



**Law
Commission**
Reforming the law

Electronic trade documents: Report and Bill

Law Com No 405

Electronic trade documents: Report and Bill

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The Law Commission

The Law Commission was set up by the Law Commissions Act 1965 for the purpose of promoting the reform of the law.

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The text of this report is available on the Law Commission's website at <https://www.lawcom.gov.uk/project/electronic-trade-documents/>.

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Glossary

Term	Definition
Air waybill or air consignment note	A receipt for goods and evidence of the contract of carriage, issued by the air carrier.
Assignment	The transfer of a right from one person to another. The equivalent in Scotland is “assignation”.
Attornment	A formal transfer of constructive possession from one person to another of a thing in the actual possession of a third party. The transfer occurs by means of an acknowledgement to the transferee, by the third party in actual possession of the thing, that they hold it for the transferee.
Bailment	A bailment arises under the law of England and Wales when 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.
Banker's draft	A cheque drawn by a bank on its own funds, usually upon a customer's request. The bank will withdraw funds from the customer's account and deposit them into an internal account to cover the amount of the draft.
Bearer bond	A negotiable instrument 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 may take the bond free of any equities or defects in the transferor's title.

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 3.27.
Bill of lading	See from paragraph 3.34.
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 3.48.
Carrier	The party transporting the goods by sea or by air.
Central registry system	A system managed and maintained by a central service provider, which provides a record of transactions over an electronic platform, and determines or identifies the system user to whom a document has been issued or transferred.
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.
Cheque	A bill of exchange drawn on a bank. Where a cheque is crossed “account payee” it is not negotiable.
Constructive possession	Where a person does not have possession of a thing as a matter of fact, but the law nevertheless deems them to have legal 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. In the report, we use the term in a broad sense.
Digital asset	Assets that are represented digitally or electronically, including cryptoassets. There are many different types of digital assets, not all of which will be capable of attracting personal property rights. In the report, we use the term in a broad sense.
Digitalisation	The use of digital technologies to change a business model. By contrast, digitisation is 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 distributed ledger is shared (that is, “distributed”) among a network of computers (known as “nodes”) and may be available to other participants. Participants 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 to goods	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.

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 3.46.
Mate's receipt	See from paragraph 3.43.
Multi-signature arrangement	A system of access control relating to a digital asset for the purposes of preventing unauthorised transactions relating to the asset, in which two or more private keys are required to conduct a transaction.
Negotiable/Negotiability	Negotiability means not only that a document is transferable but also that the transferee may acquire rights greater than those of the transferor, provided any necessary formalities are observed and requirements are met. All documents of title are transferable, but only documents of title to money and to securities (called "negotiable instruments") are negotiable in this sense. The right to claim payment under a negotiable instrument can be transferred through transfer of possession of the document itself (in some cases with indorsement).

Negotiable instrument	A document or instrument that is legally deemed to constitute the entitlement itself, rather than being evidence of an entitlement to claim payment of the sum recorded in the document.
Node	A participant in a DLT system.
Novation	A process by which the contractual rights and obligations of one of the parties to 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	Requiring authorisation to perform a particular activity.
Permissionless	Not requiring authorisation to perform a particular activity.
Permissioned DLT	A DLT system in which authorisation to perform a particular activity on the system is required.
Permissionless DLT	A DLT system in which authorisation to perform a particular activity on the system is not required.
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. Pledge is recognised in Scots law but it is not a type of bailment.
Private key	A string of data that is unique to a participant on a distributed ledger and is known only to the participant. A participant can digitally sign a transaction by combining the transaction data with their private key.
Promissory note	See from paragraph 3.31.

Public key	A string of data that is unique to a participant on a distributed ledger and is shared with other participants. A participant's public key can be used by the recipient of a transaction to confirm the authenticity of the transaction.
Sea waybill	A document evidencing a contract of carriage and constituting a receipt for the goods being carried. The consignee named in the sea waybill has rights of suit against the carrier under the contract of carriage by virtue of being so named.
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 3.39.
Transferable/transferability	A transferable document is one which entitles the lawful holder to claim performance of the obligation recorded in the document. Where a document is transferable, the right to claim performance of the obligation recorded in the document can be transferred through transfer of the document itself, but the transferee generally acquires no better title to the goods than the transferor had, although some exceptions do exist.
Warehouse receipt	See from paragraph 3.41.

List of abbreviations

1882 Act	Bills of Exchange Act 1882
2001 Advice	Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper, https://www.lawcom.gov.uk/project/electronic-commerce-formal-requirements-in-commercial-transactions/ .
ADGM	Abu Dhabi Global Market
BAFT	Bankers Association for Finance and Trade
BILA	British Insurance Law Association
BIMCO	Baltic and International Maritime Council
CIF	Carriage, insurance, and freight (contract)
CLLS	The City of London Law Society
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
ECA 2000	Electronic Communications Act 2000
EDI	Electronic data interchange
eIDAS	Regulation on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (EU) No 910/2014 Official Journal L 257/73 of 28.08.2014.

Electronic Execution Report	Electronic Execution of Documents (2019) Law Com No 386, https://www.lawcom.gov.uk/project/electronic-execution-of-documents/ .
ePU	Electronic Payment Undertaking (ITFA)
ETR	Electronic transferable record (MLETR)
FCARs	Financial Collateral Arrangements Regulations (No 2) 2003
FOB	Free on board (contract)
ICC	International Chamber of Commerce
IGP&I	International Group of Protection and Indemnity Clubs
ITFA	International Trade and Forfeiting Association
LMAA	London Maritime Arbitrators Association
LME	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.
MIA	Marine Insurance Act 1906
MLETR	UNