2.12 It is sufficient for present purposes to note that electronic trade documents constitute a form of property. It is not necessary for us to consider as part of this paper whether electronic documents under the current law are things in possession, things in action or, potentially, some third category of property. We will examine these issues in detail in the second phase of our work on digital assets.

Why is possession so important?

2.13 In the law of England and Wales, the traditional understanding of "possession" is that it captures a legally significant relationship between a person and an item of property. If a person has possession of a tangible object, they are generally in physical control of it; for example, holding it in their hand. For larger objects, such as goods in a warehouse, it is sufficient, for example, physically to control the key to the warehouse in order factually to possess everything inside.[14] The recognition that something can be possessed as a matter of law determines much about the legal treatment that it subsequently receives. The fact of being in possession of something is crucial to the determination of the possessor's legal rights over it.

2.14 Possession is not the same as ownership. A person can be in possession of an object that is owned by someone else. For example, if A hires a car from B, A is in possession of the car while B remains the owner. Possession is a matter of *fact.* While the possessor is not necessarily an owner, possession can have significant

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10 See the definition of "cryptoasset" in the UKJT Legal Statement, para 28.

11 UKJT Legal Statement, paras 85 and 86.

12 *AA v Persons Unknown* [2019] EWHC 3556 (Comm), [2020] 4 WLR 35 at [55], by Bryan J.

13 *AA v Persons Unknown* [2019] EWHC 3556 (Comm), [2020] 4 WLR 35 at [61].

14 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [18] and [23].

consequences in determining the legal relationship between the possessor and the thing possessed. Being able to possess a thing is therefore crucial to the exercise of certain legal rights. Conversely, if something cannot be possessed, exercising those legal rights can become extremely challenging.

The historic association between tangibility and possession

2.15 Historically, the concept of possession was used to distinguish between those things that were enforceable only against a particular party (*in personam*), and those which were enforceable against the whole world (*in rem*). If something was a "bare right", it had no existence separate from the person with the right to enforce it (hence "*in personam*"). This meant that no other party could take it or benefit from it, and its presence in the world was dependent upon there being both a party and a legal system willing to recognise it. An example of this, as we suggest above, is the right to bring a particular legal action; say, a breach of contract claim.

2.16 Something which a party possessed, by contrast, was distinct from any individual: parties could lay claim to it, but it would continue to exist whether they did or not, or indeed whether any law recognised such claims. An example of this is a bag of gold. A right in a bag of gold is good against the whole world.

2.17 A contractual right is intangible and a bag of gold is tangible. Until relatively recently, this tangible/intangible dichotomy tracked precisely the distinction between those things that exist independently and bare rights. It is perhaps not surprising, then, that tangibility became synonymous with the former, and intangibility with the latter. At a time when most personal property was tangible in form, "tangible" was a description capable in its own right of discriminating between those things which had an independent existence and those which did not. It was, however, always just a *description* and not an *explanation* of the difference between things in action and things in possession.

2.18 Unfortunately, common law development has somewhat elided these issues, and tangibility has been elevated from a *description* of those things historically amenable to possession into a *necessary criterion* for the law's recognition of amenability to possession. The authors of *The Law of Personal Property* argue that the distinction between things in possession and things in action has become, as a matter of practice, a distinction between tangible and intangible property.[15] This excludes digital material entirely from the category of things in possession. Sometimes, however, digital material has features that make it, in terms of possession, more like a bag of gold than a contractual right.[16] Failing to recognise such material as a thing in possession, therefore, makes too much of its intangibility and too little of its true functionality.

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15 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 4-005. On this point, see below at para 5.37.

16 These features are explained from para 5.43 below.

The key cases

2.19 The current relation between personal property, possession, and tangibility in the common law can therefore be summarised as follows:

(1) in order to be possessed, something must be deemed to be a thing in possession; and

(2) in order to be a thing in possession, something must be tangible.

OBG v Allan

2.20 In the landmark case of *OBG v Allan* in 2007, the House of Lords considered whether an action for wrongful interference with possession (the tort of conversion) could lie where the relevant property was intangible (in this case, the property was a set of contractual rights).[17] The court (by a three to two majority) ruled that no such action could lie because a conversion is an interference with possession and intangibles cannot be possessed.

2.21 The emphasis in the majority judgments of Lord Hoffmann, Lord Walker, and Lord Brown is that the strict liability tort of conversion applies only to tangible property. This effectively elides tangible property with things in possession. In Lord Brown's view, the opposite conclusion would amount to:

> no less than the proposed severance of any link whatever between the tort of conversion and the wrongful taking of physical possession of property.[18]

2.22 Lords Walker and Brown specifically said that expanding the tort of conversion to cover things in action would be too radical a change for the court to make. However, there was little consideration of any argument that an intangible asset could be a thing in possession. This is perhaps unsurprising given that, on the facts, the thing in question was a bare contractual right, as opposed to a digital asset with an existence independent of a legal claim.

2.23 As we speculate in Chapter 5, the court might have felt more able to make a modest expansion to conversion to cover electronic documentary intangibles, given that the law already recognises documentary intangibles in paper form as a special category of property.[19] The minority judgments appear to go further, and suggest that the tort of conversion should be extended to things in action, including bare legal rights. This is a distinction we will consider in phase 2 of our work on cryptoassets and other digital assets.

Your Response Ltd v Datateam Business Media Ltd

2.24 For our purposes, *Your Response Ltd v Datateam Business Media Ltd ("**Your Response**")* is the more relevant case.[20] The relevant question was whether a possessory lien, a form of security which requires the holder of the security to be in

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17 [2007] UKHL 21, [2008] 1 AC 1.

18 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [321].

19 From para 5.85 below. The category of "documentary intangibles" is explained in detail in Chapter 3 below.

20 [2014] EWCA Civ 281, [2015] QB 41.

physical possession of the secured property, could be exercised over an electronic database. The question of whether an intangible asset could be possessed was therefore central to the outcome.

2.25 Your Response Ltd was a magazine publisher that had built up a detailed electronic database of information about its magazines' subscribers. This information needed to be updated regularly, and Datateam Business Media Ltd had been engaged to manage the database and keep it up to date. For these purposes, the database was transferred to them. A dispute arose between the parties, and Datateam Business Media Ltd refused to give Your Response Ltd access to the database until they received payment for outstanding fees. That is, Datateam Business Media Ltd sought to exercise a lien over the database. At first instance, the judge (District Judge Bell) held that a lien could be exercised over intangible property (here, the electronic database). He said it would "not be appropriate for the law to ignore the development in the real world of record keeping moving from hard copy records into electronic media".[21] The decision was appealed.

2.26 A common law lien is "a right to continue an existing actual possession of goods (that is to say, to refuse to put an end to a bailment)".[22] In the Court of Appeal, it was argued that the database was a physical object and therefore could be subject to a lien in the same way as goods. Lord Justice Moore-Bick rejected this argument and held that the database was a form of intangible property. He therefore considered the following questions:

> What at common law is understood by actual possession, whether it is possible to have actual possession of an intangible thing, whether it is open to this court to recognise the existence of a possessory lien over intangible property and if so, whether it would be right for it to do so.[23]

2.27 The question was therefore whether the intangible property could be "possessed". Lord Justice Moore-Bick found, following *OBG v Allan*,[24] that it could not.

2.28 In particular, he rejected the argument that the database was a form of intangible property different from a thing in action and therefore that the reasoning in *OBG v Allan* did not apply:

> In my view that decision makes it very difficult to accept that the common law recognises the existence of intangible property other than [things] in action (apart from patents, which are subject to statutory classification), but even if it does, the decision in *OBG v Allan* prevents us from holding that property of that kind is amenable of possession so that wrongful interference can constitute the tort of

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21 Quoted by Moore-Bick LJ in *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [9].

22 *Tappenden v Artus* [1964] 2 QB 185, 195, by Diplock LJ.

23 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [12].

24 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1.

conversion. It follows, in my view, that it is equally not amenable to the exercise of a possessory lien.[25]

2.29 He also rejected an attempt to widen the concept of possession by reference to the concept of "control". Your Response Ltd argued that the essence of possession is physical control coupled with an intention to exclude others, and that a person can properly be said to possess something if they are able to exercise complete control over access to it. Lord Justice Moore-Bick found that control and possession were not the same and that, while control could extend to intangibles, possession could not:

> It is true that practical control goes hand in hand with possession, but in my view the two are not the same. Possession is concerned with the physical control of tangible objects; practical control is a broader concept, capable of extending to intangible assets and to things which the law would not regard as property at all. The case of goods stored in a warehouse, the only key to which is held by the bailee, does not in my view undermine that distinction, because the holder of the key has physical control over physical objects.[26]

2.30 Notably, Lord Justice Moore-Bick recognised that Your Response Ltd's arguments:

> owed a debt to a scholarly volume entitled *The Tort of Conversion*, in which Sarah Green[27] and John Randall QC make a powerful case for recognising that the essential elements of possession can be exercised over digitised materials, of which a database is a prime example. [28]

2.31 However, his Lordship did not feel able to take this step judicially, saying that it would:

> involve a significant departure from the existing law in a way that is inconsistent with the decision in *OBG v Allan*. That course is not open to us – indeed, it may now have to await the intervention of Parliament.[29]

Conclusion on the current law

2.32 We agree with the analysis of the UKJT that intangibles cannot be things in possession under the current law. To distinguish between forms of property that are amenable to possession and forms of property that are not, the law looks to the touchstone of tangibility. If a given item of property is intangible in nature, that intangibility operates as a bar to it being possessed.

2.33 This has many implications for the legal functionality and treatment of different forms of property. For instance, only things in possession are capable of being subject to a

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25 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [26], referring to *Colonial Bank v Whinney* (1885) 30 Ch D 261.

26 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [23].

27 Professor Sarah Green is the Commissioner for Commercial and Common Law at the Law Commission of England and Wales, and lead Commissioner for this project.

28 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [27].

29 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [27].

bailment, or to a lien, meaning that such things have a broader range of commercial uses than things which cannot be dealt with in this way.

2.34 As we explain in Chapter 3, the important thing about the documents with which we are concerned is, broadly speaking, that the person in possession of the document is entitled to call for performance of the obligation recorded in the document. These legal rights can usually pass from one party in possession of a document to a subsequent possessor of that document simply as a result of the transfer of the document (with any necessary indorsement). But as things currently stand, such possession is possible only in relation to paper forms of the relevant documents, and not to electronic forms of them.

2.35 In summary, therefore, the possession problem is that electronic trade documents cannot be possessed under the current law, meaning they cannot perform their salient functions in trade transactions. The origin of this blocker is the conflation of possession with tangibility. In Chapter 5, we make proposals to remove this blocker in respect of electronic trade documents.

CONTRACT-BASED ELECTRONIC TRADE DOCUMENTS

2.36 At present, only a handful of jurisdictions recognise electronic trade documents as having equivalent legal effects to their paper counterparts. The United States has achieved such recognition through amendments to the Uniform Commercial Code ("**UCC**") which have been widely adopted in individual states. Legislation has also appeared in other jurisdictions, including Australia, Germany, and South Korea. More recently, Bahrain, Singapore, and the Abu Dhabi Global Market ("**ADGM**") have adopted legislation based on the MLETR. The number of states adopting such legislation, however, remains small. We discuss these developments in Chapter 4.

2.37 Given the significant benefits to be gained from electronic trade documentation, it is unsurprising that a number of workarounds have been developed by industry where parties agree between themselves to recognise electronic documentation can have legal effects similar to those achieved by their paper counterparts. Under these workarounds, recognition of a party's legal position depends upon it signing up to a set of multipartite contractual terms. Transacting under these terms generates a set of rights that are equivalent to the rights that follow from the possession of a relevant paper trade document. Crucially, however, these rights are only binding on those parties who have signed up to the terms of a particular platform and have effectively contracted with each other to determine who will have possession throughout the transaction. In contrast, possession of a paper document such as a bill of exchange or bill of lading can give rights which are enforceable against the world.[30]

2.38 These arrangements are most developed in the context of bills of lading. Seven private technical solutions providing electronic alternatives to paper bills of lading have been approved by the International Group of Protection and Indemnity Clubs

[30] See discussion on negotiability and transferability from para 3.9 below.

("**IGP&I**"), insurance groups which underwrite risk in the industry.[31] Four of these are DLT-based systems.[32] All of these systems use multipartite contracts to achieve the same or similar effects as the issue, transfer, and surrender of paper documents such as bills of lading, some on the basis of the law of England and Wales.[33] We have been told anecdotally that the uptake of these private frameworks, as a percentage of the total number of trade documents, has been relatively low. In a 2018 report, the European Commission estimated that the regional rate of uptake of electronic transport documents for maritime trade rounded to "0%".[34] However, we have been told that there has been a significant increase in usage during the Covid-19 pandemic. For example, the ICC has noted that:

> A transition to digital is one of the most prominent themes seen in trade finance … 36% of respondents [to the ICC's Global Trade Survey 2020] expect either moderate or significant growth in the share of their trade finance business provided through digital ecosystems … rising to 55% for respondents from global banks.[35]

2.39 Such developments have also occurred for bills of exchange and promissory notes. The International Trade & Forfaiting Association ("**ITFA**") has created contractual functional equivalents of bills of exchange and promissory notes known as "Electronic Payment Undertakings" ("**ePUs**"). Governed by the law of England and Wales, we have been told that ePUs purport to recreate three commercial features of bills of exchange and promissory notes: independence from the underlying transaction; creation of an unconditional obligation to pay; and transmissibility of the payment obligation through an assignment of the instrument itself. The last is accomplished by passing the private key to the assignee.[36]

The deficiencies and shortcomings of private multipartite contractual frameworks

2.40 For those parties that sign up to multipartite contractual frameworks, they provide many of the benefits of digitalisation referred to above. They do not entirely replicate the effects and certainty of paper trade documents, however, for the following reasons.

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31 These systems are: Bolero and essDOCs (both considered at https://www.ukpandi.com/news-and-resources/circulars/2010/circular-1610-september-2010-electronic-paperless-trading-systems--bolero-international-limited-and/), e-Title (https://www.ukpandi.com/news-and-resources/circulars/2015/circular-1215-electronic-paperless-trading-systems/), edoxOnline (https://www.ukpandi.com/news-and-resources/circulars/2019/circular-719-electronic-paperless-trading/), WaveBL (https://www.ukpandi.com/news-and-resources/circulars/2019/circular-1619-electronic-paperless-trading/), CargoX (https://www.ukpandi.com/news-and-resources/circulars/2020/circular-320-electronic-paperless-trading---approval-of-cargox/), and Tradelens (https://www.ukpandi.com/news-and-resources/circulars/2021/uk-club-circular-0221-electronic-paperless-trading/).

32 These three are edoxOnline, WaveBL, and CargoX.

33 L Starr and J Tan, *Electronic Bills of Lading – An Update, Part 1* (UK P&I, March 2020), https://www.ukpandi.com/knowledge-publications/article/electronic-bills-of-lading-an-update-part-i-151842/. See also M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) ch 6.

34 European Commission, *State of play and barriers to the use of electronic transport documents for freight transport* (2018) p 8.

35 ICC, *ICC Global Survey on Trade Finance* (2020) p 18.

36 Template documentation is included in ITFA, *A Manual of Digital Negotiable Instruments: Issues and Implementation* (April 2020) sch 1.

(1) To rely upon the rights generated within these closed systems, commercial parties must specifically sign up to these private contractual frameworks. This increases the complexity and cost of transacting.

(2) Under these frameworks, parties acquire merely personal rights against their counterparties. They do not acquire proprietary rights enforceable against third parties who are not members of the contractual framework, in the way that they would with paper trade documents. That is, the rights generated within these systems are good only against other members of the system; they are not good against all the world.

(3) The legal validity and consequences of these contractual frameworks are untested in court and so relatively uncertain, as compared to the well-settled position in relation to paper trade documents.

2.41 This can be illustrated using the example of an electronic bill of lading issued using one of the commercially available platforms referred to above. First, all the relevant parties must have agreed with each other (in the process of agreeing to use to the service) that they will regard electronic bills of lading as being equivalent to paper bills of lading. Second, upon a transfer being made, a new contract of carriage must come into effect between the transferee and the carrier, to replace the original contract that the carrier had with the transferor. This is referred to as "novation". Instead of existing contractual rights passing from transferor to transferee, the former's rights are extinguished, and the latter's equivalent rights are created anew. Third, the carrier in possession of the goods must "attorn" to the transferee; that is, the carrier must acknowledge that they now hold the goods on behalf of the transferee rather than the transferor.

2.42 Under the current law, the usefulness of a paper document is that it avoids the need for these more complicated steps of contractual novation and attornment. Legal rights simply move with the paper document. This is likely a significant part of the explanation for the persistence of paper trade documentation in spite of the available contractual workarounds. It is a consequence of the fact that paper documents can be possessed, but electronic documents cannot.

2.43 The existence of these contractual arrangements does not, therefore, undermine the case for law reform to allow electronic trade documents to have the same legal effects as their paper counterparts under the law of England and Wales. We do, however, wish to know the views of those who use these contractual arrangements on the benefits and costs associated with such frameworks.

Consultation Question 1.

2.44 We invite consultees' views on the advantages and disadvantages associated with using private contractual frameworks to facilitate the use of electronic trade documents, compared with using electronic documents recognised in law as being equivalent to paper documents.

DISTRIBUTED LEDGER TECHNOLOGY AND THE POSSIBILITY OF ELECTRONIC TRADE DOCUMENTATION

New possibilities from new technology

2.45 The law's current view of possession made sense when technology did not exist to make electronic documents with the same relevant properties, for legal purposes, as physical pieces of paper: that is, sufficiently exclusive or uniquely connected to a particular party. We noted this in our 2001 advice to Government entitled *Electronic Commerce: Formal Requirements in Commercial Transactions* ("**2001 Advice**"). In our discussion about the possibility of electronic bills of lading, we said the following:

> Technology may in the future be capable of providing the commercial world with a true electronic equivalent of a paper bill of lading. However there is no working equivalent now. Nor, as we understand it, is there likely to be in the near future.[37]

2.46 That passage ended with a footnote which stated: "we are told that there is currently no market demand for such an equivalent".[38]

2.47 Both of these statements are now outdated, given the emergence of new technologies and given the industry calls for digitalisation. Digital technology has now reached a point where electronic documents can be created which do indeed represent what the 2001 Advice called a "true electronic equivalent" of a paper trade document. The law has not kept up with these technological developments, and indeed judges in both of the cases referred to above have called on the Law Commission to examine possession in light of these developments.[39]

The catalyst for this project: distributed ledger technology (DLT)

2.48 Notwithstanding our firm view about the merits of technology-neutral legislation in this context,[40] it is important to acknowledge that the louder calls for reform are the result of the development of DLT.[41]

2.49 We have included an explanation of this technology in Appendix 3 of this consultation paper for the sake of concision. Broadly speaking, DLT comprises a digital database (a "ledger") which is shared (that is, "distributed") among a network of computers. The ledger contains a record of data, such as a history of transactions involving an electronic promissory note, and each participating computer (known as a "node") holds a copy of the ledger. When data is added to the ledger – say to record that an

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37 Advice from the Law Commission, *Electronic Commerce: Formal Requirements in Commercial Transactions* (December 2001) para 4.8.

38 Advice from the Law Commission, *Electronic Commerce: Formal Requirements in Commercial Transactions* (December 2001) para 4.8 n 6.

39 Paras 2.20 to 2.31 below.

40 See below, from para 2.58.

41 E Ganne, *Can Blockchain Revolutionize International Trade?* (World Trade Organisation 2018). See also United Nations Conference on Trade And Development, *Review of Maritime Transport 2020* (12 November 2020), https://unctad.org/system/files/official-document/rmt2020_en.pdf.

electronic document has been transferred from person A to person B – every node's copy is updated.

2.50 A distinguishing feature of decentralised ledgers as compared to other shared databases is that the ledger is not maintained by a central administrator. Instead, the ledger is maintained collectively by the nodes on the network. No single node can unilaterally add data to the ledger. A node can propose a new data entry, but it will only be added to the ledger when the other nodes validate the trustworthiness of that new piece of data.

2.51 An element of the validation process is verifying that the proposed transaction has in fact been authorised by the transacting parties. This involves confirming that the transferor and transferee have both approved or "signed" the transaction with their "private keys".

2.52 As each addition to the ledger requires the collective consensus of the other participating nodes, it is very difficult (if not practically impossible) to tamper with the ledger's contents. Additionally, this immutable quality means that individual users can trust the ledger's veracity and transact with one another in confidence. For example, any attempt by a person to transfer an electronic bill of exchange twice would be contradicted by the ledger (which would contain an immutable record of that electronic bill having already been transferred to another person). Similarly, any attempt to manipulate the contents of the ledger to facilitate a fraud is, practically speaking, impossible.

2.53 DLT offers the prospect of creating viable electronic documents for use in shipping, trade, and trade finance that mimic the salient properties of their paper counterparts. These electronic documents can be transferred between participants on the ledger without the need for a central authority, and the record of these transactions is for all practical purposes permanent.[42] Additionally, DLT systems generally place control of an electronic document exclusively in the hands of the person with knowledge of the relevant private key. It is also possible to design systems that make the content of electronic documents invisible to all but the relevant parties, thereby safeguarding commercially sensitive information.[43]

WHAT DO OUR PROPOSALS AIM TO ACHIEVE?

2.54 Our provisional proposals set out in Chapter 5 aim to ensure that the law regards documents in electronic form which meet certain requirements as having the same functionality as their paper counterparts. This, we hope, will thereby facilitate the use of electronic trade documents. Our provisional proposals render electronic trade documents amenable to possession, provided they meet certain criteria. We think that this remedies an outdated legal distinction and its commercially undesirable consequences in trade. In developing our approach, we have been led by a number of guiding principles, which we set out below.

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42 This can be contrasted with the existing contractual arrangements, which we discuss above from para 2.36, which are registry-based and rely on a central administrator. While DLT requires a node to run the ledger, that node need not have any control over the dealings with documents.

43 M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 2.47.

Guiding principles

2.55 In developing our provisional proposals, we have endeavoured to follow three guiding principles:

(1) adopting the least interventionist solution;

(2) technological neutrality; and

(3) international alignment.

Adopting the least interventionist approach

2.56 The law of England and Wales functions effectively in relation to paper documents, and is trusted by commercial entities engaging in cross-border trade. We do not intend to disturb this status quo by attempting to impose an entirely new body of rules for electronic trade documents. Instead, we believe that it is important to adopt the least interventionist approach to the resolution of the possession problem. Our intention is to make proposals to remove the legal blocker to certain electronic documents used in trade. It is our intention that, so far as possible, other aspects of the law will then apply equally to electronic documents as they do to their paper counterparts. In Chapter 6, we discuss how we think this would work, and make some incidental proposals to facilitate it.

2.57 Our proposals are intended to facilitate the use of electronic trade documents, without being mandatory. Should commercial actors wish to continue using paper trade documents, they can do so. Equally, should they wish to develop an entirely different system for recording and recognising rights and obligations, one that operates on the basis of contractual arrangements, they are not prevented from doing so. However, our proposals, if implemented, also mean that should commercial actors wish to make use of electronic trade documents, that is a choice to which the law will give effect.

Technological neutrality

2.58 We are of the view that any draft legislation that we put forward must be technology-neutral. That is, it must not be predicated on the structure of a particular technology. We believe that this approach will foster innovation and allow more flexible commercial arrangements to be reached. Accordingly, we do not wish to predicate the validity of an electronic trade document upon particular technical requirements.[44]

2.59 We discussed similar issues in our report on electronic execution of documents.[45] While the law recognises a wide range of electronic signatures, some parties remained nervous at the use of electronic signatures, particularly for sensitive or high-value transactions and sought more prescriptive rules for signatures and signing processes.[46] While we acknowledged these concerns, we concluded in that context

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44 We contrast our approach with the explicit incorporation of a reliability standard in the MLETR from para 6.14 below.

45 Electronic Execution of Documents (2019) Law Com No 386.

46 Electronic Execution of Documents (2019) Law Com No 386, from para 4.57.

that requirements for security or reliability of electronic signatures should be separate from the question of legal validity.

2.60 Our research and the views of stakeholders on that project emphasised the challenges of proposing legislation to cater for specific technological solutions to existing practices. Legislation referring to particular technologies may quickly become outdated, excluding better solutions or potentially becoming entirely obsolete.

2.61 Professor Chris Reed has previously pointed out that there is a trend for legislation, particularly in relation to technology, to become increasingly detailed.[47] Graham Smith has warned against legislation being so prescriptive that particular technologies or types of electronic information are implicitly favoured or unnecessarily excluded.[48] Moreover, we do not wish to set standards for electronic trade documents where the same standards are not applied to paper documents.

2.62 We recognise that allowing for electronic trade documents in law is not the end of the matter. There are practical considerations which parties will have to take into account, including the security of the system and the extent to which it may be compromised. It will also be for industry to facilitate interoperability between different systems.[49] We hope, though, that this will be made easier by the legal recognition of electronic trade documents.

International alignment

2.63 Trade documents are used widely for the performance of cross-border transactions. This means that a piece of paper – whether embodying a right to claim delivery of goods, as in the case of a bill of lading, or a right to payment, such as a bill of exchange – may be transferred by and to multiple parties in multiple jurisdictions. While the law of England and Wales is chosen very frequently as the governing law of transactions involving these documents,[50] the vast majority of jurisdictions have similar laws and recognise the legal effects of being lawfully in possession of paper documents embodying obligations to pay or to deliver goods.

2.64 Whilst specific issues arising from the conflict of laws are outside of our project's terms of reference, we are conscious of the importance of international alignment insofar as this is possible. It is vital that electronic trade documents can move between different jurisdictions and be recognised worldwide as legally equivalent to paper versions.[51] We can only make proposals for the law of England and Wales, but it is

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47 C Reed, "How to make bad law: lessons from the computing and communications sector" (2010) *Queen Mary University of London, School of Law Legal Studies Research Paper No 40/2010*, 2, http://ssrn.com/abstract=1538527.

48 G Smith, "Legislating for electronic transactions" [2002] *Computer and Telecommunications Law Review* 58, 59.

49 We understand that such projects are already in development. To give an example, the United Nations Centre for Trade Facilitation and Electronic Business is working on guidance for meeting the reliability standard under the MLETR. See UNECE, *Transfer of MLETR-compliant titles,* https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles.

50 This was confirmed in our preliminary consultations with a variety of stake holders including P&I Club executives and trade finance practitioners.

51 We conduct a comparative analysis of the reform efforts underway across a range of other jurisdictions in Chapter 4 below.

important that we are aware of similar reforms in other countries, as well as international initiatives.

2.65 In developing our provisional proposals for reform, we have been particularly cognisant of the MLETR, which is proposed as an international solution to the possession problem. The MLETR is a model law developed by UNCITRAL which aims to enable the legal use of electronic transferable records by establishing a legal equivalence between control of an electronic transferable record (such as bills of exchange and bills of lading) and possession of a transferable paper document or instrument. We discuss the provisions of the MLETR in Chapter 4.

Our approach to the MLETR

2.66 Model laws are intended to be flexible instruments which can be adapted to suit domestic circumstances, and which apply in the states that implement them as domestic legislation. UNCITRAL describes a model law as:

> a suggested pattern for law-makers in national governments to consider adopting as part of their domestic legislation.[52]

2.67 While model laws are intended for transposition into domestic law, this transposition needs to be accommodated within the existing legal framework of the relevant state. We consider the overall approach of MLETR to be sound in principle, but need to consider how best to achieve similar substantive reform in a way which is compatible with the law of England and Wales.

2.68 Our proposals have therefore been developed with a keen awareness of the MLETR, aligning with it where that is possible, and integrating both its spirit and objectives into the particularities of the law of England and Wales.[53]

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52 UNCITRAL, *Frequently Asked Questions – UNCITRAL Texts*, https://uncitral.un.org/en/about/faq/texts.

53 We explain our points of difference from the MLETR in more detail in Chapters 3, 5, and 6 below.

Chapter 3: The law and practice of trade documents

3.1 The documents with which this paper is concerned are widely used in trade and finance to perform key commercial functions, but they must be possessed to do so. Most of these documents fall into a particular category of trade and finance documentation known as "documentary intangibles".[1] As we explain in Chapter 2, the law does not currently recognise the possibility of possessing intangibles, so electronic forms of these documents are not currently able to perform the same legal functions as their paper counterparts.

3.2 This chapter begins with a brief overview of the unique characteristics of documentary intangibles. It then gives an account of all the types of documents with which this consultation paper is concerned, detailing what they are, their form and content requirements, and their functions.

AN INTRODUCTION TO DOCUMENTARY INTANGIBLES

3.3 When a legal right is evidenced by a piece of paper, what is the significance of that paper? If, for instance, a party is in possession of the paper, does that mean that they also have the legal right that it evidences?

3.4 As a general rule, the law would say "no". What is written on that piece of paper is *evidence* of the right, but it does not *embody* that right. They are two independent things and are treated as such. In handing over that piece of paper, a party does not thereby hand over the right of which it is evidence. Most of the time, therefore, there is a distinction to be made on such facts between the transfer of the tangible property (the piece of paper) and the transfer of the intangible property (the legal right).

3.5 This general rule does not, however, apply to all documents. There exists an exceptional category of documents, referred to as "documentary intangibles". A documentary intangible is a document that is recognised by the law as *embodying* the right of which it is also evidence. In other words, possession of a documentary intangible can confer on the possessor certain rights.[2] This effect is what enables trade documents to perform the crucial commercial functions set out in this chapter.

3.6 The exception has its origins in the medieval law merchant, a transnational body of customary law, which eventually integrated itself into states' domestic laws. These transnational origins are significant because they mean that documentary intangibles have substantially the same legal effects wherever they are used.[3]

3.7 Importantly, documentary intangibles must record the relevant obligations in writing and be signed. Under the current law, the assumption is that such a record exists on

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1 The term "documentary intangibles" was first coined by Sir Roy Goode QC in the Crowther Report on Consumer Credit (1971) volume 2, p 577.

2 R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2021) paras 2.56 to 2.58, and 32.53.

3 *Goodwin v Robarts* (1875) LR 10 Exch 337.

paper (or on another tangible medium).[4] Unlike most documents, documentary intangibles are able to function as a means of transferring the right to claim performance of those obligations.[5] Where a documentary intangible refers to goods, for example, the law considers possession of the documentary intangible as a result of delivery with any necessary indorsement[6] equivalent to possession of the goods. When possession of the documentary intangible is transferred, therefore, so too is constructive possession[7] of the underlying goods.

3.8 Documentary intangibles are often referred to as "documents of title". This consultation paper uses the term "document of title" to refer to a document on which an obligation is recorded and which the law of England and Wales recognises as capable, by its transfer, of transferring the right to claim performance of that obligation.[8]

"Transferable" and "negotiable" documentary intangibles

3.9 There are two terms which are frequently used in relation to documentary intangibles: "transferable" and "negotiable". On occasion, they are used interchangeably. There are, therefore, sometimes said to be two different senses of negotiability: the "broad" or "general" sense (which is synonymous with transferability), and the "narrow" or "particular" sense (which requires something more than mere transferability).[9]

3.10 We consider it potentially confusing to employ two senses of the term "negotiable" when one of these senses is wholly captured by term "transferable". For this reason, we prefer to use "negotiable" exclusively in its "narrow" or "particular" sense. Accordingly, where we use the words "transferable" and "negotiable" in this consultation paper, they should be read as bearing the meanings outlined below.

"Transferable"

3.11 All documentary intangibles are "transferable".[10] This means that if the paper document is transferred, the right to claim performance of the embodied obligation is

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4 See for example J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 2-004.

5 Including, for certain documents, embodying the right to claim performance of those obligations tied to possession.

6 Indorsement is explained below at para 3.11(2).

7 If a person does not have factual possession of a thing, but the law nevertheless deems them to have legal possession of that thing, it is called "constructive possession".

8 We also occasionally refer to the separate definition of "documents of title" in section 1(2) of the Factors Act 1889, which will be explicitly noted. See the Factors Act 1889, s 1(4) (which governs the activity of mercantile agents, through which commercial goods are often sold) and the Sale of Goods Act 1979, s 61 (which governs all sale of goods).

9 In *JI McWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2003] EWCA Civ 556, [2004] QB 702 at [1], Rix LJ observed that the transferability of bills of lading has "traditionally, but idiosyncratically, been referred to as 'negotiability'". See also M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 5-009; B Eder, D Foxton, S Berry, C Smith, and H Bennett, *Scrutton on Charterparties and Bills of Lading* (24th ed 2019) para 10-003; R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.57 n 171.

10 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 5-008.

also transferred. Transferable documents can be split into two categories: "bearer documents" and "order documents". The category determines the means of transfer.[11]

(1) In a "bearer document", the obligation is owed to whoever is in possession of the document (that party is called the "bearer"). This is usually written on the document. To transfer a bearer document, the bearer simply delivers the document to another party (the "transferee"). Delivery is usually defined as the "voluntary transfer of possession".[12] Therefore, merely handing over the document would be effective to transfer possession.

(2) In an "order document", the obligation is owed to a person named on the document. To transfer an order document, the person in possession of the document (the "transferor") must indorse the document. An "indorsement" is an annotation in writing on the back of a document of title instructing that the obligation recorded therein be performed to the order of a named person or simply "to order" (called a "blank indorsement"). This instruction must be signed and is usually completed by delivery. If the indorsement is a blank indorsement, the possessor of the document, whoever they may be, may indorse it on in their turn. If the indorsement is to a named person, any subsequent indorsement must be by that person. This is what is meant by a "connected and unbroken chain of indorsements".[13]

3.12 Critically, the transfer of such a document does not require the consent of any other party, nor does it require any actions to be taken other than those which we describe in the previous paragraph. In both cases, the right to claim performance of the relevant obligation simply "travels with the document".[14]

"Negotiable"

3.13 As a general rule, a transferor cannot give better title to something than they themselves have.[15] This is not the case, however, where the thing in question is "negotiable".[16]

3.14 The principal feature of negotiability is that the transferee can obtain better rights to the property than the transferor had, provided certain requirements are met. So, for example, if there is a defect in the transferor's title, a good faith transferee for value will nonetheless take free of that defect.[17] This means that the transferee does not have to investigate the history of the transferor's title in order to rely on the integrity of the transaction.

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11 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 5-008.

12 See eg the Sale of Goods Act 1979, s 61(1).

13 *The Bank of Bengal v James William Macleod* 18 ER 795 (1849) 5 Moo Ind App 1, p 16. See also *G&H Montage GMBH v Irvani* [1990] 1 WLR 667.

14 R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.58.

15 M Bridge, *The Law of Personal Property* (2nd ed 2019) para 30-002.

16 *Picker v London and County Banking Co* (1887) 18 QBD 515.

17 This is subject to satisfying certain conditions: see for example the Carriage of Goods by Sea Act 1992, s 5(2), Bills of Exchange Act 1882, s 29.

3.15 Only documents of title to money and to securities are negotiable in that they are able to confer an overriding title on the transferee.[18] Documents of title to goods are usually not negotiable.[19]

Why are documentary intangibles useful?

3.16 There are several beneficial consequences of a document being characterised as a documentary intangible.

(1) Delivery (and, where necessary, indorsement) of a documentary intangible is sufficient to transfer the right to claim performance of the embodied obligation. If the document were merely evidence of an obligation, it would require some further step to transfer the obligation,[20] such as a formal assignment or a novation (the signing of a new contract between transferee and carrier, to replace the one between transferor and carrier). The consequent ease with which rights may be transferred using documentary intangibles promotes efficiency and convenience in commercial dealings.

(2) A documentary intangible can be the subject of a bailment.[21] A bailment is an arrangement in which one party has voluntary possession of goods belonging to another. Documentary intangibles are often bailed as part of a pledge, which means that the document is held as security.

(3) A person in possession of a documentary intangible has more extensive protection from interference than they would have for interference with a comparable right not embodied in a documentary intangible. This is because documentary intangibles are treated as tangible assets in themselves, meaning they are covered by the strict liability property torts of trespass and conversion,[22] as well as by negligence.[23] In contrast, interference with purely intangible rights is not covered by the property torts, leaving claimants to resort to the economic torts (eg inducing breach of contract or causing loss by unlawful means), which require establishing a certain type of intention on the defendant's part.

(4) In terms of remedies for interference, documentary intangibles are treated differently from other paper documents. For ordinary documents, the measure of damages in conversion would be the nominal value of the paper, whereas for

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18 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 5-008.

19 There are exceptions to this under ss 24 and 25 of the Sale of Goods Act 1979.

20 R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.57.

21 *Carter v Wake* (1877) 4 Ch D 605; *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653.

22 When someone's property is interfered with by another (for instance, when it is stolen, taken without their permission or destroyed), they can sue in the tort of conversion. This is the law of England and Wales' primary means of protecting interests in personal property. Professor Sarah Green and John Randall QC, in S Green and J Randall, *The Tort of Conversion* (2009) p 75, identify the three elements of conversion: "1. A claimant who has the superior possessory right; 2. A deprivation of the claimant's full benefit of that right; and 3. An assumption by defendant of that right". It follows that only things amenable to possession can be converted.

23 *Smith v Lloyds TSB Group Plc* [2001] QB 541; M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 1-022.

documentary intangibles, the measure of damages is the value of the obligation or right embodied in the document.[24]

(5) To discharge an obligation contained in a documentary intangible, the person who owes the obligation (the "obligor") must render performance to the holder of the documentary intangible. Rendering performance to any party other than the holder of the document will not discharge the obligation.[25]

SCOPE OF THIS PROJECT – CATEGORIES OF RELEVANT DOCUMENTS

3.17 In this consultation paper we consider documents which fulfil their legal and commercial function by virtue of being possessed. These include, but are not limited to, documentary intangibles.

3.18 Our provisional proposals concern only the following categories of document:

(1) bills of exchange;

(2) promissory notes;

(3) bills of lading;[26]

(4) ship's delivery orders;

(5) warehouse receipts;

(6) marine insurance policies; and

(7) cargo insurance certificates.

3.19 We do not include sea waybills, air waybills, bearer bonds, and other documents of title.[27]

3.20 Below, we explain each of these documents in more detail. We ask whether consultees agree both with the list of documents we have included in, and the list we have excluded from, the scope of our provisional proposals.

DOCUMENTS COVERED BY OUR PROVISIONAL PROPOSALS

Bills of exchange

3.21 A bill of exchange is a document that orders a person addressed in the bill (the "drawee") to pay a sum of money to someone else (either a specified person, or the

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24 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [225] to [226].

25 R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) paras 2.56(b) to 2.56(c).

26 Including straight bills of lading: see from para 3.40 below.

27 See further from para 3.66 below.

bearer).[28] One example of a bill of exchange is a cheque: the bank is the drawee and is ordered to pay a sum of money to whomever is named on the cheque.

3.22 It is thought that bills of exchange were introduced to England via international trade with Europe at least by the late 17th century. Once bills of exchange became a popular instrument used by traders in both foreign and domestic trades, the courts began to give them legal effect as part of the common law.[29] Most of this law was later codified in the 1882 Act, which remains in force. The common law rules continue to apply so long as they are not inconsistent with the provisions of the 1882 Act.[30]

3.23 A document must meet various statutory requirements to be considered a bill of exchange. For example, the document must contain an "unconditional order"[31] for the payment of money only,[32] it must specify the drawee, and the sum must be "certain".[33] As for the form of the document, it must be "in writing", signed by the person giving the order, and delivered.[34] In the 1882 Act, delivery is defined as the "transfer of possession, actual or constructive, from one person to another."[35]

3.24 A bill of exchange is a negotiable instrument[36] and a document of title to money.[37] It has three main characteristics.

(1) A bill of exchange is transferred by delivery alone. Simply handing over possession of the bill will transfer title. If a bill of exchange is not payable to bearer and is delivered without indorsement, the transferee will only receive the title which the transferor had in the bill. For the transferee to receive better title than the transferor, the transferor must also indorse the bill.

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28 Bills of Exchange Act 1882, s 3(1).

29 *Goodwin v Robarts* (1875) LR 10 Exch 337.

30 Bills of Exchange Act 1882, s 97(2).

31 This means that the payment must not depend on a contingency. For example, an "order to pay out of a particular fund" would be a conditional order, and therefore that document would not be a bill of exchange. See Bills of Exchange Act 1882, s 3.

32 Bills of Exchange Act 1882, s 3(2). If a document orders or promises to performance of some act other than the payment of money, it is not a bill of exchange.

33 Bills of Exchange Act 1882, s 3(1).

34 Bills of Exchange Act 1882, ss 3(1), 3(2), and 21.

35 Bills of Exchange Act 1882, s 2.

36 Note that cheques are now rarely issued in a negotiable form in the UK and most of Europe. Cheques which are marked "account payee" are non-transferrable. See J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 8-011; Cheques Act 1992. See also the Bills of Exchange Act 1882, s 36 for the circumstances in which a bill of exchange ceases to be a negotiable instrument.

37 M Bridge, L Gullifer, K Low, and G McMeel *The Law of Personal Property* (2nd ed 2019) para 5-015.

(2) If the transferee is a "holder in due course",[38] they take free from most defects in the title[39] of prior parties and from the defences available to them.[40] Almost every holder of a bill of exchange is presumed to be a holder in due course.[41]

(3) The transfer of a bill of exchange is valid without consideration.[42] While the lack of consideration might enable the drawee to resist an action on the bill of exchange, it does not entitle the transferor to deny the validity of the transfer.[43]

3.25 Bills of exchange are a critical document in international trade and finance. They have three main functions.[44]

(1) A bill of exchange is a means of payment in international trade.[45] Long-term international trading arrangements are vulnerable to exchange rate fluctuations. This risk can be managed through the use of bills of exchange, which provide the holders with the assurance of a fixed price.

(2) Bill of exchange trading is a means of financing. If a bill of exchange specifies a future date of payment, the drawer can discount and sell the bill of exchange to a third party (usually a bank) in return for immediate payment. The third party will then, as holder, receive the ordered payment from the drawee when it falls due.

(3) A bill of exchange is evidence of a payment owed by the drawee to the relevant payee.[46]

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38 Bills of Exchange Act 1882, s 29(1): "A holder in due course is a holder who has taken a bill, complete and regular on the face of it, under the following conditions; namely, (a) That he became the holder of it before it was overdue, and without notice that it had been previously dishonoured, if such was the fact: (b) That he took the bill in good faith and for value, and that at the time the bill was negotiated to him he had no notice of any defect in the title of the person who negotiated it."

39 Bills of Exchange Act 1882, s 29(2) provides a non-exhaustive list of "defects of title" within the meaning of the statute: "In particular the title of a person who negotiates a bill is defective within the meaning of this Act when he obtained the bill, or the acceptance thereof, by fraud, duress, or force and fear, or other unlawful means, or for an illegal consideration, or when he negotiates it in breach of faith, or under such circumstances as amount to a fraud."

40 E Peel (ed), *Treitel on the Law of Contract* (15th ed 2020) para 15-048.

41 Bills of Exchange Act 1882, s 30: "Every holder of a bill is prima facie deemed to be a holder in due course; but if in an action on a bill it is admitted or proved that the acceptance, issue, or subsequent negotiation of the bill is affected with fraud, duress, or force and fear, or illegality, the burden of proof is shifted, unless and until the holder proves that, subsequent to the alleged fraud or illegality, value has in good faith been given for the bill."

42 *Easton v Pratchett* (1835) 1 Cr M & R 798, 808.

43 E Peel (ed), *Treitel on the Law of Contract* (15th ed 2020) para 15-049.

44 J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 1-002.

45 H Beale (ed), *Chitty on Contracts* (33rd ed 2019) para 34-003.

46 G Mihai, "Bill of Exchange – A Modern and Efficient Instrument of Payment Within The Commercial Relations" (2016) 3(7) *Journal of Euro and Competitiveness* 15.

3.26 In contrast to the international market, bills of exchange are diminishing in importance domestically, although they still are used in the form of cheques.[47]

Promissory notes

3.27 A promissory note is a document which promises to pay a specified person or the bearer a sum of money.[48] The difference between a promissory note and a bill of exchange is which party pays the specified person or bearer. For a promissory note, the maker of the note promises to pay; for a bill of exchange, a third party is ordered to pay and incurs a commitment to the holder on acceptance of the bill.[49]

3.28 Promissory notes and bills of exchange share several similarities in their history, characteristics, and requirements for content and form.

(1) Like bills of exchange, promissory notes were documents arising from mercantile custom, recognised by the common law, and then codified in the 1882 Act.[50] The common law rules apply so long as they are not inconsistent with the provisions of the 1882 Act.[51]

(2) Promissory notes, like bills of exchange, are negotiable instruments[52] and documents of title to money.[53] As with bills of exchange, the law does not explicitly state that promissory notes must be on paper; however, this assumption runs throughout the law.[54]

(3) Promissory notes, like bills of exchange, must be an "unconditional promise", in writing, signed by the maker of the note,[55] and delivered.[56]

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47 J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 1-001.

48 Bills of Exchange Act 1882, s 83(1).

49 *Goodwin v Robarts* (1875) LR 10 Exch 337, 348. The difference between a promissory note and a bill of exchange for a given document is not always clear. In such cases, the holder may treat the ambiguous document as either: Bills of Exchange Act 1882, s 5(2). See also *Edis v Bury* (1827) 6 B & C 433.

50 *Goodwin v Robarts* (1875) LR 10 Exch 337.

51 Bills of Exchange Act 1882, s 97(2).

52 Like bills of exchange, promissory notes were initially considered negotiable as a matter of merchant custom, but this development was curtailed by the decision of *Clerke v Martin* (1702) 2 Ld Raym 757. The negotiability of promissory notes was quickly restored by the Statute of Anne 1704, c. 9. Today, their negotiability comes from the Bills of Exchange Act 1882, ss 8, 31(1), and 89.

53 See from para 3.21 above.

54 J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 2-004.

55 Bills of Exchange Act, s 83(1). Note further s 83(2), which requires the maker to indorse the note if it is made out to the "maker's order".

56 Bills of Exchange Act, s 84: "A promissory note is inchoate and incomplete until delivery thereof to the payee or bearer."

3.29 In international trade, promissory notes have a limited function. They usually serve as security for instalments under medium or long-term credit transactions.[57] They are also used in some transactions covered by export credit guarantees.[58]

3.30 Promissory notes are more popular in domestic trade, in which they serve two functions.[59]

(1) Promissory notes issued by the payor can act as security for a main contract. If the payor falls into arrears, the payee can bring an action to enforce the promissory note. The payee may prefer this action as the payor cannot plead all of the defences that would be available under the main contract.[60]

(2) Promissory notes are used to raise finance. The payee can sell the promissory note to a financial institution. In return the financial institution (as current holder of the note) will receive the payment embodied in the note when it falls due.[61]

Bills of lading

3.31 A bill of lading is a document used in the carriage of goods by sea. The shipper (the party initially in possession of the goods) gives the goods to the carrier (the party transporting the goods by sea).[62] In return, the carrier signs and issues a bill of lading to the shipper, which will state that the carrier has received or loaded the goods delivered to it by the shipper.[63] The bill of lading gives the shipper (or any subsequent lawful holder) contractual rights against the carrier[64] and constructive possession of the goods.[65] The shipper can either retain the bill of lading or transfer it to a third party, usually in performance of a contract of sale of the goods or by way of pledge where financing arrangements are in place.[66] The lawful holder of the bill of lading is legally entitled to claim delivery of the goods from the carrier.

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57 H Beale (ed), *Chitty on Contracts* (33rd ed 2019) para 34-004.

58 Exporting goods on deferred payment terms exposes the exporter to the risk that the buyer may not be able to pay for the goods. An export credit guarantee is a financial arrangement which enables the exporter to limit this credit risk. Despite its name, an export credit guarantee can be either a contract of insurance or a guarantee. See further M Bridge (ed), *Benjamin's Sale of Goods* (11th ed 2020) paras 25-032 to 25-042.

59 H Beale (ed), *Chitty on Contracts* (33rd ed 2019) para 34-004.

60 For example, counterclaim or set-off. H Beale (ed), *Chitty on Contracts* (33rd ed 2019) para 34-094; *Banque Cantonale de Geneve v Sanomi* [2016] EWHC 3353 (Comm) at [31]. For this reason, the role of promissory notes has been limited in certain consumer agreements by the Consumer Credit Act 1974, ss 123-125.

61 Promissory notes are preferred over an assignment of a contract because the bank will be presumed to be a holder in due course, and therefore entitled to enforce the note despite any defects in the title of previous parties, see Bills of Exchange Act 1882, ss 29-30.

62 R Aikens, R Lord, M Bools, M Bolding, and K S Toh SC, *Bills of Lading* (3rd ed 2020) para 3.1. See also the summary of "events in the life of a bill of lading" by Lord Steyn in *JI MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423 at [38].

63 M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 1.04.

64 Carriage of Goods by Sea Act 1992, s 2.

65 *Lickbarrow v Mason* (1787) 2 TR 63; *Barber v Meyerstein* (1870) LR 4 HL 317; *Sanders Bros v Maclean & Co* (1883) 11 QBD 327.

66 J P H Mackay (ed), *Halsbury's Laws of England, Carriage and Carriers, Bills of Lading* (2020) at para 432. See further discussion in para 6.64 below.

3.32 There is no statutory definition of a bill of lading. To determine whether a document is a bill of lading, a court will consider certain characteristics of the document. These characteristics include (i) the document being titled "bill of lading", (ii) the inclusion of information ordinarily found in a bill of lading, and (iii) where issued in a set of three originals,[67] the inclusion of the following standard wording: "one of which being accomplished, the others stand void."[68]

3.33 The bill of lading originated as a receipt for goods that had been put on board another person's ship.[69] A mercantile custom later developed whereby the bill of lading was used to transfer constructive possession of the goods while they were at sea and this custom became recognised by law.[70] Today, bills of lading are governed by four sources of law:

(1) the common law;

(2) the Carriage of Goods by Sea Act 1971 ("**COGSA 1971**");

(3) the Sale of Goods Act 1979 ("**SOGA**"); and

(4) COGSA 1992.[71]

3.34 COGSA 1971 implements the Hague-Visby Rules,[72] an international treaty which applies to contracts of carriage covered by a bill of lading or any similar document of title which relates to carriage of goods by sea.[73] This means that the agreement to issue a bill of lading will trigger the application of the Hague-Visby Rules[74] (subject to article X of those Rules).

3.35 The Hague-Visby Rules set out requirements for the form and content of a bill of lading; for example, a bill of lading must enable the identification and verification of the goods.[75] There is no explicit requirement that a bill of lading must be in paper form but, as with bills of exchange and promissory notes, the need to be able to possess

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67 See further at para 3.38 below.

68 *JI MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423 at [5], by Lord Bingham. It should be noted that a lack of such a clause has been held not to prevent a document from being a bill of lading: see *Carewins Development (China) Ltd v Bright Fortune Shipping Ltd* [2009] HKCFAR 185 and *Forsa Multimedia Ltd v C&C Logistics (HK) Ltd* [2011] HKCU 254.

69 M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 5.04.

70 *Lickbarrow v Mason* (1787) 2 TR 63; *Barber v Meyerstein* (1870) LR 4 HL 317; *Sanders Bros v Maclean & Co* (1883) 11 QBD 327.

71 This repealed the previous statute on bills of lading, namely the Bills of Lading Act 1855. See the Carriage of Goods by Sea Act 1992, s 6(2).

72 The Hague-Visby Rules refer to the International Convention for the Unification of Certain Rules of Law relating to Bills of Lading, signed at Brussels on 25 August 1924 (the "Hague Rules"), as amended by the Protocol signed at Brussels on 23 February 1968 (the "Visby Rules") and by the Protocol signed at Brussels on 21 December 1979. See the Carriage of Goods by Sea Act 1971, s 1(1). The Hague-Visby Rules are reproduced in the Carriage of Goods by Sea Act 1971, sch 1.

73 Hague-Visby Rules, art I.

74 *AP Moller Maersk A/S trading as Maersk Line v Kyokuyo Ltd* [2018] EWCA Civ 778, [2018] 3 All ER 1009.

75 Hague-Visby Rules, art III(3)(a).

the document implies such a requirement.[76] Furthermore, section 1(5) of COGSA 1992 empowers the Secretary of State to make provision for electronic documents which fall under the Act, including bills of lading. This section therefore also implies that the bill of lading must be in paper form, subject to exercise of this power by the Secretary of State.

3.36 A bill of lading is a transferable document of title to goods. It can therefore be used to transfer rights, but not to transfer an overriding title.[77] This means that the transferee of a bill of lading will generally only acquire as good a title as the transferor.[78]

3.37 A bill of lading is traditionally understood to have three functions: as a receipt for the goods, as evidence of the contract of carriage, and as a document of title (meaning that possession of the bill gives one constructive possession of the goods specified in it). These functions reflect how bills of lading are used in practice:

(1) to check facts about the goods;

(2) to effect constructive delivery of the goods when the document is delivered; [79]

(3) to give a financing bank a pledge over the goods;

(4) to exclude persons other than the holder from claiming delivery of the goods or giving instructions to the carrier regarding the goods; and

(5) to make the contract of carriage binding and enforceable as between the carrier and the transferee.

3.38 As stated above,[80] it is common for bills of lading to be issued in sets of three originals, each stating "any one of which being accomplished, the others shall be void".[81] This means that the carrier is considered to have fully performed its

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76 See discussion from para 3.23 above.

77 Unless the bill of lading is a "straight bill of lading", which is made deliverable only to a named person (as we discuss from para 3.40 below). See *JI MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423 at [1] and [59].

78 See exceptions in the Sale of Goods Act 1979, ss 24 to 25.

79 *Lickbarrow v Mason* (1787) 2 TR 63, 71. It should be noted that the ability of a bill of lading to pass property is an important function in practice, especially in the commodities trade, where goods are frequently bought and sold in chains. In some areas, such as CIF contracts, the law draws a presumption that the transfer of a bill of lading for value evidences that the parties intended to pass property at that time, see for example *Carlos Soto Sau v AP Moller-Maersk As* [2015] EWHC 458 (Comm), [2015] 2 All ER (Comm) 382. If a seller retains a bill of lading, this is also likely to be seen as the seller retaining title in the goods, see by analogy the Sale of Goods Act, s 19(2).

80 Para 3.32 above.

81 This is standard bill of lading wording, found on the front page of bills of lading above the issuer's signature. The wording is of very long standing. For a modern-day example see the Congenbill form of the Baltic and International Maritime Council ("BIMCO"), https://www.bimco.org/contracts-and-clauses/bimco-contracts/congenbill-2016#. This wording appears in all three versions of Congenbill published by BIMCO (1994, 2006 and 2016).

obligations under the contract of carriage and as bailee on terms if it delivers the goods against any one of the three originals.[82]

3.39 When this practice was first introduced, each original would normally have been held by a different person.[83] However the practice of issuing three originals has long been criticised by the courts, which have described it as liable to cause "confusion, … difficulty, and embarrassment"[84] because it has the potential to decouple title to the goods from possession of the document.[85] It is therefore very common for sale contracts and documentary credit agreements to require a "full set" of bills of lading.[86] Indeed this requirement appears even in the earliest reported cases.[87] This may be why there are very few reported cases "involving the kind of fraud that the existence of more than one bill of lading each of equal validity would seem to render so easy".[88] In practice, the physical possession of a full set of bills of lading precludes any person other than the possessor from lawfully claiming delivery of them from the carrier.[89] This gives the possessor a remedy against the carrier if they are delivered in the absence of the bill.[90]

Straight bills of lading

3.40 For a bill of lading to be a document of title in the common law sense, it must be either a bearer bill or an order bill. This excludes "straight" bills of lading, under which the relevant goods are deliverable only to a named party (called the "consignee"). Although they may satisfy the requirements of bills of lading in other ways, straight bills of lading "either contain no words importing transferability or contain words negativing transferability".[91]

3.41 This is the essential difference between a straight bill of lading and an order or bearer bill. A carrier must deliver the goods to the party named in a straight bill of lading,

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82 *Barber v Meyerstein* (1870) LR 4 HL 317; *Glyn Mills Currie & Co v The East and west India Dock Company* (1882) 7 App Cas 591.

83 See D Foxton, H Bennett, S Berry, C F Smith and D Walsh, *Scrutton on Charterparties and Bills of Lading* (24th ed 2019) para 5-003.

84 Even in the late 19th century when this case was decided, the House of Lords observed that "many of the reasons for having bills of lading in parts [are] much modified", and indicated that it would be better if only one original were issued: *Glyn Mills Currie & Co v The East and West India Dock Company* (1882) 7 App Cas 591, 598 to 599, by Earl Cairns.

85 See *Barber v Meyerstein* (1870) LR 4 HL 317, 331 to 332.

86 ICC, *Incoterms 2020, Cost Insurance Freight (CIF)*, Article A6; ICC, *Uniform Customs and Practices on Documentary Credits (UCP) version 600*, 2007, Article 20, although presentation of less than a full set is contemplated in the ICC *International Standard Banking Practice for the Examination of Documents under the UCP 600*, 2013 (ISBP), Article A29(c).

87 See for example *Yglesias v The Mercantile Bank of the River Plate* (1877) 3 CPD 60; *Donald H Scott & Co v Barclays Bank* [1923] 2 KB 1, 2.

88 See D Foxton, H Bennett, S Berry, C F Smith and D Walsh, *Scrutton on Charterparties and Bills of Lading* (24th ed 2019) para 5-003.

89 *Sucre Export SA v Northern River Shipping Ltd* (*The Sormovskiy 3068)* [1994] 2 Lloyd's Rep 266, 274.

90 *Standard Chartered Bank v Dorchester LNG (the Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1.

91 M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) para 5.41.

whereas voluntary transfer of an order or bearer bill (with indorsement, for the former) is enough to transfer rights over the goods to the transferee.

3.42 For the purposes of COGSA 1992, straight bills of lading are treated as sea waybills.[92] The House of Lords has held that straight bills of lading are considered "a bill of lading or similar document of title" for the purposes of COGSA 1971.[93] This means that the issue of a straight bill of lading triggers the mandatory application of the Hague-Visby Rules.

3.43 While the straight bill of lading is not a document of title in the common law sense,[94] having possession of it, and being able to demonstrate that one is in possession of it, is an essential part of using it. A straight bill of lading is also transferable in the sense that the shipper would need to transfer the bill to the consignee for the latter to obtain constructive possession of the goods. Conversely, if the shipper wanted to withhold constructive possession from the consignee (eg as a response to the consignee's failure to pay), this could be done by refusing to give the consignee the bill. For this reason, straight bills of lading fall within our provisional proposals.

Ship's delivery orders

3.44 A ship's delivery order is a document often used to split bulk cargoes among several different buyers. They will usually be issued by the holder of a bill of lading instructing the carrier of goods to deliver different portions of the cargo covered by the bill to different named persons.[95]

3.45 A ship's delivery order must be signed by (or on behalf of) the carrier, so that the carrier undertakes to act in accordance with the delivery order's instructions. If the delivery order is made out "to order", the right to claim delivery of the goods can be transferred to another by indorsement and delivery of the document.[96]

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92 From para 3.66 below.

93 *JI MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423. Note that in addition to the document being a "bill of lading or similar document of title", article X of the Hague-Visby Rules must be fulfilled for the Rules to apply. Art X requires that "(a) the bill of lading is issued in a contracting State, or (b) the carriage is from a port in a contracting State, or (c) the contract contained in or evidenced by the bill of lading provides that these Rules or legislation of any State giving effect to them are to govern the contract; whatever may be the nationality of the ship, the carrier, the shipper, the consignee, or any other interested person."

94 See M Bridge, ***Benjamin's Sale of Goods,*** (11th ed 2020) para 18-195: "the fact that [the straight bill of lading has to be produced to the carrier by the person claiming delivery of the goods] does not conclude the question whether a straight bill is a document of title [in the common law sense]; for while the existence of the requirement is no doubt a *necessary*, it does not follow that it is also a *sufficient*, condition of a document's falling within that class." (emphasis in original)

95 *Glencore International AG v MSC Mediterranean Shipping Co SA* [2017] EWCA Civ 365, [2017] 2 All ER (Comm) 881 at [14].

96 *Colin & Shields v W Weddel & Co Ltd* [1952] 2 All ER 337; *Waren Import Gesellschaft Krohn & Co v Internationale Graanhandel Thegra NV* [1975] 1 Lloyd's Rep 146.

3.46 A ship's delivery order is not a document of title in the common law sense, so the delivery of the document does not transfer the rights in the goods.[97] However, in practice, ship's delivery orders can be made out in favour of a named person or to that person's order, making the document (and the right to claim delivery of the goods) transferable by indorsement. A person in possession of a delivery order that was validly indorsed to them may claim delivery of the goods from the carrier.[98]

3.47 As with bills of lading, the existence of section 1(5) COGSA 1992 implies that ship's delivery orders must be in paper form, subject to the exercise of the power set out in that provision by the Secretary of State.[99] The assumption that they are paper documents underlies the whole law relating to ship's delivery orders.

Warehouse receipts

3.48 A warehouse receipt (in some contexts called a warehouse warrant[100] or a warehouse-keeper's certificate[101]) is a document issued by a warehouse keeper, acknowledging that they hold the goods for the person to whom the receipt is issued. Warehouse receipts are governed by the common law only.[102]

3.49 When a warehouse receipt is issued, it is dated and signed by (or on behalf of) the warehouse keeper. It will contain a description of the goods that the warehouse keeper is holding, and it will name the person from whom the goods were received. Where there is a warehouse receipt there is a bailment of goods between the person depositing the goods (the "bailor"), and the warehouse keeper (the "bailee)".[103]

3.50 The warehouse receipt will also contain, or incorporate, the conditions of storage, making the bailment a bailment on terms. Where the warehouse receipt is made out to the bailor's order, it will contain a promise by the bailee to the bailor to deliver against the original document.[104] The legal consequences of being in possession of a warehouse receipt may therefore vary according the terms of the document itself.

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97 *Comptoir d'Achat et de Vente du Boerenbond Belge SA v Luis de Ridder Limitada (The Julia)* [1949] AC 293, 316; G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 8-060. However, it should be noted that a ship's delivery order is considered a document of title by the Factors Act 1889, s 1(4) (which governs the activity of mercantile agents, through which commercial goods are often sold) and the Sale of Goods Act 1979, s 61.

98 Carriage of Goods by Sea Act 1992, ss 2(1)(c) and 2(3)(a).

99 See para 3.35.

100 While the courts have used the two terms interchangeably, the term "warehouse warrant" tends to be used to refer to warehouse receipts that are made out so as to be transferable.

101 See the Factors Act 1889, s 1. This expression appears in one reported case decided by the English courts, *Inglis v Robertson* [1897] 24 R 758, 778 to 780 in which Lord Kinnear suggests that "warehouse-keeper's certificate" is a synonym of "warehouse warrant".

102 G Wynne and S Cook, "Warehouse receipts past, present and future: Part 1" (1998) 17(1) *International Banking and Financial Law* 8, 8.

103 *Natixis v Marex Financial* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [229].

104 This may be subject to someone demonstrating a higher right to possession: see *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [229] and [230].

3.51 Absent any explicit arrangement to the contrary,[105] the person to whom the document is indorsed (the "indorsee") will not have direct contractual rights against the warehouse keeper by virtue of possessing the document. However, it is possible that the Contracts (Rights of Third Parties) Act 1999 may confer on the indorsee the right to enforce the contract in their own right.[106]

3.52 Warehouse receipts are not documents of title at common law. Therefore, the handing over of a warehouse receipt will not transfer constructive possession of the goods.[107] In practice, however, as explained above, warehouse receipts are still used to claim delivery of goods if the receipt is made out to a named person (the bailor) or includes the words "or order".[108] In this scenario, constructive possession may be transferred by attornment by the warehouse keeper to the indorsee.[109]

3.53 It should be noted that that the definition of "document of title" found in the Factors Act 1889[110] (that applies also for the purposes of SOGA[111]) is broad enough to encompass warehouse receipts,[112] and that warehouse receipts have been referred to by the courts as "effectively documents of title".[113]

3.54 Warehouse warrants issued by the London Metal Exchange ("**LME warrants**")[114] operated as documents of title when issued in paper form,[115] thanks to the LME

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105 See discussion of the London Metal Exchange ("**LME**") arrangements in para 3.54 below.

106 This would be the case if it can be shown that the contract between the warehouse keeper and the bailor fulfils the requirements of the Contracts (Rights of Third Parties) Act 1999, s 1. It should be noted that this possibility was not addressed in *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431. See, by analogy, M Bridge, L Gullifer, K Low, and G McMeel *The Law of Personal Property* (2nd ed 2019) para 5-039.

107 *Mercuria Energy Trading Pte Ltd v Citibank NA* [2015] EWHC 1481 (Comm), [2015] 1 CLC 999 at [57] to [60], citing *Farina v Home* (1846) 16 M & W 119 and *Dublin City Distillery (Great Brunswick Street, Dublin) v Doherty* [1914] AC 823.

108 M Bridge (ed), *Benjamin's Sale of Goods* (10th ed 2017) para 8-013.

109 *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [230].

110 Factors Act 1889, s 1(4).

111 Sale of Goods Act 1979, s 61(1).

112 See *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [235].

113 *Niru Battery Manufacturing Co v Milestone Trading Ltd* [2003] EWCA Civ 1446, [2004] QB 985 at [9], by Clarke LJ (with whom Sedley LJ and Dame Elizabeth Butler-Sloss P agreed). See also *Impala Warehousing and Logistics (Shanghai) Co Ltd v Wanxiang Resources (Singapore) Pte Ltd* [2015] EWHC 811 (Comm), [2015] 2 All ER (Comm) 234 at [55].

114 Versions of the London Metal Exchange Rules and Regulations applicable prior to the full digitalisation of LME warrants defined a warrant as "a warehouse warrant for the storage of metal, issued by a listed warehouse and in a form approved by the Exchange" and "a warehouse warrant issued by a Warehouse in accordance with the Warehouse Contract". Warehouse was defined as "a warehouse which is party to the Warehouse Contract and listed in Appendix III of the Rules" (see London Metal Exchange Rules and Regulations version No. 110 dated 31 January 2020, Part 1, regulation 1.1 and Part 10 regulation 12.1).

115 In 2000 the Financial Law Panel of the Financial Markets Law Committee ("**FMLC**") published a paper indicating that London Metal Exchange (LME) Warrants were used and had the same effect as documents of title, thanks to the operation of the LME regulations. See Financial Law Panel, *The London Metal Exchange and LME Warrants*, FMLC, July 2000, pp 3 to 6, http://fmlc.org/wp-content/uploads/2018/04/the_london_metal_exchange_and_lme_warrants_july_00.pdf. Note that the authors of that document adopted a narrower definition of document of title (pp 6 to 7).

Regulations which bind all members of the Exchange, including warehouses authorised by the LME.[116] Thus possession of the LME warrant would give a transferee buyer possession of the metal sold. More recently, the LME has moved to a fully electronic substitute for paper documents, through contractual terms which bind all users.[117]

3.55 Warehouse receipts are also used to raise finance.[118] This suggests that, at least as far as business practice is concerned, possession of the document may serve to identify the person to whom delivery is to be made. Thus, we think that warehouse receipts should fall within the scope of our project.

Marine insurance policies

3.56 An insurance policy is a document issued by (or on behalf of) insurers; it sets out the terms of the contract whereby the insurer undertakes to compensate the insured person for any loss caused by a covered risk.

3.57 Under the Marine Insurance Act 1906 ("**MIA**"), which applies to policies concerning "the losses incident to marine adventure",[119] such policies must fulfil three formal requirements:

(1) they must specify the name of the assured or of some person who effects the insurance on his behalf;[120]

(2) they must be signed by or on behalf of the insurer;[121] and

(3) they must designate the subject matter of the insurance with reasonable certainty.[122]

3.58 Where the insured subject matter is an item of commercial value (usually a vessel), it may well change hands during the lifetime of the insurance policy. When the insured subject matter is sold, the rights against the insurer may be transferred from the seller to buyer by indorsement of the marine insurance policy.[123] As a matter of custom,

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116 The latest version of the London Metal Exchange Rules and Regulations is No 114 dated 18 March 2021 (hereinafter "**LME Rulebook 2021**"), https://www.lme.com/About/Market-Regulation/Rules/Rulebook. Part 2 is entitled 'Membership, Enforcement and Discipline'. See, in particular, reg 14.1(i) of this Part.

117 LME Rulebook 2021, Part 10 (LMEsword Regulations) and *Consultation Paper on Proposed Rule Amendments to Implement Dematerialisation of LME Warrants and Electronic Warranting Process*, 16 October 2020. Regulation 1.6.13(iii) of Part 10 harnesses the concept of attornment to achieve the transfer of constructive possession upon a digital warrant being transferred.

118 *ABN Amro v Royal Sun Alliance* [2021] EWHC 442 (Comm) at [211]. See also FMLC, *The London Metal Exchange and LME Warrants* (July 2000) p 5, http://fmlc.org/wp-content/uploads/2018/04/the_london_metal_exchange_and_lme_warrants_july_00.pdf.

119 Marine Insurance Act 1906, s 1.

120 Marine Insurance Act 1906, s 23(1).

121 Marine Insurance Act 1906, s 24(1). This might be signed by means of a corporate seal.

122 Marine Insurance Act 1906, s 26(1).

123 Marine Insurance Act 1906, s 50(3).

indorsement is not always necessary.[124] In some circumstances, merely transferring possession of the marine insurance policy can be considered to transfer the right to claim under the insurance.[125]

3.59 In 2010, a joint issues paper by the Law Commission of England and Wales and the Scottish Law Commission concluded that the MIA probably did not prevent a marine policy from being in electronic form.[126] However, the authors of that paper were of the view that "the issue is not entirely beyond doubt".[127]

Cargo insurance certificates

3.60 A cargo insurance certificate is a document used to evidence that cargo is insured. If the cargo is being shipped under a cost, insurance, and freight ("**CIF**") contract,[128] the insured person (the "seller") must tender to the buyer documents which show the cost of the goods (an invoice), the insurance cover obtained (an insurance document), and the freight paid (a transport document).[129]

3.61 Cargo insurance certificates are usually issued under open cover agreements; these agreements are not covered in the MIA as they were developed after its adoption. An open cover is an agreement by the insurer to cover all cargoes declared by the insured person shipped during a defined period (usually one year). The insurance premium depends on the value of the declared cargo. Open cover agreements are frequently facultative-obligatory, which means that they are facultative (optional) for the assured and obligatory for the insurer (who must accept all declared risks). The assured can choose to declare any particular shipment, each of which must then be accepted by the insurer.

3.62 In an open cover agreement that is facultative-obligatory, a cargo is covered if the assured makes a declaration with respect to it.[130] When a declaration is made, a certificate is issued to evidence cover of the specific cargo for that voyage. The certificate is pre-signed by the insurer and is countersigned by the assured at the time of issue.[131]

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124 Unless expressly required in the marine insurance policy.

125 *Safadi v Western Assurance Co* (1933) 46 Lloyd's List Law Reports 140, 144, by Roche J: "I have no doubt myself that policies often are assigned otherwise than by indorsement. In the case of CIF contracts they are so often handed over without an indorsement being made upon them that I should be surprised if it could not be proved that is a customary manner of assigning policies".

126 *The Requirement for a Formal Marine Policy: Should Section 22 Be Repealed? Reforming Insurance Contract Law Issues* Paper 9 (2010) Law Commission and Scottish Law Commission, para 4.39.

127 The Requirement for a Formal Marine Policy: Should Section 22 Be Repealed? Reforming Insurance Contract Law Issues Paper 9 (2010) Law Commission and Scottish Law Commission, para 4.39.

128 A "cost, insurance, and freight" contract is an agreement to sell goods at a price which includes the cost of the goods, insurance, and freight carriage of goods to the specified destination. See M Bridge (ed), *Benjamin's Sale of Goods* (10th ed 2017), para 19-001. For more detail, see para 6.65 below.

129 ICC, *Incoterms 2020, Cost Insurance Freight (CIF)*.

130 *Glencore International v Alpina Insurance* [2003] EWHC 2792 (Comm), [2004] 1 All ER (Comm) 766 at [264] to [271].

131 See discussion in M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) from para 7.19.

3.63 Certificates contain or incorporate the terms of cover, a statement that they are payable to the order of the original assured, and instructions on what should be done in the event of a claim.[132] To enable the transferee to claim directly against the insurer, the certificate must be issued and signed by the insurer, and countersigned by the assured person.[133]

3.64 Certificates are transferable at common law.[134] It appears that delivery of a certificate is sufficient to transfer the benefit of the insurance, unless the certificate expressly requires indorsement.[135] Transferring of cargo insurance certificates is effected in practice through (indorsement and) delivery of the paper document. An electronic cargo insurance certificate would need to be capable of possession and delivery in order to be used in the same way as its paper counterpart.

3.65 Cargo insurance certificates are sometimes issued electronically, but there is no option on current platforms to transfer them in electronic form. To transfer the certificate itself, one would need to print it out and indorse and transfer it in paper form.[136] We have been told that even if a certificate explicitly requires indorsement to be assigned, parties do not always require an indorsed certificate in practice. We have also been told that although certificates are sometimes printed out and indorsed, the electronic version on the system is considered authoritative. This position is, however, untested in court. Legal recognition of an electronic cargo insurance certificate would enable the development of transferable electronic certificates.

DOCUMENTS PROVISIONALLY CONSIDERED OUTSIDE THE SCOPE OF THIS PROJECT

Sea waybills and air waybills

3.66 We have considered whether documents such as sea waybills and air waybills should be included in the scope of our provisional proposals. While these documents are used in shipping and trade finance, they do not require possession to fulfil their legal and commercial functions.

3.67 A "sea waybill" is a document used in the carriage of goods by sea. It evidences an undertaking by the carrier to deliver the goods to a named person. A sea waybill is not a document of title in the common law sense. Given the existence of transferable bills of lading, it is unnecessary for sea waybills to become documents of title.

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132 See sample certificate in M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019), appendix 2.

133 Paper certificates are signed in facsimile by the insurer and provided to the assured under the open cover agreement (the "original assured") as blank forms to be completed at the time a declaration is made. The forms are countersigned by the original assured at the time of the certificate's issue, when the declaration is made.

134 *Koskas v Standard Marine Insurance Co* (1927) 27 Ll L Rep 59, 60.

135 *Koskas v Standard Marine Insurance Co* (1927) 27 Ll L Rep 59, 60.

136 See discussion in M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) paras 8.42 to 8.46 and 12.19 to 12.32.

3.68 It is noted above that a straight bill of lading is considered a sea waybill for the purposes of COGSA 1992. [137] A sea waybill contract provides that delivery will be made to the named consignee. By contrast a straight bill of lading contract provides that delivery will be made to the named consignee *upon presentation of the bill*. The named consignee under a straight bill of lading will not "become the person to whom delivery is to be made" unless and until they receive the bill from the shipper, who received it from the carrier. For this reason, straight bills of lading fall within our current proposals, but sea waybills do not.

3.69 An "air waybill" is the equivalent of a sea waybill for the carriage of goods by air. Like a sea waybill, an air waybill is not a document of title.[138] Given the speed of air transport, there is relatively little commercial need to give this degree of transferability to air waybills. This is likely why there are no reported cases that have attempted to prove that an air waybill is a document of title.[139]

3.70 Sea waybills and air waybills are already widely used in electronic form and are capable, under the current law, of performing evidentiary functions. There is no need to establish who is in possession of them to determine who can claim performance of the obligation evidenced in them (the obligation to deliver goods). As possession is not essential for their functions, we do not consider that these documents need to be included as part of our provisional proposals.

Bearer bonds and other documents of title

3.71 In formulating the list of documents to which our provisional proposals will apply, we considered whether bearer bonds should be included. A "bond" is a promise by a person (the "issuer") to pay money to another (the "bondholder") at some future date.[140] Bonds are governed by common law rules.

3.72 In a typical bond arrangement, a bond is given in exchange for the bondholder's investment. As well as the payment of the principal amount on the bond's "maturity",[141] the issuer will typically also make regular interest payments to the bondholder. There are two types of bonds:

(1) a bearer bond; or

(2) a registered bond.

3.73 From the issuer's perspective, the issuing of bonds is a means of raising finance. From the bondholder's perspective, the value lies in the interest received as part of the bond's repayment and in the active secondary market for bearer bonds where they are bought and sold. Bearer bonds are issued by governments and companies to

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137 See above at para 3.42.

138 M Bridge, *Benjamin's Sale of Goods* (11th ed 2020) para 21-067.

139 See further, M Bridge, *Benjamin's Sale of Goods* (11th ed 2020) para 21-067.

140 P Wood, *International Loans, Bonds, Guarantees and Legal Opinions* (3rd ed 2019) para 25-012.

141 A bond's date of maturity is typically a number of years from the date of issue, normally greater than five: P Wood, *International Loans, Bonds, Guarantees and Legal Opinions* (3rd ed 2019) para 25-012.

raise money. Bearer bonds are the preferred form of security if bondholders wish to remain anonymous.

3.74 A bearer bond is a negotiable instrument[142] and a document of title to a debt, according legal title to the person in possession. The entitlement embodied within the bond is transferable by means of delivery of the document, and a good faith transferee[143] may take the bond free of any equities or defects in the transferor's title.[144]

3.75 Bearer bonds may be either certificated or global.[145] A bearer bond in certificated form is a printed paper document (referred to as a "note"). For this reason, such bonds are called "physical" or "definitive".[146] Each bondholder is issued their own physical note.

3.76 When bearer bonds are issued in global form, one document (a "global note") is created that contains the terms of all the bearer bonds issued in a particular tranche. This global note is kept with a bank for safekeeping; the bank therefore has the legal entitlement to the sums due under it. Bondholders have only a beneficial entitlement to their proportion of the total (global) issued debt, exercisable only against their own intermediary, except where under the terms of issue they are exchangeable for definitive notes (this is now uncommon).

3.77 A registered bond is not a document of title.[147] Title to a registered bond is determined by the register, not by possession of the bond. Registered bonds serve at most an evidential function and are therefore not within the scope of this consultation paper.

3.78 In preliminary discussions with stakeholders, we were told that bearer bonds should not be part of this list as their legitimate commercial use has diminished and there was no call for them to be made electronic. It should also be noted that the MLETR does not apply to "securities, such as shares and bonds, and other investment instruments".[148] The MLETR therefore does not apply to bearer bonds.

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142 The term "negotiable instrument" is often used to refer to negotiable documents of title to money and to securities, see M Bridge, L Gullifer, K Low, and G McMeel, The Law of Personal Property (2nd ed 2019) para 5-007. This is a result of the common law: *Edelstein v Schuler & Co* [1902] 2 KB 144, 155, by Bigham J. Bearer bonds are sometimes instead called a "negotiable security".

143 The term "good faith transferee" is used as a shorthand for "a person in possession of the instrument who has in good faith given value for it, provided that it was complete and regular on its face, not overdue and that is has not, to his knowledge, been dishonoured": E Peel (ed), *Treitel on The Law of Contract* (15th ed 2020) para 15-048.

144 "A negotiable instrument payable to bearer is one which, by the custom of trade, passes from hand to hand by delivery, and the holder of which for the time being, if he is a *bona fide* holder for value without notice, has a good title, notwithstanding any defect of title in the person from whom he took it.": *Simmons v London Joint Stock Bank* [1891] 1 Ch 270, 294, by Bowen LJ.

145 Registered bonds can also take these two forms, albeit the paper documents are referred to as "certificates" to reinforce the lack of negotiability.

146 See, for example, G Fuller, *Corporate Borrowing: Law and Practice* (5th ed 2016) para 3.21; and P Wood, *International Loans, Bonds, Guarantees and Legal Opinions* (3rd ed 2019) para 27-006.

147 P Wood, *International Loans, Bonds, Guarantees and Legal Opinions* (3rd ed 2019) para 27-003.

148 MLETR, article 1.

3.79 The provisional list of documents covered by our proposed reforms concentrates on those in respect of which we are aware of demand for digitalisation. There are several other documents that we have not currently included within the scope of this project but which have been, or are likely to be, recognised as documents of title.[149] This category of documents includes banker's drafts,[150] certificates of deposit payable to bearer,[151] bearer scrip certificates exchangeable for shares,[152] mate's receipts,[153] traveller's cheques,[154] and dividend warrants.[155] We would welcome consultees' views on whether these documents should be part of our proposed reforms.

Other intangible assets

3.80 As set out in Chapter 1, our digital assets work is in two phases. This consultation paper is part of the first phase of the project which focuses on, and is limited to, electronic trade documents. The second phase of the project covers other digital assets, including cryptoassets. Those interested in this broader category of digital assets are invited to respond also to our separate call for evidence, published alongside this consultation paper.[156]

LISTING THE DOCUMENTS IN THE DRAFT BILL

3.81 As indicated above, we propose to set out a list of the documents which we intend our proposed reforms to cover in the draft Bill. As we discuss in Chapter 4, this is a different approach from that taken by other legal frameworks, such as the MLETR.[157]

3.82 The MLETR refers to documents or instruments that entitle "the holder to claim the performance of the obligation indicated in the document or instrument and to transfer the right to performance of the obligation indicated in the document or instrument through the transfer of that document or instrument."[158] The Explanatory Note includes further explanation, and an indicative list:

> Applicable substantive law should determine which documents or instruments are transferable in the various jurisdictions. An indicative list of transferable documents or instruments … includes: bills of exchange; cheques; promissory notes; consignment notes; bills of lading; warehouse receipts; insurance certificates; and air waybills.[159]

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149 M Bridge, L Gullifer, K Low, and G McMeel *The Law of Personal Property* (2nd ed 2019) para 5-015.

150 According to the Bills of Exchange Act 1882, s 5(2), banker's drafts can be treated by the holder as either a bill of exchange or a promissory note.

151 *Customs and Excise Commissioners v Guy Butler (International) Ltd* [1977] QB 377, 382.

152 *Rumball v Metropolitan Bank* (1877) 2 QBD 194.

153 D Foxton et al, *Scrutton on Charterparties and Bills of Lading* (24th ed 2019) paras 9-158 to 9-160.

154 E Ellinger, E Lomnicka, and C Hare, *Ellinger's Modern Banking Law* (5th ed 2011) pp 422 to 423.

155 Bills of Exchange Act 1882, s 97(3)(d).

156 Digital assets call for evidence (2021), https://www.lawcom.gov.uk/project/digital-assets/.

157 For detail on the MLETR, see from para 4.29 below.

158 MLETR, art 2.

159 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 38.

3.83 We propose instead to list the documents in the provisions of the law itself for two reasons: first, to provide certainty for users of the legislation; and second because, as explained above, not all of the documents which we wish to capture are susceptible to a general definition. In particular, straight bills of lading, warehouse receipts, and ship's delivery orders are not strictly documents of title, but possession is an important part of how they function.

3.84 We acknowledge that in the future, evolving trade practices may warrant a variation of the categories of document included by virtue of this list within the scope of the legislation. We provisionally propose therefore that the Secretary of State should have the power to vary the list by adding, removing, or amending an entry in the list. This power is included as clause 5(1) of our draft Bill.

Consultation Question 2.

3.85 We provisionally propose that our reforms cover only the following categories of document:

(1) bills of exchange;

(2) promissory notes;

(3) bills of lading;

(4) ship’s delivery orders;

(5) warehouse receipts;

(6) marine insurance policies; and

(7) cargo insurance certificates.

Do consultees agree?

If not, we invite consultees to suggest categories of document that should be added to or removed from this list, and to explain why.

Consultation Question 3.

3.86 We provisionally propose that sea waybills and air waybills need not and should not be included. Do consultees agree?

Consultation Question 4.

3.87 We provisionally propose that bearer bonds and other documents of title including banker's drafts, certificates of deposit payable to bearer, bearer scrip certificates exchangeable for shares, mate's receipts, traveller's cheques, and dividend warrants need not and should not be included. Do consultees agree?

Consultation Question 5.

3.88 We provisionally propose that the Secretary of State should have the power to add, remove, or amend an entry in the list of documents described in Consultation Question 1 by regulations made by statutory instrument. Do consultees agree?

TERMINOLOGY AND DEFINITIONS

3.89 We have included with this consultation paper a draft Bill which would implement our proposed reforms. The draft Bill is attached at Appendix 4 and we describe our proposals, and the draft Bill, in detail in Chapters 5 and 6.

3.90 Clause 1(2) of the draft Bill sets out the documents listed above, under the label "trade documents".

3.91 Technically speaking, not all of the documents are trade documents within the context of international trade. For example, there is a non-commercial dimension to the use of cheques, which are bills of exchange. However, trade documents are the focus of the proposed reforms. As "trade documents" is just a label, defined in legislation by the list of documents above, it does not have the effect of excluding documents such as cheques. Similarly, the label will not include all documents that could conceivably be adjacent to a trade transaction, such as sea waybills and air waybills.

3.92 We prefer this broad term to a narrower, more technical term which, even if used as a label, could cause confusion. For example, we do not think we could use labels such as "document of title", "documentary intangible", or "transferable document", as they are all technical terms which may fail to capture the range of documents we wish to cover. "Trade documents" is broad enough to capture all of the documents with which we are concerned, and because it does not have a technical legal meaning, we think that it is a better general term.

3.93 We welcome consultees' views.

Consultation Question 6.

3.94 We provisionally propose that the group of documents covered by our proposed reforms should be referred to as "trade documents" in the draft Bill. Do consultees agree?

If not, what alternative label would consultees propose, and why?

3.95 Our provisional view is that the categories of document listed above are sufficiently defined in the general law and understood by practitioners so as not to need a statutory definition in the draft Bill. In fact, we consider that in some cases, a definition might have the effect of excluding documents which we would like to include within our proposed reforms. For example, if we were to define a bill of lading as it has been defined in subsection 1(2) of COGSA 1992, it would not include straight bills of lading within the scope of our reforms. For this reason, we do not define these documents in our draft Bill beyond the language in the list set out above. We seek consultees' views on this.

Consultation Question 7.

3.96 We provisionally propose that each individual trade document in the draft Bill need not and should not be defined. Do consultees agree? If not, please give reasons.

3.97 As mentioned above, not all of the documents in our list are, strictly speaking, documents of title. For example, the possession of ship's delivery orders and warehouse receipts is only legally relevant if they are made out to order. Our proposed reforms do not make an explicit distinction between ship's delivery orders and warehouse receipts that are made out to order and those that are not. We do not foresee that this will have any adverse consequences. Possession of ship's delivery orders and warehouse receipts, which are not made out to order is not relevant where those documents are issued in paper form. We consider that those documents will be treated the same way legally (ie that possession will not be relevant) if they are issued in electronic form.

3.98 We would be interested in consultees' views on this matter.

Consultation Question 8.

3.99 We provisionally propose to include ship's delivery orders and warehouse receipts in our list of trade documents, without an express restriction to those that have been made out to order. Do consultees consider that this will cause problems? Please explain why.

Chapter 4: Comparative analysis of other reform initiatives

4.1 As a result of the perceived advantages of electronic documents in international trade, the last few decades have seen various initiatives in both international frameworks and individual jurisdictions to recognise the use of electronic documents as legally valid. At present, however, use of electronic documents in international trade remains very limited.

4.2 This chapter examines the following attempts at reform: the Rotterdam Rules, the UNCITRAL Model Law on Electronic Transferable Records (MLETR), developments in Singapore, and the US's Uniform Commercial Code (UCC). These examples comprise a useful sample of potential approaches to facilitating the widespread use of electronic documents in international trade.

4.3 In this chapter, we describe and compare the ways in which each attempt has approached the legal validity and effect of electronic documents, and identify some overall themes which have informed the development of our proposals. We also look briefly at legislation in other countries.

4.4 One thing that these legislative efforts have in common is that they all attempt to address the possession problem which we discuss in Chapter 2. This is because possession is fundamental to the way that trade documents operate internationally, across all legal systems. Some legislative efforts address it by seeking to identify a functional equivalent or analogue to possession.[1] Others bypass possession entirely and instead set out the circumstances in which a person is deemed to hold a document, and how that person is able to transfer specific rights or entitlements.[2]

UNCITRAL INITIATIVES

4.5 Legal enablement of the use of electronic communications and contracting in international trade has been the subject of much attention from UNCITRAL.[3]

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1 For example, the US, Bahrain, Singapore, and the Abu Dhabi Global Market. The latter three jurisdictions have both adopted the MLETR: see the discussion from para 4.45 below.

2 For example, China, South Korea, and Japan: see the discussion from para 4.93 below.

3 UNCITRAL was established by the United Nations General Assembly in 1966 for the purpose of furthering "the progressive harmonization and modernization of the law of international trade by preparing and promoting the use and adoption of legislative and non-legislative instruments in a number of key areas of commercial law." See UNCITRAL, *United Nations Commission on International Trade Law,* https://uncitral.un.org/en/content/homepage.

4.6 Three UNCITRAL instruments have attempted to facilitate digitalisation of trade by making provision for electronic documents of title. Two of these are model laws,[4] and one is a convention:[5]

(1) the Model Law on Electronic Commerce (adopted by UNICTRAL in 1996);

(2) the United Nations Convention on Contracts for the Carriage of Goods Wholly or Partly by Sea 2008 (the "**Rotterdam Rules**"); and

(3) the MLETR (adopted by UNCITRAL in 2017).

4.7 The three instruments are separate from each other and have different aims. As they are all UNCITRAL instruments, one would expect them to be broadly compatible with each other so that a state could adopt all three without significant conflicts within its own legislation. However, as shall be seen below, each adopts a slightly different approach. This might be explained by the different ages of the initiatives, and the different purposes of the convention compared to the model laws.

4.8 The 1996 Model Law on Electronic Commerce deals with electronic commerce generally. While it contains two provisions on documents concerning the carriage of goods,[6] it has been, for our purposes, effectively superseded by the MLETR. We therefore concentrate on the Rotterdam Rules and the MLETR.

ROTTERDAM RULES

4.9 The Rotterdam Rules (and their predecessors) relate to the carriage of goods by sea. That is, they are particularly focused on documents such as bills of lading and sea waybills which concern goods. They do not apply to instruments relating to the payment of money, such as bills of exchange.[7]

Historical background

4.10 The Hague-Visby Rules[8] are a multilateral treaty incorporated into UK law as a schedule to COGSA 1971. The provisions of the rules have force of law.[9] The Hague-

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4 As we note in Chapter 2 above, the model laws are intended to be flexible instruments which can be adapted to suit domestic circumstances and apply in the states that implement them into domestic legislation, in the form in which they are so implemented. UNCITRAL describes a model law as "a suggested pattern for law-makers in national governments to consider adopting as part of their domestic legislation": UNCITRAL, *Frequently Asked Questions – UNCITRAL Texts*, https://uncitral.un.org/en/about/faq/texts. Legislative guides are more flexible still and merely set out key objectives.

5 The international conventions adopted by UNCITRAL apply in the jurisdictions that sign, ratify and implement them domestically once they come into force, which happens when they are ratified by a minimum number of states. This minimum varies among conventions. See UNCITRAL, *Frequently Asked Questions – UNCITRAL Texts,* https://uncitral.un.org/en/about/faq/texts.

6 UNCITRAL Model Law on Electronic Commerce of 1996, arts 16 and 17.

7 See Chapter 3 above for a discussion of these documents and their functions.

8 Protocol amending the International Convention for the unification of certain rules of law relating to bills of lading, 25 August 1924, as amended by the Protocol of 23 February 1968 (Brussels, 21 December 1979).

9 Carriage of Goods by Sea Act 1971, s 1(2).

Visby Rules are largely identical to the 1924 Hague Rules,[10] which were enacted in the UK by the Carriage of Goods by Sea Act 1924. The purpose of the Hague-Visby Rules is to protect shippers in a context where carriers are in a position to dictate the terms of the agreements.[11]

4.11 In the 1970s, several countries expressed dissatisfaction with the Hague Rules and Hague-Visby Rules. These complaints included the narrow scope of the rules' application and the perception that some of the rules were unduly favourable to carriers.[12] In response, UNCITRAL drafted the Hamburg Rules.[13] While the Hamburg Rules, adopted by UNCITRAL in 1978, were eventually ratified by a sufficient number of states to bring them into force, they were considered largely unsuccessful due to their lack of widespread international support.[14] The lack of support led to a fragmented approach as between different legal systems.[15]

4.12 Unsurprisingly given their age, none of these treaties contemplated the use of documents other than in paper form.[16]

The context of the Rotterdam Rules

4.13 As a response to the limited success of the Hamburg Rules, the Rotterdam Rules were negotiated by national delegates under the auspices of UNCITRAL. They were intended as a complete replacement for the Hague Rules, the Hague-Visby Rules, and the Hamburg Rules.[17] The Rotterdam Rules were adopted by the United Nations in 2008.

4.14 Amongst their many aims,[18] the Rotterdam Rules were intended to facilitate the use of electronic documents (what they refer to as "electronic transport records").[19] The Convention, however, has not entered into force; the condition for entering into force is ratification by at least 20 states and only five have done so.[20]

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10 International Convention for the Unification of Certain Rules of Law relating to Bills of Lading (Brussels, 25 August 1924).

11 M Goldby, "The impact of new commercial practices on liner contracts of carriage: new wine in old skins?", ch 10 in J Chuah (ed) *Research Handbook on Maritime Law and Regulation* (2019) 223, 243.

12 A Diamond, "The Rotterdam Rules" [2009] *Lloyd's Maritime and Commercial Law Quarterly* 445, 445–6.

13 United Nations Convention on the Carriage of Goods by Sea (Hamburg, 31 March 1978).

14 B Makins, "The Hamburg Rules: A Casualty" (1994) 76 *Maritime Studies* 6.

15 G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 10-001.

16 Although article 1(8) of the Hamburg Rules provides ""Writing" includes, inter alia, telegram and telex."

17 Resolution adopted by the General Assembly on 11 December 2008, 63/122, *United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea,* art 89, https://treaties.un.org/doc/source/docs/A_RES_63_122-E.pdf.

18 For full list of aims, see Resolution adopted by the General Assembly on 11 December 2008, 63/122, *United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*, https://treaties.un.org/doc/source/docs/A_RES_63_122-E.pdf.

19 A Diamond, "The Rotterdam Rules" (2009) *Lloyd's Maritime and Commercial Law Quarterly* 445, 499.

20 The Rotterdam Rules were adopted by the UN General Assembly in 2008 and have been signed by 25 countries (not including the UK). Of these 25 countries, only five have ratified. The condition for enforcement is ratification by at least 20 states. The United Kingdom is not a signatory.

4.15 A number of possible explanations have been offered for the low uptake of the Rules.[21] These include that they may be disproportionately advantageous for wealthy countries,[22] do not reflect market practice,[23] and are in places "excessive and unnecessarily complex".[24]

4.16 Despite these criticisms, it has been suggested that the Rotterdam Rules are likely to be the best available pathway to harmonisation of the law relating to the carriage of goods by sea:

> The Rules represent … the result of ten years of careful work which is unlikely to be repeated in this generation. They are probably the best that can be obtained unless uniformity is to decline and in the end cease altogether.[25]

4.17 There are two other points which it is helpful to note before we look at the Rotterdam Rules in more detail:

(1) the Rotterdam Rules were designed to provide as complete a code as possible to govern contracts for the carriage of goods wholly or partly by sea. The provisions on documentation are only a small part of the overall regime and are intended to work in tandem with other provisions in the Rules; and

(2) the Rotterdam Rules have separate (albeit parallel) regimes for paper documents and electronic documents. As we discuss in Chapter 2, we would prefer that the two are legally identical so far as possible.

Documents covered by the Rotterdam Rules

4.18 The Rotterdam Rules apply to "transport documents",[26] defined as a document issued under a contract of carriage by the carrier that:

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21 J Alcantara, F Hunt, S O Johansson, B Oland, J Ramberg, D G Schmitt, W Tetley, and J Vidal, "Particular concerns with regard to the Rotterdam Rules" (2010) 2 *Cuadernos Derecho Transnacional* 5.

22 The Rotterdam Rules have a "volume contract exemption", which would essentially allow more powerful states to decide their own rules, going against the purported aim of uniformity across jurisdictions. See J Alcantara, F Hunt, S O Johansson, B Oland, J Ramberg, D G Schmitt, W Tetley, and J Vidal, "Particular concerns with regard to the Rotterdam Rules" (2010) 2 *Cuadernos Derecho Transnacional* 5, 15.

23 For example, regarding allocation of liability: J Alcantara, F Hunt, S O Johansson, B Oland, J Ramberg, D G Schmitt, W Tetley, and J Vidal, "Particular concerns with regard to the Rotterdam Rules" (2010) 2 *Cuadernos Derecho Transnacional* 5, 7.

24 J Alcantara, F Hunt, S O Johansson, B Oland, J Ramberg, D G Schmitt, W Tetley, and J Vidal, "Particular concerns with regard to the Rotterdam Rules" (2010) 2 *Cuadernos Derecho Transnacional* 5.

25 G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 10-001.

26 In previous international conventions, the provisions applied to documents which they expressly referred to as "bills of lading" (see eg United Nations Convention on the Carriage of Goods by Sea (Hamburg, 31 March 1978, art 1(7)). During preparation of the Rotterdam Rules, the Working Group moved away from the term "bill of lading" for two key reasons. First, electronic alternatives might not resemble a bill of lading and second, the maritime trade industry might move towards using new documents that should also be covered by the Convention, see UNCITRAL, *UNCITRAL Consolidated Official Reports On the Preparation of the United Nations Convention on Contracts for International Carriage of Goods Wholly or Partly by Sea ("The Rotterdam Rules"),* p 76 and p 106, https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/compilation_of_reports.pdf.

(a) Evidences the carrier's or a performing party's receipt of goods under a contract of carriage; and

(b) Evidences or contains a contract of carriage.[27]

4.19 This definition covers both bills of lading and sea waybills.[28] The Rotterdam Rules use the terminology "electronic transport record" to refer to the electronic equivalents of transport documents.[29]

4.20 The consent of the carrier and the shipper is required if an electronic transport record is to be validly issued instead of a paper counterpart.[30]

Central provision allowing for electronic documents

4.21 The Rotterdam Rules reflect the international requirement for "possession" of documents such as bills of lading. They make "exclusive control" the functional equivalent of possession:

> The issuance, exclusive control, or transfer of an electronic transport record *has the same effect as* the issuance, possession, or transfer of a transport document.[31]

4.22 The concepts of "issuance" and "transfer" of an electronic transport record are both defined in relation to "exclusive control":

> The "issuance" of a negotiable electronic transport record means the issuance of the record in accordance with procedures that ensure that the record is subject to exclusive control from its creation until it ceases to have any effect or validity.[32]
>
> The "transfer" of a negotiable electronic transport record means the transfer of exclusive control over the record.[33]

4.23 The Rotterdam Rules do not define "exclusive control".[34]

Who "holds" an electronic transport record under the Rotterdam Rules?

4.24 It is important to be able to identify who holds a negotiable document at any given time. For paper transport documents, the Rotterdam Rules define "holder" as the party

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27 Rotterdam Rules, art 1(14).

28 M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 6.88.

29 Rotterdam Rules, art 1(18).

30 Rotterdam Rules, art 8(a), art 35.

31 Rotterdam Rules, art 8(b) (emphasis added).

32 Rotterdam Rules, art 1(21).

33 Rotterdam Rules, art 1(22).

34 However, it must be presumed that some degree of control by the operator of a centralised system would not impair the exclusivity of the holder's control over the document, given that the drafters intended to include registry systems within the scope of the Convention, see UN General Assembly, *Report of Working Group III (Transport Law) on the work of its fifteenth session (New York, 18-29 April 2005) A/CN.9/576* (13 May 2005) paras 192 to 195 and 206 to 210.

in physical possession.[35] For electronic transport records, the Rotterdam Rules instead define a holder as:

> the person to which a negotiable electronic transport record has been issued or transferred in accordance with the procedures referred to in article 9, paragraph 1.[36]

4.25 The Rotterdam Rules are technology-neutral[37] and article 9(1) does not list specific technical standards which an electronic transport record must meet. Instead, it provides a "model structure"[38] for negotiable electronic transport records to follow:

> (1) The use of a negotiable electronic transport record shall be subject to procedures that provide for:
>
> > (a) The method for the issuance and the transfer of that record to an intended holder;
> >
> > (b) An assurance that the negotiable electronic transport record retains its integrity;
> >
> > (c) The manner in which the holder is able to demonstrate that it is the holder; and
> >
> > (d) The manner of providing confirmation that delivery to the holder has been effected, or that, pursuant to articles 10, paragraph 2, or 47, subparagraphs 1 (a) (ii) and (c), the electronic transport record has ceased to have any effect or validity.
>
> (2) The procedures in paragraph 1 of this article shall be referred to in the contract particulars and be readily ascertainable.[39]

4.26 So long as these procedures are provided for in the "contract particulars",[40] the party can be a "holder" of a negotiable electronic transport record, regardless of how these procedures are met.

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35 Rotterdam Rules, art 1(10)(a).

36 Rotterdam Rules, art 1(10)(b).

37 N Gaskell, "Bills of lading in an electronic age" (2010) *Lloyd's Maritime and Commercial Law Quarterly* 233, 274.

38 N Gaskell, "Bills of lading in an electronic age" (2010) *Lloyd's Maritime and Commercial Law Quarterly* 233, 275.

39 Rotterdam Rules, art 9.

40 Rotterdam Rules, art 1(23) clarifies that for the purposes of the Rotterdam Rules, "contract particulars" means "any information relating to the contract of carriage or to the goods (including terms, notations, signatures and endorsements) that is in a transport document or an electronic transport record."

Rights over the goods obtained by means of exclusive control of a negotiable electronic transport record

4.27 The Rotterdam Rules effectively provide that the person with exclusive control of the electronic transport record has a "right of control" over the goods. This right consists in:

> (a) The right to give or modify instructions in respect of the goods that do not constitute a variation of the contract of carriage;
>
> (b) The right to obtain delivery of the goods … ; and
>
> (c) The right to replace the consignee by any other person including the controlling party.[41]

The holder of a negotiable electronic transport record, termed the "controlling party" may also transfer the right of control by transferring the negotiable electronic transport record.[42]

4.28 Thus, the Rotterdam Rules create parallel regimes applicable to paper and electronic documents, adopting the notion of exclusive control as a substitute for possession in the electronic sphere. It should also be noted that the Rules do not limit themselves to solving the possession problem, leaving the rights and entitlements consequent upon possession unchanged. They are intended as a comprehensive regime governing contracts for the carriage of goods, spelling out the rights that may be exercised as a result of being the holder. There is therefore the risk that the "exclusive control" solution may not work as effectively if taken out of this context.

THE UNCITRAL MODEL LAW ON ELECTRONIC TRANSFERABLE RECORDS (MLETR)

4.29 In 2017, UNCITRAL formulated the MLETR. Unlike the Rotterdam Rules, the MLETR was aimed specifically at enabling the widespread use of electronic documents. It includes the general provision that:

> An electronic transferable record shall not be denied legal effect, validity or enforceability on the sole ground that it is in electronic form.[43]

4.30 As a model law, this instrument is "a suggested pattern for law-makers in national governments to consider adopting as part of their domestic legislation".[44] As we discuss below, three states have implemented legislation adopting the MLETR: Bahrain, Singapore, and the ADGM.[45]

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41 Rotterdam Rules, art 50. Art 47 entitles the holder of a negotiable electronic transport record to claim delivery from the carrier after the goods have arrived at the place of destination. Art 51 states that the holder of a negotiable electronic transport record is the "controlling party" (defined at art 1(13)), and therefore has the "right of control".

42 Rotterdam Rules, art 51.

43 MLETR, art 7(1).

44 UNCITRAL, *Frequently Asked Questions – UNCITRAL Texts*, https://uncitral.un.org/en/about/faq/texts.

45 From para 4.45 below.

4.31 The ICC has urged governments to align with, or adopt, the MLETR, in order to facilitate the widespread use of electronic trade documents.[46]

4.32 We address the key aspects of the MLETR below. When we describe our proposals in more detail, particularly in Chapter 6, we touch on some of the MLETR's additional provisions.

Documents covered by the MLETR

4.33 The MLETR has a wider remit than the Rotterdam Rules, and does not only cover documents related to the carriage of goods. As we discuss briefly in Chapter 2, the MLETR applies to "transferable documents or instruments" in electronic form. Transferable document or instrument means:

> a document or instrument issued on paper that entitles the holder to claim the performance of the obligation indicated in the document or instrument and to transfer the right to performance of the obligation indicated in the document or instrument through the transfer of that document or instrument.[47]

4.34 Unlike our draft Bill, the MLETR does not list the documents to which it applies. However, the MLETR Explanatory Note includes further explanation, and an indicative list:

> Applicable substantive law should determine which documents or instruments are transferable in the various jurisdictions. An indicative list of transferable documents or instruments … includes: bills of exchange; cheques; promissory notes; consignment notes; bills of lading; warehouse receipts; insurance certificates; and air waybills.[48]

4.35 The MLETR Explanatory Note states that straight bills of lading are not covered by the MLETR, and nor are other "documents or instruments, which are generally transferable, but whose transferability may be limited due to other agreements".[49]

4.36 As we discuss in Chapter 3, we propose to set out in our draft Bill the relevant documents covered by its provisions.[50] While the list has the same general effect as the MLETR's general description, it has some differences. For instance, we do not include sea waybills or air waybills as these are not considered transferable documents under the law of England and Wales, but we do include straight bills of lading, for the reasons set out in that chapter.[51]

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46 ICC, *Electronic Trade Roadmap – Version 2.0* (2020) p 4, https://iccwbo.org/content/uploads/sites/3/2020/05/2020-icc-digital-roadmap.pdf.

47 MLETR, art 2.

48 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 38.

49 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 88.

50 From para 3.81 above.

51 On sea waybills and air waybills see from para 3.66 above. On straight bills of lading see from para 3.40 above.

4.37 The MLETR refers to what we have called electronic trade documents as "electronic transferable records" ("**ETRs**").[52] The model law aims to achieve functional equivalence between paper and electronic documents through the operation of three main elements.

Central provision for allowing for electronic documents

4.38 The MLETR contains three central provisions, the requirements of which would need to be satisfied by an electronic record for functional equivalence to be attained.

4.39 The first of these is article 10 which provides as follows:

> 1. Where the law requires a transferable document or instrument, that requirement is met by an electronic record if:
>
> > (a) The electronic record contains the information that would be required to be contained in a transferable document or instrument; and
> >
> > (b) A reliable method is used:
> >
> > > (i) To identify that electronic record as the electronic transferable record;
> > >
> > > (ii) To render that electronic record capable of being subject to control from its creation until it ceases to have any effect or validity; and
> > >
> > > (iii) To retain the integrity of that electronic record.
>
> 2. The criterion for assessing integrity shall be whether information contained in the electronic transferable record, including any authorized change that arises from its creation until it ceases to have any effect or validity, has remained complete and unaltered apart from any change which arises in the normal course of communication, storage and display.

4.40 Therefore article 10 lays down three broad requirements:

(1) that the electronic document contains the information that would be required to be contained in its paper equivalent, and that it is identified as the relevant electronic document;

(2) that the electronic document can be subject to "control"; and

(3) that the integrity of the electronic document is retained (in that the information in the document has remained free of unauthorised amendment or interference).

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[52] MLETR, art 2.

4.41 The second element is that the role played by possession with respect to paper documents is played by "exclusive control" with respect to electronic documents. This is specified in article 11:[53]

> 1. Where the law requires or permits the possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record if a reliable method is used:
>
> (a) To establish exclusive control of that electronic transferable record by a person; and
>
> (b) To identify that person as the person in control.
>
> 2. Where the law requires or permits transfer of possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record through the transfer of control over the electronic transferable record.

4.42 This article requires that exclusive control be given over the electronic record and that the person in control be identifiable. A functional equivalent was necessary because of the assumption that possession applies only to tangibles. Paragraph (2) of article 11 provides that transfer of control will have equivalent effects at law to the transfer of possession of a paper document. "Control" is not defined but the Explanatory Note indicates that it is intended as equivalent to factual possession.[54] This approach is in line with UNCITRAL's general "functional equivalent" approach that it first introduced in the Model Law on Electronic Commerce, adopted in 1996.[55]

Reliable method

4.43 Both articles 10 and 11 refer to the need to adopt a "reliable method" for meeting the functional equivalence requirements. The meaning of this is explained by means of the general reliability standard in article 12. This is the third central provision in the MLETR. The method must be "as reliable as appropriate for the fulfilment of the function for which the method is being used, in light of all the relevant circumstances".[56] The provision includes a non-exhaustive list of circumstances to which regard may be had when establishing whether the method used for the purposes of recording and transferring rights is as reliable as appropriate:

> (i) Any operational rules relevant to the assessment of reliability;
>
> (ii) The assurance of data integrity;

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53 See UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* paras 84 and 95.

54 See UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* paras 13(b), 107, 108, and 119.

55 See UNCITRAL, *UNCITRAL Model Law on Electronic Commerce, 1996 (with additional article 5 bis as adopted in 1998), Guide to Enactment, Part E The "Functional Equivalent" Approach*, paras 15 to 18.

56 MLETR, art 12(a).

(iii) The ability to prevent unauthorized access to and use of the system;

(iv) The security of hardware and software;

(v) The regularity and extent of audit by an independent body;

(vi) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method;

(vii) Any applicable industry standard … .[57]

4.44 In articles 10 and 11, the reliability requirement is expressed as a pre-condition to the recognition that an electronic transferable record is equivalent at law to its paper counterpart. However, article 12(2) provides that the reliability standard is deemed to have been met in a particular case if the method in question is "proven in fact to have fulfilled the function by itself or together with further evidence". This effectively provides that reliability can be assessed retrospectively in a particular case. This qualification is intended to reduce the opportunity for frivolous litigation.[58]

SINGAPORE

4.45 The Government of Singapore is involved in several projects intended to facilitate the use of electronic trade documents, including the adoption of the MLETR and a series of government-initiated standards and technical projects.

Background to developments in Singapore

4.46 Developments in Singapore are particularly relevant to us because Singaporean law has many similarities with the law of England and Wales. Both are common law jurisdictions, and English common law and English legislation (including commercial law statutes) have been received as part of Singaporean law.[59] Singapore has also drawn inspiration from the law of England and Wales in adopting domestic legislation. To take bills of lading as an example, the Singaporean Bills of Lading Act (Chapter 384) covers the same material as the UK Carriage of Goods by Sea Act 1992.[60] Akin to the law of England and Wales, Singaporean law requires the possession of bills of lading. Similarly, in order to transfer a bill of lading, the original document must be (indorsed and) delivered to the transferee.[61]

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57 MLETR, art 12(a).

58 See UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 136.

59 See the Application of English Law Act 1993, and especially the first schedule which lists commercial law statutes.

60 Clyde & Co, *The Legal Status of Electronic Bills of Lading, A report for the ICC Banking Commission* (October 2018) p 33, https://cdn.iccwbo.org/content/uploads/sites/3/2018/10/the-legal-status-of-e-bills-of-lading-oct2018.pdf.

61 Info-communications Media Development Authority and Attorney-General's Chambers, *Joint IMDA-AGC Review of Electronic Transactions Act (Cap. 88) – Review of Draft UNCITRAL Model Law on Electronic Transferable Records (Public Consultation Paper)* (March 2017) para 2.1.3, https://www.imda.gov.sg/~/media/imda/files/inner/pcdg/consultations/consultation%20paper/public%20consultation%20paper%20-%20uncitral%20model%20law%20on%20etrs_10%20march%202017.pdf.

4.47 Although Singapore has for some time had legislation to facilitate electronic transactions generally, in the form of the Electronic Transactions Act (Chapter 88),[62] the relevant provisions excluded the following documents:

> Negotiable instruments, documents of title, bills of exchange, promissory notes, consignment notes, bills of lading, warehouse receipts or any transferable document or instrument that entitles the bearer or beneficiary to claim the delivery of goods or the payment of a sum of money.[63]

4.48 The status of bills of lading in Singapore has been, therefore, the same as in the law of England and Wales: parties who wish to use electronic equivalents of bills of lading cannot do so under the general law and must instead do so through direct contractual arrangements.[64]

Singapore Act to implement the MLETR

4.49 Following public consultation on whether and how to amend the Electronic Transactions Act (Chapter 88) and adopt the MLETR,[65] the Singapore Parliament passed the Electronic Transactions (Amendment) Act 2021 ("**Singapore Act**") in February 2021. The Singapore Act largely implements the MLETR, but with some modifications and omissions. The reaction of Singapore to the MLETR is instructive because of that country's importance in global shipping and trade finance, its willingness to facilitate electronic documents in its law, and because its legal framework is similar to the law of England and Wales.

4.50 The most significant divergences from the MLETR are the following new requirements in the Electronic Transactions Act (Chapter 88):

(1) subsections 16M(2)(a) and 16N(2)(a), which require all information in a transferable document or instrument to be reproduced in its electronic transferable record replacement, and vice versa (with some exceptions);[66] and

(2) section 16O, which introduces an accreditation system. If an electronic transferable record is associated with an electronic transferable record management system provided by an approved provider, the methods used by that management system are presumed "reliable".

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62 Electronic Transactions Act (Cap 88), particularly s 6.

63 Electronic Transactions Act (Cap 88), s 4; Electronic Transactions Act (Cap 88), sch 1.

64 Clyde & Co, *The Legal Status of Electronic Bills of Lading, A report for the ICC Banking Commission* (October 2018) p 32, https://cdn.iccwbo.org/content/uploads/sites/3/2018/10/the-legal-status-of-e-bills-of-lading-oct2018.pdf.

65 Info-communications Media Development Authority, *Public Consultation on the Draft UNCITRAL Model Law on Electronic Transferable Records*, https://www.imda.gov.sg/regulations-and-licensing/Regulations/consultations/Consultation-Papers/2017/public-consultation-on-the-draft-uncitral-model-law-on-electronic-transferable-records.

66 See for example Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting s 16N(3) into the Electronic Transactions Act (Chapter 88)).

Documents covered by the Singapore Act

4.51 The definition of "transferable document or instrument" is identical to the MLETR definition except that it says specifically that the definition includes a bill of exchange, a promissory note, and a bill of lading.[67]

4.52 The Explanatory Statement for the Bill which preceded the Singapore Act noted that this is not an exhaustive list of examples:

> Any other document or instrument that is (or may in the future acquire the status of) a transferable document or instrument (eg a document of title through proof of mercantile custom to that effect), would also fall within the definition.[68]

4.53 Unlike the MLETR Explanatory Note, the Bill's Explanatory Statement did not include a longer list of example documents. It did, however, note that the definition is "descriptive", and the determination of which documents fall into this definition is a matter for substantive law to decide.[69]

4.54 The documents mentioned in the Singapore Act may not always be "transferable" under law. For example, some of the listed documents may be transferable only when made out "to order". Singaporean law is like the law of England and Wales in that not all bills of lading are transferable; transfer of a straight bill of lading does not transfer the right to performance of the obligation as indicated in the document.

4.55 It is not immediately clear whether the Singapore Act is intended to include straight bills of lading (excluded from the MLETR but included in our proposals). It may be left to the courts to determine whether the label of "transferable document or instrument" is applied to an entire class of documents (for example, all bills of lading), a subset of that class (for example, only transferable bills of lading, such as bearer bills and order bills), or on an ad hoc basis (depending on the specific bill of lading in front of the court).

Central provision allowing for electronic documents

4.56 The Singapore Act follows very closely articles 10 and 11 of the MLETR. In particular, it refers to "control" and "exclusive control" as functional equivalents of possession, without further definition.

Reliable method and an accreditation scheme

4.57 Like the MLETR, the Singapore Act requires a "reliable method" to prove a variety of facts, including control over the electronic record, the identity of the person controlling the electronic record, and the integrity of the electronic record.[70]

4.58 The general reliability standards in both the MLETR and the Singapore Act provide that reliability may be determined by, among other things, "the existence of a

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67 Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting s 16A). Emphasis has been added where the Act differs from MLETR, art 2.

68 Electronic Transactions (Amendment) Bill (No 1/2021), Explanatory Statement.

69 Electronic Transactions (Amendment) Bill (No 1/2021), Explanatory Statement.

70 Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting ss 16G to 16H); MLETR, arts 10 to 11.

declaration by a supervisory body, an accreditation body or a voluntary scheme, regarding the reliability of the method".

4.59 The Singapore Act goes further than the MLETR by establishing an accreditation system by which an electronic document is presumed reliable for the purposes of the Act.[71] The Government of Singapore suggested an accreditation system in their first consultation on the MLETR.[72] The perception of the published consultee responses was that an accreditation system would build confidence in using electronic transferable records and mitigate problems with interpreting the MLETR terminology.[73] However, concern was raised over the cost of such a system[74] which might bar small and medium-sized enterprises ("**SMEs**") from participating[75] and potential complexities over where the technology was located.[76] It remains to be seen whether the potential costs of this system[77] will outweigh its efficacy.

Other considerations

4.60 Singapore's consideration of legal reform has been accompanied by technological and regulatory initiatives, some of which have been motivated by a series of fraud accusations against several Singaporean trading companies in 2020.[78] As a result, Singapore might be said to have taken a lead in grappling with the various aspects of facilitating the use of electronic documentation in international trade. These aspects include the standardisation of trade documents, the interoperability of digital trade platforms, and the aforementioned domestic law reform.

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71 Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting ss 16O(2) and 16O(3)).

72 Info-communications Media Development Authority and Attorney-General's Chambers, *Joint IMDA-AGC Review of Electronic Transactions Act (Cap. 88) – Review of Draft UNCITRAL Model Law on Electronic Transferable Records (Public Consultation Paper)* (March 2017), paras 5.2.4 to 5.2.5.

73 Deutsche Bank Asia, *Response,* https://www.imda.gov.sg/-/media/Imda/Files/Inner/PCDG/Consultations/consultation-paper/Public-Consultation-on-the-Draft-Uncitral-Model-Law-on-Electronic-Transferable-Records/Deutsche-Bank-Public-Consultation-on-Review-of-Draft.pdf?la=en.

74 Deutsche Bank Asia, *Response,* https://www.imda.gov.sg/-/media/Imda/Files/Inner/PCDG/Consultations/consultation-paper/Public-Consultation-on-the-Draft-Uncitral-Model-Law-on-Electronic-Transferable-Records/Deutsche-Bank-Public-Consultation-on-Review-of-Draft.pdf?la=en.

75 Aviva Ltd, *Public Consultation on Draft UNCITRAL Model Law on Electronic Transferable Records – Respondents*, https://www.imda.gov.sg/-/media/Imda/Files/Inner/PCDG/Consultations/consultation-paper/Public-Consultation-on-the-Draft-Uncitral-Model-Law-on-Electronic-Transferable-Records/Aviva-Public-Consultation-on-Review-of-Draft-UNCITRAL-Model--Law-on-Electronic-Transferable-Records.pdf?la=en.

76 Deutsche Bank Asia, *Response,* https://www.imda.gov.sg/-/media/Imda/Files/Inner/PCDG/Consultations/consultation-paper/Public-Consultation-on-the-Draft-Uncitral-Model-Law-on-Electronic-Transferable-Records/Deutsche-Bank-Public-Consultation-on-Review-of-Draft.pdf?la=en.

77 Deutsche Bank Asia, *Response,* https://www.imda.gov.sg/-/media/Imda/Files/Inner/PCDG/Consultations/consultation-paper/Public-Consultation-on-the-Draft-Uncitral-Model-Law-on-Electronic-Transferable-Records/Deutsche-Bank-Public-Consultation-on-Review-of-Draft.pdf?la=en.

78 We return to these allegations of fraud briefly at para 7.52 below, where we talk about the potential benefits of increased security offered by electronic rather than paper documents.

4.61 For example, TradeTrust is an initiative led by two Singapore public bodies.[79] It comprises a set of "standards and frameworks that support the exchange of electronic trade documents" through a "public blockchain offering".[80] Its apparent aim is to encourage electronic trade documents to be used in cross-border transactions and across multiple electronic platforms.

4.62 Singapore is also involved in a "Transfer of MLETR-compliant titles" project coordinated by the United Nations Centre for Trade Facilitation and Electronic Business ("**UN/CEFACT**").[81] The project, which is currently in development, was proposed by the Head of Singapore's delegation to UN/CEFACT. It is intended to give clear guidance, via a White Paper, on how to establish reliability as described in the MLETR.[82] At the time of publication, the UN/CEFACT project remains in development.

4.63 Given Singapore's status in the international trade and shipping world and its position as a financial, commercial, and transport hub,[83] other jurisdictions may be encouraged by Singapore's adoption of the MLETR and follow suit.

BAHRAIN

4.64 Bahrain was the first country to adopt the MLETR, doing so in 2019.[84] It adopted it with similar modifications to the recent Singapore Act, including an accreditation system (to be determined by the Minister of an administrative agency designated in a decree) to certify reliability.

4.65 The legislation defines a "document" as:

(1) bills of lading;

(2) letters of credit;

(3) warehouse receipts; and

(4) any other document of title, in respect of an obligation to deliver goods indicated in the document, specified in a regulation issued by the competent Minister for Transportation after consultation with the Governor.[85]

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79 The Info-comm Media Development Authority and the Maritime Port Authority of Singapore. See https://www.imda.gov.sg/programme-listing/international-trade-and-logistics/tradetrust.

80 The Info-comm Media Development Authority, *Trade Trust,* https://www.imda.gov.sg/programme-listing/international-trade-and-logistics/tradetrust.

81 UN/CEFACT is an inter-governmental body of the United Nations Economic Commission for Europe, working to produce trade facilitation recommendations and electronic business standards. See https://unece.org/trade/uncefact.

82 UNECE, *Transfer of MLETR-compliant titles,* https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles.

83 According to the Singapore Department of Statistics, in 2020, Singapore's total merchandise trade was S$969.1 billion, https://www.singstat.gov.sg/.

84 UNCITRAL, *Bahrain enacts the UNCITRAL Model Law on Electronic Transferable Records* (29 November 2018), https://uncitral.un.org/en/news/bahrain-enacts-uncitral-model-law-electronic-transferable-records.

85 Law No 55 of 2018 with respect to Electronic Transferable Records, article 1.

4.66 The legislation defines "instrument" as:

(1) cheques;

(2) bills of exchange;

(3) promissory notes; and

(4) any other instruments, in respect of an obligation to pay a fixed amount of money indicated in the instrument, specified in a regulation issued by the Governor.[86]

ABU DHABI GLOBAL MARKET

4.67 The ADGM is an international financial centre located in the United Arab Emirates. In 2021, the ADGM enacted the Electronic Transactions Regulations 2021.[87] This legislation adopted several UNCITRAL model laws, including the MLETR.[88] While there are some minor amendments in drafting, the Electronic Transactions Regulations 2021 do not, in substance, depart from the MLETR.

UNIFORM COMMERCIAL CODE (US)

4.68 In the United States, legal recognition has been given to electronic documents of title by way of amendments to the UCC.[89] The UCC is a model law jointly administered and promulgated by the National Conference of Commissioners on Uniform State Laws ("**NCCUSL**") and the American Law Institute ("**ALI**"), with the object of promoting uniformity in the commercial law of the fifty US states. As a model law, it does not apply automatically as law throughout the United States, but is instead subject to voluntary adoption by individual states. The approach taken in the UCC focuses on the concept of control as an analogue to possession.

Documents covered by the UCC

4.69 A document of title is defined as:

> A record (A) that in the regular course of business or financing is treated as adequately evidencing that the person in possession *or control* of the record is entitled to receive, control, hold, and dispose of the record and the goods the record covers and (B) that purports to be issued by or addressed to a bailee and to cover goods in the bailee's possession which are either identified or are fungible portions of an identified mass.[90]

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86 Law No 55 of 2018 with respect to Electronic Transferable Records, article 1.

87 ADGM, *ADGM enacts Electronic Transactions Framework* (28 February 2021), https://www.adgm.com/media/announcements/adgm-enacts-electronic-transactions-framework.

88 UNCITRAL, *UNCITRAL Model Law on Electronic Transferable Records (2017) – Status,* https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records/status.

89 The amendments are to the UCC's Article 7 – Documents of Title.

90 §1-201(b)(16) UCC (emphasis added).

4.70 As can be seen in this definition, “control” was included as an alternative to possession in defining a document of title. An “electronic document of title” is defined as “a document of title evidenced by a record consisting of information stored in an electronic medium”.[91]

Achieving recognition through the concept of control

4.71 The UCC recognises that a document of title can be electronic by expanding the definition of a holder of a document of title to include a person in “control” of a document in electronic form.[92] It provides a definition of “control” that is rooted in being able reliably to identify the person to whom the electronic document of title is issued, and any person(s) to whom that document is subsequently transferred.

4.72 The state of having control of an electronic document of title is defined as follows:

> A person has control of an electronic document of title if a system employed for evidencing the transfer of interests in the electronic document reliably establishes that person as the person to which the electronic document was issued or transferred.[93]

4.73 The holder of an electronic document of title can then transfer that document (and so too the right to claim performance of the embodied obligation) merely by “delivery”, which is defined as the “voluntary transfer of control” of the electronic document.[94]

4.74 While described as an “analogue” to possession,[95] control operates in parallel to possession, in legal terms. It is noteworthy that the indorsement requirement was done away with for the purposes of electronic documents of title: “control of an electronic document of title is the conceptual equivalent of possession *and indorsement* of a tangible document of title.”[96] This means that, under the UCC, if you are in control of an electronic document of title, you are the holder. The implication is that the fact of being in control may import more in legal terms than the fact of being in physical possession.

4.75 Control under the UCC is not therefore an exact analogue of possession: it is a distinct legal concept. Thus “control” does not have the same meaning for the

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91 §1-201(b)(16) UCC. In contrast, a “tangible document of title” is defined as “a document of title evidenced by a record consisting of information that is inscribed on a tangible medium”.

92 §1-201(b)(21)(C) UCC.

93 §7-106(a) UCC.

94 §7-501(b) UCC and §1-201(b)(15) UCC.

95 J K Winn, “Electronic Chattel Paper: Invitation Accepted” (2010) 46 Gonz L Rev 407, 415 citing UCC § 9-327 cmt 5 (Article 9 Revisions Draft 1997).

96 See New York City Bar, Committee on Commercial Law and Uniform State Law, *Report on Revised Article 7 of the Uniform Commercial Code* (December 2011) p 4, https://www2.nycbar.org/pdf/report/uploads/20072201-ReportonRevisedArticle7oftheUniformCommercialCode.pdf.

purposes of the UCC as it does for the purposes of the MLETR, where it is intended as the functional equivalent of factual possession.[97]

4.76 Under the current law of England and Wales for paper documents, possession of a paper trade document may not be enough by itself to make a person the holder: something else, such as indorsement, may be required.[98] As we discuss in the following chapters, our approach is to allow for possession of electronic trade documents; other rules, such as indorsement, which currently apply to paper documents will also apply to their electronic equivalents.

Reliability

4.77 An important feature of the UCC's approach is that control of a document is, as in the MLETR, defined by reference to the notion of reliability. Indeed, the wording of §7-106(a) UCC suggests that control can only be established if the particular system of electronic documentation is sufficiently reliable. It is not enough for it to be possible to identify, on a particular occasion, to whom an electronic document of title has been issued or transferred. It must be possible to do so "reliably", although this does not require infallibility.

4.78 The reliability of a given system is judged by reference to various contextual factors such as the technology used to run the system, the technological and human processes for managing and using the system, and the people managing and making use of the system. Additionally, §7-106(b) UCC contains a "safe harbour" provision – that is, a series of conditions which, if satisfied, will in turn satisfy the reliability requirement.[99] This provision states that:

> A person will be deemed to have control of an electronic document of title, if the document is created, stored, and assigned in such a manner that:
>
> (1) a single authoritative copy of the document exists which is unique, identifiable, and, except as otherwise provided in paragraphs (4), (5), and (6), unalterable;
>
> (2) the authoritative copy identifies the person asserting control as:
>
> (A) the person to which the document was issued; or
>
> (B) if the authoritative copy indicates that the document has been transferred, the person to which the document was most recently transferred;
>
> (3) the authoritative copy is communicated to and maintained by the person asserting control or its designated custodian;

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97 See para 4.42 above.

98 As in the case of "to order" documents: see para 3.11(2) above.

99 J K Winn, "Electronic Chattel Paper: Invitation Accepted" (2010) 46 *Gonzaga Law Review* 407, 423.

(4) copies or amendments that add or change an identified assignee of the authoritative copy can be made only with the consent of the person asserting control;

(5) each copy of the authoritative copy and any copy of a copy is readily identifiable as a copy that is not the authoritative copy; and

(6) any amendment of the authoritative copy is readily identifiable as authorized or unauthorized.

THEMES AND ISSUES EMERGING FROM THESE COMPARATIVE APPROACHES

4.79 The approaches outlined above have highlighted several shared aims in the recognition of the legal validity of electronic documents.

(1) **Harmonisation**. In order for electronic documents to be a workable alternative to paper documents used in trade and finance, they must be recognised in all relevant jurisdictions involved in the trade or finance arrangement. For this reason, several of the reforms set out here were either posed at an international level or considered in a multi-jurisdictional context. It has been equally important for our work to consider the international scope and impact of our proposed reforms. In particular, we have developed our proposals with the MLETR in mind, while ensuring that they fit within, or constitute a natural development of, the existing legal framework in England and Wales.[100]

(2) **Technological neutrality**. All of the above reforms have avoided specifying the technology and processes to be involved in creating, holding, or transferring the relevant electronic documents. It is clear to us, both through analysing the reforms above and through discussions with stakeholders, that in order for our reforms to be future-proof, they must remain technology-neutral and not, therefore, depend on the existence or operation of any particular system.[101]

(3) **Control**. The three major avenues of reform outlined in this consultation paper have settled on the concept of "control" of an electronic trade document as being in some way equivalent or analogous to possession of an equivalent paper trade document. This provides a useful background to the development of our provisional proposals for the law of England and Wales.

4.80 We have considered these themes to guide our own proposals to recognise electronic documents in trade and finance.

4.81 There are also several aspects of the reforms which we discuss above where our considerations were not necessarily the same.

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100 As we discuss in the following chapter, we think the effect of our central provisions on possession of electronic trade documents are substantially aligned with articles 10 and 11 of the MLETR. In Chapter 6 below, where we set out the other details of our proposals, we explain where we align with the MLETR and, where we do not, we explain why.

101 We discuss our technology-neutral approach from para 2.58 above.

4.82 First, both UNCITRAL and the UCC assume that possession only applies to tangibles. They therefore establish (exclusive) control as a functional equivalent that applies to electronic documents or records. By contrast, as we discuss in the following chapter, our approach is to expand the category of assets that are amenable to possession. We view this as the least interventionist way to achieve the desired outcomes.[102] It also means that electronic trade documents can be subject to legal treatment which is based on possession, including bailment, possessory securities, and unlawful interference giving rise to a claim in conversion. If we did not expand the application of possession to include intangibles that satisfy certain criteria, and instead adopted a new concept which applies to them, it would be more difficult to bring electronic trade documents within the ambit of existing laws applicable to their paper counterparts, and thereby make them legally equivalent to paper trade documents.

4.83 Second, the UNCITRAL reforms in particular necessarily had to be applicable across jurisdictions with different conceptions of property and possession. We are not constrained in this way; our proposals can and should be based on the particular nature and significance of possession in the law of England and Wales.

4.84 Third, there is uncertainty surrounding the meaning of "(exclusive) control", a central concept which is not defined by any of these pieces of legislation. In our view, getting around the possession difficulty by adopting (exclusive) control as an analogue of or functional equivalent to possession, without defining it, merely postpones the question of "what does possession look like in the cybersphere?". Through our examination of case law and analysis of the legally relevant characteristics of possession, we have attempted to make the inquiry more straightforward for the purposes of the law of England and Wales.

OTHER SYSTEMS

4.85 Here, we consider briefly the approaches taken in other countries. They are less relevant to our approach. Some of them (Germany and Australia) are less relevant because they do not propose a comprehensive solution to the possession problem, leaving it to be dealt with by delegated legislation or by contract. Others are less relevant because their approach is to bypass the possession problem by setting out explicitly the circumstances in which a person is deemed to hold, and how that person is able to transfer, specific rights or entitlements which are recorded electronically (China, South Korea, and Japan).

4.86 In particular, some countries have implemented centralised registry systems backed by the state to enable the creation and transfer of rights to claim performance of specific obligations, while preserving the legal effects of transferable paper documents.

Germany

4.87 From 2013, the German Commercial Code has allowed an electronic bill of lading (article 516) and an electronic sea waybill (article 526) to be equivalent to their paper

[102] We discuss this approach from para 2.56 above.

counterparts. An electronic bill of lading will only be deemed equivalent if the "authenticity and integrity of the [electronic] record are assured".[103]

4.88 The Federal Ministry of Justice and Consumer Protection have the power to regulate further the electronic bill of lading but have not yet exercised this power. It has been suggested to us that within Germany, further changes to domestic law are seen as having limited economic impact, due to the limited application of German law in international shipping and trade finance.

Australia

4.89 Each state in Australia has an identical provision in their legislation on sea-carriage documents[104] which clarifies that electronic sea-carriage documents fall under the scope of the legislation. The Australian provisions leave the definitions of "delivery", "endorsement", "possession", and "signed" to be determined by the terms of the contract of carriage. Section 6 of the New South Wales legislation has been given below as a representative example:

> **6 Electronic and computerised sea-carriage documents**
>
> (1) Subject to this section, this Act applies:
>
> (a) in relation to a sea-carriage document in the form of a data message[105]—in the same way as it applies in relation to a written sea-carriage document, and
>
> (b) in relation to the communication of a sea-carriage document by means of a data message—in the same way as it applies in relation to the communication of a sea-carriage document by other means.
>
> (2) This Act applies under subsection (1) with necessary changes and in accordance with procedures agreed between the parties to the contract of carriage.
>
> (3) Without limiting the generality of subsection (2), in this Act, in the application of the following terms to a sea-carriage document in the form of a data message, or to the communication of a sea-carriage document by means of a data message:
>
> ***delivery*** includes any form of communication which constitutes delivery under the terms of the contract of carriage.
>
> ***endorsement*** includes any form of authorisation which constitutes endorsement under the terms of the contract of carriage.

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103 Commercial Code, s 516(2).

104 Sea-Carriage Documents Act 1997 (NSW); Sea-Carriage Documents Act 1998 (NT); Sea-Carriage Documents Act 1996 (Qld); Sea-Carriage Documents Act 1998 (SA); Sea-Carriage Documents Act 1997 (Tas); Sea-Carriage Documents Act 1997 (WA). The sea-carriage documents to which they refer are bills of exchange, sea waybills, and ship's delivery orders.

105 New South Wales Sea-Carriage Documents Act 1997, s 5: "data message means information generated, stored or communicated by electronic, optical or analogous means including, but not limited to, electronic data interchange, electronic mail, telegram, telex and telecopy."

> ***possession***, in relation to the document, includes being in receipt of the document in any manner which constitutes possession under the terms of the contract of carriage.
>
> ***signed*** includes authentication in any manner which constitutes signing under the terms of the contract of carriage.

4.90 The most notable part of this provision is how it deals with the concepts of "possession", "delivery", "endorsement", and "signed". The provision delegates the determination of these definitions to the contract of carriage.

Sweden

4.91 The Swedish Supreme Court has held that an electronic promissory note can be a negotiable instrument:

> provided that the debtor who makes payment by electronic means is afforded the same protections as when acknowledgement of payment is written on a physical promissory note or when the physical promissory note is returned to the debtor.[106]

4.92 In this case,[107] Justice Lindskog commented on the need for a "unique and exclusive" locus of information to replace the paper document as the "unique and exclusive" source of authoritative information about the debt. He opined that this was possible for registered financial instruments but not for privately agreed electronic documents (such as bills of lading), and suggested that any change to the law should be technology-neutral.

State-backed registry systems

South Korea

4.93 South Korea recognises electronic bills of lading as functionally equivalent to paper bills of lading if the electronic bill is registered with the state-designated registry.[108] South Korea legislated for this by introducing article 862 into its Commercial Act 2001 and by issuing a Presidential Decree (No 20829 of 20 June 2008). The Ministry of Justice designated the Korea Trade Network ("**KTNET**") as the official registry agency[109] for electronic bills of lading. If a party wants to issue, endorse, amend, or replace an electronic bill of lading, they must submit a request to, or notify, the registry agency. The Ministry of Justice has the power to supervise and inspect registry agencies.[110]

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106 The Supreme Court of Sweden, *Activity Report of the Supreme Court* (2017) p 29, https://www.domstol.se/globalassets/filer/domstol/hogstadomstolen/verksamhetsberattelser/2017-activity-report.pdf.

107 Supreme Court decision of 2 November 2017 in case no Ö 5072-16, the "Collector's Electronic Promissory Note" case. We are grateful to Associate Professor Johanna Hjalmarsson for her assistance with this case.

108 Commercial Act 2001, art 862(1).

109 Regulation on Implementation of the Provisions of the Commercial Act Regarding Electronic Bills of Lading, art 2(2).

110 Regulation on Implementation of the Provisions of the Commercial Act Regarding Electronic Bills of Lading, art 14.

4.94 According to the UNCITRAL paper on the Korean electronic bill of lading:[111]

(1) for an electronic bill of lading to be issued, the carrier must submit a request to the registry operator. The message must contain the same information as required for a paper bill of lading;

(2) a holder may endorse an electronic bill of lading by communicating the intention to transfer it to the registry operator;

(3) a holder may amend an electronic bill of lading by submitting a request to the registry operator;

(4) a holder may request to the registry operator to replace the electronic bill of lading with a paper bill of lading; and

(5) the registry operator shall retain electronic records of the electronic bill of lading for ten years after the date of delivery of the goods.

China

4.95 China has legislated for an electronic equivalent to bills of exchange and promissory notes called the "electronic commercial draft" ("**ECD**"),[112] under the Measures for the Administration of Electronic Commercial Draft Business.[113] ECDs are stored on the Electronic Commercial Draft System ("**ECDS**"), which is run by the People's Bank of China. The introduction of the ECDS is part of a wider reform to the China National Advanced Payments System.

Japan

4.96 Japan legislated in 2007 for the electronic equivalent of bills of exchange and promissory notes in the form of an "electronically recorded monetary claim" ("**ERMC**").[114] An ERMC is recorded in a registry[115] managed by an "electronic monetary claim recording institution" ("**EMCRI**").[116] The state designates which institutions qualify as EMCRIs based on whether they fulfil certain requirements.[117] The EMCRI registry determines the contents and the holder of the ERMC.[118]

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111 United Nations General Assembly, *Present and possible future work on electronic commerce, UNCITRAL Forty-third session, New York, 29 June-9 July 2010* (15 April 2010), https://undocs.org/pdf?symbol=en/A/CN.9/692.

112 The Measures for the Administration of Electronic Commercial Draft Business, art 2.

113 Order No 2 [2009] of the People's Bank of China (16 October 2009).

114 Electronically Recorded Monetary Claims Act (Act No 102 of 2007), art 2(1).

115 Electronically Recorded Monetary Claims Act (Act No 102 of 2007), art 2(3).

116 Electronically Recorded Monetary Claims Act (Act No 102 of 2007), art 2(2).

117 Electronically Recorded Monetary Claims Act (Act No 102 of 2007), art 51.

118 Electronically Recorded Monetary Claims Act (Act No 102 of 2007), art 9.

4.97 The paper negotiable instrument is replaced by a series of electronic records that evidence, or document, the actions taken with regard to the claim in question. The records are made and maintained by the EMCRI.

4.98 Unlike China and South Korea, Japan does not have a state-run registry. Instead, the state designates compliant systems as EMCRIs.

4.99 Thus, the means whereby the EMCRI must satisfy the singularity and exclusive control requirements are prescribed by the legislation – that is, the legislation is not technology-neutral, although flexibility is introduced by allowing the specification of different methods of recording by the competent authority.[119]

[119] M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) para 4.29.

Chapter 5: Possessing electronic trade documents

5.1 As we explain in Chapter 2, in the past it was logical for the law to assume that only tangible things could be possessed. We explained how tangibility evolved in case law from a description of possessibility to its definitive characteristic. We looked at the case law which has considered and rejected the possibility of intangible things being possessed. Recent advances in technology, however, have brought about the possibility of digital "things" which can have the same relevant properties (as far as possession is concerned) as physical things. In this chapter we set out our arguments for severing the link between possessibility and tangibility for the purposes of electronic trade documents, and propose a route to achieving this.

5.2 In particular, we look at more general case law on possession, and seek to identify the factors considered by courts when deciding whether a party is in possession of a particular thing. Based on this case law and reasoning from first principles, we extrapolate the criteria that we think need to be fulfilled by electronic trade documents if they are to be possessable. We set out the central elements of our provisional proposals to allow for possession of electronic trade documents if they satisfy certain criteria, so that they can have the same legal effect as their paper equivalents. We also explain how the draft Bill reflects these proposals.

THE APPROPRIATENESS OF DEVELOPING THE CONCEPT OF POSSESSION

5.3 The UKJT Legal Statement recognised "the ability of the common law to stretch traditional definitions and concepts to adapt to new business practices".[1] However, the courts have not so far felt able to develop the common law to this extent. In *Your Response*, Lord Justice Moore-Bick included a plea that Parliament develop a statutory means of accommodating digital material.[2] Similarly, both Lord Walker and Lady Hale in *OBG v Allan* felt it was more appropriate for such a reform to come from Parliament, after consideration by the Law Commission.[3] Given the iterative and mostly incremental nature of common law development, it is perhaps not surprising that judges have felt cautious about extending to intangible things principles that have only ever been applied to tangible things.

5.4 The proposals in this consultation paper represent an attempt to respond to these judicial calls for reform in an area of confined scope (electronic trade documents), in circumstances in which industry has expressed a clear desire for the removal of this particular legal blocker.

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1 UKJT Legal Statement, para 77.

2 *Your Response v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] 1 QB 41 at [27].

3 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [271], by Lord Walker and at [316] to [317], by Baroness Hale.

POSSESSION BEYOND TANGIBILITY

5.5 In most cases in which possession is a relevant issue, it is considered a matter to be proved by evidence because it is fundamentally a factual question. There is, therefore, not as much case law directly analysing the *legal* principles underlying possession as one might expect for such a foundational concept.

5.6 In the recent case of *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd ("**MSCC**")*, the UK Supreme Court endorsed the following statement of the law:

> There are two elements to the concept of possession: (1) a sufficient degree of physical custody and control ("factual possession"); (2) an intention to exercise such custody and control on one's own behalf and for one's own benefit ("intention to possess"). What amounts to a sufficient degree of physical custody and control will depend on the nature of the relevant subject matter and the manner in which that subject matter is commonly enjoyed. The existence of an intention to possess is to be objectively ascertained and will usually be deduced from the acts carried out by the putative possessor … .[4]

5.7 *MSCC* was a case about real property (land) rather than personal property, and there was no question as to the tangibility of the asset in question. However, the statement is nevertheless helpful for identifying the elements of possession, being factual custody and control, and an intention to exercise such custody and control, both objectively assessed.

5.8 This statement is a simple enough explanation of when a person will be considered to be in possession of a particular object. It does not, however, address the question that must be answered first: what sorts of objects are amenable to being possessed?

5.9 We have already seen that the answer to that question under the current law is that a thing is possessable if, and only if, it is tangible. As we indicate in Chapter 2, however, tangibility has acted as a proxy for the underlying properties relevant to possession. In Chapters 2 and 3, we explain that there is significant commercial motivation for expanding the law to allow for possession of certain types of electronic documents. As we will set out in this chapter, we think that there is also a substantive legal and policy basis for saying that many of the factors which are relevant to the possessibility of tangible things can be replicated in the electronic environment.

5.10 This prompts two key questions:

(1) What are the salient properties of physical things which make them possessable in the eyes of the law?

(2) How can those properties be extrapolated for electronic trade documents?

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[4] [2019] UKSC 46, [2020] AC 1161 at [42] and [55], by Lord Briggs, approving *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2018] EWCA Civ 1100, [2019] WLR 330 Ch 331 at [59] by Lewison LJ.

5.11 Below, we consider three cases which shed some light on what makes a thing amenable to possession. We consider how the principles of each case can be extrapolated and applied in the context of electronic trade documents.

The Tubantia

5.12 In *The Tubantia,*[5] the claimants were a salvage company on an expedition to recover goods from the Tubantia, a wrecked steamship. The claimants' divers worked on the wreck during the summer of 1922 and for four months in 1923. The claimants' work was limited by the weather conditions and tides, meaning that they could only work for limited periods during each year. The issue of relevance for present purposes was whether the claimants were in possession of the Tubantia when the defendants appeared on the scene and disrupted the operation.

5.13 In determining that the claimants were indeed in possession of the shipwreck, the court addressed the following questions:

> What are the kinds of physical control and use of which the things in question were practically capable? Could physical control be applied to the res [thing] as a whole? Was there a complete taking? Had the [claimants'] occupation [been] sufficient for practical purposes to exclude strangers from interfering with the property? Was there the *animus possidendi* [the relevant intention]?[6]

5.14 First, Sir Henry Duke[7] assessed possession by reference to the kinds of physical (that is, factual as opposed to legal) control which could be exercised over the shipwreck, *given its nature and location*. Both the size of this shipwreck, and its location 20 fathoms below the surface, made it impracticable for anyone to exercise the same level of factual control over it as one would over a chattel such as a bag of gold or even a car. But this did not mean the claimants were not in possession.

5.15 Sir Henry Duke held it to be a "true proposition in English law" that:

> a thing taken by a person of his own motion and for himself, and subject in his hands, *or under his control*, to the uses of which it is capable, is in that person's possession.[8]

5.16 In this case, Sir Henry Duke was advised by experts that the location of the wreck made it extremely difficult to access, but that ultimately the claimants "were in effective control of the wreck as a whole".[9] He concluded that it would be "an unfortunate conclusion" if the wreck were to be incapable of possession because of the difficulty in accessing it, and that this would run counter to the commercial understanding of, and

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5 [1924] P 78.

6 *The Tubantia* [1924] P 78, 89, by Duke P, citing F Pollock and R S Wright, *An Essay on Possession in the Common Law* (1888).

7 Sir Henry Duke was the then President of the Probate, Divorce and Admiralty Division of the High Court of Justice.

8 *The Tubantia* [1924] P 78, 89 (emphasis added).

9 *The Tubantia* [1924] P 78, 90.

public interest in, the salvage industry.[10] Sir Henry Duke reached this conclusion despite the technical difficulty of working on a wreck at that depth, and the necessarily slow and frequently interrupted work schedules. Several aspects of the claimants' conduct were considered salient for establishing possession:

(1) they kept vessels and divers at the site of the wreck;

(2) they placed fixed buoys on the surface marking the position of the wreck;

(3) they were in a position to prevent any useful work by newcomers; and

(4) there was "use and occupation of … the subject matter", and they acted in the way a purchaser of the wreck would have done.[11]

What can be extrapolated to electronic documents?

5.17 This case demonstrates two relevant propositions. First, that the question of whether a person has possession is determined by how a thing is used or otherwise controlled by them. Second, that the nature of possession can vary according to the form of the thing in question, and therefore depends on the types of use and control of which the thing is capable.

5.18 Sir Henry Duke's pronouncement that a person possesses something which is "subject in his hands, or under his control, to the uses of which it is capable" can apply equally well to electronic documents which are designed so as to be subject to exclusive control.[12] In particular, the inclusion of "or under his control" suggests that control can be an alternative to holding physically a tangible object and can amount, as a matter of fact, to possession. We return to these points in more detail below.[13]

Douglas Valley Finance Co Ltd v S Hughes (Hirers) Ltd

5.19 *Douglas Valley Finance Co Ltd v S Hughes (Hirers) Ltd ("**Douglas Valley Finance**")*[14] concerned an action in conversion. As Professor Sarah Green and John Randall QC explain:

> The gist of conversion is that the claimant has lost the ability fully to exercise his superior possessory rights over his assets and the defendant has assumed such rights; that is all that is necessary for liability in conversion.[15]

5.20 As will be shown, the defendants were found liable in conversion despite not having physical possession of the relevant assets. What was deemed significant about

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10 *The Tubantia* [1924] P 78, 90.

11 *The Tubantia* [1924] P 78, 90, by Duke P.

12 *The Tubantia* [1924] P 78, 89 (emphasis added).

13 Para 1.38 below.

14 *Douglas Valley Finance Co Ltd v S Hughes (Hirers) Ltd* [1969] 1 QB 738.

15 S Green and J Randall, *The Tort of Conversion* (2009) p 66. As previously mentioned, Professor Sarah Green is the Commissioner for Commercial and Common Law at the Law Commission of England and Wales and is the Lead Commissioner on this project.

possession was the claimant's inability to use and control the assets, and not the physical location of the assets themselves.

5.21 The claimants, a finance company, had leased two lorries under a hire-purchase agreement to Hutchinson. Before he had completed the payments on the lorries (at which point he would have become their legal owner), Hutchinson sold the lorries to the defendants, who in turn sold them on.

5.22 The finance company sued the defendants for conversion of the lorries and sought damages. It is significant that, at all times after Hutchinson approached the defendants, the lorries themselves remained unused in Hutchinson's garage.[16] In other words, the defendants did not have physical custody of them.

5.23 The claimants succeeded in their conversion claim despite the fact that the defendants were not in physical possession of the assets. After reviewing the authorities, Mr Justice McNair accepted the claimants' submissions that conversion required the defendants to have "wrongfully asserted ownership or control of the lorries in a manner inconsistent with the ownership or right of control of the [claimants]".[17] Thus, it was sufficient that the defendants had interfered with the rightful possessor's ability to use or control the thing.

What can be extrapolated to electronic documents?

5.24 As in *The Tubantia*, the ability to use or otherwise control the thing in question was what characterised the party's possessory relationship with the thing, rather than the physical holding of it. It was the claimant's factual control of the lorries that the defendants had interfered with, and this constituted a conversion. This suggests that so long as an electronic document exists in such a way that it can be used and controlled as a matter of fact, independently of any person's legal right, it can be amenable to possession, notwithstanding its intangible nature.

Parker v British Airways Board

5.25 *Parker v British Airways Board ("**Parker**")*[18] focuses on the "intention" element of possession, referred to in the *MSCC* statement above. It demonstrates the significance of manifesting through one's actions an intention to possess.

5.26 The claimant (Parker) found a gold bracelet on the floor of the British Airways lounge at Heathrow Airport. He handed it to British Airways staff, along with a note of his name and address, and asked for it to be returned to him if not claimed by its owner.

5.27 When nobody claimed the bracelet, British Airways sold it instead of returning it to Parker. He successfully sued British Airways in conversion, a result affirmed by the

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16 *Douglas Valley Finance Co Ltd v S Hughes (Hirers) Ltd* [1969] 1 QB 738, 748 and 749.

17 *Douglas Valley Finance Co Ltd v S Hughes (Hirers) Ltd* [1969] 1 QB 738, 749.

18 [1982] 1 QB 1004.

Court of Appeal.[19] The case required the Court of Appeal to determine "the conflicting rights of finder and occupier" where an object is found on the latter's premises.[20]

5.28 In the course of this analysis, the Court considered in detail the nature of possession, because a claimant needs to establish a superior possessory right in order to succeed in a conversion action.

5.29 Parker asserted a "finder's right", based on the "ancient common law rule that the act of finding a chattel which has been lost and taking control of it gives the finder rights with respect to that chattel".[21] British Airways asserted an interest in the bracelet as occupiers of the land on which the bracelet was found. The basis of their argument was that "they had rights in relation to the bracelet immediately *before* the [claimant] found it and that these rights are superior to the [claimant's]."[22] In essence, the dispute turned on whether or not British Airways were in possession of the bracelet prior to Parker having possession of it. If so, then British Airways would have the better possessory right to the bracelet.

5.30 Parker sought to support his argument by reference to *Bridges v Hawkesworth*.[23] In that case, the claimant, Bridges, found a package containing £65 in notes in a shop and handed it to the shopkeeper (Hawkesworth) in case its true owner claimed it. The court found that:

> no circumstances in this case … take it out of the general rule of law, that the finder of a lost article is entitled to it as against all persons except the real owner … and … the learned judge was mistaken in holding that the place in which they were found makes any legal difference.[24]

5.31 As Lord Justice Donaldson observed, the relevant point here is that "the unknown presence of the notes on the premises occupied by Mr Hawkesworth could not without more, give him any rights or impose any duty upon him in relation to the notes".[25] This lack of knowledge was material.

5.32 In order to establish a better possessory right, British Airways would have needed to show a "manifest intention to exercise control over the lounge and all things which might be in it."[26] This again is a fact-specific inquiry. His Lordship held that there was a spectrum of cases. At one extreme, "the intention of the occupier to assert control over articles lost on his premises speaks for itself" (the example given in the case was

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19 *Parker v British Airways Board* [1982] 1 QB 1004, 1008.

20 *Parker v British Airways Board* [1982] 1 QB 1004, 1008.

21 *Parker v British Airways Board* [1982] 1 QB 1004, 1008.

22 *Parker v British Airways Board* [1982] 1 QB 1004, 1008, by Donaldson LJ (emphasis in original).

23 (1851) 21 LJQB 75,(1851) 15 Jur 1079. The judgment is reproduced in its entirety by Donaldson LJ in *Parker* due to the obscurity of the relevant reports.

24 (1851) 15 Jur 1079, 1082, by Patteson J. Quoted in *Parker v British Airways Board* [1982] 1 QB 1004, 1012, by Donaldson LJ.

25 *Parker v British Airways Board* [1982] 1 QB 1004, 1012.

26 *Parker v British Airways Board* [1982] 1 QB 1004, 1018, by Donaldson LJ.

a bank vault). At the other, there is no "manifest intention to exercise any such control" (the example given is a public park).[27]

5.33 In Lord Justice Donaldson's view, the defendants clearly had control over who entered and used the lounge and under what circumstances. This was not, however, relevant to "a manifest intention to assert custody and control over lost articles. There was no evidence that they searched for such articles regularly or at all".[28] Accordingly, British Airways were not in possession of the bracelet before it came into Parker's possession, and so they did not have any better possessory right to it.

5.34 It is also worth noting that, whilst the central question was whether British Airways had possession of the bracelet prior to it being found by the claimant (which turned on matters of intention), the claimant's possession was itself uncontroversial. On finding the bracelet, the claimant had evidently "tak[en] [it] into his care and control".[29] A clear illustration of this control can be seen in what happened next. The claimant "hand[ed] the bracelet to an official of the defendants".[30] Alternatively, and as the court noted, the claimant could instead have "hand[ed] the bracelet to the police".[31] As a matter of fact, the claimant could have kept it and put it on, or destroyed it, or handed the bracelet to another. The important point is that, once it had been found, the bracelet was in the claimant's possession because (amongst other things) he alone had the factual ability to put the bracelet to these various possible uses. In other words, the bracelet was – from the moment that he found it – exclusively within his factual control.

What can be extrapolated to electronic documents?

5.35 This case demonstrates that the law recognises possession based on the actions and intentions of the parties in relation to the thing in question. Although the asset in question was tangible, it would be possible to make a similar assessment of parties' actions and intentions with respect to an electronic document, provided that its qualities mean that only one party at a time can act in a way that amounts to control of it.

5.36 *Parker* also illustrates a further consideration that is important for present purposes; that the possessor alone has the factual ability to decide what happens to an asset, and whether it is retained, transferred to another party, or destroyed. When Parker found the bracelet, this was the ability he thereby gained. It was also the ability he relinquished, along with factual possession, when he handed the bracelet over to British Airways. As we explain below, we think that this relationship between a person and a thing can be replicated in the context of electronic trade documents, and is important both in determining whether something is possessable, and whether something is in fact possessed.[32]

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27 *Parker v British Airways Board* [1982] 1 QB 1004, 1019, by Donaldson LJ

28 *Parker v British Airways Board* [1982] 1 QB 1004, 1018, by Donaldson LJ.

29 *Parker v British Airways Board* [1982] 1 QB 1004, 1018, by Donaldson LJ.

30 *Parker v British Airways Board* [1982] 1 QB 1004, 1018.

31 *Parker v British Airways Board* [1982] 1 QB 1004, 1018.

32 From para 1.43 below.

Possession beyond tangibility: preliminary conclusions

5.37 It is clear from the cases which we discuss above that, whilst the tangible nature of an asset has long *coincided* with possessibility, tangibility is not a necessary criterion of possessibility.

5.38 These cases all concern tangible things, but they demonstrate that the factors considered by a court when assessing title founded on possession do not necessarily hinge on the tangible nature of the thing in question. The wreck in *The Tubantia*, although obviously tangible, could not be physically grasped; indeed, divers could only be working on it for short periods owing to the technological limitations of the time. The court was instead concerned with who had the control and practical use of the wreck.

5.39 The tangible quality of an asset can make it easy to observe who has control of, or who is using that asset at any particular time, but is not a pre-requisite of possessibility. In *Douglas Valley Finance,* for instance, the actionable interference with the claimant's possession was established not on the basis of the physical location of the assets, but on the locus of the ability to use and control them. In short, there is nothing about tangibility of the asset which compels a court to rule one way or another in a given case. Rather, difficult questions that arise in relation to possession may be answered by looking at the way in which the asset's practical uses are controlled.

5.40 In *Parker*, the emphasis was on the parties' knowledge and, in particular, actions manifesting an intention to possess (*animus possidendi*). There was nothing in this analysis of possessory interests which turned on the tangibility of the gold bracelet. Instead, it turned on the factual behaviour of the parties in relation to the asset.

5.41 If an object is tangible, it is relatively simple for a court to establish who (for example) holds a bracelet at a particular time, or which salvage company controls the surface area above a shipwreck. The role that tangibility is really playing, though, is that it allows legal rights to be allocated based on an observable state of facts. If technology has developed to the point where factual ascription of possession to one person or another can be determined without recourse to tangibility, tangibility is no longer necessary.

5.42 The practical use of an asset must also be capable of being ascribed to a legal person in order for that asset to be possessable. This is distinct from ownership: the point is that courts must be able to say who, at any given time, could be construed as *controlling* or *influencing* that use.

AMENABILITY TO POSSESSION: OUR PROPOSALS

5.43 The case law and our discussion above demonstrate that tangibility does not have to be determinative in an assessment of possession. We have referred to the possibility that some digital things have the same relevant properties (when it comes to possession) as tangible things. Here, we set out those properties, and develop them, with reference to the case law and to general principles, into criteria that we propose should determine possessibility in relation to an electronic trade document.

5.44 In order to distil these criteria, it is useful first to consider a relatively straightforward and familiar example: the possession of a paper document. When a person holds a piece of paper in their hand, they know what it is and where it is – it is objectively identifiable as a "thing". Because it is in their hand, they are the one in control of it as a matter of fact. When they hand the piece of paper over to somebody else, they also hand over control of the piece of paper. If they hand over a trade document of the kind that we discuss in Chapter 3 (with any necessary indorsement), they are transferring the rights that go with possession of that document. What is important is that there is only one (active) version of the document,[33] and only one person can hold it at a time.

5.45 How can these features be replicated by an electronic trade document? The electronic data would have to constitute a document for the purposes of the law, and there must be a method of associating that document with just one person at a time (the possessor). It would have to be possible for the possessor to exclude others from the document. And when the possessor transfers the document to someone else, the transferee must automatically become the (only) possessor.

5.46 Based on these observations and the relevant case law, we have identified three criteria which, if satisfied, we think would make an electronic document possessable as a matter of fact. We propose that this should also be the case as a matter of law, meaning that electronic trade documents would have the same legal effects as their paper equivalents.

Our proposals at a glance

5.47 We provisionally propose that an electronic document should be capable of being possessed in the eyes of the law if all the following three criteria are met.

(1) It has an existence independent of both persons and the legal system: it is not a bare legal right.

(2) It is capable of exclusive control: the nature of the electronic document does not support concurrent assertions of occupation or use. This quality is sometimes described as "rivalrousness".

(3) It is fully divested on transfer: that is, if A transfers the document to B, A must no longer be able to access or use the document.

5.48 We explain each of these criteria (and how they are incorporated into the draft Bill) below.

Existence independent of persons and the legal system: excluding bare legal rights

5.49 Our first proposed criterion of possessibility is that the thing must exist independently of both persons and the legal system. In this consultation paper, we are concerned with electronic documents and, in particular, electronic versions of documentary intangibles and similar documents where possession is significant to the performance of their legal functions. These are identifiable as "things", albeit in electronic form. We do not have to consider whether forms of intangible personal property other than

[33] There may be photocopies, but these are not "the document" as they do not have the relevant legal effect.

electronic documents should be amenable to possession.[34] However, it is helpful to include a brief explanation of our current thinking.

5.50 An independent existence is a characteristic common to all those things that are currently amenable to possession. A person can point to a thing independent from them over which they have a right and say, "that is mine; do not interfere with it." This instruction is valid against anyone without a better title to the thing. It is, however, factually possible, albeit wrongful, for someone to go ahead and interfere with it. A paper bill of lading, for instance, could be picked up by a party with no right to do so, and used to obtain goods from a carrier. Where, however, a thing has no existence independent of legal persons or systems, such interference is not *factually* possible because the right itself is not separable from the person who holds it.

5.51 Although not currently capable of being possessed in the eyes of the law, electronic documents are things over which parties have rights, rather than being bare rights in themselves. This is because an electronic document exists as a matter of fact, regardless of the recognition given to it by any legal system, and regardless of whether anyone lays a claim to it. The same cannot be said of a debt or of a right to sue.

5.52 Our current thinking is that there is good reason to distinguish between those intangibles which are bare rights (such as a debt) and those intangibles which are things over which parties have rights (such as an electronic document).[35]

5.53 In Chapter 2, we explain that *OBG v Allan* established that an intangible could not be the subject of a claim in conversion.[36] It is important to remember that the intangibles in that case were contractual relations - bare legal rights – and therefore did not have an independent existence. For example, a key reason for Lord Hoffmann's objection to extending conversion in *OBG v Allan* was that it would involve a significant change in the law, given that the case was about bare legal rights. His Lordship was clearly concerned that this would constitute too drastic an extension of the strict liability tort for it to be taken forward by the court.[37] While his Lordship noted that the documentary intangibles exception already provides for conversion of an intangible in certain circumstances, he stressed that this is "anomalous and limited".[38]

5.54 Lord Brown was even more circumspect as to whether the extension of conversion to intangible assets would be a positive development, even if it were possible for the court to do so. However, the source of his concern was focused on pure things in action, as opposed to documentary representations of such things:

> There remains a logical distinction between the wrongful taking of a document of this character and the wrongful assertion of a right to a chose in action which properly belongs to someone else. One (the document) has a determinable value as at the

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34 We will consider this question in phase 2 of our digital assets work (see Chapter 1 above).

35 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1.

36 From para 2.20 above.

37 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [100].

38 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [102] to [106].

date of its seizure. The other, as so clearly demonstrated by this very case (*OBG*), does not.[39]

5.55 The dissenting judgments of Baroness Hale and Lord Nicholls went beyond our current proposals in recognising the possibility of conversion in respect of interference with things in action including bare legal rights.[40] For the majority, this was too big a stretch. But it is at least arguable that, had the case been about an electronic documentary intangible, one or more of the majority might have felt able to extend conversion to this more limited extent, particularly given the existing exception for (paper) documentary intangibles.

5.56 Baroness Hale explained that, although conversion had initially been restricted to physical property for historical reasons,[41] the action of conversion had adapted to accommodate new forms of property (being documentary intangibles) as their use developed during the 17th and 18th centuries.[42] There is some symmetry in electronic documentary intangibles being the first intangibles to be admitted as amenable to possession – potentially as a precursor to wider consideration of digital assets.

5.57 In summary, it is easier to say that something (ie an electronic trade document) has qualities equivalent to a tangible object for the purposes of possession if the thing is not what Blackstone called "only a bare right, without any occupation or enjoyment".[43] *OBG v Allan* emphasises the difference between, first, bare legal rights, and second, documents which embody an obligation. At this stage, we think only the latter should be capable of possession.

Consultation Question 9.

5.58 We provisionally propose that bare legal rights should be excluded from the scope of our proposals for the possession of electronic trade documents. Do consultees agree?

The draft Bill

5.59 A document in electronic form will always meet the criterion of having an independent existence, for the reasons set out above.[44] A bill of lading stored on a distributed ledger, for example, will exist there irrespective of whether a person lays claim to it. The draft Bill does not therefore explicitly include this as a requirement.

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39 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [321].

40 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [229] to [230], by Lord Nicholls, and at [311], by Baroness Hale.

41 Rights of action were not seen as property in the 15th and 16th centuries, when the tort was first developing: *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [309].

42 *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [309].

43 Blackstone, *Commentaries* (Volume 2, 1753) p 389.

44 From para 5.51.

5.60 Rather, the draft Bill limits the electronic documents to which it applies. The relevant document must be a "trade document" in "electronic form".[45] "Trade documents" are those documents listed in clause 1(2), being:

(a) a bill of exchange;

(b) a promissory note;

(c) a bill of lading;

(d) a ship's delivery order;

(e) a marine insurance policy;

(f) a cargo insurance certificate; or

(g) a warehouse receipt.

5.61 In Chapter 3, we explain that the common thread linking these documents is that they are documentary intangibles, possession of which is material. The need for a document to be one of the kinds on this list effectively excludes bare legal rights, including written contracts which merely record them.

5.62 In order to be a document of the relevant kind, the electronic trade document must include and communicate the same information as would be required to be included in and communicated by its paper counterpart. This is set out specifically at clause 1(3)(b). In order to constitute a document for the purposes of the evidence law of England and Wales, it would also need to satisfy certain integrity requirements. We discuss both of these points in more detail in the next chapter.[46]

Exclusivity of occupation or use

5.63 Second, we propose that, in order to be amenable to possession, an electronic document must be capable of being the subject of exclusive occupation or use. This requires that the nature of the electronic document does not support concurrent use or control by multiple parties at one time. In personal property law, a thing with this quality is referred to as "rivalrous".

5.64 This criterion aims to capture a factor highlighted in *The Tubantia* in particular: that what is key for possession is that only one person, or persons acting together, may have possession at any given time.

5.65 It is clear from *The Tubantia* that you can have exclusive possession of something that you cannot hold in your hand. Sir Henry Duke said that a person possesses something which is "in his hands, or under his control".[47] This appears to equate

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45 Clause 1(3)(a) refers simply to a requirement that the document be in "electronic form".

46 From para 6.29 below on information requirements, and from para 6.4 below on integrity.

47 *The Tubantia* [1924] P 78, 89.

physical possession with some alternative kind of control,[48] which could vary according to the nature of the asset. Whilst the claimants' access to the wreck in *The Tubantia* was difficult and sporadic, they were still able to control it and, critically, to exclude others as far as was practicable given its nature.

5.66 As we have seen above in the discussion of the cases, the notion of an exclusive or superior ability to "control" or "use" an asset is frequently used to describe this characteristic of a possessable thing.

5.67 In his well-known essay on possession, Professor Donald Harris presented physical control as the first "factor of possession" and, citing the *Tubantia*, described it as the "degree of physical control over the chattel which the [claimant] actually exercises or is immediately able to exercise". [49] He went on to say that the:

> [claimant's] degree of physical control should not be considered in isolation, but in relation to the greatest degree of physical control which it is possible for the particular [claimant] to exercise over the particular chattel.[50]

5.68 Notwithstanding the references to "physical" control, this passage makes it clear that possession is a question of relative fact. In considering whether a party is in possession of something or not, their level of control or use is measured against what is possible in the circumstances. There is no objective or universal standard for the kinds of interactions with a thing that constitute possession. In *The Tubantia*, for instance, Sir Henry Duke did not expect the company to have divers constantly at the site of the wreck, because this was simply not possible. The point was that the claimants' use of the wreck inherently excluded possible use by others (or at least, others could not, without force or without the claimants' consent, use the wreck).

5.69 Applying this to electronic documents, it follows that, if they can be under the control of a single party (or parties acting together), they are therefore amenable to possession and ought to be regarded as such in law.

5.70 It might be argued that it is impossible to exclude others in any absolute sense from certain types of objects, such as something as big as a ship or an aeroplane, and yet both have been deemed by courts to be possessable.[51] This demonstrates that things can be possessed as a matter of law, despite the obvious practical challenges to exclusion presented by their physical form. It is arguably easier to exclude others from

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48 This contrasts with *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2014] 3 WLR 887, in which Moore-Bick LJ said that possession and control were separate things and that control was not sufficient to amount to possession: see discussion in Chapter 2 above, and in particular at para 2.29.

49 D R Harris, "The Concept of Possession in English Law" in A G Guest, *Oxford Essays in Jurisprudence* (1961) p 74.

50 D R Harris, "The Concept of Possession in English Law" in A G Guest, *Oxford Essays in Jurisprudence* (1961) p 74.

51 See for example *Kuwait Airways Co v Iraqi Airways Co* [2002] UKHL 19, [2002] 2 AC 883.

an electronic document than it is from a shipwreck, particularly given recent developments in technology.[52]

5.71 We therefore propose that the second criterion for possessibility of an electronic trade document be that it is capable of exclusive control; it does not support concurrent control by multiple parties acting independently at one time. This leads to the question of how precisely to define the meaning of control, which we discuss below.

Consultation Question 10.

5.72 We provisionally propose that, in order for an electronic trade document to be capable of possession, the nature of the document must not support concurrent control by multiple parties at one time. Do consultees agree?

The meaning of "control"

5.73 We note in Chapter 4 that other reforms engaging with the possession problem (for example, the MLETR) have also used the notion of "exclusive control"[53] as the functional equivalent of physical possession. However, neither the MLETR nor the UCC define the meaning of "control". Given that control lies at the centre of our proposals, we are of the view that the contours of control must be specified in legislation. In this section, we review the various divergent meanings of "control" in English statute, especially in settings in which it interacts in some way with possession.

5.74 We then outline how we provisionally propose to define the term for the purpose of enabling possession of electronic trade documents.

(i) Control which amounts to possession

5.75 The first meaning attributed to "control" under the law of England and Wales is the meaning with which the word is used in the Torts (Interference with Goods) Act 1977[54]

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52 See Appendix 3 below.

53 MLETR, art 10.

54 The Tort (Interference with Goods) Act 1977 governs torts such as trespass, conversion and negligence so far as it results in damage to goods or to an interest in goods (see s 1). S 3(1) (Form of judgment where goods are detained), provides "in proceedings for wrongful interference against a person who is *in possession or in control* of the goods relief may be given in accordance with this section, so far as appropriate". Similarly, s 12 on a bailee's power of sale applies to "goods *in the possession or under the control* of a bailee" (s 12(1), emphasis added). In *Thunder Air v Hilmarsson* [2008] EWHC 355 (Ch) "control" and "possession" are used alongside each other in the collective through most of the judgment, the assumption appearing to be that they are equivalent for the purposes of the Act: see [1], [2], [15], [24], [26], and [30]. The distinction is explained at [33], by Patten J: "Control in the context of ss 3 and 4 of the 1977 Act means control of the goods. Under normal circumstances this is co-extensive with possession but if goods are handed by the Defendant to a nominee (e.g. a bank or storage facility) to hold them on his behalf and to his order, then they clearly remain under his control notwithstanding the absence of physical possession". See further discussion at [32] to [40], by Patten J.

and in case law interpreting the Limitation Act 1980.[55] Factual possession in these contexts can be determined on the basis of the degree to which one exercises control over the thing in question. Control in this sense is both exclusive and perceivable to others (that is, others are able to see that one is in control).[56] This is also the sense in which the word is used in *The Tubantia*.[57]

5.76 *MSCC*,[58] a case about land, provides valuable insight into the ways in which control can amount to possession. The Manchester Shipping Canal Company (MSCC) owned the Manchester Shipping Canal and the adjacent riparian land.[59] Vauxhall Motors owned a vehicle manufacturing plant situated close to the canal and had a contractual licence to discharge surface water from their plant, over the riparian land, and into the canal. When Vauxhall failed to pay the annual fee, MSCC terminated the licence. Vauxhall applied to the court seeking equitable relief from forfeiture. MSCC argued that the court had no jurisdiction to do so because relief against forfeiture could only be granted in relation to proprietary rights; and Vauxhall's rights, they argued, were not of that nature. The case turned on whether Vauxhall was in possession of the infrastructure constructed for the surface water to flow across the riparian land (and which became a fixture of the land).

5.77 While possession was described in this case as "physical custody and control" (as it was in *Pye v Graham*[60]), the use of the word "physical" in this context makes sense, because these were both disputes about land. However, the factual elements that were considered to constitute sufficient "physical custody and control" to establish possession[61] in *MSCC* can have electronic analogues. These features were: Vauxhall had access to the subject matter (the infrastructure), was the dominant player in maintenance and operation of that infrastructure, and had exclusive and perpetual use of it.[62] We consider that "access" and "use" are concepts that may equally apply to electronic trade documents.

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55 Most notably *JA Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [40], by Lord Browne-Wilkinson: "there are two elements necessary for legal possession: (1) a sufficient degree of physical custody and control ("factual possession"); (2) an intention to exercise such custody and control on one's own behalf and for one's own benefit ("intention to possess")." See also *Powell v McFarlane* (1977) 38 P&CR 452.

56 See *Powell v McFarlane* (1977) 38 P&CR 452, 470 to 471, by Slade J: "Factual possession signifies an *appropriate degree of physical control*. It must be a *single* and *exclusive* possession, though there can be a single possession exercised by or on behalf of several persons jointly. Thus an owner of land and a person intruding on that land without his consent cannot both be in possession of the land at the same time. The question what acts constitute a sufficient degree of exclusive physical control must depend on the circumstances, in particular the nature of the land and the manner in which land of that nature is commonly used or enjoyed." (emphasis added)

57 *The Tubantia* [1924] P 78, 89 citing F Pollock and RS Wright, *An Essay on Possession in the Common Law* (1888).

58 *The Manchester Ship Canal Company v Vauxhall Motors* [2019] UKSC 46, [2019] 3 WLR 852.

59 Riparian land is land that relates to, or is situated on, the banks of a river, canal, lake etc.

60 *JA Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [40], by Lord Browne-Wilkinson.

61 *The Manchester Ship Canal Company v Vauxhall Motors* [2019] UKSC 46, [2019] 3 WLR 852 at [62], by Lord Briggs.

62 *The Manchester Ship Canal Company v Vauxhall Motors* [2019] UKSC 46, [2019] 3 WLR 852 at [57], by Lord Briggs.

(ii) Control as distinct from possession

5.78 The second meaning attributed to control is as a legal right distinct from a factual state, and distinct from possession. This meaning appears in a number of places in the law of England and Wales.

5.79 For example, the High Court has interpreted "control" as used in the Financial Collateral Arrangements Regulations (No 2) 2003 ("**FCARs**")[63] as distinct from possession, and as the state of having a legal right rather than a state of fact.[64] The FCARs refer to control when defining "security financial collateral arrangement", saying that one requirement of such an arrangement is that:

> the financial collateral is delivered, transferred, held, registered or otherwise designated so as to be *in the possession or under the control* of the collateral-taker or a person acting on its behalf … .[65]

5.80 The coupling of these two concepts (possession and control) originated in the EU Directive which FCARs was designed to implement.[66] In *Re Lehman Brothers International (Europe) (In Administration)*,[67] Mr Justice Briggs (as his Lordship then was) considered the meaning of the compound usage of possession or control in the context of the law of England and Wales. He distinguished possession and control and referred to control in the context of a "legal right":

> It seems to me that [the provision] clearly contemplates that a particular form of delivery, transfer, holding, registration or designation may be sufficient to establish possession but not control, or control but not possession, but that in either case the requirements … would be satisfied … .
>
> There will be cases in which the collateral is sufficiently clearly in the possession of the collateral taker that no further investigation of its rights of control is necessary. In other cases … it will be necessary to analyse the degree of control thereby conferred on the collateral taker. There may be some cases, in particular where there is no delivery, transfer or holding to or by the collateral taker, but merely some form of designation, where the collateral remains wholly in the possession of the collateral provider, but on terms which give a legal right to the taker to ensure that it is dealt with in accordance with its directions.[68]

5.81 In the context of fixed and floating charges, control is also used to denote a legal rather than a factual state, in the sense that the person in control has the legal right to prevent the person in possession from dealing with the thing in their possession. In *Re Spectrum Plus*[69] it was held that fixed and floating charges are distinguished by the

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63 SI 2003 No 3226.

64 See *Re Lehman Brothers International (Europe) (In Administration)* [2012] EWHC 2997 (Ch), [2014] 2 BCLC 295 at [131] and [134].

65 SI 2003 No 3226, reg 3. See also SI 2003 No 3226, reg 19(4) (emphasis added).

66 Financial Collateral Directive 2002/47/EC, Official Journal L 168 of 27 June 2002 p 43.

67 [2012] EWHC 2997 (Ch) at [131].

68 [2012] EWHC 2997 (Ch) at [131] and [136].

69 [2005] UKHL 41, [2005] 2 AC 680.

degree of control exercised by the chargee over charged assets. In both fixed and floating charge arrangements, it is the chargor who has possession of the relevant asset, although the chargee has control over it. This means that person A can be in possession while simultaneously person B is (as a matter of law) in control.

5.82 In the definition of possession in section 1(2) of the Factors Act 1889, control is used to denote a situation where a person (the person in control) has possessory rights over a thing of which another person has actual possession.[70] This definition has been held to apply also for the purposes of SOGA.[71]

5.83 Broadly, therefore, the second sense in which control is used envisages the person in control as being distinct from the person in possession and as having legal rights over the thing in the actual possession of another. Here, control is not used as a concept analogous to factual possession.

"Control" in our proposals

5.84 Given the different (and somewhat opposing) uses of control in the current law, we have given careful consideration to using it in articulating what amounts to possession of electronic documents and, in particular, to using it within the draft Bill itself. We want to capture the essence of the first use of control which we discuss above.

5.85 It is difficult to talk about the possession of electronic documents without reverting to "control", in the first sense described above. It is clear from the emphasis on control in the case law that key to possessibility is the equivalent control of an electronic document. A party claiming to have exclusive control of an electronic trade document would need to demonstrate, as a matter of fact, that they have access to it, that they alone (or in concert with others acting collectively) are able to deal with it, and that their use of it is exclusive.[72]

5.86 The presence of the second meaning of control could give rise to confusion, but we think that this can be overcome with careful definition: much of the uncertainty around its meaning in the FCARs is down to the fact that the FCARs do not define control.

5.87 In formulating a definition of control, we have determined that control must be used in a factual sense, and not in the sense of a legal right distinct from possession. The party who has control of an asset can decide what to do with it or what happens to it: to keep it, transfer it or destroy it. We think, therefore, that "control" is the ability to use, and transfer or otherwise dispose of a thing, in this case, an electronic document.

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70 See interpretation in *Forsythe International (UK) Ltd v Silver Shipping Co Ltd (The Saetta)* [1993] 2 Lloyd's Rep. 268.

71 See *Forsythe International (UK) Ltd v Silver Shipping Co Ltd (The Saetta)* [1993] 2 Lloyd's Rep. 268, 275. However, see *Michael Gerson (Leasing) Ltd v Wilkinson* [2001] QB 514, [34] to [35] where Clarke LJ (as he then was) expressed doubt as to whether it was to be defined *exclusively* in this way. He thus concluded that: 'I do not think that the question whether a buyer has received goods within the meaning of section 24 [of the Sale of Goods Act 1979] depends wholly upon whether he is in possession of the goods within the meaning of section 1(2) of the Factors Act 1889.'

72 See discussion of *The Manchester Ship Canal Company v Vauxhall Motors* [2019] UKSC 46, [2019] 3 WLR 852 in para 5.77 above.

5.88 The question of whether a person has control (or possession) is a factual rather than legal one: is that person, *as a matter of fact*, the person who is has control of the electronic trade document? The lawfulness or otherwise of the control or possession is irrelevant, as it is with possession generally in the law: even a thief, for instance, acquires possessory title to a stolen asset, good against everyone except the rightful owner.[73]

5.89 As we discuss below, the draft Bill on which we are consulting uses the word control. Among other things, it has the effect of aligning the language of our proposals with an international trend in legislating in this field, as we discuss in Chapter 4.

Consultation Question 11.

5.90 We provisionally propose that "control" should be defined as the ability (as a matter of fact) to:

(1) use; and

(2) transfer or otherwise dispose of

an electronic trade document. Do consultees agree?

The draft Bill

5.91 Clause 1(3)(c)(i) provides that, in order to be an electronic trade document within the meaning of the draft Bill, the system on which the document is held must secure that "no more than one person has control of the document at any one time". We intend "system" to be a generic term for the platform or digital architecture on which the document is created and held.[74]

5.92 "Control" is defined at clause 1(4), which provides that a person has "control" of a document if that person is able to:

(a) use the document, and

(b) transfer or otherwise dispose of it.

5.93 The references in clause 1(3)(i) to a person who "has" control, and in clause 1(4) to something that a person "is able to" do, are intended to ensure that the question is a factual one rather than a legal one. As we discuss above: is that person, as a matter

[73] And, strictly, anyone with a prior possessory title - see *Costello v Chief Constable of Derbyshire Constabulary* [2001] EWCA Civ 381, [2001] WLR 1437.

[74] Similarly, the MLETR refers to the "system" and the "information system": see eg MLETR art 12(a)(iii) and art 14.

of fact, the one who is able to use and transfer or otherwise dispose of the document?[75]

5.94 The requirement that no more than "one person" can control the document takes the usual legislative meaning of person.[76] It includes a natural or legal person (that is, an individual or an entity such as a company), and can include an unincorporated body. We have used this language for now as it is the standard legislative language. However, it is not clear that it could cover, for example, two incorporated entities acting together. We are interested to know if this is likely to cause issues in practice. Would two separate entities ever need to have possession of a document (other than where one is acting as the agent of the other)?[77] While, in a DLT-based context, for example, two or more parties might have access to the private key, we still think it would be possible to identify which party was the party intended to have "possession" being the person (including a company) named on the system.

Consultation Question 12.

5.95 We provisionally propose that, in order for an electronic trade document to be capable of possession, "the system" on which the document is held must ensure that no more than one person can control the document at any one time. Do consultees agree?

Consultation Question 13.

5.96 We invite consultees' views on whether there could be a situation in which multiple parties could have equal claim to "possession" of an electronic trade document in such a way that they would not be "one person" for the purposes of the law.

Divestibility

5.97 Our third proposal for possessibility of an electronic trade document is that a transfer of the document necessarily entails a transfer of control of the document. That is, when A transfers to B, A must be divested both of the document and of the ability to control the document.

5.98 For tangible things, this property is self-evident: if Alice gives her motorbike to Bob, Bob has the motorbike and Alice does not. It is inherent in the nature of physical

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75 In this context, an example of using the document could be examining the information contained within it. Additionally, the phrase "otherwise dispose of it" is intended to capture (amongst other things) the surrender, accomplishment, or cancellation of an electronic trade document. That is, the act of causing the document to no longer be of legal effect.

76 Interpretation Act 1978, sch 1 provides that "person" includes a body of persons corporate or unincorporated.

77 We do not consider that the presence of the operator of the underlying system prevents a person from being in "exclusive" control of the document.

things that a transfer of that thing means that the transferor loses physical possession and/or factual control: they are divested of the thing.

5.99 Where digital objects are concerned, however, this is not necessarily the case. Whether an electronic document is fully divested on transfer will depend upon the way in which a particular piece of software functions. For instance, when one person sends a standard word-processing document to another person, another copy is simply created; the sender is not automatically divested of it on transfer.[78] There do exist, however, programs that can ensure this consequence, by using DLT, so that there is only one document which is "the document". The proposed requirement of divestibility ensures that the relevant electronic document is relinquished by the transferor upon transfer.

5.100 We have considered the argument that those documents capable of being fully divested on transfer might be no more than a subset of things which are amenable to exclusive control. The two characteristics have much in common because, if something can be transferred completely from one party to another, it must be under the control of one party at a time. Were this the case, including divestibility as a separate requirement could be redundant.

5.101 We are currently of the view, however, that this requirement should be included separately: it is not necessarily the case that all things that can be exclusively occupied can also be transferred whilst retaining their exclusive quality.

5.102 This requirement also explicitly ensures that any system that supports electronic trade documents must be designed to exclude any "double-spend"; that is, the situation in which A could give title to B in exchange for payment, and then purport to transfer the same title to C. This is the problem that prevented digitalised currencies from being a viable option before it was solved by blockchain technology. We are interested to know how current systems for electronic trade documents, and those in development, ensure this.

Consultation Question 14.

5.103 We provisionally propose that, in order for an electronic document to be capable of possession, transfer of the document must transfer control of the document to the transferee, and the transferor must lose control of it as a consequence. Do consultees agree?

[78] The sender could delete their version of the document so that the recipient's copy is the only one, or the parties could agree between themselves that a particular version (such as the version received by the recipient) has some legal significance as "the document" or "the original". But those effects require some additional action; the sender is not divested at the moment of transfer.

Consultation Question 15.

5.104 We invite consultees' views on how existing systems, or those in development, ensure that the transferor of an electronic document can no longer control the document after it is transferred.

The draft Bill

5.105 This criterion is set out at clause 1(3)(c)(ii). It provides that, in order to be an electronic trade document, the system must secure that "after the document is transferred from one person to another person, the transferor no longer has control of it".

Copies of electronic trade documents

5.106 We understand that many of the existing systems in development allow users to retain access to copies of documents for their records, after they have transferred the electronic document itself. This, of course, is like a party being able to take a photocopy or scan of a paper document before it is transferred, which does not interfere with possession of the original.

5.107 There is a fundamental distinction between the electronic trade document, which is the document that embodies rights, and a copy which does not carry with it any rights. The ability to retain a copy of the document after transfer would not prevent the divestibility requirement from being satisfied, and would not constitute retention of control of the trade document itself.

5.108 We do not think there is any need to make explicit provision for this in the draft Bill; there is no equivalent provision allowing for copies of paper documents. We are interested to know whether consultees think that the ability to retain a copy of an electronic trade document after transfer could cause problems in practice.

Consultation Question 16.

5.109 We invite consultees' views on whether the ability to retain a copy of an electronic trade document after transfer or other disposal of the electronic trade document could lead to problems in practice.

Other possible criteria

5.110 We have identified the three criteria above as being central to the notion of possession. We propose that, if an electronic trade document satisfies those requirements, it should be amenable to being possessed. Such a document would therefore be legally analogous to its paper equivalent, with all the legal rights and processes that entails.

Consultation Question 17.

5.111 We invite consultees' views on whether the possessibility of electronic trade documents should depend on any other factors or criteria. If so, please explain the reasons for your additional criteria.

WHAT AMOUNTS TO POSSESSION OF AN ELECTRONIC TRADE DOCUMENT?

5.112 We have set out above what we consider to be the criteria which an electronic trade document must have in order to be capable of possession. The next question is, if an electronic trade document can be possessed, what would constitute possession of it in practice?

5.113 We consider that someone who has the factual ability to control (that is, to use, and transfer or otherwise dispose of) an electronic trade document should have "possession" of it.

5.114 When the person who has had possession of the electronic trade document transfers it to someone else, they are no longer in possession of it. Given our definition of "control" above, this means that possession is transferred when the transferee gains the ability to use, and transfer or otherwise dispose of the document. The transferee's gain will mean that the transferor must necessarily lose those abilities to deal with the document.

Consultation Question 18.

5.115 We provisionally propose that:

(1) the person who is able to control an electronic trade document is the person in possession of it; and

(2) possession of an electronic trade document is transferred from one person to another when the transferee gains control of that electronic trade document.

Do consultees agree? If not, please explain why not.

The draft Bill

5.116 As we discuss above, clause 1 of the draft Bill sets out the characteristics which an electronic document must have before it is an electronic trade document capable of being possessed for the purposes of our proposals.

5.117 Clause 2 sets out the effect of an electronic trade document, including what amounts to possession of an electronic trade document within the meaning of clause 1. Given the link between the criteria for possessibility and the description of what will actually amount to possession, it is useful to consider that element of clause 2 here. We

discuss the other details of our proposals, and their formulation in the draft Bill, in the following chapter.

5.118 Clause 2(1) of the draft Bill provides that, for the purposes of any statutory provision or rule of law, "the person who has control of an electronic trade document is the person who has possession of it".

5.119 Clause 2(2) then sets out the consequences of this. Particularly relevant for the purposes of this discussion of possession is clause 2(2)(a), which provides that "possession of the electronic trade document is transferred from one person to another when the transferee gains control of it". When combined with the definition of control in clause 1(4), this ensures such a transfer will occur where the transferee gains the ability to use and transfer or otherwise dispose of the document. The transferee's gain will mean that the transferor will lose those abilities to deal with the document.

5.120 As clauses 2(2)(b) and 2(2)(c) do not pertain to the central characteristics of the ability to possess an electronic trade document, or the fact of being in possession, we discuss them with other related matters in the next chapter.[79]

Intention to possess

5.121 As we explain above, there is another element to possession: intention. It seems to play a part as an explicit judicial consideration only where there are two or more competing claims to possession, such as in the *Parker* case which we discuss above.[80] However, it is clearly a part of the common law concept of possession more generally.[81] In his essay on possession, for example, Professor Donald Harris identified nine factors of possession, four of which are based on "knowledge and intention".[82]

5.122 *The Tubantia* is a particularly useful case for identifying what is legally relevant about possession, and what amounts to effective control of a given thing. Sir Henry Duke noted that the final question was whether there was "*animus possidendi*" – that is, whether there was the intention to possess. This question is less dependent on the nature of the thing than the other characteristics listed in the excerpt above.

5.123 While possession disputes are more likely to turn on control than on the relevant intention, the latter is still part of the law. Intention will in most cases be relatively easy to establish and, we think, as easy to establish in relation to an intangible thing such as an electronic document as it is to a tangible thing.

5.124 Clause 2(1) should not be read as implying that the intention to possess is not required in respect of electronic trade documents. We note that the definition of

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79 From para 6.54 below on indorsement in clause 2(2)(b), and 6.77 below on other dealings with documents in 2(2)(c).

80 From para 5.25 above.

81 See the statement in *Manchester Ship Canal Company Ltd v Vauxhall Motors Ltd* [2019] UKSC 46, [2019] 3 WLR 852 at [42] and [55], by Lord Briggs.

82 See also D R Harris, "The Concept of Possession in English Law" in A G Guest, *Oxford Essays in Jurisprudence* (1961) p 75.

possession in the Factors Act 1889 does not reference or "save" the intention element of possession. It simply provides:

> A person shall be deemed to be in possession of goods or of the documents of title to goods, where the goods or documents are in his actual custody or are held by any other person subject to his control or for him or on his behalf. [83]

5.125 We are not aware of a suggestion that this definition has the effect of excluding the need for intention. However, the context is slightly different. While the Factors Act 1889 definition might be seen to be clarifying the law in relation to possession of goods by a person or their agent, the draft Bill is extending possession to a wholly new category of assets. It could therefore be interpreted as a complete codification of possession in this context.

5.126 Although we considered including a provision which would explicitly confirm that the intention requirement applies in the context of electronic trade documents, our view is that this is unnecessary, and that this aspect of the general law of possession is better left to the common law. Our proposals aim only to expand the applicability of the factual elements of possession to electronic trade documents. The proposals should not be interpreted as removing the common law requirement of intention for such documents.

5.127 While we appreciate that it is a particularly niche legal point on which only a few stakeholders may have a view, we ask consultees whether they agree that an explicit provision is not required.

5.128 We are also interested to know whether there could ever be a question about who possesses an electronic trade document given that the system will allocate control to a user in a binary (all or nothing) way, and that possession is a question of fact. However, there is a question as to the position if two or more parties have access to the means of control – for example, on a DLT, to the private key – and their interests diverge such that there might be competing claims. We think that the person (natural or legal) named or otherwise identified on the system is still likely to be regarded as being in possession of the document and that custody or knowledge of the private key does not change that. Clearly, if a company is named on the system as the holder of the document and two directors with access to the private key have a falling out, the company still has possession.[84] We are interested in views as to whether problematic scenarios are likely to arise in practice.

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[83] Factors Act 1889, s 1(2).

[84] If one director makes an unauthorised transfer of the document using the private key, the consequences will partly depend on whether the document is negotiable and whether the transferee can give title on a further transfer.

Consultation Question 19.

5.129 We provisionally propose that there is no need to make explicit in legislation that the requirement of intention to possess applies to electronic trade documents. Do consultees agree?

Consultation Question 20.

5.130 We invite consultees' views on what circumstances there could be a debate about which of one or more parties is in possession of an electronic trade document held on a system of the type envisaged by our proposals.

COMPARING THE MLETR APPROACH

5.131 The draft Bill defines an electronic trade document by reference to the type of document it must be and the characteristics it must have in order to be amenable to possession. It then sets out what amounts to possession of an electronic trade document.

5.132 We consider that, while not identical, the form and substance of the central provisions in the MLETR and of our draft Bill are very similar.

5.133 We compare, in Chapter 3, our approach and that of the MLETR on defining the documents covered by the draft Bill.[85]

5.134 As explained in Chapter 4, article 10 of the MLETR lays down requirements to be met by a record if it is to be the functional equivalent of a transferable paper document or instrument. Article 11 establishes exclusive control as the functional equivalent of possession. Our proposed reforms focus attention on setting out the criteria to be satisfied by an electronic document if it is to be amenable to possession. Where we make use of the notion of control, we use it in much the same way as it is used in article 10(1)(b)(ii) which provides that:

> Where the law requires a transferable document or instrument, that requirement is met by an electronic record if … a reliable method is used … to render that electronic record capable of being subject to control from its creation until it ceases to have any effect or validity.

Similarly, clause 1(3)(c)(i) of the draft Bill provides that:

> (3) An "electronic trade document" is a trade document that … (c) is held by means of a system that secures that … (i) no more than one person has control of the document at any one time.

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85 From para 3.81 above.

5.135 Article 11 of the MLETR provides that a requirement for possession can be met by an electronic transferable record if a reliable method is used to establish "exclusive control of that electronic record by a person". Control is thus expressed as functionally equivalent to possession. By contrast in our draft Bill, control is used to articulate what amounts to possession in the digital sphere. Clause 2(1) provides: "The person who has control of an electronic trade document is the person who has possession of it for the purposes of any statutory provision or rule of law."

Our provision does not therefore adopt a concept distinct from possession (control) that applies to electronic trade documents (that is, it does not adopt control as a functional equivalent of possession). Instead, it expands the category of things which are amenable to possession to include also electronic trade documents that fulfil the criteria in clause 1(3). However, while the approach may be distinct, in order better to accommodate features particular to the law of England and Wales, the practical outcome achieved by both pieces of legislation is the same.

5.136 Control is not defined in the MLETR although the MLETR Explanatory Note indicates that the sense in which it is used in the MLETR is to denote a factual concept rather than any legal right.[86] This understanding of control is in line with our own. However, we have gone one step further than the MLETR and adopted a definition of control in our draft Bill, for the reasons given above.[87]

5.137 Article 11(2) of the MLETR provides that a transfer of control of an electronic transferable record has equivalent effect to a transfer of possession of a paper transferable document or instrument. This provision achieves the same outcome as our clause 2(2)(a), although this clause speaks of a transfer of control amounting to a transfer of possession rather than creating parallel regimes for paper and electronic documents.

5.138 Thus, while the legislative approach varies to a degree from that adopted by the drafters of the MLETR, the reasons for the variations do not relate to any concerns regarding the principles underlying this approach. Indeed, we consider the underlying notions and concepts to be sound and the objectives to be the same as ours. Namely, to ensure that provided an electronic trade document (or, in the case of the MLETR, record) can be possessed (or in the case of the MLETR, controlled) exclusively by a person, that electronic trade document can function in a legally equivalent manner to its paper counterpart. We differ only for the purposes of ensuring that our reforms fit comfortably within the existing body of the law of England and Wales that spans three centuries of case law and legislation.

5.139 In the next chapter we set out the rest of our proposals, with reference to the MLETR where relevant. This includes the references in articles 10 and 11 to a "reliable method".[88]

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86 See UNCITRAL, *UNCITRAL Model Law on Electronic Transferable Records* (July 2018) Explanatory Note, paras 13(b), 107, 108 and 119, https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/mletr_ebook_e.pdf.

87 See from paras 5.84 above.

88 See from para 6.14 below.

Chapter 6: Using electronic trade documents

6.1 In the previous chapter, we introduce the central element of our proposals: a framework for the possession of electronic trade documents meeting certain criteria. We provisionally propose that an electronic trade document should be amenable to possession if it meets three criteria: it has an independent existence and is more than a bare legal right, it is capable of being exclusively controlled, and it is fully divested upon transfer.[1] We explain that these requirements are broadly similar to the requirements set out in articles 10 and 11 of the MLETR.

6.2 In this chapter, we consider how electronic trade documents would work in practice, with reference to the provisions of the MLETR and of other jurisdictions. We also consider how electronic trade documents would operate within the existing domestic legal framework and in the international context. We make further proposals for reform as necessary and explain the corresponding provisions of the draft Bill.

LIFE CYCLE OF A TRADE DOCUMENT

6.3 In this section, we consider the lifecycle of a trade document from the point of its preparation and issue. We consider the current legal framework for paper documents and explain how electronic trade documents would fit within it.

Formalities and issue

Integrity

6.4 Integrity is important for establishing that the document is original or authentic. From a practical perspective, a trade document which is highly susceptible to alteration cannot be used as evidence in courts and will not be trusted by the parties using the document.

6.5 As we touch upon in Chapter 4, the MLETR requires that "a reliable method is used… to retain the integrity of that electronic record".[2] The MLETR elaborates further in article 10(2):

> The criterion for assessing integrity shall be whether information contained in the electronic transferable record, including any authorized change that arises from its creation until it ceases to have any effect or validity, has remained complete and unaltered apart from any change which arises in the normal course of communication, storage and display.

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1 See para 5.47 above.

2 MLETR, art 10(1)(b)(iii).

6.6 The question of whether an ETR retains integrity is a factual enquiry.[3] The MLETR notion of integrity is binary: either an ETR retains integrity, or it does not.[4] The MLETR explanatory note explains that integrity might be verified if:

> a reliable assurance is provided of the link between an electronic signature affixed on the record and the content of that record at the time the electronic signature was affixed.[5]

6.7 As we note in Chapter 4,[6] German law contains a similar explicit requirement for integrity. In Germany, an electronic bill of lading will be considered equivalent to paper only if the "authenticity and integrity of the [electronic] record are assured".[7]

6.8 These provisions are intended to ensure that any tampering or interference with an electronic document is immediately identifiable, so that its integrity can be ascertained.

6.9 Our provisional view is that we need not include a specific provision concerning integrity. There is no express requirement that paper documents must not be susceptible to interference. Indeed, it would be possible for a party to make amendments to a paper trade document before transferring it or seeking to rely on it. Whether this is legitimate, or whether it voids the document, is a matter which can be dealt with under the existing law. For example, the 1882 Act provides that if interfered with a document can become unenforceable.[8] This will apply equally to electronic versions of the documents covered by that Act.

6.10 To this extent, we consider integrity to be an existing implicit requirement in the law of England and Wales.[9] We also consider that this requirement is implicit within our first criterion: that the electronic document has an "independent existence", that is, it is a trade document within the list of documents. As we discuss below, these requirements have certain implications for the purposes of the law of England and Wales.[10]

6.11 We do not think it is necessary or appropriate to include an explicit requirement as to integrity, particularly when it is only implicit for paper documents. As set out below, trade documents are required to be in writing and signed, and there is therefore a record of their terms. This requirement will apply equally to electronic trade documents. And as we discuss in more detail in Chapter 7, there is a good argument

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3 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 100.

4 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 100.

5 UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records,* para 101.

6 Para 4.87 above.

7 German Commercial Code, s 516(2).

8 Except if the alteration is not apparent and the bill is in the hands of a holder in due course, see the Bills of Exchange Act 1882, s 64.

9 See for example Civil Evidence Act 1995, s 8; Electronic Communications Act 2000; *Promontoria (Oak) Ltd v Emanuel* [2020] EWHC 104 (Ch); *Peter J Stirling Ltd v Brinkman (Horticultural Service) UK Ltd* [2020] CSOH 79, [2020] GWD 29-378; *Bates v Post Office Ltd (No.6: Horizon Issues)* [2019] EWHC 3408 (QB). See also The Hearsay Rule in Civil Proceedings (1993) Law Com No 216.

10 From para 6.14.

that electronic documents are less susceptible to interference than paper documents as a matter of fact.[11]

6.12 We do not therefore propose that electronic trade documents should be subject to an explicit integrity requirement.

Consultation Question 21.

6.13 We provisionally propose that electronic trade documents should not be subject to an explicit statutory requirement for integrity. Do consultees agree?

Reliability

6.14 As we have set out in Chapter 4, in many international initiatives, including the MLETR and the UCC, the requirements for an electronic document include a "reliability" requirement. In contrast, the criteria that we have identified for possession do not refer to the reliability of the system on which the electronic trade document is held. We set out the relevant provisions of the UCC and MLETR in full in Chapter 4, but we summarise them here for convenience, and explain our own approach.

Comparative approaches

6.15 In the UCC, the ability of the system to reliably establish the person to whom the electronic document was issued or transferred is crucial to that person's ability to exercise the rights of a holder.[12] We have been told that, under the UCC, the reliability requirement must be fulfilled before the electronic document can be considered functionally equivalent to a paper document.

6.16 Under the MLETR, a "reliable method" must be used to identify the electronic record, to render that record capable of being subject to control, and to retain the integrity of the record. The implication is that if a reliable method is not used, the electronic record in question is not equivalent to a transferable document or instrument (that is, for our purposes, it would not be recognised as a trade document capable of being possessed). Article 11 similarly requires a reliable method to establish control of the record, and to establish who has that control. Article 12(a) of the MLETR provides a list of factors which may be considered to establish reliability. Article 12(b) creates a presumption that reliability is deemed fulfilled where the method is "proven in fact" to have performed the function for which it was adopted.

6.17 Bahrain and Singapore have both adopted the MLETR and have created a rebuttable presumption that, if a system is accredited using the procedure in their legislation, it is "reliable".[13]

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11 From paragraph 7.50 below.

12 Uniform Commercial Code, §7-106 (emphasis added).

13 Electronic Transactions (Amendment) Act (No 5/2021) (Singapore), s 6 (inserting s 16O(2)); The Electronic Communications and Transactions Law (Bahrain), ss 20 to 21.

Our approach

6.18 The notion of reliability comes up in existing law of England and Wales applicable to electronic records in the context of the admissibility and evaluation of evidence in a dispute.

6.19 In the event of a dispute concerning a document, the person bringing a claim may have to demonstrate that they have standing to do so. Where the document is a documentary intangible (whether in paper or electronic form), they may have to demonstrate that they are (or were at the relevant time) in possession of the document. If these facts are in dispute, evidence to establish them will be crucial to the putative holder's case. As is explained elsewhere in this consultation paper, establishing that you are, or were, in possession can be very significant in view of the special status attributed to the holder of documentary intangibles. For example, in the hands of a transferee in good faith, a bill of lading is deemed conclusive evidence of certain facts therein stated, namely the leading marks necessary for the identification of the goods, the number of packages or pieces, quantity or weight of the goods and the apparent order and condition of the goods.[14] It is also conclusive evidence of the goods' shipment or receipt for shipment, as the case may be.[15]

6.20 Where a document is presented as evidence of its contents (rather than its existence), the court will need to be satisfied as to its integrity and provenance – that is, that it has not been tampered with. One important tool to this end is that of authentication whereby due execution of the document is established. This is often established by reference to a signature,[16] which can be used to establish the integrity of a document, including an electronic document.[17] It is important also to establish the provenance of an electronic document,[18] which may be done by reference to the document's properties/metadata.[19] Establishing integrity and provenance assists in determining the reliability of a document.[20]

6.21 It is worth noting here that, as was the case for admissibility, a distinction may subsist in respect of ascertaining reliability between documents prepared by human agents and data generated by machines without human intervention. It is also worth noting that there is a rebuttable common law presumption of regularity, which requires court to proceed on the basis that machines are in good working order, unless sufficient

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14 Carriage of Goods by Sea Act 1971, Schedule, Art III(3).

15 Carriage of Goods by Sea Act 1992, s 4.

16 We have previously discussed this in our report on Electronic Execution of Documents: (2019) Law Com No 386, especially Chapter 3.

17 Explanatory Notes to the Electronic Communications Act 2000, para 5. See also discussion in Electronic Execution of Documents (2019) Law Com No 386, paras 3.39 to 3.40, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/09/Electronic-Execution-Report.pdf.

18 *NN v AS* [2018] EWHC 2973 (Fam), [2019] 1 FLR 1397 at [154], [156], [169] and [242]. See also *Pedro Emiro Florez Arroyo & Others v Equion Energia Limited (formerly known as BP Exploration Company (Colombia) Limited)* [2016] EWHC 1699 (TCC) at [1286] and *Community Gateway Association Limited v Beha Williams Norman Limited* [2011] EWHC 2311 (TCC) at [70].

19 For recent examples of this being done see *ATB Sales Ltd v Rich Energy Ltd* [2019] EWHC 1207 (IPEC) at [61], [64] and [66]; *Liverpool Victoria Insurance Co Ltd v Khan* [2018] EWHC 94 (QB) at [24], [25] and [31].

20 *Ahmed v Secretary of State for the Home Department* [2002] UKIAT 439, [2002] INLR 345.

relevant evidence to the contrary was adduced.[21] A recent illustration of this presumption is *Ali v DPP*, where it was common ground between the parties that the court could presume that an evidential breath machine was working properly.[22] It may be observed that similar presumptions exist in the law with regard to qualified time stamps.[23]

6.22 We therefore think that the reliability of a system will already be examined under our law where such an enquiry is relevant. We do not propose to include an explicit reliability requirement, for three reasons.

6.23 First, we are wary of imposing a reliability requirement as a condition precedent to recognising the validity of an electronic document in view of the uncertainties to which it may give rise. As we have seen above, if a dispute arose on whether the evidence presented by the system on which the document is stored and which confers possession should be believed, the court would likely look into evidence of the reliability of the system. Thus, the system's reliability may well be relevant for determining the material facts of particular cases. This is also the case if there are questions about the existence or content of paper documents. Courts are already well-equipped to apply principles relating to reliability in this context, in accordance with well-established rules. We therefore consider that there is no need to include the adoption of a reliable method or system as an explicit legal requirement for an electronic document of title to be considered amenable to possession under the law of England and Wales. Again, this is particularly the case where there is no such requirement for paper documents despite them being susceptible to forgery and tampering in their own ways.[24]

6.24 Second, to require an electronic document to be reliable before it can be considered valid could disadvantage new systems or technologies the reliability of which has yet to be conclusively established. In the absence of an official certification system whereby reliability may be established in advance (so that the consequences of failure to meet the requirement falls upon the providers of the system rather than its users), we do not consider this approach to be appropriate. Rather, users should be free to determine the level of risk they are prepared to take when selecting the system, with due awareness that selecting an unreliable system may harm their prospects of success in the event of a dispute. As we noted in our 2019 Report on Electronic Execution of Documents ("**Electronic Execution Report**"), this is also the position of

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21 The common law presumes that, in the absence of evidence to the contrary, machines are in good working order: *Castle v Cross* [1984] 1 WLR 1372. Historically, this presumption's relevance lay principally in the field of complex mechanical devices such as clocks and thermometers. In more modern times, it extends by analogy to computers. The Law Commission has previously considered this presumption of fact in both the civil and the criminal contexts: respectively, The Hearsay Rule in Civil Proceedings (1993) Law Com No 216, from para 3.14, and Evidence in Criminal Proceedings: Hearsay and Related Topics (1997) Law Com No 245, from para 13.1.

22 *Ali v DPP* [2020] EWHC 2864 (Admin), [2020] 4 WLR 146.

23 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 ("**eIDAS**"), art 41.

24 We discuss the susceptibility of paper documents to forgery and tampering from para 7.50 below.

the law relating to electronic signatures: the law of England and Wales does not impose reliability requirements on the type of electronic signature used.[25]

6.25 Third, while the inclusion of an explicit reliability requirement may incentivise the development and adoption of more reliable systems, we consider that this benefit is obtainable despite the absence of such a requirement. This is because standards governing the use of technology in this space are currently being developed transnationally by a mixture of state and multi-stakeholder industry efforts.[26]

6.26 As far as electronic evidence is concerned, compliance with good industry practice[27] should assist in establishing reliability of electronically stored information. In our Electronic Execution Report, we said that "users of electronic signatures should satisfy themselves that the system or technology they adopt will have sufficient evidential weight to answer questions as to the identity of a signatory, authority of a signatory to sign and integrity of the document being signed."[28] Similar observations may be made with regard to adopting systems for the issue, possession, transfer, presentation and surrender of electronic trade documents.

6.27 We do not therefore propose that electronic trade documents should be subject to an explicit reliability requirement.

Consultation Question 22.

6.28 We provisionally propose not to impose an express statutory reliability requirement. Do consultees agree? Please give reasons.

If consultees disagree:

(1) When should a party be required to prove that their electronic document is reliable?

(2) Do consultees think our proposals should include an accreditation process? If so, in what form?

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25 Electronic Execution of Documents (2019) Law Com No 386, from para 2.33, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/09/Electronic-Execution-Report.pdf.

26 UN/CEFACT, *Project on transfer of MLETR-compliant titles* (expected publication in June 2021), https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles; ICC, *Digital Trade Standards Initiative launches under the umbrella of ICC* (March 2020), https://iccwbo.org/media-wall/news-speeches/digital-trade-standards-initiative-launches-under-the-umbrella-of-icc/.

27 See British Standards Institute ("**BSI**"), *British Standard (BS) 10008, Ensuring the Authenticity and Integrity of Electronic Information* (last revised 2014), https://www.bsigroup.com/en-GB/bs-10008-electronic-information-management/. This standard includes a section on Legal Admissibility of Electronic Information.

28 Electronic Execution of Documents (2019) Law Com No 386, para 3.41, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/09/Electronic-Execution-Report.pdf.

Information

6.29 All of the trade documents which fall within our proposed reforms have requirements as to what information they contain.[29] We consider that this information must also be contained in any electronic version of any of these documents for them to fall within the meaning of clause 1(2) of the draft Bill.

6.30 However, we also think that there is merit in including a separate provision to ensure that electronic trade documents include the required information. As set out in Chapter 4, the MLETR provides that an electronic record must contain the information that would be required to be contained in a transferable document or instrument.[30]

6.31 This establishes the link between the electronic document and its paper counterpart and implies that, for example, not every electronic payment instruction will suddenly become a bill of exchange and subject to the requirements of the Bills of Exchange Act 1882.[31] We have therefore included the following provision in clause 1(3)(b) of the draft Bill, based on the MLETR:

> (3) An "electronic trade document" is a trade document that – … (b) contains the information that would be required to be contained in the equivalent trade document in paper form… .

6.32 This means that, for example, an electronic promissory note would need to include an unconditional promise to pay the bearer a sum certain in money in order to fall within the application of the draft Bill.[32] Failure to include this information would mean that it would not be considered an electronic trade document.

Consultation Question 23.

6.33 We provisionally propose that there should be a statutory requirement that electronic trade documents must contain the same information as would be required to be contained in a paper equivalent. Do consultees agree?

Writing

6.34 All of the documents that we have mentioned have a requirement that they are in writing. In some cases this is explicit, such as in the 1882 Act which specifies that both bills of exchange and promissory notes must be "in writing".[33] For other documents it

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29 We discuss each of the documents with which our provisional proposals are concerned in detail, in Chapter 3.

30 MLETR, art 10(1). We discuss this requirement of the MLETR from para 4.39 above.

31 We discuss the accidental creation of electronic trade documents from para 6.173 below.

32 We discuss the information required to be in a promissory note from para 3.27 above.

33 Bills of Exchange Act 1882, ss 3(1), 83(1).

is implicit from their content requirements, such as the requirement for a warehouse receipt to contain a description of the goods that the warehouse keeper is holding.[34]

6.35 The MLETR makes specific provision for an "in writing" requirement as it applies to electronic documents.[35] We have considered whether such a provision is necessary in our draft Bill.

6.36 In a 2001 Advice to Government, the Law Commission concluded that there was a difference between words displayed on a screen (such as an email) and wording using electronic data interchange ("**EDI**").[36] We said that the former would satisfy a statutory requirement for writing, and the latter would not. This advice relied at least in part on the reference to other modes of representing or reproducing words in a visible form in the definition of writing in schedule 1 to the Interpretation Act 1978.[37]

6.37 We still consider this advice correct. "In writing" includes wording displayed on a screen and we think that any electronic trade documents should be required to satisfy this meaning. Whatever the "back-end" mechanisms a system uses, its designers may always construct a user-friendly "front-end" interface. It is this "front-end" which the users see. It will appear much like any other electronic document, such as a pdf or Word document. In the language of our 2001 Advice, this will constitute words displayed on a screen rather than EDI.

6.38 In 2001, the concept of DLT did not exist. It is understandable that, against this background, the Advice concluded that "a series of electronic messages" performing the same functions as a paper bill of exchange could not in law constitute a functionally equivalent bill of exchange. We agree with this very specific conclusion. But the technology available today allows for electronic forms to be very close factual analogues to traditional, paper-based documents in a way that was neither possible nor even contemplated at the time. We are therefore of the view that the "front-end" of any relevant system will be able to display the document in such a way as to fulfil the definition of writing in the Interpretation Act 1978.

6.39 In our 2001 Advice, we specifically examined bills of exchange. The 1882 Act says the following about writing:

> "Written" includes printed, and "writing" includes print.[38]

6.40 While application of the Interpretation Act 1978 definition is subject to contrary intention, we do not consider that this definition provides a contrary intention for the

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34 We discuss this requirement for warehouse receipts from para 3.49 above.

35 MLETR, article 8.

36 Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice, https://www.lawcom.gov.uk/project/electronic-commerce-formal-requirements-in-commercial-transactions/.

37 Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice, paras 3.9 to 3.10, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2015/09/electronic_commerce_advice.pdf. Interpretation Act 1978, sch 1: "'Writing' includes typing, printing, lithography, photography and other modes of representing or reproducing words in a visible form, and expressions referring to writing are construed accordingly."

38 Bills of Exchange Act 1882, s 2.

purposes of the 1882 Act. Section 2 of the 1882 Act appears to us to be permissive, rather than limiting, given that "'written' includes printed, and 'writing' includes print". Given the context and purpose of the 1882 Act, we believe this provision should be read as excluding any argument that bills of exchange had to be written out longhand or that manuscript is to be preferred.[39] Our view is that the permissive language does not provide the necessary degree of contrary intention to override the Interpretation Act's reference to "other modes of representing or reproducing words in a visible form".[40]

6.41 We do not therefore think that it is necessary or desirable to include an express statement that electronic trade documents can satisfy an "in writing" requirement.

6.42 Finally, in our 2001 Advice, we noted that the 1882 Act included "several paper-based concepts" which precluded the possibility of electronic bills of exchange and promissory notes.[41] We do not think that comment referred to the in writing requirement (or the requirement for a signature, which we discuss below). Rather, we consider that the paper-based concepts are "possession" and "holder", both of which are dealt with by our proposed reforms.

Consultation Question 24.

6.43 We do not consider there to be a need to introduce an express statutory provision on writing in electronic trade documents, because the law already considers electronic displays to be capable of constituting "writing". Do consultees agree? Please give reasons.

Signed

6.44 All of the documents with which we are concerned are required to be signed in order to be validly issued.[42] The MLETR makes specific provision to allow for the signing of electronic documents.[43]

6.45 As we explain in detail in our Electronic Execution Report, the law of England and Wales is already sufficiently flexible to accommodate electronic signatures.[44] This

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39 *Bondina Ltd v Rollaway Shower Blinds Ltd and Others* [1986] 1 WLR 517; *Ringham v Hackett* (1980) 124 SJ 201.

40 Interpretation Act 1978, sch 1.

41 Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice p 38, n 1, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2015/09/electronic_commerce_advice.pdf.

42 See for example Bills of Exchange Act 1882 ss 3(1), 83(1) and the Marine Insurance Act 1906, s 24. Documents may also need to be signed for other purposes; for example, a bill of exchange must be signed to be accepted, see the Bills of Exchange Act 1882, s 17(2).

43 MLETR, art 9.

44 Electronic Execution of Documents (2019) Law Com No 386. The report includes a brief statement of the law on execution with an electronic signature at pp 1 and 2, https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/09/Electronic-Execution-Report.pdf.

includes where there is a statutory requirement for a signature (unless the relevant statute provides otherwise). We do not therefore consider that there is a need to make special provision for this in our draft Bill.

6.46 Sections 3(1) and 83(1) of the 1882 Act provide, respectively, that bills of exchange and promissory notes must be signed. The provisions requiring signature do not refer to any particular method of signing; in particular, they do not require a manuscript signature. For example, section 3 refers to a bill of exchange having to be "signed by the person giving it", and section 17 says an acceptance must be "signed by the drawee". We consider that these requirements could be satisfied by an electronic signature.

6.47 Section 91 of the 1882 Act clarifies two things about the requirement, which are worth noting here. First, it is unnecessary for the person required to sign to do so "with his own hand".[45] Instead, the law will consider the person to have signed if the signature is in their name and signed by somebody else with authority to do so – that is, this provision allows for signature by an agent.[46] Second, if a corporation is required to sign, the document or writing will be considered signed if "sealed with the corporate seal".[47] Neither of these affects our conclusion that electronic signatures can satisfy the requirements of the 1882 Act.

6.48 In our 2010 paper on marine insurance policies, we noted that marine insurance policies must be signed.[48] We suggested that this would not prevent a marine insurance policy from being an electronic document; however, we noted a "need for caution".[49] In light of our conclusions in the Electronic Execution Report, we now consider it possible to say that electronic signatures will be recognised as valid signatures in this context.

Consultation Question 25.

6.49 We do not consider there to be a need to introduce an express statutory provision on signing electronic trade documents. Do consultees agree? Please give reasons.

Appearance

6.50 The documents which fall under our proposals are all used to evidence certain rights or obligations. For example, a bill of lading acts as a receipt for the goods and as

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45 Bills of Exchange Act 1882, s 91(1).

46 *London CC v Agricultural Food Products* [1955] 2 QB 218, 223 to 224; *Re Prince Blücher* [1931] 2 Ch 70.

47 Bills of Exchange Act 1882, s 91(2).

48 Marine Insurance Act 1906, s 24(1).

49 Law Commission and Scottish Law Commission, "The Requirement for a Formal Marine Policy: Should Section 22 Be Repealed? Reforming Insurance Contract Law" (2010) Insurance Contract Law Issues Paper 9, paras 4.10 to 4.11.

evidence of the contract of carriage. Similarly, the 1882 Act contains references to documents being presented or exhibited.[50]

6.51 For the above reasons, we consider that the relevant information in the electronic document must be accessible to the holder of that document, and the holder must be able to show others the relevant information when required to do so, to prove that they are the holder. If the information is not accessible, then these documents cannot function as evidence. In addition, there is a practical imperative, parties will not be able to ascertain and exercise their rights under the document as easily as they would for a paper copy.

6.52 We do not consider that there is need for an express provision to this effect.

Consultation Question 26.

6.53 We do not consider there to be a need to introduce an express statutory provision on the accessibility of information contained in electronic documents. Do consultees agree? Please give reasons.

Indorsement

6.54 The law sometimes refers explicitly to the "face" of a document.[51] For example, section 29(1) of the 1882 Act specifies that "a holder in due course is a holder who has taken a bill, complete and regular on the face of it". "Face" in this provision has been interpreted as referring to both the front and back of the paper document.[52]

6.55 Whether the document has a "back" is potentially important for the purposes of indorsement. As explained above, indorsement is part of the process of transferring documents which are issued "to order", a process which must be followed if the transfer is to be recognised as legally valid.[53] It is therefore important to ensure that any reforms recognise that electronic trade documents are capable of being indorsed.[54] In practice, indorsements are written on the back of the paper document ("*dorsus*" being the Latin for "back").

6.56 We have already seen above that the law of England and Wales recognises that electronic data can constitute writing and signature, and this could therefore be achieved electronically in the context of indorsement. Nevertheless, we provisionally propose that there should be an express provision on electronic indorsements in view of the practice that indorsements are as a matter of business usage written on the back of paper documents. We think it is important to ensure that an electronic indorsement will be valid regardless of where it is located on the document; this is

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50 Bills of Exchange Act 1882, ss 10(1)(a) and 52(4).

51 See for example, Bills of Exchange Act 1882, ss 4, 36, 51(2), 76.

52 J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 18-005; *Arab Bank Ltd v Ross* [1952] 2 QB 216.

53 Para 3.11(2) above.

54 See for example Bills of Exchange Act 1882, ss 32 and 83(2); Marine Insurance Act 1906, s 29.

especially important as an electronic document may not have a "back". The law does not state explicitly that it has to be on the back, but this is the business understanding of "indorsement" and a valid indorsement is required for certain documents. Although virtually the appearance of the document on the screen can still be given a "front" and "back", this provision precludes the necessity to do so in order to give electronic indorsements validity, and therefore is conducive to certainty.

6.57 In the digital context, the chain of indorsements may be verified through an audit trail; if DLT is used, this audit trail would occur through hashing, which links successive transactions to one another. However, it is important to note that to satisfy a legal requirement for a chain of indorsements, deliberate action to indorse must be taken at the time the transfer is made (delivery on its own is not enough) and indorsements to named persons must be traceable by human agents. This means that the system would need to provide not just an unbroken chain of valid transfers but an unbroken chain of names perceptible to human agents.

6.58 We therefore propose the following provision on indorsement, set out at clause 2(2)(b) of the draft Bill:

> anything done in relation to the electronic trade document that corresponds to indorsement of the equivalent trade document in paper form has the same effect in relation to the electronic trade document as indorsement has in relation to the document in paper form… .

6.59 We consider that our draft provision is equivalent to article 15 of the MLETR, which also explicitly allows indorsement of documents in electronic form.

Consultation Question 27.

6.60 We provisionally propose that legislation should explicitly allow for indorsement of electronic documents. Do consultees agree? Please give reasons.

Sets

6.61 As we refer to in Chapter 3, it is common practice for some trade documents, such as bills of lading[55] or bills of exchange,[56] to be in sets. If there is demand for this functionality, it will likely be developed by technology providers, and the law allows for this. There is no requirement for these documents to be drawn in sets; therefore, we do not consider it necessary to have a requirement that the system on which the electronic trade document exists makes this possible.

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55 We discuss this practice from 3.38 above.

56 See Bills of Exchange Act 1882, s 71.

Consultation Question 28.

6.62 We seek consultees' views on whether there is any need for electronic trade documents to be capable of being issued in sets.

Transfer

6.63 In the course of conversations with stakeholders, it became clear that the specification of different points in a transfer of an electronic trade document is important for clarity in these transactions. In particular, we discuss below the concepts of delivery and point-in-time of the transfer, rejection of an electronic trade document, and amendment of a trade document. We do not consider that any particular provision needs to be made for these issues; we ask if consultees agree.

Delivery

6.64 We have been told that the notion of delivery of a document is especially important in the following arrangements:

(1) CIF contracts;

(2) free on board ("**FOB**") contracts;[57] and

(3) payments by documentary credit.[58]

6.65 A CIF contract is a contract for the sale of goods performed by means of documents[59] in the sense that the seller's obligations are performed upon tendering to the buyer of documents conforming to the requirements of the contract of sale.[60] The documents in question must include an invoice for the goods ("cost"), an insurance document, usually a cargo insurance certificate ("insurance") and a transport document, usually a bill of lading ("freight").[61] These documents must be such as to permit the buyer to claim the goods directly against the carrier (in the case of the bill of lading) or to claim

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57 *Benjamin's Sale of Goods* (10th ed 2017), para 20-001: "The f.o.b. contract has, in the words of Devlin J., become 'a flexible instrument', so much so that no really satisfactory definition of such a contract is possible. The central idea is that the seller is bound at his expense to place the goods 'free on board' a ship for transmission to the buyer from a port or range of ports specified in the contract".

58 *Benjamin's Sale of Goods* (10th ed 2017), para 23-002: "The basic idea of a documentary credit can be stated simply: a bank commits itself to a financial undertaking that it will fulfil against presentation of stipulated documents".

59 *Biddell Bros v E Clemens Horst* [1912] AC 18, 22 to 23: "delivery of the bill of lading can be treated as delivery of the goods themselves".

60 *Tregelles v Sewell* (1862) 158 ER 600, 603: "I think the true meaning of the contract is this, 'When you, the defendant, have performed, what you were bound to do, and put the goods on board a ship destined for Harburgh, and handed me the bill of lading and a policy of insurance, I will pay you 5l. 14s. 6d. per ton, less the freight.' The defendant having done all he was bound to do, is entitled to keep the money he got".

61 See *Ireland v Livingston* (1871-72) LR 5 HL 395, 406 to 407 and ICC, *Incoterms 2020, Cost Insurance Freight (CIF)* Articles A1, A5 and A6.

against the insurer where the goods are lost or damaged (in the case of the cargo certificate).[62]

6.66 Under a FOB contract, the seller has the obligation of shipping the goods on board the vessel nominated by the buyer,[63] thus obtaining the bill of lading, which he then tenders to the buyer.[64] As we discuss elsewhere in this paper,[65] in order to obtain payment under a documentary credit arrangement, a beneficiary (seller) must present to the bank documents that comply with the credit. These usually also include a document of title to the goods (the bill of lading) and an insurance document.[66]

6.67 The question then becomes: what constitutes delivery of an electronic document? This is perhaps a subset of the broader question: how does a "transfer" work for an electronic document?

6.68 We think that it is highly likely that a court will interpret "delivery" as bearing its ordinary meaning; that is, as a voluntary and unconditional transfer of possession that is met with an unconditional acceptance by the transferee.[67] In any case, if electronic trade documents are made amenable to possession by statute, the legal characterisation of the transfer will develop by analogy with paper documents. The legal recognition of the electronic document as a thing capable of possession puts the focus of any dispute resolution, as to when and how something was delivered, on an assessment of the factual characteristics of the system. Our expectation is that developers of electronic trade platforms will construct their system in such a way that assessments of transfer and delivery may be conducted by easy analogy with paper documents.

Time of transfer

6.69 At what point in time is an electronic document transferred? To put this another way: when does a transferee come into possession of an electronic document? The answer to this will be determined by the platform on which the transfer of the electronic trade document takes place. This is analogous to paper documents: the exact moment of transfer will depend on whether a document is physically handed over or couriered between the parties. The mode of transfer will dictate the moment of transfer.

6.70 It is appropriate however, given the prominence of DLT as the basis of many platforms currently in development, to comment on when the transfer would take place on a distributed ledger. Consider an electronic bill of lading created on a blockchain. When the transferor executes the transfer, that action will be broadcast to the network. The action itself is immediate, but the transferee cannot act as having received that

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62 ICC, *Incoterms 2020, Cost Insurance Freight (CIF)*, Articles A5 and A6.

63 Sale of Goods Act 1979, s 32(1); ICC, *Incoterms 2020, Free On Board (FOB)*, Articles A1 and A2.

64 ICC, *Incoterms 2020, Free On Board (FOB)*, Article A6. See also *Concordia Trading BV v Richco International Ltd* [1991] 1 Lloyd's Rep 475.

65 See para 1.9 above.

66 ICC, *Uniform Customs and Practices on Documentary Credits (UCP) version 600* (2007) arts 20 and 28.

67 *The Erin Schulte* [2014] EWCA Civ 1382, [2016] QB 1 at [28]. We note that the requirement for an unconditional acceptance means that there can be circumstances in which the party in possession of a document will not be its holder, eg because that party has rejected the document.

document until notification of the transfer has spread throughout the network and been verified. This may be a matter of seconds or minutes, depending on the specific technology used. Only once the network verifies the transfer can it be said to be complete.

Rejecting documents

6.71 In some cases, the purported recipient of a transfer may wish to reject the document.[68] We have been told that in practice, banks rejecting documents for non-compliance simply transfer the documents back, with the necessary indorsement. In our provisional view, therefore, no particular statutory provision need be made in order to facilitate rejection. It was suggested to us that platform providers may wish to design their systems with some kind of circuit-breaker mechanism to prevent indefinite successive transfers between two parties disputing the validity of a document. We consider this to be a matter of design to be resolved by platform providers.

Amendment and curing of errors

6.72 Parties to a transaction may notice a discrepancy in the document and agree that it should be amended. In practice, with paper documents, this is be done by inserting an amendment in writing on the document. What would be the equivalent of this process for an electronic trade document?

6.73 Depending on the technology used, amendment of an electronic trade document might require a particular process to be gone through. As we discuss in detail in our Call for Evidence on smart contracts,[69] one of the key features of DLT is its immutability. We explained there that data, once recorded on the ledger, is very difficult to amend due to the consensus mechanism. The immutability of the ledger means that nodes can trust in its veracity and transact with one another in confidence, despite the absence of a central administrator. For example, the immutability of transactions recorded on the Bitcoin blockchain ensures that no participant can "double-spend" a bitcoin. Any attempt to double-spend a bitcoin would be contradicted by the ledger (which would contain an immutable record of the previous spend), and the proposed transaction would be rejected by the nodes as invalid.[70]

6.74 Of course, the need to amend an electronic trade document is likely to arise in circumstances very different from a party attempting double-spending. The benefit of DLT is that it minimises the risk of a party illegitimately modifying a document without the knowledge of other parties with an interest in that document. What if parties agree that it should be modified? We assume that the process of amending the document is one that should be tackled by platform providers. Ultimately, the situations in which parties can amend an electronic trade document, and the legal implications of doing so, will be analogous to those of a paper document. We do not therefore think that there is a need to make explicit provision in the legislation for it. However, we are

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68 As was the case in *The Erin Schulte* [2014] EWCA Civ 1382, [2016] QB 1.

69 Smart contracts (2020) Law Commission Call for Evidence para 2.19.

70 S Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System" (2008) pp 1 to 2; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 26.

interested in hearing from consultees about how amendment of an electronic trade document is achieved under existing systems and those in development.

Consultation Question 29.

6.75 We provisionally propose that no further provision is required in legislation to address the following in respect of electronic trade documents:

(1) timing of delivery;

(2) timing of transfer;

(3) rejection; and

(4) amendment.

Do consultees agree?

Consultation Question 30.

6.76 We seek consultees' views on how amendment or rectification of an electronic trade document is achieved under existing systems and those in development.

Other uses

6.77 In order to make an electronic trade document functionally equivalent to a paper trade document, we have included clause 2(2)(c) in the draft Bill, which states:

> anything else done in relation to the electronic trade document that corresponds to something that could be done in relation to the equivalent trade document in paper form has the equivalent effect in relation to the electronic trade document.

6.78 We initially considered including the phrase "so far as practicable" in this provision, so that it would read:

> anything else done in relation to an electronic trade document that corresponds to something that could be done in relation to the equivalent document in paper form has, so far as practicable, the equivalent effect in relation to the electronic trade document.

6.79 We ultimately decided to remove this phrase as we saw no scenario in which this qualification was necessary.

Consultation Question 31.

6.80 We seek consultees' views on whether the phrase "so far as practicable" should be included in clause 2(2)(c). If yes, please give examples where such a qualification would be required.

Security interests – electronic trade documents as collateral

6.81 As we suggest in Chapter 2, possession is important not only in the context of the legal effect and functionality of trade documents such as bills of lading and bills of exchange.[71] If something can be possessed, it can also be the subject of various legal interests and claims, including:

(1) bailment;

(2) possessory security interests; and

(3) wrongful interference (conversion).

6.82 The documentary intangibles exception means that the legal interests embodied in the piece of paper can be the subject of these interests and claims.[72] Will the same be true of electronic trade documents if our reforms are implemented?

6.83 Below, we explain each concept briefly, and propose an explicit provision to ensure that electronic documents will also be amenable to these treatments and claims.

Bailment

6.84 A bailment arises whenever one person (the bailee) takes voluntary possession of goods belonging to another (the bailor).[73] The bailor (or their agent) must give actual or constructive possession of the goods to the bailee.[74] The bailor retains ownership[75] of the goods, but wholly divests themselves of possession in favour of the bailee.[76] The bailor also has a reversionary interest in the goods,[77] which means that at the end

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71 We discuss the consequences of a document being capable of possession from para 3.16 above.

72 *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653; *Brandt v Liverpool Steam Navigation Co* [1924] 1 KB 575.

73 J P H Mackay (ed) *Halsbury's Laws of England, Bailment and Pledge* (2020) para 101; *East West Corporation v DKBS AF 1912 A/S* [2003] EWCA Civ 83, [2003] QB 1509 at [25] to [27].

74 *Ashby v Tolhurst* [1939] 2 KB 242, 255, by Romer LJ: "in order that there shall be a bailment there must be a delivery by the bailor, that is to say, he must part with his possession of the chattel in question".

75 Or else superior title to that of the bailee, see N Palmer, "Bailment" in A Burrows (ed), *English Private Law* (2013) para 16.04: "Bailments can arise where the bailor is not the owner. All that is necessary is that the bailor should have some superior right in possession of the goods".

76 N Palmer, "Bailment" in A Burrows (ed), *English Private Law* (2013) para 16.04: "a bailment can arise without any previous possession on the part of the bailor. A bailment exists where goods are sold to one person but delivered directly on his instructions to another, who has agreed to hold them as his bailee. From the moment that he receives possession the recipient is the bailee of the new owner".

77 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 11-017.

of the bailment, the bailee must either return the goods[78] to the bailor or deal with the goods as the bailor directs.[79]

6.85 The law of bailment applies to things in possession.[80] In some cases, courts have accepted the pledging[81] of documentary intangibles, such as bearer bonds[82] and bills of lading.[83] Palmer argued that "principles akin to those of bailment should govern the 'global custody' of electronically stored securities which have no material existence",[84] but no such principles have been recognised for intangible assets.

6.86 Under our provisional proposals, electronic trade documents can be possessed. We intend that electronic trade documents should be capable of being the subject of a bailment.

Security interests

6.87 Security can be taken over (paper) trade documents in various ways. The relevant securities can be possessory or non-possessory.[85]

Possessory securities

6.88 As the name suggests, under a possessory security, the party taking security has possession of the subject of security. Pledges and liens are possessory securities.

6.89 A pledge involves a debtor (the pledgor) transferring possession of the property serving as security to the pledgee creditor.[86] It is therefore a type of bailment. A lien is a right to retain possession of a thing until a claim or debt has been satisfied. Liens may arise by operation of law, by statute or under a contract between the parties.[87] Both pledges and liens are regularly used in international trade and trade finance.

6.90 Of course, since electronic documents cannot currently be possessed in the eyes of the law, it is not possible for a pledge or lien to be effected by means of an electronic document. It is our intention that, if our proposed reforms are implemented so that

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78 Either the identical goods or an equivalent, depending on the type of bailment: Bridge, *The Law of Personal Property* (2nd ed 2019) para 11-018.

79 *TRM Copy Centres (UK) Ltd v Lanwall Services Ltd* [2009] UKHL 35, [2009] 1 WLR 1375; *PST Energy 7 Shipping LLC v O W Bunker Malta Ltd* [2016] UKSC 23, [2016] AC 1034.

80 M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (2nd ed 2019) para 11-008. It does not apply to real property or fixtures annexed onto real property: J P H Mackay (ed), *Halsbury's Laws of England, Bailment and Pledge* (2020) para 103.

81 A pledge is a type of bailment, therefore if documentary intangibles can be bailed, then they can be pledged.

82 *Carter v Wake* (1877) 4 Ch D 605.

83 *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653.

84 N Palmer, "Bailment" in A Burrows (ed), *English Private Law* (2013) para 16.15.

85 M Bridge, *Personal Property Law* (4th ed 2015) p 269.

86 M Bridge, *Personal Property Law* (4th ed 2015) p 277.

87 L Gullifer and R Goode, *Goode and Gullifer on Legal Problems of Credit and Security* (6th ed 2017) para 15-027.

electronic trade documents can be possessed, it will also be possible for them to be the subject of a possessory security.

Examples of pledges

6.91 In international sale transactions, where the seller demands an undertaking from a bank as to payment, or where the buyer wants to obtain credit to finance the sale transaction, the seller will be paid through a bank that has given a personal undertaking to pay. This is often in the form of a letter of credit addressed to the seller as beneficiary. In these instances, the bank may require a pledge of those goods as collateral.

6.92 If a bill of lading is pledged to a bank, the bank will hold a pledge over the goods that the bill describes because bills of lading are documents of title. The transfer of possession of the bill of lading constitutes a pledge of the goods that it represents, as opposed to a transfer of the ownership of them, if it is made with the appropriate intention.[88]

6.93 Having taken a pledge over the goods, banks often release the bill of lading to the debtor/buyer of the goods to enable them to take delivery of the goods and sell them on in the course of business. They do this against a trust receipt.

> A trust receipt or letter of trust is used where a bank-pledgee having possession of documents of title or actual or constructive possession of the goods, received from or on behalf of the owner, delivers them to the owner or to a third party, who undertakes to hold them and, if sold, the proceeds, in trust for the bank.[89]

6.94 This practice enables business to continue while at the same time preserving the bank's priority as a creditor vis-à-vis the goods. However, a purchaser of the bill of lading for value without notice from a pledgor in possession of the bills of lading via a trust receipt would take the bills of lading and the goods free of the pledgee's pledge interest. This is because the pledgor would be treated as a mercantile agent of the pledgee and capable of transferring ownership in the bills of lading and the goods they represent to a bona fide purchaser for value.[90] The pledgee's rights against the proceeds of that sale in such a case would still be preserved by the trust receipt.[91]

6.95 In advancing credit, including by way of trade finance, banks must comply with applicable capital requirements.[92] Such requirements generally treat credit exposures

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88 *Hibbert v Carter* (1787) 1 TR 745; *Sewell v Burdick* (1884) 10 App Cas 74; *Brandt v Liverpool, etc, Steam Navigation Co* [1924] 1 KB 575.

89 R King, *Gutteridge and Megrah's Law of Bankers' Commercial Credits* (8th ed 2001) para 8-20.

90 See Factors Act 1889, s 2; Sale of Goods Act 1979, s 24.

91 *Lloyds Bank Ltd v Bank of America National Trust & Savings Association* [1938] 2 KB 147, 164 to 165.

92 Most jurisdictions impose capital requirements on internationally active banks in line with the Capital Adequacy Framework adopted by the Basel Committee on Banking Supervision ("**BCBS**"). The most recent (third) edition of the Framework was adopted in 2011, with subsequent additions and revisions: see Bank for International Settlements, *Basel III: A global regulatory framework for more resilient banks and banking systems—revised version* (June 2011), https://www.bis.org/basel_framework/ ("**Basel III**"). Implementation is under way and progress is being monitored in the twenty-eight BCBS member states: see Bank for

created under letters of credit as being less risky to the bank where the exposure is collateralised by the underlying shipment.[93] Collateral would typically be taken in the form of a pledge of the goods through the bill of lading, as described above. We anticipate that our reforms would mean that a pledge taken through an electronic bill of lading would have the same effect for capital requirements purposes as a pledge taken over a paper bill, subject to the conflict of laws issues which we discuss below.[94]

6.96 In order for the goods represented by the bill of lading to act as collateral it is necessary that:

(1) the bill of lading held by the issuing bank confers title to the goods and this title is legally effective and enforceable in all relevant jurisdictions;

(2) that the issuing bank possessing the bill can use it to take possession of the goods, and can liquidate or retain them, in the event of the buyer/applicant's default on payment, in order to mitigate its loss;

(3) that this is the case even in situations where relevant parties (eg the buyer/applicant or the carrier) are insolvent; and

(4) that the goods, and the markets for them, are such that the bank is reasonably able to liquidate them to recover loss.

6.97 Our current understanding is that it is difficult or impossible for firms to use purely contractual mechanisms to enable electronic bills of lading to satisfy all of the above, in particular the third condition.[95] Thus legal reform may be necessary for electronic bills to be treated as equivalent to paper bills from the perspective of the bank capital framework.

International Settlements, *Sixteenth progress report on adoption of the Basel regulatory framework* (May 2019), https://www.bis.org/bcbs/publ/d464.htm.

93 Calculation of credit-risk exposures under Basel III may be found in the section on Calculation of Risk-Weighted Assets for Credit Risk. See in particular ch 20, "Standardised Approach: Individual Exposures", para 20.44, https://www.bis.org/basel_framework/. Basel III will become applicable from 1 January 2023, but this rule also appears in the second edition of the Basel framework. See BCBS*, International Convergence of Capital Measurements and Capital Standards: A Revised Framework* (July 2006) para 85, https://www.bis.org/publ/bcbs128.pdf.

94 In practice, recognition for capital requirements purposes might be subject to the regulator obtaining comfort from firms that the electronic bills in question would be recognised not just under the law of England and Wales but also in other relevant jurisdictions, as provided in the EU Capital Requirements Regulation No 575/2013, art 194. We consider that the ability to replace the electronic bill with a paper one may be key in these situations. We work through an example of a pledged electronic bill of lading at para 6.149 below.

95 Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice . Clyde & Co, *The Legal Status of Electronic Bills of Lading, A report for the ICC Banking Commission* (October 2018), https://cdn.iccwbo.org/content/uploads/sites/3/2018/10/the-legal-status-of-e-bills-of-lading-oct2018.pdf.

Examples of liens

6.98 Under the MIA, a marine policy is capable of being subject of a broker's lien.[96] In 2001, the Law Commission argued that the nature of liens implied that a marine policy must be in tangible form.[97] This was on the basis that, as a lien consists of a right to retain possession of goods, it cannot exist over intangible property.[98]

6.99 In 2010, however, the joint report of the Law Commission of England and Wales and the Scottish Law Commission instead argued that, even if the broker's lien was limited to tangibles, this did not mean that the marine policy must be in tangible form. This was because not all marine policies need to be subject to the broker's lien.[99] This argument is supported by the provision in the MIA for parties to dispense with the broker's lien by agreement.[100] More generally, we anticipate that our reforms would mean that an electronic trade document would be capable of being subject to a lien.

Non-possessory securities

6.100 Trade documents may be the subject of fixed or floating charges. As they do not depend on tangibility even under the current law, we consider that there is no legal barrier to electronic trade documents being subject to fixed or floating charges.

6.101 The distinction between these categories is made largely on the basis of the degree of control that the chargee exerts over the relevant asset.[101] We have been told that fixed charges are not used in respect of trade documents. We would be interested to hear more from consultees about how security is taken over trade documents.

Consultation Question 32.

6.102 We seek consultees' views on what security interests are typically taken over trade documents at the moment.

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96 Marine Insurance Act 1906, s 53. This reflects the fact that the broker is generally directly responsible to the insurer for the premium. There can be two separate liens: the first is a particular lien over the policy for unpaid premium and charges; the second a general lien covering any outstanding balances due to the broker in relation to insurance business.

97 Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper, paras 7.9 and 7.10.

98 For recent authority confirming that liens cannot be taken over intangibles (eg electronic databases), see *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41. We discuss this decision in Chapter 2 from para 2.24 above.

99 The Requirement for a Formal Marine Policy: Should Section 22 Be Repealed? Reforming Insurance Contract Law Issues Paper 9 (2010) Law Commission and Scottish Law Commission, para 4.37.

100 Marine Insurance Act 1906, s 50(2) begins "unless otherwise agreed".

101 *Re Spectrum Plus Ltd (in liquidation)* [2005] UKHL 41, [2005] 2 AC 680. See also R Goode and L Gullifer, *Goode and Gullifer on Legal Problems of Credit and Security* (6th ed 2017) paras 4-16 to 4-22. As we discuss from para 5.78 above, in this context, "control" is used as something distinct from possession.

Conversion

6.103 When someone's property is interfered with by another (for instance, when it is stolen, taken without their permission or destroyed), they can sue in the tort of conversion. This is the law of England and Wales' primary means of protecting interests in personal property. *OBG v Allan* confirmed that, under the current law, there can be no claim in conversion in respect of things in action as opposed to things in possession.[102]

6.104 The documentary intangibles exception means that conversion can arise in respect of goods described in a (paper) trade document.[103] In some cases, the damages available will be calculated based on the value of the obligation embodied by the document.

6.105 We intend that, as part of our proposed reforms, wrongful interference with electronic trade documents should be capable of giving rise to an action in conversion.

Will our proposals mean that possessory concepts apply to electronic trade documents?

6.106 We consider that allowing for the possession of electronic trade documents should be sufficient to ensure that electronic trade documents could be the subject of possessory concepts such as those listed above.

6.107 However, although it would be unfortunate, we think it is possible that a court considering the question after the implementation of our reforms could conclude that our reforms do not have this effect. A court could find that an electronic trade document is possessable for the limited purpose of ensuring that it can function as a trade document, but nevertheless find itself bound to conclude that, by virtue of *OBG v Allan*, an electronic trade document is not capable of being converted (or bailed, or the subject of a possessory security) because of its intangible nature.

6.108 For this and other reasons, we have included clause 2(2)(c) in the draft Bill, to ensure that, in all other respects apart from their intangibility, electronic trade documents are legally analogous to their paper counterparts.

6.109 The combined effect of clauses 2(1) and 2(2)(c), in our view, is sufficient to ensure that electronic trade documents will be susceptible to interests premised on possession, including bailment, conversion, pledges, and liens.

Consultation Question 33.

6.110 We provisionally propose that an electronic trade document should be capable of being the subject of possessory concepts including bailment, conversion, pledges, and liens, and that this should be provided for in legislation. Do consultees agree?

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102 [2007] UKHL 21, [2008] 1 AC 1. We discuss this case in more detail from para 2.20 above.

103 See for example *Glencore International AG v MSC Mediterranean Shipping Co SA* [2017] EWCA Civ 365, [2017] 2 All ER (Comm) 881 at [42].

Surrender and accomplishment

6.111 Once paper trade documents have served their purpose, they are considered spent. Bills of lading, for example, are stamped as "accomplished" once the cargo is delivered. From that point, they no longer give the holder the right to claim the goods described in the document.[104] The 1882 Act provides for "discharge" of a bill including by payment[105] or cancellation,[106] but does not require any particular process to be gone through to mark the bill as discharged.

6.112 In much the same way as a paper document continues to exist physically after it is spent but is devoid of legal significance, it is likely that an electronic trade document will remain on the system after it is spent as a record or archive copy. We have been told that currently, private systems providing for electronic trade documents mimic the paper document process. In the case of a bill of lading, for example, a button is clicked saying "surrender", and then the carrier clicks a button that says "accomplished", terminating the effect of the bill and taking it out of circulation.

6.113 We do not consider that anything explicit is required in legislation to provide for the discharge, surrender, or accomplishment of electronic trade documents. In the event that such a clause would be needed, we consider clause 2(2)(c) of our draft Bill sufficient to cover discharge, surrender, and accomplishment.

Consultation Question 34.

6.114 We provisionally propose that existing rules and practices can accommodate the discharge, surrender or accomplishment of electronic trade documents, and that no specific legislative provision is needed. Do consultees agree?

Change of medium

6.115 A number of the documentary intangibles which the proposed reforms will cover are used in cross-border trade transactions and therefore need to be amenable to being used in different jurisdictions and to being tendered or presented under contracts governed by different laws. Variations in the extent to which different jurisdictions recognise electronic forms of these documents are inevitable, as is the fact that some transaction participants or port and border authorities will not be in a position to process electronic documents.

6.116 In view of this, the law needs to recognise that electronic documents may be replaced by a paper substitute should the situation require it. This is perhaps particularly important for electronic bills of lading which often need to be issued to shippers, accepted by receivers, or processed by border control and customs agencies in

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104 *The David Agmashenebeli* [2002] EWHC 104 (Admlty), [2003] 1 Lloyd's Rep 92; see also *The Delfini* [1990] 1 Lloyd's Rep 252 regarding the meaning of "accomplished".

105 Bills of Exchange Act 1882, s 59.

106 Bills of Exchange Act 1882, s 63.

jurisdictions where electronic trade documents are not legally recognised as equivalent to paper documents of title.

6.117 The MLETR includes a provision on a change of medium from electronic to paper[107] and also a provision on change of medium from paper to electronic,[108] although we consider that the latter is less likely to be used extensively.

6.118 For the change of medium to take effect (using the transition from electronic to paper under article 18 as an example), the MLETR requires a statement indicating a change of medium to be included in the paper "replacement" document.[109] Once the paper substitute is issued, the electronic document becomes inoperative and ceases to have any effect or validity. [110]

6.119 Under the MLETR, a change of medium does "not affect the rights and obligations of the parties".[111] While it is not explicitly stated in the MLETR provisions, the reference to "change of medium" and the preservation of the parties rights and obligations implies that only the medium is being changed, and that the content of the document remains unchanged.

6.120 This is made explicit in the Singapore Act, one of the stated aims of which is to implement the MLETR.[112] Sections 16M and 16N, inserted in the Electronic Transactions Act, concern the transition between electronic and paper forms of the documents. The Act adds an additional requirement (beyond the language of the MLETR) into both sections, requiring that all the information contained in the original document or instrument must be accurately reproduced in the replacement document or instrument.[113]

6.121 On balance, we prefer the approach of the MLETR which ensures that the substance remains the same but does not require the information to be identical. This is achieved by clause 1(3)(b) of the draft Bill, which applies not just to instances of replacement but to electronic trade documents generally. We do not think that a provision explicitly governing information required in replacement documents is required. The policy aims in question are that transactions can proceed regardless of the medium of the trade document, and that the rights and obligations of the parties involved are not affected by the change of medium. In our view, these aims are achieved already by clause 3(2)(b):

> (1) Where a document is replaced under this section –
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> …

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107 MLETR, article 18.

108 MLETR, article 17.

109 MLETR, art 18(2).

110 MLETR, art 18(3).

111 MLETR, art 18(4).

112 See Explanatory Statement accompanying the Bill, para 1.10.

113 Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting ss 16M(2) and 16N(2)).

(b) all rights and liabilities relating to the original document continue to have effect in relation to the replacement document.

6.122 The relevant information that we wish to capture is precisely the information which dictates whether a document will be considered to be one of the seven kinds of trade documents listed in clause 1(2). Thus the replacement document would, like the document being replaced, need to satisfy any content requirements imposed by the law. Clause 3(2)(b) assumes that the information in the replacement document must not have changed in any way which is material to the rights and liabilities of the parties.

6.123 Given the above, we do not wish to provide an avenue for parties to dispute a trade document (whether paper or electronic) on the basis of discrepancies in form which do not substantively affect the rights or obligations of the parties, and do not impinge on transactions. We do not, in other words, wish to provide a statutory provision which will be fodder for litigation as to the effect of non-compliance.[114]

6.124 Clause 3 in the draft Bill enabling a change of medium for a trade document therefore reads as follows:

(1) A trade document in paper form may be replaced by an electronic trade document, and an electronic trade document may be replaced by a trade document in paper form, if the replacement document contains a statement that it is a replacement document.

(2) Where a document is replaced under this section:

(a) the original document ceases to have effect; and

(b) all rights and liabilities relating to the original document continue to have effect in relation to the replacement document.

Consultation Question 35.

6.125 We provisionally propose that provision should be made to allow for a change of medium for trade documents from electronic to paper, or from paper to electronic. Do consultees agree?

6.126 It is our provisional view that the party in possession of the document is, by virtue of that possession, entitled to change the medium of that document. As a matter of commercial practice, we consider it highly likely that the issuer will allow for the holder to replace their document where requested. For this reason, we do not consider it necessary to require the issuer to do so in the draft Bill.

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[114] We have in mind interpretive inquiries of the kind described in *R v Soneji* [2005] UKHL 49, [2006] 1 AC 340 at [14] to [23], by Lord Steyn. See for example of application in non-criminal context *Natt v Osman* [2014] EWCA Civ 1520, [2015] WLR 1536.

6.127 We similarly do not consider it necessary to require a technology provider to allow for the replacement of trade documents in the draft Bill. As a result, we have not included provision on this in our draft Bill.

Consultation Question 36.

6.128 We seek consultees' views on whether the draft Bill should contain a requirement that the issuer of a trade document must allow the person in possession to change the document's medium.

INTERNATIONAL ISSUES

The compatibility of our provisional proposals with positions taken in other jurisdictions

6.129 We have been asked whether our provisional proposals will be compatible with the positions taken in relation to electronic trade documents by other jurisdictions around the world, and in particular the MLETR. Some jurisdictions have already enacted reform; others have reform processes underway, often based on the MLETR.

6.130 Broadly speaking, we think that our provisional proposals are (and will be) compatible with the MLETR and the positions taken in other jurisdictions. Where there are discrepancies, we think that our proposals are likely to be more permissive.

Compatibility with positions based on the MLETR

6.131 As we discuss in Chapter 2, model laws are intended to be flexible instruments which can be adapted to suit domestic circumstances. While model laws are intended for transposition into domestic law, that transposition must conform to the existing legal framework in the relevant state.

6.132 Our provisional proposals aim to recognise the legal validity of electronic trade documents. This will ensure that such electronic trade documents are able to function in the same ways as their paper counterparts. We believe that our provisional proposals align with the objectives of the MLETR and indeed there is a large degree of overlap between the provisions of our draft legislation and the provisions of the MLETR. However, as we explain in this and the previous chapter, there are certain concepts and terms used in the MLETR which we think need to be adapted for the law of England and Wales, or which we do not think are necessary given the existing legal framework in England and Wales.[115]

6.133 Although our proposals therefore achieve the objectives in a slightly different way, we do not believe that the difference results in incompatibility. For example, we have taken care to ensure that our provisional proposals do not impose requirements beyond those which must be met under the MLETR. Accordingly, we believe that our

[115] For example, reliable method (see from para 6.14 above), and specific provisions on writing and signatures (see from para 6.34 above).

provisional proposals are compatible with positions taken in other jurisdictions that are (or will be) based on the MLETR.[116]

Compatibility with positions that are not based on the MLETR

6.134 As we discuss in Chapter 4, there have been developments in a number of jurisdictions that are not based on the MLETR. Broadly speaking, in so far as these developments are aimed at the ultimate objective of achieving the legal recognition of electronic trade documents, we think that our provisional proposals with be compatible with them. However, there are a few points of important difference.

(1) Instead of developing a functionally equivalent concept to possession, we have provisionally proposed an extension of the applicability of the concept of possession itself.[117] This is a different approach from that taken, for example, in the UCC.[118]

(2) We have not endorsed the introduction of any form of state-backed registry system. We have not, therefore, followed the approach taken in jurisdictions such as South Korea, China, and Japan.[119]

(3) We have not proposed the development of an accreditation system. This differentiates our approach from that of Bahrain and Singapore.[120]

(4) Our provisional proposals do not merely amend existing statutory provisions. Instead, they alter the prevailing common law position. To that end, our approach is different from the approaches taken in civil law jurisdictions such as Germany.[121]

(5) Whilst the trade documents with which our provisional proposals are concerned can be said to embody contractual obligations, we have not left the status of being in "possession" of a document to be determined through the interpretation of the relevant underlying contract. We have not, therefore, followed the approach taken in Australia.[122]

(6) Our intervention is statutory. We have not therefore sought to leave the possession problem to be resolved by the courts. In so doing, we have been

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116 We note also that article 19 of the MLETR provides that an electronic transferable record shall not be denied legal effect, validity or enforceability on the sole ground that it was issued or used abroad. Generally speaking, an electronic trade document would be recognised as valid and capable of enforcement in a state that had implemented the MLETR, even if governed by English law (provided that the document also met the requirements of being an electronic transferable record under the MLETR). However, an exception is electronic straight bills of lading. These are recognised as legally effective under our reforms, but are not so recognised under the MLETR.

117 We justify this difference in approach from para 4.82 above.

118 We discuss the UCC in more detail from para 4.68 above.

119 We discuss the approaches taken in South Korea, China, and Japan from para 4.93 above.

120 We discuss the developments in Singapore and Bahrain from para 4.45 and para 4.64, both above, respectively.

121 We discuss the 2013 amendments to the German Commercial Code from para 4.87 above.

122 We discuss the Australian approach from 4.89 above.

mindful of Lord Justice Moore-Bick's observation that rendering an intangible susceptible to possession is a course that is "not open" to courts, and "may now have to await the intervention of Parliament".[123] In taking this step through legislation, our approach is different from that taken in Sweden.[124]

6.135 The critical question is whether any of these differences, particularly compared to the MLETR, pose problems for the international use of electronic trade documents as provided for by our draft Bill.

Consultation Question 37.

6.136 We seek consultees' views on whether the electronic trade documents that satisfy the requirements of our draft Bill will also satisfy the requirements of the MLETR.

To the extent that consultees consider our provisional proposals to be incompatible with the MLETR or other international approaches, please explain this and the consequences to which it could give rise.

Other cross-border issues

6.137 Our provisional proposals aim to give legal recognition to electronic forms of trade documents under the law of England and Wales. But when international trade involves the transfer of goods, money and supporting documents across borders, and between different parties in different countries, is changing the law of England and Wales enough?

6.138 To the extent that electronic documents will be able to function in the same ways as their paper counterparts – which have facilitated trade across the world for hundreds of years – we do not anticipate significant cross-border issues. There is an existing, complex set of private international law rules which determine which courts have jurisdiction over a dispute and which country's law should be applied to resolve it. Courts in one country may apply the laws of another. Questions such as which country's law determines who is in possession of a particular electronic document, or the legal consequences of being in possession, will be determined by reference to the same rules that currently determine those questions for paper documents.

6.139 For example, an English court will consider the formal validity of a bill of exchange to be determined by the law of the country in which that bill is issued.[125] Similarly, an

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123 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [27].

124 We discuss the Swedish Supreme Court's recognition of an electronic promissory note as a negotiable instrument from para 4.91 above.

125 Bills of Exchange Act 1882, s 72. The place of issue means the place where the bill is first delivered to a holder. The position is the same for promissory notes: s 89. This rule is subject to two provisos. First, a bill or note issued outside of the United Kingdom will not be deemed invalid only by reason that it is not stamped in accordance with the law of the place of issue: s 72(1)(a). Second, English law may treat a bill or note as valid – for the purposes of enforcing payment between persons who negotiate, hold, or become parties to it in the United Kingdom – if it confirms with the requirements for validity under English law: s 72(1)(b).

English court will consider the effectiveness of a transfer of a bill of lading to be determined by the law of the place where the document is situated at the time of the transfer.[126] Additionally, parties will normally agree upon the law that is to govern the contractual obligations embodied in their documents, although in disputes involving proprietary aspects of dealings with documents, the parties' choice may be superseded by the law of the place where the document is situated.[127]

6.140 This will also be the case for questions of a document's status. An agreement that a particular document is to be governed by a particular law does not extend to the separate proprietary question of whether the possession of the document is of particular legal significance. In other words, a governing law clause is not determinative of whether the document has the status of being a document of title.

6.141 The editors of *Dicey, Morris, and Collins* state the general position in the following terms:

> The rights of the holder … are to be determined both by the law governing the instrument and by the law of the place where the instrument was situated at the time it was delivered to him … A person's (proprietary) entitlement to be treated as a "holder", as against other claimants, will normally be determined in accordance with the [law of the place where the instrument is situated], but the question whether the instrument carries with it rights against the issuer (and questions concerning the exercise of those rights) will, ultimately, be matters for the law governing the instrument.[128]

6.142 While the rules are complex and fact-specific, there is generally an established way to reach an answer. As we note, these documents have facilitated global trade for a significant period of time. And even where there is a lack of judicial authority, this is most likely a consequence of the pervasive international use of these documents, and the relative uniformity of their treatment by different legal systems. Matters of private international law have not been litigated because they have not been the subject of sufficient dispute.

6.143 However, there are two novel cross-border issues caused by electronic documents that should be specifically mentioned:

(1) Where is an electronic trade document located at any given time (and related questions such as where does a transfer take place)?

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126 L Collins and J Harris (eds), *Dicey, Morris, and Collins on the Conflict of Laws* (15th ed 2018) para 33-383. See, for example, *Alcock v Smith* [1892] 1 Ch 238, *Embericos v Anglo-Austrian Bank* [1905] 1 KB 677; and *Koechlin et Cie v Kestenbaum Bros* [1927] 1 KB 889. However, this issue is distinct from the question of whether the transfer of the document carries with it rights which are enforceable against the document's issuer.

127 L Collins and J Harris (eds), *Dicey, Morris, and Collins on the Conflict of Laws* (15th ed 2018) para 23R-062 (for immovables, such as land) and 24R-001 (for tangible movables, such as a piece of paper).

128 L Collins and J Harris (eds), *Dicey, Morris, and Collins on the Conflict of Laws* (15th ed 2018) para 33-389. The position is different for bills of exchange and promissory notes, as "any conflict of laws with regards to [those documents] must be determined in accordance with the provisions of the Bills of Exchange Act 1882, insofar as that statute applies": see para 33R-327.

(2) How will an electronic trade document issued in England and Wales be treated in a country that does not recognise the validity of electronic trade documents?

The location of an electronic trade document

6.144 When the applicable law turns on the location of the relevant document, it is important for a court to be able to identify that location.[129] For paper documents, this is relatively straightforward – a paper document is in the country where it is physically located at a particular time. But what about intangible, electronic documents?

6.145 The law of England and Wales is familiar with ascribing a location to an intangible. To give an example, the general rule is that a debt is located in the country in which the person who owes the money resides.[130] However, a contractual right is different from a document which embodies a contractual right. A paper promissory note, for example, is a piece of paper – a tangible asset that is in the country where it is physically located. For the electronic equivalent, where is the electronic document located? If an electronic document is transferred from one party to another, where does the transfer take place?

6.146 As the UKJT Legal Statement says:

> [The law] allocates an artificial location to certain types of intangible property, which is often the place in which some sort of control over the property might be exercised … But the rules and how they apply are often difficult to state with certainty.[131]

The Statement notes that some systems on which electronic assets are held:

> have some sort of central control in a particular country. So the proprietary aspects of dealings with them might sensibly be said to be governed by the laws of that country.[132]

However, if the system is fully decentralised, "it does not make much sense to say that there is any one country where the asset is recoverable or enforceable". The UKJT Legal Statement suggests that there are good reasons for applying rules other than the conventional ones, and that the solution is ultimately likely to be resolved by legislation, ideally with international cooperation.[133]

6.147 We agree. With electronic documents, as with other digital assets including cryptoassets, there are inherent difficulties in determining the geographical location of the assets, and of dealings with the assets. This suggests that conventional rules might not work well in this context. But what rules would be better is a significant question, and not one which we can answer satisfactorily within the context of this project, since it considers only one subset of digital assets. The Law Commission is

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129 The location of a specific item of property is to be determined by reference to English law: see L Collins and J Harris (eds), *Dicey, Morris, and Collins on the Conflict of Laws* (15th ed 2018) para 22-024.

130 L Collins and J Harris (eds), *Dicey, Morris, and Collins on the Conflict of Laws* (15th ed 2018) para 22-026.

131 UKJT Legal Statement, paras 94 to 96.

132 UKJT Legal Statement, para 95.

133 UKJT Legal Statement, paras 97 to 99.

currently considering whether a separate project on conflict of laws in the digital context could be taken forward as part of our 14th programme of law reform. In the meantime, we think the courts will continue to deal with such questions on a case by case basis applying the existing rules as far as possible.

Consultation Question 38.

6.148 We provisionally propose that the Law Commission should consider the private international law aspects of digital assets, including electronic trade documents, as part of a separate project. Do consultees agree?

The treatment of an electronic trade document in other jurisdictions

6.149 Consider the following scenario. Pursuant to a pledge, a bank holds an electronic bill of lading issued in Country X (which recognises their legal validity and effect). The goods underlying the electronic bill have reached their port of destination in Country Y (which does not recognise the legal validity of electronic documents). Unfortunately, the buyer (the bank's debtor) has gone insolvent. A liquidator has been appointed, and is trying to lay claim to the goods. The (as yet unpaid) bank seeks to enforce its possessory security over the goods. Assume that the (proprietary) issue of possession of the goods is to be determined on the basis of the law of the place where those goods are situated – the law of Country Y. Is the bank in constructive possession of the underlying goods?

6.150 This is a question that our provisional proposals cannot solve on their own. However, our proposals do allow for a change of medium.[134] An electronic document can be replaced with a paper document, and a paper document can be replaced with an electronic document. We would hope that, in practice, this sidesteps the problem by mitigating the risk of such situations arising. To return to the example: the bank could swiftly replace its electronic bill of lading with a paper bill of lading, which would be recognised (under the law of Country Y) as giving it constructive possession over the goods.

General observations

6.151 Ultimately, we can only make recommendations for the law of England and Wales. We hope, however, that the adoption of our provisional proposals would help facilitate a broader global recognition of the legal effect of electronic trade documents.[135]

Compliance with certain international standards?

6.152 We are aware that work is underway to create electronic documents that conform to particular international standards. This work is running in parallel with efforts to establish the international standards themselves. We are aware of a series of projects taking place in this space. For example, the Digital Container Shipping Association

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134 We discuss change of medium above from para 6.115 above.

135 R Harding, *Legal reform to enable digitisation of transferrable instruments: Steering committee update* (3 February 2021), p 3.

("**DCSA**") has recently published a standard for the electronic bill of lading.[136] Similarly, there is relevant work by the UN/CEFACT to produce a white paper based on the MLETR,[137] and the ICC Digital Trade Standards Initiative to establish open trade standards for facilitating interoperability among digital trade platforms.[138]

6.153 Our provisional proposals do not make the legal effect of an electronic trade document contingent on it meeting any particular international standard. For that reason, we have not engaged with these standards in this consultation paper. However, insofar as the development of international standards facilitates broader uptake of electronic trade documents, we are supportive of such endeavours.

EFFECT OF THE REFORM

A standalone piece of legislation

6.154 Our provisional proposals take the form of a standalone Bill, rather than a series of more targeted amendments to different pieces of legislation. This is because the change that we are seeking to make is the same across the different types of trade document. It would therefore be repetitious to include the same wording in multiple different pieces of legislation. Additionally, the possession of trade documents is a matter of both common law and statute law. In this context, we think that a standalone piece of legislation is more appropriate.

6.155 We are aware of suggestions that electronic trade documents could be allowed by secondary rather than primary legislation. For example, section 8 of the Electronic Communications Act 2000 ("**ECA 2000**") contains a power to amend "any enactment or subordinate legislation" or any schemes set out in an enactment or subordinate legislation for the purposes of facilitating electronic communications or storage. Section 1(5) of COGSA 1992 gives a power to make regulations to enable bills of lading, sea waybills and ship's delivery orders issued by electronic means.

6.156 We do not consider that either of these provisions is wide enough to allow for the reforms we are proposing. The power in the ECA 2000 is restricted to making changes to legislation. Regulations made under this power could therefore amend the 1882 Act for bills of exchange and promissory notes, and potentially COGSA 1992 for bills of lading. However, some of the documents with which we are concerned are entirely creatures of the common law, and the ECA 2000 does not give a power to amend the common law. The power in COGSA 1992 is limited to the documents covered by that Act and again would not reach far enough. We therefore consider that the reforms must be made through primary legislation.

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136 DCSA, *Standard for the Bill of Lading: A roadmap towards eDocumentation* (2020), https://dcsa.org/wp-content/uploads/2020/12/20201208-DCSA-P4-DCSA-Standard-for-Bill-of-Lading-v1.0-FINAL.pdf.

137 UNECE, *Transfer of MLETR-Compliant Titles,* https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles.

138 ICC, *Digital Trade Standards Initiative launches under the umbrella of ICC* (3 April 2020), https://iccwbo.org/media-wall/news-speeches/digital-trade-standards-initiative-launches-under-the-umbrella-of-icc/.

Application to existing electronic trade documents

6.157 We consider that our provisional reforms should have prospective effect only, and therefore only affect electronic trade documents created after the legislation is passed. They should have no effect on existing electronic trade documents.

6.158 Electronic trade documents issued prior to the coming into force of any Act implementing our reforms are likely to be governed by private contractual frameworks. We do not consider that parties who have entered into these contractual arrangements should have to determine whether their already issued documents are now documentary intangibles within the meaning of the general law, creating rights and obligations against the world and not just the contracting parties. That has the potential to disturb a settled status quo.

6.159 However, private contractual frameworks will likely need to be revisited and adapted to the new law. For example, certain contractual techniques such as novation and attornment will no longer be required to achieve the desired legal effects for electronic trade documents.[139] Under our provisional proposals, an electronic bill of lading would transfer contractual rights against the carrier under COGSA 1992 and constructive possession of goods without the need for an attornment.

6.160 Clause 6(3) of the draft Bill specifies that the proposed reforms will have prospective effect only:

> Section 2 does not apply to a document issued before the day on which this Act comes into force, and such a document may not be replaced under section 3.

6.161 We have used the language of "issue" as it is our understanding that all the trade documents which we are considering need to be issued to acquire legal effect. We seek consultees' views on this point.

Consultation Question 39.

6.162 We provisionally propose that the word "issue" describes the process by which a trade document (where relevant) becomes a document of title. Do consultees agree?

6.163 Finally, we have considered whether the change of medium provision should apply to paper documents issued prior to the coming into force of the Act: that is, whether our draft Bill should render possessable a replacement electronic document (created after the coming into the force of the Act) that replaces a paper document issued *prior* to the Act coming into force.

6.164 Our provisional view is that in order to promote certainty and clarity, all the provisions in the Act (including those relating to changes of medium) should only apply to trade documents issued after the Act enters into force. Such documents are issued, transferred, and accomplished in a relatively short space of time, and therefore the

[139] See from para 2.36 above.

period during which paper trade documents exist which cannot be made electronic will be relatively short. The trade-off for certainty and clarity is therefore warranted. This position also mitigates the risk of disturbing existing documentary relationships that would have been entered into on the previously settled basis that such paper documents could not be replaced by electronic documents.

Consultation Question 40.

6.165 We provisionally propose that the change of medium of a trade document issued before the Act comes into force should not be permitted. Do consultees agree?

Can existing technology fulfil our proposed criteria for amenability to possession?

6.166 Law reform that is based on a particular technology can stifle creativity and innovation. It also risks becoming swiftly obsolete, because of the speed at which technology advances.[140] Our provisional proposals therefore aim to be technology-neutral.

6.167 However, technology-neutral proposals must guard against being unattainable in practice. The possession problem is not solved by a set of criteria which no electronic document can meet. To demonstrate the viability of our provisional proposals, we explain below how technology that is currently in use could be used to create electronic trade documents that would be capable, under our proposals, of being possessed. We use the specific example of an electronic bill of lading recorded on DLT.

An electronic bill of lading

6.168 A bill of lading can be thought of as performing two types of functions.[141]

(1) **Evidentiary functions**. A bill of lading evidences particular facts, including the terms of the contract of carriage. It does so, broadly speaking, because paper documents are secure and resilient to tampering. Any alterations to a paper document are likely to be evident on its inspection.[142]

(2) **Rights-transmission functions**. The delivery (with any necessary indorsement) of a bill of lading can be used to transfer certain rights against a carrier, and certain rights over the underlying goods. It can do so because the handing over of a paper bill is an act that evidences the transferor's intention to relinquish the relevant rights, and because the receiving of a paper bill

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140 For example, in 1989 the world wide web existed only in the form of a written proposal for a "distributed hypertext system" to share and keep track of information amongst researchers at CERN. The proposal's feedback, scribbled across the top of the document's first page, reads: "vague but exciting". Tim Berners-Lee's proposal is now an integral part of modern life. The first page of Berners-Lee's proposal, including Mike Sindall's handwritten feedback, can be seen at: http://info.cern.ch/Proposal.html.

141 M Goldby, "Bills of Lading" in D J Attard, M Fitzmaurice, N A Martinez Gutierrez, I Arroyo and E Belia, *The IMO International Maritime Law Institute Manual on International Maritime Law, Volume II: Shipping Law* (2016) pp 310 to 331.

142 This "evidentiary function" captures the way in which a bill of lading can be viewed as both a "receipt" and as containing the "contract of carriage": see para 3.37 above.

evidences the transferee's intention to accept the relevant rights. Additionally, the fact of being in possession of a paper bill provides clear evidence as to who is entitled to exercise, or transfer on, the relevant rights.[143]

6.169 If an electronic document is to be used in the same way as a paper bill of lading, it must be capable of performing both these types of functions, and to do so in accordance with our proposals. Therefore, an electronic bill of lading must satisfy the following criteria.[144]

(1) It must have an existence in the world, evidence particular facts, including the terms of the contract of carriage, and give parties relying on it sufficient reassurance that it has not been tampered with.

(2) It must exist in a sufficiently unique form, so that it is capable of being exclusively associated with, and controlled by, a single person. This is reflected in our proposal that control must be exclusive, ie that no more than one person is able to use, and to transfer or otherwise dispose of the document at any one time. To fulfil the above functions, this exclusive association between the document and the possessor must be readily ascertainable at any given moment.

(3) It must be capable of moving from one party's exclusive control to another party's exclusive control. This is reflected in our proposal that, after transfer, the transferor must no longer be able to deal with the document. To fulfil the evidentiary and rights-transfer functions, this must happen in a way that evidences the parties' respective intentions to relinquish and accept the relevant rights.

6.170 We provide an overview of DLT above in Chapter 2,[145] as well as a more substantive explanation in Appendix 3. The issue of an electronic bill of lading would be marked by the creation of a unique token on a distributed ledger. All transfers involving that token (that is, involving the document), once validated, would be similarly recorded on the ledger. The validation process involves checking that the transaction has been signed by the transferor, and checking that the purported transfer is not inconsistent with a prior transfer. It also involves checking the integrity of the electronic document – that is, ensuring that the substance of the electronic document has not been altered.

6.171 These features of blockchain technology (which involve complex cryptographical processes) ensure that data recorded on the distributed ledger is practically impossible to hack into and alter. The recorded data – which will include both the substantive content of an electronic bill of lading, and a history of it being transferred through the hands of different parties – can therefore be trusted.

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143 This "rights-transmission function" captures a bill of lading's status as a document of title. See M Goldby, "Bills of Lading" in D J Attard, M Fitzmaurice, N A Martinez Gutierrez, I Arroyo and E Belia, *The IMO International Maritime Law Institute Manual on International Maritime Law, Volume II: Shipping Law* (2016) p 328.

144 We discuss these criteria from para 5.47 above.

145 From para 2.45 above.

6.172 Therefore, an electronic bill of lading created using DLT is likely to exhibit the following characteristics.

(1) The electronic bill is secure enough to evidence certain facts, including the terms of the contract of carriage. This is because terms of the bill must be in writing, and the integrity of the electronic bill – and so also the accuracy of its contents – can be trusted. It also has an independent existence, as a unique token, and can be trusted by parties as not having been tampered with.

(2) The electronic bill exists in a sufficiently unique form, so that it is capable of being exclusively associated with a single person, and in such a way that this exclusive association can be readily identified at any given moment. In effect, the bill exists as a unique electronic token rather than a unique paper token.[146] The capacity to transfer it is limited to a particular party. Additionally, at any given moment a party can consult the ledger to ascertain the party with whom the electronic bill is exclusively associated.

(3) The electronic bill is capable of moving from one party's exclusive control to another's party's exclusive control, in a way that evidences the parties' respective intentions to relinquish and accept the relevant rights. DLT precludes the "double-spending" (that is, the purported double transferring) of an electronic bill. Additionally, transfers must be initiated and electronically signed by the transferor. Whilst the transfer may be complete before the transferee has had the chance to signal any acceptance, this can be true also of transfers of paper bills, and a transferee wishing to reject the document may immediately send it back.[147] Finally, once an electronic document has been transferred within a distributed ledger, the transferor loses the ability to transfer the document.

What if the electronic document was not intended to become a document of title?

6.173 We have been told that our provisional proposals could risk allowing some of the legal doctrines associated with bills of exchange to permeate into other types of commercial transactions. This is because the statutory definition of a bill of exchange is potentially capable of being met by a diverse range of electronic payment instructions. The concern is that a number of electronic records that parties do not intend to be bills of exchange would, in fact, be regarded by the law as that type of document as a result of our reforms. This would make them subject to the provisions of the 1882 Act.

6.174 We do not consider that our proposals create a risk that does not already exist for paper documents. We do not propose any changes to the content or form of the relevant trade documents, nor to their function. Indeed, our draft Bill includes a specific provision that an electronic trade document must have all the information that would be required to be in a paper equivalent. We do not therefore consider that

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146 In fact, because of the industry practice of issuing paper bills in triplicate, a paper bill is less unique than an electronic bill.

147 In relation to paper bills see *Fortis Bank SA/NV and anor v Indian Overseas Bank* [2011] EWCA Civ 58, [2011] 2 All ER (Comm) 288 at [35] to [38].

anything needs to be said in the draft Bill to address this issue. However, we are interested in consultees' views on this point.

Consultation Question 41.

6.175 We provisionally propose that our proposals do not create any additional risk that documents which are not intended to be documentary intangibles will become so by virtue of the draft Bill. Do consultees agree?

Data protection

6.176 The transactions we are dealing with involve mainly commercial data relating to corporations rather than personal data which is protected under data protection laws. However, we understand that it would not be unusual for elements of personal data to find their way into the transactions data. Personal data is "any information that relates to an identified or identifiable natural person".[148] If different pieces of information, once collected together, could lead to the identification of a particular person, then that information would also constitute personal data.[149] The control and processing of such data is subject to regulatory protections under UK law.[150]

6.177 Regulatory matters, including the relevant data protection requirements, are beyond the scope of this project. However, we understand that some consultees have concerns about how their data protection and processing obligations would be complied with in the context of electronic trade documents.

6.178 We do not anticipate that our proposed reforms will have any impact on the application of data protection rules and requirements; that is, the same data protection laws will apply to electronic trade documents as apply to paper ones. However, we acknowledge that data in electronic form may present different challenges in view of the ease with which it can be shared and repurposed. It therefore requires appropriate security measures to be in place. Users might need to join and use multiple different platforms and systems on which different documents are issued and used, or might be receiving and processing data deriving from such systems. As users participating in such transactions, they are required by law to ensure that the data in question complies with applicable data protection rules.

6.179 Data protection law applicable in the UK has recently seen significant developments and there are discussions at international level which might lead to its further

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148 Regulation (EU) of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), art 4(1). Note that this only refers to living persons: see recital (27).

149 European Commission, *What is personal data?,* https://ec.europa.eu/info/law/law-topic/data-protection/reform/what-personal-data_en.

150 Data Protection Act 2018.

evolution.[151] We understand that business is adapting quickly to the relevant requirements and challenges and we therefore consider that the necessary measures required to participate in cross-border electronic transactions would be adopted as part of or alongside existing efforts to comply with data protection laws.

[151] World Trade Organisation, *World Trade Report 2020*, https://www.wto.org/english/res_e/publications_e/wtr20_e.htm.

Chapter 7: Assessing the impact of reform

7.1 In this chapter, we summarise the evidence of the main benefits and costs of our proposed reforms as we understand them. We ask consultees for evidence of impact including costs and benefits (both monetary and non-monetary) and transitional costs.

7.2 We also consider the limits of our proposed reforms, insofar as the law cannot solve technical issues such as the interoperability of systems.

7.3 The principal rationale for intervention in this case is efficiency: the current position of the law has forced industry to rely on paper documents where electronic versions could fundamentally improve the efficiency with which international trade is executed and financed. Intervention is therefore aimed at facilitating, in law, the use of electronic trade documents to unlock these processes.

7.4 Using paper documents increases transaction costs and slows processes down, necessitating reliance on intermediate parties such as couriers. Intervention is necessary to ensure that the law in this area is sufficiently flexible to remain competitive in a global environment.

7.5 The policy objective is to remove the legal blockers to the electronic conduct of trade. The intended effects are: (1) to make England and Wales the jurisdiction of choice for electronic commerce; (2) to reduce transaction costs for parties; (3) to encourage business growth by facilitating the development of digital products and services.

7.6 The stakeholders who will be affected include:

(1) businesses in the international trade and trade finance industries and their representative bodies, including:

(a) importers and exporters of goods;

(b) shippers and haulage carriers;

(c) insurers;

(d) port authorities and customs authorities; and

(e) financial institutions, including banks;

(2) technology companies who sell electronic document solutions or platforms; and

(3) lawyers advising on and coordinating electronic transactions.

THE MAGNITUDE OF THE PROBLEM

7.7 As we explain in previous chapters, the reluctance of the current law in England and Wales to recognise the possibility of “possessing” electronic versions of documents means that certain documents used in international trade and trade finance must be in

paper form if they are to perform certain functions. Although we consider that there is a clear case for expanding the application of possession as a matter of legal principle, the push for reform comes mainly from the international trade sector. It is clear that there are financial and other gains to be realised from moving towards paperless transactions. These reforms are likely to have a significant impact in view of the scale and complexity of global trade,[1] the large number of documents involved from the beginning to end of each single transaction, and the present need to transfer multiple documents physically between parties in different countries.

7.8 In 2014 AP Moller-Maersk, a large container logistics company, undertook a project to demonstrate this problem by tracking a shipment of roses from Kenya to the Netherlands.[2] It concluded that a single container of goods involved 30 different parties, 100 people, and 200 exchanges of information. There was a 10-day waiting period for documents to be processed in a shipment period of 34 days. A key document went missing and was later found in a pile of paper 25 cm high.

7.9 As Dr Burcu Yüksel Ripley has observed:

> Once this process for one single shipment is multiplied by the thousands of shipments, the global picture becomes clear that millions of paper documents are being exchanged daily in international trade with an estimated cost of "$500 billion annually, an average of about 10% of the cost of each trade transaction".[3]

7.10 By contrast, it was reported that one trial blockchain-based trade transaction reduced a process usually taking between seven and 10 days to under four hours.[4]

How many documents are involved?

7.11 In order to quantify the potential benefits of our proposals, it is important to develop a heuristic model for the scale of paper documentation in shipping.

7.12 Because of the discrete nature of its units, we consider only container shipping for now. We leave to one side the documentation required in bulk and dry cargo carriers, as well as tankers, because of the variability of the number of different transactions that those modes of shipping might generate.

7.13 In the most recent annual Maritime Transport Review, the United Nations Conference on Trade and Development ("**UNCTAD**") reviewed the turnaround time performance of ports worldwide. It did this by using a dataset representing more than 300 million standard containers (twenty-foot equivalent, or "**TEU**"), which it said comprised

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1 In July 2020, the ICC found that international trade was worth more than US$18 trillion: ICC, *2020 ICC Global Survey on Trade Finance* (July 2020) p 15, https://iccwbo.org/publication/global-survey/.

2 Known as the Trail of Roses project. See for example K Park, *Blockchain Is About to Revolutionize the Shipping Industry* (18 April 2018) Bloomberg, https://www.bloomberg.com/news/articles/2018-04-18/drowning-in-a-sea-of-paper-world-s-biggest-ships-seek-a-way-out.

3 B Yüksel Ripley, *Transition to Paperless Trade to Mitigate COVID-19 Impact on International Trade* (2020), https://www.abdn.ac.uk/law/blog/transition-to-paperless-trade-to-mitigate-covid19-impact-on-international-trade/, referencing figures quoted at e-Title, https://www.e-title.net/sol_overview.php.

4 J Kelly, *Barclays says conducts first blockchain-based trade-finance deal* (7 September 2016) Reuters, https://www.reuters.com/article/us-banks-barclays-blockchain-idUSKCN11D23B.

approximately 42% of the worldwide yearly total.[5] On the basis of these figures, we estimate that at least 714 million TEUs were shipped worldwide in 2020.

7.14 We assume, for now, that each of these containers represents one customs transaction. This is likely to be a conservative estimate, as multiple goods shipments could be part of the same container (although it is also feasible that one customs transaction could cover multiple containers).

7.15 UNCTAD has provided an estimate of 40 documents per customs transaction.[6]

7.16 The ICC has estimated that the international trade industry generates four billion paper documents per year.[7] On the above figures, we estimate that in fact, as many as 28.5 billion documents may be generated by contained shipping alone every year. Some of these may already be in electronic form, as not all are required to be possessed. This is for containers alone – it does not include the documentation requirements of bulk carriers.

7.17 To date, due to the problems which we discuss extensively throughout this consultation paper, the use of electronic transport documents as a proportion of global trade has been negligible. A 2018 European Commission report explained that:

> Today electronic versions of transport documents exist mostly in parallel to existing paper-based documents rather than as a replacement. For nearly every mode, a standard paper-based transport document exists, even if the laws or rules do not formally require it.[8]

7.18 The same report estimated that currently "1-3% of all cross-border trips use only an electronic transport document."[9]

Consultation Question 42.

7.19 We seek consultees' views on what, in their experience, is the average number of paper documents required in a single trade transaction, compared to our current assumption of 40.

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5 UNCTAD, *Review of Maritime Transport 2020* (2020) p 84, https://unctad.org/webflyer/review-maritime-transport-2020.

6 Referenced in WTO, *Briefing note: Trade facilitation – Cutting "red tape" at the border* (2013), https://www.wto.org/english/thewto_e/minist_e/mc9_e/brief_tradfa_e.htm.

7 ICC, *Global Trade – Securing Future Growth* (2018) p 17, https://iccwbo.org/publication/global-survey-2018-securing-future-growth/; S Ramachandran, J Porter, R Kort, R Hanspal, and H Garg, *SIBOS 2017: Digital Innovation in Trade Finance: Have We Reached a Tipping Point?* (October 2017) p 2, https://www.swift.com/news-events/news/digital-innovation-trade-finance-have-we-reached-tipping-point.

8 European Commission, *State of play and barriers to the use of electronic transport documents for freight transport – final report* (Dec 2018) ("**EC Report**") p 35, https://op.europa.eu/en/publication-detail/-/publication/b187493e-0349-11e9-adde-01aa75ed71a1.

9 EC Report, p 41.

Consultation Question 43.

7.20 We seek consultees' views on whether our estimate of the global total number of paper trade documents used in container shipping is accurate.

Consultation Question 44.

7.21 We seek consultees' views on whether the average number of documents required in a trade transaction varies between sectors. If so, please give details.

What proportion of these documents are governed by the law of England and Wales?

7.22 We have been told that a "significant" percentage of global trade and shipping documentation is conducted under the law of England and Wales; anecdotally we have heard that this could be as much as between 50 and 80% for shipping documents. We have also been told, for example, that 80% of maritime arbitration is in London, although that may not always correlate to the law of the documents.

Consultation Question 45.

7.23 We seek consultees' views, if they are able to give an estimate, on the percentage of trade and shipping documentation which is under the law of England and Wales.

The potential pace of transition

7.24 If the law were changed to facilitate electronic trade documents in English law, how quickly would the transition to electronic documentation occur?

7.25 In a survey commissioned by the ICC, 28% of respondents said that the law was preventing them adopting electronic trade documents.[10] The DCSA made the comparison with standardised electronic air waybills for airfreight. These were developed in 2010 and by 2020, there was an adoption rate of over 68%. Using this example, they said:

> If we start on standardising eBL [electronic bills of lading] now, we have reason to believe a 50% adoption rate is feasible by 2030.[11]

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10 ICC, *Aligning national laws to the UNCITRAL Model Law on Transferrable Records, UK Business Case* (2021).

11 DCSA, *DCSA takes on eBL standardisation, calls for collaboration* (2020) p 1, https://dcsa.org/wp-content/uploads/2020/05/20200519-DCSA-taking-on-eBL.pdf.

7.26 We are interested to know if stakeholders agree that up to 50% of the current paper documents could be in electronic form by 2030. We also ask for estimates beyond 2050.

7.27 We are aware that it is not only legal blockers inhibiting the transition to electronic commerce. For example, there are questions about the affordability of, and widespread international access to, the required technology; about the interoperability of systems; and about the willingness of financers to accept the legal efficacy of electronic transport records and associated processes. We ask questions on this below.

Consultation Question 46.

7.28 We seek consultees' views on how quickly the industry would move to electronic trade documents if these provisional proposals came into force in 2022. If possible, we request that consultees say what percentage of documentation might be issued and used in electronic form:

(1) by 2030; and

(2) by 2050.

BENEFITS

7.29 Below, we set out some of the benefits that could be realised if trade finance, and international trade generally, could move towards a digitalised system. We ask if consultees agree with the potential benefits that we outline, and ask questions about the extent of those benefits. We also ask if there could be any impact on the ultimate end-users of goods.

7.30 Using electronic documents promises a variety of potential benefits compared to paper documents, including:

(1) cost savings;

(2) greater efficiencies in processes and labour;

(3) increased security and compliance; and

(4) environmental benefits.

7.31 We consider each of these below.

Lower operating costs

7.32 Paper-heavy transactions are expensive. Each document involves a number of different resources – paper, printer ink, secure postage and courier services etc. Considered individually, none of these resources is particularly expensive. However, as the number of paper documents relied upon to facilitate international trade runs into the billions, the cost of producing all of this paper is far from trivial. Additionally,

handling the documentation requires significant resources. Indeed, it has been suggested that the cost of handling the relevant paper documents could be higher than the cost of transporting the containers themselves.[12]

7.33 Moving to electronic documents could result in significant cost savings. The ICC has recently estimated that digitising certain trade documents will free up £224 billion in efficiency savings, enabling banks to focus resources on tackling the trade finance gap. These savings are broken down as:

(1) £171 billion in bills of lading;

(2) £26 billion in bills of exchange; and

(3) £27 billion in promissory notes.[13]

7.34 Similarly, and to give an example of a specific type of electronic trade document, the DCSA has suggested that the cost of processing a digital bill of lading is three times less than a paper bill of lading. On this basis, the DCSA estimate that if 50% of the container shipping industry were to adopt digital bills of lading, the collective savings could reach US $4 billion.[14]

7.35 Technological advances have also been key to minimising the negative economic impact of the COVID-19 pandemic on trade. UNCTAD projected that global GDP and maritime trade would contract by 4.1% over the course of 2020, and suggested that part of the pandemic's "legacy" will be "a strengthened case for digitalization and dematerialization".[15] This is because:

> the first movers in terms of technological uptake have been able to better weather the storm (for example, commerce and online platforms, those using blockchain solutions and information and information technology enabled third-party logistics companies). The digitalisation of interactions and information-sharing has been critical to the continuity of maritime transport operations during the pandemic.[16]

7.36 Broadly speaking, savings will materialise in at least two ways:

(1) resourcing and operational costs (for example paper, printing/photocopying, postage/courier services, filing, storage, staffing); and

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12 W Lehmacher and J Mcwaters, *How blockchain can restore trust in trade* (1 February 2017) World Economic Forum, https://www.weforum.org/agenda/2017/02/blockchain-trade-trust-transparency/.

13 ICC, *Aligning national laws to the UNCITRAL Model Law on Transferable Records, UK Business Case* (2021).

14 DCSA*, DCSA takes on eBL standardisation, calls for collaboration* (2020)*,* https://dcsa.org/wp-content/uploads/2020/05/20200519-DCSA-taking-on-eBL.pdf.

15 UNCTAD, *Review of Maritime Transport 2020* (12 November 2020) p 124, https://unctad.org/system/files/official-document/rmt2020_en.pdf.

16 UNCTAD, *Review of Maritime Transport 2020* (12 November 2020) p xiii to xiv, https://unctad.org/system/files/official-document/rmt2020_en.pdf.

(2) increased productivity (not having to re-enter information, saving time and eliminating the risk of mistakes, time spent searching for lost documents).

Consultation Question 47.

7.37 We seek consultees' views on how much money, or what percentage of the cost of a transaction, do consultees estimate could be saved per transaction by transitioning to electronic documents.

Increased efficiency

7.38 Digital trade is less expensive than paper-based trade. It is also more efficient. The movement of documents and payments can be accelerated, ancillary administrative processes can be simplified, and trading parties can allocate their resources more effectively.[17]

7.39 Some of the cost savings referred to above derive from the removal or reduction of manual processing, leading to cost and efficiency savings when documents are prepared, received, and checked.[18] Parties in the chain will therefore be able to reduce staffing costs and speed up their dealings with documents. Instantaneous transmission of electronic documents removes the delays caused when documents have to be posted or couriered, and mitigates the risk of documents being lost in transit.

7.40 As a paper by the United Nations Economic Commission for Europe ("**UNECE**") put it in 2006:

> Since goods cannot travel faster than the information that controls them, speeding up the information exchange makes trading more competitive and efficient.[19]

7.41 The trigger event for making a particular payment will often be the receipt of particular documentation. An increase in the speed with which documents can move and be processed between links in a chain will also, therefore, lead to faster payments.

7.42 Digitalisation will enable compliance processes to be streamlined and at least partly automated, so that they occur more quickly, smoothly, and efficiently, and so that breaches occurring as a result of human error are minimised. In addition,

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17 World Economic Forum, *Paperless Trading: How Does It Impact the Trade System?* (October 2017) United Nations Economic Commission for Europe p 5, http://www3.weforum.org/docs/WEF_36073_Paperless_Trading_How_Does_It_Impact_the_Trade_System.pdf.

18 ICC, *Aligning national laws to the UNCITRAL Model Law on Transferrable Records, UK Business Case* (2021) found that the main advantage of electronic trade documents would be reduced manual processing.

19 UNECE, *A Roadmap towards Paperless Trade* (2006) p 1, https://unece.org/fileadmin/DAM/cefact/publica/ece_trd_371e.pdf.

documentation errors can be more quickly corrected.[20] The potential overall benefits are considerable, including: the speeding up of compliance; the elimination of duplication in the submission of information; and the acceleration (through a reduction of paper processing) of cargo clearance.[21]

7.43 Non-compliant documentation causes costly delays. Documents must be corrected, and this can have adverse knock-on effects for the rest of the supply chain. In some circumstances, the errors are beyond repair. This may lead to one or more of the parties having to bear costs of delay or breach of contract; more significantly, it can lead to the breakdown of a trading relationship between parties and litigation.

7.44 A significant amount of non-compliance is caused by human mistakes. Paper-intensive processes require manual processing which is prone to error.[22] For example, humans re-key inaccurately and misplace pieces of paper. As Dr Burcu Yüksel Ripley puts it:

> In addition to time and cost, this burdensome and inefficient process, which is about 400 years old if not more, also significantly increases documentation risk and liability in trading internationally due to being too much reliant on a piece of paper which might get lost or missing or altered in one of the phases of the transaction or which might be simply inaccurate.[23]

7.45 Another advantage of reducing delays is the minimisation of any knock-on effects on subsequent phases in the performance of cross-border sale contracts. For example, a delay at the point of export might preclude the seller from making a compliant documentary presentation and receiving payment. A delay in the manual checking of documents by a bank will preclude the buyer from surrendering the bill of lading to the carrier and obtaining delivery of the goods.[24] Where delays are severe, this can lead to breach of contractual obligations (such as where the contract requires documentary tender by a specific date) or, in more extreme cases, to the frustration of the contract.

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20 P Mockel, G Myers, M Niforos, V Ramachandran, T Rehermann, and J Salmon, *Blockchain: Opportunities for Private Enterprise in Emerging Markets,* International Finance Corporation, World Bank Group (January 2019) pp 27 to 33, https://www.ifc.org/wps/wcm/connect/2106d1c6-5361-41cd-86c2-f7d16c510e9f/201901-IFC-EMCompass-Blockchain-Report.pdf?MOD=AJPERES&CVID=mxYj-sA.

21 See UNECE*, A Roadmap Towards Paperless Trade* (October 2005) p 1, https://www.unece.org/fileadmin/DAM/cefact/publica/ece_trd_371e.pdf.

22 M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) at paras 3.19 and 3.21. See also E Ganne*, Can Blockchain Revolutionize International Trade?* (2018), https://www.wto.org/english/res_e/publications_e/blockchainrev18_e.htm; P Mockel, G Myers, M Niforos, V Ramachandran, T Rehermann, and J Salmon, *Blockchain: Opportunities for Private Enterprise in Emerging Markets,* International Finance Corporation, World Bank Group (January 2019) p 33, https://www.ifc.org/wps/wcm/connect/2106d1c6-5361-41cd-86c2-f7d16c510e9f/201901-IFC-EMCompass-Blockchain-Report.pdf?MOD=AJPERES&CVID=mxYj-sA.

23 B Yüksel Ripley, *Transition to Paperless Trade to Mitigate COVID-19 Impact on International Trade* (2020), https://www.abdn.ac.uk/law/blog/transition-to-paperless-trade-to-mitigate-covid19-impact-on-international-trade/.

24 For illustrations see *Finmoon v Baltic Reefers Management* [2012] EWHC 920 (Comm), [2012] 4 WLUK 238 and *Flacker Shipping Ltd v Glencore Grain Ltd (The Happy Day)* [2002] EWCA Civ 1068, [2002] 2 All ER (Comm).

7.46 The impact of these inefficiencies was discussed in a report by the European Commission which highlighted the reduction in comparative advantage engendered by the use of paper documents along the transport and logistics chain.[25] The figures in the report considered only freight transport involving EU Member States. Nevertheless, it estimated that the maritime transport sector spends €667 million annually on administrative costs for shipments between EU Member States alone.[26] This figure gives some sense of the scale of the inefficiencies caused by the requirement for paper documentation.

7.47 More recently, the digitalisation of trade documentation has been put forward as a way to make global supply chains more resilient to external shocks.[27] This is particularly salient in light of the pressure put on maritime trade by the global effects of Covid-19.[28]

Consultation Question 48.

7.48 We seek consultees' views on the efficiency gains of a transition to electronic trade documents. Please provide evidence or data if possible.

Increased security and transparency

7.49 Trading parties need to know that they can trust their documentation. Electronic trade documents are more secure than paper documents, and offer the prospect of a greater level of transparency.[29] They are also likely to reduce the instances of non-compliance – commonly caused by human errors and inconsistencies.

Greater security

7.50 The international trade sector is vulnerable to fraud, such as parties obtaining multiple financing on the security of copies of the same paper document. Indeed, certain trade documents seem inherently vulnerable to such deception; paper bills of lading, for example, are customarily issued in triplicate, which provides greater opportunity for fraudulent presentation of a bill. More fundamentally, there is the lack of security inherent in the medium; paper can be photocopied, and signatures can be forged.

7.51 We have observed that the initial reaction in some quarters to electronic trade documents is to imagine them as less secure than paper documents. This is most likely a consequence of the widespread use of word processing software and the ease

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25 EC Report.

26 EC Report, p 47.

27 UNCTAD, *Review of Maritime Transport 2020* (2020) pp 123 and 129, https://unctad.org/webflyer/review-maritime-transport-2020.

28 UNCTAD, *Review of Maritime Transport 2020* (2020) p 9, https://unctad.org/webflyer/review-maritime-transport-2020.

29 World Economic Forum, *Paperless Trading: How Does It Impact the Trade System?* (October 2017) United Nations Economic Commission for Europe p 6, http://www3.weforum.org/docs/WEF_36073_Paperless_Trading_How_Does_It_Impact_the_Trade_System.pdf.

with which such documents can be opened and amended. The electronic trade documents that will satisfy our provisional proposals will be very different in nature from ordinary text documents. The digital architecture of the systems on which they are hosted will ensure that no more than one person is able to use, and transfer or otherwise dispose of them. Additionally, their movements and encumbrances may be recorded in a manner with which it is practically impossible to tamper. Such electronic trade documents will be significantly more secure that their paper counterparts.

7.52 Indeed, as we discuss in Chapter 4,[30] we understand that the desire to reduce incidents of fraud involving trade documents was a motivating factor behind the push for reform in Singapore, after several major instances of alleged fraud against Singaporean trading companies.[31] The accusations included claims that the companies had issued bills of lading for shipments that did not exist,[32] used the cargo to finance multiple transactions,[33] and forged trade documents.[34] In response, Singapore has supported several technical and security initiatives including the launching of a blockchain-based initiative called Trade Finance Registry aimed at preventing "double financing fraud".[35]

Consultation Question 49.

7.53 We provisionally propose that electronic trade documents will reduce the risk of fraud compared to paper trade documents. Do consultees agree?

Greater transparency

7.54 Although paper documents are presently able to achieve effects at law that their electronic counterparts cannot, their functionality is limited.

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30 At para 4.60 above.

31 N Hume and S Palma, *Commodity trading blow-ups dent Singapore's reputation* (21 May 2020) Financial Times, https://www.ft.com/content/28356e03-1ef9-46ab-aa08-8751687e146d; J Basquill, *Singapore oil trader Hontop faces fraud claims: what went wrong?* (22 July 2020) Global Trade Review, https://www.gtreview.com/news/asia/singapore-oil-trader-hontop-faces-fraud-claims-what-went-wrong/.

32 E Wragg, *Analysis: Little hope for banks caught up in Agritrade collapse* (24 March 2020) Global Trade Review, https://www.gtreview.com/news/asia/analysis-little-hope-for-banks-caught-up-in-agritrade-collapse/.

33 J Basquill, *Analysis: Hin Leong's "vicious cycle" of trade finance fraud* (19 August 2020) Global Trade Review, https://www.gtreview.com/news/asia/analysis-hin-leongs-vicious-cycle-of-trade-finance-fraud/; E Yep and O Zhou, *HSBC alleges Singapore trader Zenrock conducted fraudulent oil trades: court filing* (8 May 2020) S&P Global, https://www.spglobal.com/platts/en/market-insights/latest-news/oil/050820-hsbc-alleges-singapore-trader-zenrock-conducted-fraudulent-oil-trades-court-filing.

34 J Basquill, *Singapore oil trader Hontop faces fraud claims: what went wrong?* (22 July 2020) Global Trade Review, https://www.gtreview.com/news/asia/singapore-oil-trader-hontop-faces-fraud-claims-what-went-wrong/.

35 D Patel, *Trade Finance Registry: Singapore launches the world's first blockchain-based solution aimed at preventing double financing fraud* (8 October 2020) Trade Finance Global, https://www.tradefinanceglobal.com/posts/singapore-launches-the-worlds-first-blockchain-based-solution-aimed-at-preventing-double-financing-fraud/.

7.55 The following are just two examples that may be given of the possible greater functionality of electronic documents. First, online sensors inside containers could register the level of heat or humidity in the container, adding this data to the bill of lading and cargo insurance records, which in turn can speed up an insurance claim process if the cargo arrives damaged.[36] Second, a digital warehouse receipt could be updated in real-time with the precise location of the underlying goods if and when they were moved around inside a warehouse. Additionally, the document could be connected to a sensor inside the warehouse, which could provide real-time updates on the temperature at which the goods were stored.[37] Thus, the warehouse keeper can evidence compliance with contractual terms, should any disputes arise regarding the condition of the goods.

7.56 More generally, the provenance of electronic documents is likely to be more trustworthy than paper documents. The audit trail of an electronic document will be more visible and verifiable than the paper equivalent, which may well be simply a series of scribbled indorsements on the back of the document. The latter is relatively less trustworthy.

Consultation Question 50.

7.57 We provisionally propose that electronic trade documents will enhance the transparency of supply chains. Do consultees agree? Please provide examples or evidence if possible.

Environmental benefits

7.58 We estimate above that over 28.5 billion paper documents are used every year in trade transactions in the container shipping sector alone.[38] This obviously involves the use of an enormous quantity of paper. There will therefore be a direct environmental benefit to the transition from paper to electronic documents, due to the quantities of paper production which can be foregone.

7.59 There will also be indirect but significant environmental benefits. For example, the increase in efficiency produced by the transition from paper documents to electronic documents has the potential to eliminate food wastage, a highly undesirable source of carbon emissions. In advocating for a shift to digitalisation of trade documents, Tan Chong Meng, the CEO of PSA International Group (one of the operators of the Port of Singapore, and over 50 other ports worldwide), explained that 30% of food industry

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36 See discussion of this scenario in M Goldby, C Reed, M MacDonald, K Richards, and L Stanbrough, *Triggering Innovation: How Smart Contracts Bring Policies to Life, Lloyd's Emerging Risk Report 2019: Understanding Risk, Lloyd's of London* (2019) pp 24 to 25, https://www.lloyds.com/news-and-risk-insight/risk-reports/library/technology/triggering-innovation.

37 W Lehmacher and J McWaters give a similar example of Modum, a company that uses blockchain to assure recipients that pharmaceuticals have remained within an acceptable bound of temperatures whilst in transit: *How blockchain can restore trust in trade* (1 February 2017) World Economic Forum, https://www.weforum.org/agenda/2017/02/blockchain-trade-trust-transparency/.

38 Para 7.16 above.

production is wasted because it does not arrive in an edible form.[39] This wastage caused by "logistical failures" could be addressed using information technology.

7.60 In a 2016 white paper, the World Economic Forum was bullish about the potential environmental benefits of trade document digitalisation, which it included as part of a larger survey of digitalisation of logistics:

> The greatest impact from digital transformation in the logistics industry will come from societal benefits. These include lower carbon emissions, less traffic congestion, lives saved through reduction in accidents, increase in cross-border trade as a result of platforms simplifying trade, and discounts to customers on account of increased utilization levels. Digital alone has the opportunity to reduce emissions from logistics by as much as 10 to 12% by 2025. We estimate the total benefits to customers and society to add up to approximately $2.4 trillion coming primarily from three initiatives: crowdsourcing, digitally enhanced cross-border platforms, and shared warehouse agreements.[40]

Consultation Question 51.

7.61 We provisionally propose that there will be environmental benefits from a transition to electronic trade documents. Do consultees agree? Please provide examples or data if possible.

Benefits for SMEs and consumers

7.62 We are of the view that the increased efficiency and decreased costs which we discuss above are likely to lead to some particular benefits to SMEs as well as to consumers. Maritime transport remains the backbone of globalised trade and the manufacturing supply chain, with more than four-fifths of global merchandise trade (by volume) carried by sea. The maritime sector offers the most economical and reliable mode of transportation over long distances.[41] Therefore, a system-wide transformation of processes which produces greater efficiency and lower costs should be of some benefit to end users. It is possible though that port operators, shippers, and exporter/importers will retain those benefits in the form of increased profits.

7.63 The WTO has estimated that "up to 80 per cent of global trade is supported by some sort of financing or credit insurance".[42] The adoption of electronic documents – which lowers costs, expedites transactions, and increases visibility of supply chain cash flow

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39 A Koh and H Lee, *Stop Food Rotting on Ships and You'll Cut Carbon Pollution Too* (27 October 2020) Bloomberg, https://www.bloomberg.com/news/articles/2020-10-27/stop-food-rotting-on-ships-and-you-ll-cut-carbon-pollution-too.

40 World Economic Forum, "White Paper – Digital Transformation of Industries – Logistics" (2016) p 24, http://reports.weforum.org/digital-transformation/wp-content/blogs.dir/94/mp/files/pages/files/dti-logistics-industry-white-paper.pdf.

41 World Bank and the International Association of Ports and Harbors, *Accelerating Digitisation* (December 2020) para 25.

42 World Trade Organisation, *Trade Finance and SMEs – Bridging the Gaps in Provision* (2016) p 4, https://www.wto.org/english/res_e/booksp_e/tradefinsme_e.pdf.

– will likely SMEs to enjoy increased access to trade finance.[43] It has been estimated by the ICC that the adoption of electronic documents in trade will generate £24.6 billion in SME trade by 2024, which would be an increase of 25%.[44]

7.64 We would be interested in consultees' views on the effects on SMEs or consumers, and whether they are able to provide any quantitative evidence for such effects.

Consultation Question 52.

7.65 We seek consultees' views on what impact is foreseen for ultimate end-users of goods. Please provide quantitative evidence if possible.

Consultation Question 53.

7.66 We seek consultees' views on if there are any potential positive impacts of our proposals that have not been identified above.

COSTS

7.67 It is also important to consider any potential difficulties and detriments associated with our proposals, and the changed practices they may facilitate. We consider three kinds of potential detriments below: transition costs, technological and market risks, and the potential impact of the energy consumption associated with some forms of DLT.

Transition costs

7.68 Perhaps the most immediate detrimental effect of the adoption of our proposals would be the costs of transition in global networks of commerce from paper-based documentation to electronic documents. These costs may result from the need to train staff on new systems, to develop and refine new internal processes for dealing with documentation, and the time spent negotiating with trading partners as to the shift to electronic trade documents.

7.69 There are several responses to this concern. The first, and perhaps most significant, is that much of the impetus for these reforms has come from the shipping and trade finance sectors themselves. The short-term one-off costs of transitioning from a paper system to an electronic one will be more than offset by the significant increase in efficiency brought about by electronic documentation.

7.70 Additionally, we do not propose to make the use of electronic trade documents mandatory. Indeed, our proposals are designed such that there will be no substantive

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43 E Ganne, *Can Blockchain Revolutionize International Trade?* (2018) World Trade Organization p 25, https://www.wto.org/english/res_e/booksp_e/blockchainrev18_e.pdf.

44 ICC, *Aligning national laws to the UNCITRAL Model Law on Transferrable Records, UK Business Case* (2021).

difference, in legal terms, between using paper and electronic documents. Parties who wish to continue using paper documents because they are not able to bear the transition costs, therefore, will be able to do so and avoid the associated costs.

7.71 For these reasons, we do not consider that transition costs will be a significant obstacle to the shift to electronic trade documents, subject to one caveat: it may be that there is a disadvantage for the first movers into the digital space, due to the up-front costs that will have to be incurred before the technology is widely adopted. We are of the view that this first-mover disadvantage will be overcome by the imperative for digitalisation felt by businesses at the core of trade finance and shipping. Shipowners, exporter/importers, and container shipping companies will all be keen to implement digitalisation once the legal blockers are removed, notwithstanding the inevitable transition costs and a possible first-mover disadvantage.

Consultation Question 54.

7.72 We seek consultees' views on whether it is anticipated that transition costs will be a brake on the uptake of electronic trade documents.

Technological and market risks

7.73 Paperless trade projects require the integration of cross-sector business requirements and potentially the interoperability of different platforms. One source of friction for the adoption of paperless trade might be a lack of interoperability between different platforms. Furthermore, there will inevitably be a significant variation in the level of technological integration between different ports and different countries. It was suggested by the UNECE in 2006 that there would need to be a dual electronic and paper system for "several decades".[45] While we hope of course that our legal reforms spur rapid adoption of electronic documents in transactions using the law of England and Wales, we agree that in the medium-term, there will be a need for both paper and electronic trade documents.

7.74 We have carefully formulated proposals to deal with change of medium of trade documents. We consider these to be an essential part of the practical efficacy of our proposals. They align with similar proposals in the MLETR. Beyond these proposals, however, divergence in technological capability between ports and other trade fora will be unavoidable.

7.75 We are aware that it is not only legal blockers preventing the move to electronic documents. For example, there are questions about the affordability of, and widespread international access to, the required technology and interoperability of systems, and the willingness of financers to accept the legal efficacy and security of electronic trade documents and their associated processes.

7.76 As far as the interoperability of different systems is concerned, this will ultimately have to be a matter for alignment in the private sector. The multi-jurisdictional nature of this

[45] UNECE, *A Roadmap towards Paperless Trade* (2006) p 5, https://unece.org/fileadmin/DAM/cefact/publica/ece_trd_371e.pdf.

problem, combined with the private sector nature of platform developers and stakeholders in trade and finance, means that there is at best a limited role for any single national government.

7.77 It will be to the advantage of all stakeholders, however, if different platforms for electronic trade documents can be made interoperable and standardised (as far as technologically possible). It is perhaps not surprising, therefore, that work is already underway to establish international technical standards and documents which conform to them, in particular the Digital Trade Standards Initiative run by the International Chamber of Commerce.[46] A recent WTO paper tracks a significant number of technical projects aimed at using blockchain and DLT in international trade.It notes that "a natural year's worth of progression has been both accelerated and, in some areas, stunted by the forces of the COVID-19 pandemic", and that while some projects have fallen by the wayside, others have been realised.[47]

Consultation Question 55.

7.78 We seek consultees' views on factors that may affect the willingness of financers of trade transactions to adopt electronic trade documents.

Environmental and climate change impact

7.79 While there are some environmental benefits to digitalised documentation, there are also some potentially significant detriments. In particular we consider the energy consumption of some DLT platforms (the most likely existing technology to be used to take advantage of our proposals) to be a source of concern. The essential nature of the problem is the power required by the network users employing computational capacity to verify the transactions added to the blockchain. At a time of increasing global efforts to combat climate change, the scaling up of a highly energy intensive technology must be carefully evaluated.

7.80 The energy consumption of Bitcoin has been the main focus in media reports. The energy consumption of the Bitcoin network has been compared to that of whole countries in recent years, most recently to that of Argentina.[48] This extraordinary energy consumption (and attendant carbon emissions) is in service of a network which currently functions chiefly as a venue for speculative and volatile investment.

7.81 Bitcoin is of course only one example (albeit the foundational one) of a distributed ledger. The energy consumption of a particular network will depend on its consensus mechanism. The high energy consumption of Bitcoin is a design feature of that

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46 For an overview, see ICC, *Digital Trade Standards Initiative launches under the umbrella of ICC* (4 March 2020), https://iccwbo.org/media-wall/news-speeches/digital-trade-standards-initiative-launches-under-the-umbrella-of-icc/.

47 WTO, *Blockchain & DLT in trade: where do we stand?* (2020) p 6, https://www.wto.org/english/res_e/publications_e/blockchainanddlt_e.htm.

48 See for example C Criddle, *Bitcoin consumes 'more electricity than Argentina'* (10 February 2021) BBC, https://www.bbc.co.uk/news/technology-56012952.

network, which uses proof of work as its consensus mechanism. Other consensus mechanisms may reduce energy consumption by orders of magnitude.[49] Indeed, the Ethereum Foundation recently identified a need to change from a proof-of-work consensus mechanism to verification by proof-of-stake, which is generally considered to reduce power consumption of the network by two orders of magnitude.[50] This is particularly significant given the Ethereum network's role as the first platform for smart contracts. As smart contracts begin to be used more frequently, the consumption of the network will necessarily increase.

7.82 These concerns about energy consumption and attendant carbon emissions from DLT must be viewed against the background of Government's legal obligations under the Climate Change Act 2008. The 2008 Act imposes an overall emissions reduction target,[51] as well as requiring the Government to establish carbon budgets for the UK.[52] The tension between DLT and these carbon budgets could be a significant difficulty in the coming decades if DLT becomes the underlying framework of global trade documentation without the intensity of its energy consumption being addressed.

7.83 We are therefore interested to hear from consultees as to what steps are being taken by platform developers and others to minimise the energy consumption and environmental impact of these technologies.

Consultation Question 56.

7.84 We seek consultees' views on the average energy consumption per transaction for proposed electronic trade document platforms.

Consultation Question 57.

7.85 We seek consultees' views on how the energy consumption of DLT can be minimised.

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49 J Sedlmeir, HU Buhl, G Fridgen, R Keller, "The Energy Consumption of Blockchain Technology" (2020) 62(6) *Business and Information Systems Engineering* 599.

50 See for example P Fairley, *Ethereum Plans to Cut Its Absurd Energy Consumption by 99 Percent* (2 January 2019), https://spectrum.ieee.org/computing/networks/ethereum-plans-to-cut-its-absurd-energy-consumption-by-99-percent.

51 Climate Change Act 2008, s 1.

52 Climate Change Act 2008, s 4. See also *R (Friends of the Earth Ltd and others) v Heathrow Airport Ltd* [2020] UKSC 52, [2021] PTSR 190.

Consultation Question 58.

7.86 We seek consultees' views on whether there are any other potential negative impacts of our proposals that have not been identified above.

Chapter 8: Consultation Questions

Consultation Question 1.

8.1 We invite consultees' views on the advantages and disadvantages associated with using private contractual frameworks to facilitate the use of electronic trade documents, compared with using electronic documents recognised in law as being equivalent to paper documents.

Paragraph 2.44

Consultation Question 2.

8.2 We provisionally propose that our reforms cover only the following categories of document:

(1) bills of exchange;

(2) promissory notes;

(3) bills of lading;

(4) ship's delivery orders;

(5) warehouse receipts;

(6) marine insurance policies; and

(7) cargo insurance certificates.

Do consultees agree?

If not, we invite consultees to suggest categories of document that should be added to or removed from this list, and to explain why.

Paragraph 3.85

Consultation Question 3.

8.3 We provisionally propose that sea waybills and air waybills need not and should not be included. Do consultees agree?

Paragraph 3.86

Consultation Question 4.

8.4 We provisionally propose that bearer bonds and other documents of title including banker's drafts, certificates of deposit payable to bearer, bearer scrip certificates exchangeable for shares, mate's receipts, traveller's cheques, and dividend warrants need not and should not be included. Do consultees agree?

Paragraph 3.87

Consultation Question 5.

8.5 We provisionally propose that the Secretary of State should have the power to add, remove, or amend an entry in the list of documents described in Consultation Question 1 by regulations made by statutory instrument. Do consultees agree?

Paragraph 3.88

Consultation Question 6.

8.6 We provisionally propose that the group of documents covered by our proposed reforms should be referred to as "trade documents" in the draft Bill. Do consultees agree?

If not, what alternative label would consultees propose, and why?

Paragraph 3.94

Consultation Question 7.

8.7 We provisionally propose that each individual trade document in the draft Bill need not and should not be defined. Do consultees agree? If not, please give reasons.

Paragraph 3.96

Consultation Question 8.

8.8 We provisionally propose to include ship's delivery orders and warehouse receipts in our list of trade documents, without an express restriction to those that have been made out to order. Do consultees consider that this will cause problems? Please explain why.

Paragraph 3.99

Consultation Question 9.

8.9 We provisionally propose that bare legal rights should be excluded from the scope of our proposals for the possession of electronic trade documents. Do consultees agree?

Paragraph 5.58

Consultation Question 10.

8.10 We provisionally propose that, in order for an electronic trade document to be capable of possession, the nature of the document must not support concurrent control by multiple parties at one time. Do consultees agree?

Paragraph 5.72

Consultation Question 11.

8.11 We provisionally propose that "control" should be defined as the ability (as a matter of fact) to:

(1) use; and

(2) transfer or otherwise dispose of

an electronic trade document. Do consultees agree?

Paragraph 5.90

Consultation Question 12.

8.12 We provisionally propose that, in order for an electronic trade document to be capable of possession, "the system" on which the document is held must ensure that no more than one person can control the document at any one time. Do consultees agree?

Paragraph 5.95

Consultation Question 13.

8.13 We invite consultees' views on whether there could be a situation in which multiple parties could have equal claim to "possession" of an electronic trade document in such a way that they would not be "one person" for the purposes of the law.

Paragraph 5.96

Consultation Question 14.

8.14 We provisionally propose that, in order for an electronic document to be capable of possession, transfer of the document must transfer control of the document to the transferee, and the transferor must lose control of it as a consequence. Do consultees agree?

Paragraph 5.103

Consultation Question 15.

8.15 We invite consultees' views on how existing systems, or those in development, ensure that the transferor of an electronic document can no longer control the document after it is transferred.

Paragraph 5.104

Consultation Question 16.

8.16 We invite consultees' views on whether the ability to retain a copy of an electronic trade document after transfer or other disposal of the electronic trade document could lead to problems in practice.

Paragraph 5.109

Consultation Question 17.

8.17 We invite consultees' views on whether the possessibility of electronic trade documents should depend on any other factors or criteria. If so, please explain the reasons for your additional criteria.

Paragraph 5.111

Consultation Question 18.

8.18 We provisionally propose that:

(1) the person who is able to control an electronic trade document is the person in possession of it; and

(2) possession of an electronic trade document is transferred from one person to another when the transferee gains control of that electronic trade document.

Do consultees agree? If not, please explain why not.

Paragraph 5.115

Consultation Question 19.

8.19 We provisionally propose that there is no need to make explicit in legislation that the requirement of intention to possess applies to electronic trade documents. Do consultees agree?

Paragraph 5.129

Consultation Question 20.

8.20 We invite consultees' views on what circumstances there could be a debate about which of one or more parties is in possession of an electronic trade document held on a system of the type envisaged by our proposals.

Paragraph 5.130

Consultation Question 21.

8.21 We provisionally propose that electronic trade documents should not be subject to an explicit statutory requirement for integrity. Do consultees agree?

Paragraph 6.13

Consultation Question 22.

8.22 We provisionally propose not to impose an express statutory reliability requirement. Do consultees agree? Please give reasons.

If consultees disagree:

(1) When should a party be required to prove that their electronic document is reliable?

(2) Do consultees think our proposals should include an accreditation process? If so, in what form?

Paragraph 6.28

Consultation Question 23.

8.23 We provisionally propose that there should be a statutory requirement that electronic trade documents must contain the same information as would be required to be contained in a paper equivalent. Do consultees agree?

Paragraph 6.33

Consultation Question 24.

8.24 We do not consider there to be a need to introduce an express statutory provision on writing in electronic trade documents, because the law already considers electronic displays to be capable of constituting "writing". Do consultees agree? Please give reasons.

Paragraph 6.43

Consultation Question 25.

8.25 We do not consider there to be a need to introduce an express statutory provision on signing electronic trade documents. Do consultees agree? Please give reasons.

Paragraph 6.49

Consultation Question 26.

8.26 We do not consider there to be a need to introduce an express statutory provision on the accessibility of information contained in electronic documents. Do consultees agree? Please give reasons.

Paragraph 6.53

Consultation Question 27.

8.27 We provisionally propose that legislation should explicitly allow for indorsement of electronic documents. Do consultees agree? Please give reasons.

Paragraph 6.60

Consultation Question 28.

8.28 We seek consultees' views on whether there is any need for electronic trade documents to be capable of being issued in sets.

Paragraph 6.62

Consultation Question 29.

8.29 We provisionally propose that no further provision is required in legislation to address the following in respect of electronic trade documents:

(1) timing of delivery;

(2) timing of transfer;

(3) rejection; and

(4) amendment.

Do consultees agree?

Paragraph 6.75

Consultation Question 30.

8.30 We seek consultees' views on how amendment or rectification of an electronic trade document is achieved under existing systems and those in development.

Paragraph 6.76

Consultation Question 31.

8.31 We seek consultees' views on whether the phrase "so far as practicable" should be included in clause 2(2)(c). If yes, please give examples where such a qualification would be required.

Paragraph 6.80

Consultation Question 32.

8.32 We seek consultees' views on what security interests are typically taken over trade documents at the moment.

Paragraph 6.102

Consultation Question 33.

8.33 We provisionally propose that an electronic trade document should be capable of being the subject of possessory concepts including bailment, conversion, pledges, and liens, and that this should be provided for in legislation. Do consultees agree?

Paragraph 6.110

Consultation Question 34.

8.34 We provisionally propose that existing rules and practices can accommodate the discharge, surrender or accomplishment of electronic trade documents, and that no specific legislative provision is needed. Do consultees agree?

Paragraph 6.114

Consultation Question 35.

8.35 We provisionally propose that provision should be made to allow for a change of medium for trade documents from electronic to paper, or from paper to electronic. Do consultees agree?

Paragraph 6.125

Consultation Question 36.

8.36 We seek consultees' views on whether the draft Bill should contain a requirement that the issuer of a trade document must allow the person in possession to change the document's medium.

Paragraph 6.128

Consultation Question 37.

8.37 We seek consultees' views on whether the electronic trade documents that satisfy the requirements of our draft Bill will also satisfy the requirements of the MLETR.

To the extent that consultees consider our provisional proposals to be incompatible with the MLETR or other international approaches, please explain this and the consequences to which it could give rise.

Paragraph 6.136

Consultation Question 38.

8.38 We provisionally propose that the Law Commission should consider the private international law aspects of digital assets, including electronic trade documents, as part of a separate project. Do consultees agree?

Paragraph 6.148

Consultation Question 39.

8.39 We provisionally propose that the word "issue" describes the process by which a trade document (where relevant) becomes a document of title. Do consultees agree?

Paragraph 6.162

Consultation Question 40.

8.40 We provisionally propose that the change of medium of a trade document issued before the Act comes into force should not be permitted. Do consultees agree?

Paragraph 6.165

Consultation Question 41.

8.41 We provisionally propose that our proposals do not create any additional risk that documents which are not intended to be documentary intangibles will become so by virtue of the draft Bill. Do consultees agree?

Paragraph 6.175

Consultation Question 42.

8.42 We seek consultees' views on what, in their experience, is the average number of paper documents required in a single trade transaction, compared to our current assumption of 40.

Paragraph 7.19

Consultation Question 43.

8.43 We seek consultees' views on whether our estimate of the global total number of paper trade documents used in container shipping is accurate.

Paragraph 7.20

Consultation Question 44.

8.44 We seek consultees' views on whether the average number of documents required in a trade transaction varies between sectors. If so, please give details.

Paragraph 7.21

Consultation Question 45.

8.45 We seek consultees' views, if they are able to give an estimate, on the percentage of trade and shipping documentation which is under the law of England and Wales.

Paragraph 7.23

Consultation Question 46.

8.46 We seek consultees' views on how quickly the industry would move to electronic trade documents if these provisional proposals came into force in 2022. If possible, we request that consultees say what percentage of documentation might be issued and used in electronic form:

(1) by 2030; and

(2) by 2050.

Paragraph 7.28

Consultation Question 47.

8.47 We seek consultees' views on how much money, or what percentage of the cost of a transaction, do consultees estimate could be saved per transaction by transitioning to electronic documents.

Paragraph 7.37

Consultation Question 48.

8.48 We seek consultees' views on the efficiency gains of a transition to electronic trade documents. Please provide evidence or data if possible.

Paragraph 7.48

Consultation Question 49.

8.49 We provisionally propose that electronic trade documents will reduce the risk of fraud compared to paper trade documents. Do consultees agree?

Paragraph 7.53

Consultation Question 50.

8.50 We provisionally propose that electronic trade documents will enhance the transparency of supply chains. Do consultees agree? Please provide examples or evidence if possible.

Paragraph 7.57

Consultation Question 51.

8.51 We provisionally propose that there will be environmental benefits from a transition to electronic trade documents. Do consultees agree? Please provide examples or data if possible.

Paragraph 7.61

Consultation Question 52.

8.52 We seek consultees' views on what impact is foreseen for ultimate end-users of goods. Please provide quantitative evidence if possible.

Paragraph 7.65

Consultation Question 53.

8.53 We seek consultees' views on if there are any potential positive impacts of our proposals that have not been identified above.

Paragraph 7.66

Consultation Question 54.

8.54 We seek consultees' views on whether it is anticipated that transition costs will be a brake on the uptake of electronic trade documents.

Paragraph 7.72

Consultation Question 55.

8.55 We seek consultees' views on factors that may affect the willingness of financers of trade transactions to adopt electronic trade documents.

Paragraph 7.78

Consultation Question 56.

8.56 We seek consultees' views on the average energy consumption per transaction for proposed electronic trade document platforms.

Paragraph 7.84

Consultation Question 57.

8.57 We seek consultees' views on how the energy consumption of DLT can be minimised.

Paragraph 7.85

Consultation Question 58.

8.58 We seek consultees' views on whether there are any other potential negative impacts of our proposals that have not been identified above.

Paragraph 7.86

Appendix 1: Terms of reference

The Law Commission is asked to:

(1) Set out the current law and identify law reform necessary to ensure that electronic documents, as digitised versions of traditional instruments, can perform the same legal functions as conventional paper documents in terms of representing, transferring, and promising the transfer of, value (with reference to the questions listed in the Annex of the MoU on crypto-assets dated 31.03.20 where the Law Commission considers this to be appropriate). The electronic versions of documents on which the project will focus include bills of lading, promissory notes, warehouse warrants, delivery orders, letters of credit, and sea waybills – all potential means of transferring interests in assets, rather than being assets themselves.

(2) Make recommendations to solve the problems caused by English law's approach to the "possession" and transfer of electronic documents based on a comprehensive review of the law in England and Wales and a brief comparative analysis of the approach in other jurisdictions.

(3) Make such other recommendations as the Law Commission considers necessary or desirable to ensure that electronic documents are capable of possession and transfer under the law, insofar as the timetable allows.

(4) Produce draft legislation to implement the Commission's recommendation.

ANNEX OF MOU DATED 31 MARCH 2020

Part A: key questions

1.2 Under what circumstances, if any, would the following be characterised as personal property:

(1) a crypto/intangible asset;

(2) a private key?

1.3 In particular:

(1) What are the key characteristics that a crypto/intangible asset must have to be considered property?

(2) What characteristics would prevent a crypto/intangible asset from being considered property?

1.4 If a crypto/intangible asset is capable of being property:

(1) Is that as a thing in possession, a thing in action or another category of property?

(2) How is title to that property capable of being transferred?

1.5 Is a crypto/intangible asset capable of being the object of a bailment?

1.6 Can security validly be granted over a crypto/intangible asset and, if so:

(1) How?

(2) What forms of security may validly be granted over a crypto/intangible asset?

1.7 Can a crypto/intangible asset be characterised as "property" for the purposes of the Insolvency Act 1986?

1.8 Can crypto/intangible assets be characterised as "goods" under the Sale of Goods Act 1979?

1.9 In what circumstances is a distributed ledger capable of amounting to a register for the purposes of evidencing, constituting and transferring title to assets?

Part B: Possible additional questions for consideration

1.10 If crypto/intangible assets can be characterised as property:

(1) What are the key characteristics that a DLT system must have so that crypto/intangible assets on that system can be considered property?

(2) What characteristics would prevent any crypto/intangible assets on a DLT system being considered property?

1.11 The Legal Statement found that private/public keys in themselves are not private property. [1]

(1) Does the Law Commission agree?

(2) If so, what are the implications for cryptoasset wallets (especially in a theft scenario)?

1.12 Crypto/intangible assets may be represented "off-chain" (outside the DLT) by other digital assets. Crypto/intangible assets may also be linked to underlying physical assets.[2] In such case:

(1) How are assets, services or other things that are linked to cryptoassets to be treated?

(2) Would linkage create separate legal rights, such that bailment is possible in certain circumstances?

1.13 Could a crypto/intangible asset be characterised as:

(1) a documentary intangible?

(2) a document of title?

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[1] There are wallet providers for many cryptoassets. These companies provide cryptoasset wallets which store public and/or private keys which can be used to track ownership of a cryptoasset, but they do not store the cryptoasset itself which remains on the decentralised DLT. Germany has developed specific regulation to cover wallet providers. See Legal Statement, paras 43 and 65**.** The Legal Statement considers a cryptoasset as consisting of a "parameter" of data, including private keys.

[2] On the role of the underlying asset, see Eversheds Sutherland, *Animal, vegetable or mineral? UKJT Legal Statement on Cryptoassets and smart contracts: a lot of welcome clarification but forgets the underlying asset* (18 November 2019), https://www.eversheds-sutherland.com/global/en/what/articles/index.page?ArticleID=en/Financial_services/ukjt-crypto-181119.

(3) negotiable?

(4) an “instrument” under the Bills of Exchange Act 1882?

Appendix 2: Acknowledgements

In preparing this consultation paper, the Law Commission met or corresponded with the following people and organisations with respect to this project. We are grateful for their time and for the information they have provided.

JUDICIARY

The Rt Hon Sir Richard Aikens

The Hon Mr Justice David Foxton

LAWYERS AND LAW FIRMS

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Clyde & Co LLP

CMS

Herbert Smith Freehills

Linklaters LLP

Mishcon de Reya LLP

Norton Rose Fulbright

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Sullivan & Worcester LLP

Thrings Solicitors

Nik Yeo, Fountain Court Chambers

GOVERNMENT AND PUBLIC BODIES

Her Majesty's Revenue and Customs

Prudential Regulation Authority

Bank of England

INDUSTRY

Etienne Amic

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Britannia P&I Club

Bolero

Digital Container Shipping Association

Digital Standards Initiative, International Chamber of Commerce

Enigio

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eTEU Technologies Ltd

Global Policy House

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International Chamber of Commerce

The International Group of Protection and Indemnity Clubs

International Swaps and Derivatives Association

International Trade and Forfaiting Association

Lloyd’s Agency

Lloyds Banking Group plc

London Metal Exchange

R3

Royal Dutch Shell plc

Society for Worldwide Interbank Financial Telecommunication

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Professor Andrew Steven, University of Edinburgh

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Professor Christian Twigg-Flesner, University of Warwick

Associate Clinical Professor Aaron Wright, Yeshiva University

OTHER

Coriolis Technologies

The Committee on the Uniform Commercial Code, including advisors and observers

UNIDROIT Working Group on Digital Assets and Private Law, whom we thank for including the Law Commission in their discussions

Appendix 3: A summary of distributed ledger technology

OVERVIEW

3.1 Distributed ledger technology (DLT) is a method of recording and sharing data across a network.[1] A DLT system comprises a digital database (a "ledger") which is shared (that is, "distributed") among a network of computers (known as "nodes"). The ledger contains a record of data, such as a history of transactions, and each node holds a copy of the ledger on its system.

3.2 The distinguishing feature of DLT compared to other shared databases is that the ledger is not maintained by a central administrator. Instead, the ledger is maintained collectively by the nodes on the network. No single node has the power unilaterally to add data to the ledger. A node can propose a new data entry, but it will only be added to the ledger when the other nodes reach "consensus" that the entry should be recorded. The process by which this occurs is known as the "consensus mechanism".

3.3 The consensus mechanism is set by the software underlying a DLT system. In general, it requires some or all of the nodes to determine the validity of a proposed data entry. The consensus mechanism is typically designed so that, once data is added to the ledger, the data is very difficult to amend.[2]

3.4 For example, in the Bitcoin blockchain,[3] a "block" of bitcoin transactions can only be added to the ledger when the nodes reach consensus on the solution to a mathematical problem.[4] Broadly, this problem requires the nodes to generate a number (known as a "hash") for the proposed block based on the hash of the preceding block. Finding a solution requires significant computational resources.[5]

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1 For overviews of DLT, see P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) chs 1 and 2; World Bank, *Distributed Ledger Technology and Blockchain* (2017) chs 1 and 3. We discuss the potential relevance of DLT to intermediated securities from para 9.57 above.

2 The consensus mechanism may differ depending on whether the DLT system is "permissionless" or "permissioned": see from para 3.6 of this appendix.

3 The Bitcoin blockchain is a distributed ledger which records transactions in the bitcoin cryptocurrency. It is called a "blockchain" because of the way transactions are recorded on the distributed ledger: in timestamped "blocks" which are mathematically linked or "chained", via the consensus mechanism, to the preceding block on the ledger: see Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://bitcoin.org/bitcoin.pdf.

4 This is known as "proof of work".

5 By "resources", we refer to the electricity required to power computers and air condition the rooms of servers. The process of generating hashes for proposed blocks is called "mining". Nodes are incentivised to engage in mining because they are rewarded with bitcoins upon generating a valid hash for a proposed block: Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 4, https://bitcoin.org/bitcoin.pdf; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) pp 25 and 26.

When a solution is found and verified by the nodes, the block is added to the ledger.[6] The result is that all the blocks recorded on the Bitcoin blockchain are mathematically linked via their hashes.[7] No block (and by extension its hash) can be amended without having to re-solve the mathematical problem for all subsequent blocks in the chain – a task which would be beyond the computing capabilities of any single node.[8]

BENEFITS OF DLT COMPARED TO CENTRALISED LEDGERS

3.5 DLT offers three potential advantages over a centralised ledger.[9]

(1) *Security*: in a centralised ledger, the central administrator is a "single point of attack": if the administrator is hacked, then the hacker can gain control of the ledger and tamper with its data.[10] In contrast, in a decentralised ledger maintained by consensus, there is no single point of attack. The ledger is the collective responsibility of the nodes, which makes it more difficult for a hacker to infiltrate and tamper with the ledger.

(2) *Immutability*: the consensus mechanism ensures that data, once recorded on the ledger, is very difficult to amend. The data is said to be "immutable". The immutability of the ledger means that nodes can trust in its veracity and transact with one another in confidence, despite the absence of a central administrator. For example, the immutability of transactions recorded on the Bitcoin blockchain ensures that no participant can "double-spend" a bitcoin. Any attempt to double-spend a bitcoin would be contradicted by the ledger (which would contain an immutable record of the previous spend), and the proposed transaction would be rejected by the nodes as invalid.[11]

(3) *Efficiency*: in a centralised ledger, participants have to rely on a central administrator to maintain and update the ledger. Inconsistencies may arise between the central ledger and the participants' copies, requiring reconciliation. In contrast, in a decentralised ledger, each participant's copy of the ledger is intended to automatically update as data is added and the need to reconcile data across ledgers is meant to be removed. This potentially increases the speed and reduces the cost of transactions.

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6 The nodes also check that the transacting participants have sufficient bitcoin in their accounts to engage in the proposed transactions: Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://bitcoin.org/bitcoin.pdf.

7 Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) pp 1 to 3, https://bitcoin.org/bitcoin.pdf.

8 Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://bitcoin.org/bitcoin.pdf; World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 18; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 25.

9 See World Bank, *Distributed Ledger Technology and Blockchain* (2017) ch 5; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) ch 2.

10 Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 2; World Bank, *Distributed Ledger Technology and Blockchain* (2017) pp 5 and 6.

11 Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) pp 1 and 2; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 26.

PERMISSIONLESS AND PERMISSIONED DLT SYSTEMS

3.6 DLT systems can be permissionless or permissioned.[12] In a permissionless DLT system, nodes do not need permission from any entity to participate in the network and propose transactions. All that is required to participate is a computer installed with the relevant software.[13] Once a participant has joined the network, it can view transactions and propose and verify new data entries. As participants on a permissionless DLT system are unknown to one another, these systems typically employ a rigorous consensus mechanism to enhance security and trust among participants.[14] The Bitcoin blockchain is an example of a permissionless DLT system.

3.7 In a permissioned DLT system, nodes cannot participate in the network until they receive permission from a central administrator, who controls network access and enforces the rules of the ledger. Participants typically have to verify their identity before they can join the network. As participants in a permissioned DLT system are typically pre-selected, known to one another, and trusted, these systems tend to employ a less rigorous consensus mechanism.[15] Permissioned systems are likely to be more appropriate in certain industries, such as the finance industry, where the law requires the identities of the transacting parties to be disclosed.[16]

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12 World Bank, *Distributed Ledger Technology and Blockchain* (2017) ch 4; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) pp 31 and 32.

13 The software that supports permission-less systems such as the Bitcoin blockchain is open source and can be downloaded for free from a website.

14 For example, the "proof of work" consensus mechanism described at para 3.4 of this appendix.

15 For example, some permissioned ledgers use a "proof of stake" consensus mechanism, where transactions can be validated by a subset of nodes who hold a "stake" in the transaction: P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 57, n 90.

16 World Bank, *Distributed Ledger Technology and Blockchain* (2017) 19 (referring to "Know-Your Customer" laws in Anti-Money Laundering/Combating the Financing of Terrorism regulations).

Appendix 4: Draft Bill

Electronic Trade Documents Bill

CONTENTS

A

B I L L

TO

Make provision for trade documents in electronic form to have the same effect as trade documents in paper form

BE IT ENACTED by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1 Definitions of "trade document", "electronic trade document" and "control"

(1) This section defines certain expressions used in this Act.

(2) A document is a "trade document" if it is—
- (a) a bill of exchange,
- (b) a promissory note,
- (c) a bill of lading,
- (d) a ship's delivery order,
- (e) a marine insurance policy,
- (f) a cargo insurance certificate, or
- (g) a warehouse receipt.

(3) An "electronic trade document" is a trade document that—
- (a) is in electronic form,
- (b) contains the information that would be required to be contained in the equivalent trade document in paper form, and
- (c) is held by means of a system that secures that—
  - (i) no more than one person has control of the document at any one time, and
  - (ii) after the document is transferred from one person to another person, the transferor no longer has control of it.

(4) A person has "control" of a document if the person is able to—
- (a) use the document, and
- (b) transfer or otherwise dispose of it.

2 Possession etc of electronic trade documents

(1) The person who has control of an electronic trade document is the person who has possession of it for the purposes of any statutory provision or rule of law.

(2) Accordingly, for those purposes—

(a) possession of the electronic trade document is transferred from one person to another when the transferee gains control of it,

(b) anything done in relation to the electronic trade document that corresponds to indorsement of the equivalent trade document in paper form has the same effect in relation to the electronic trade document as indorsement has in relation to the document in paper form, and

(c) anything else done in relation to the electronic trade document that corresponds to something that could be done in relation to the equivalent trade document in paper form has the equivalent effect in relation to the electronic trade document.

(3) In this section "statutory provision" means provision made by or under any Act, or by or under an Act or Measure of Senedd Cymru, whenever passed or made.

3 Replacement of trade documents

(1) A trade document in paper form may be replaced by an electronic trade document, and an electronic trade document may be replaced by a trade document in paper form, if the replacement document contains a statement that it is a replacement document.

(2) Where a document is replaced under this section—

(a) the original document ceases to have effect, and

(b) all rights and liabilities relating to the original document continue to have effect in relation to the replacement document.

4 Electronic presentment of cheques etc

In section 89B(2) of the Bills of Exchange Act 1882 (instruments to which section 89A applies), at the end insert "or to a bill or note that is an electronic trade document for the purposes of the Electronic Trade Documents Act 2021 (see section 1 of that Act)."

5 Power to amend definition of "trade document"

(1) The Secretary of State may by regulations made by statutory instrument add, remove or amend an entry in the list of documents in section 1(2).

(2) Regulations under this section may make incidental, consequential, transitional or saving provision, including incidental or consequential provision amending this or any other Act, or any Act or Measure of Senedd Cymru.

(3) A statutory instrument containing regulations under this section may not be made unless a draft of the instrument has been laid before and approved by a resolution of each House of Parliament.

6 Extent, commencement and short title

(1) This Act extends to England and Wales only.

(2) This Act comes into force at the end of the period of two months beginning with the day on which it is passed.

(3) Section 2 does not apply to a document issued before the day on which this Act comes into force, and such a document may not be replaced under section 3.

(4) This Act may be cited as the Electronic Trade Documents Act 2021.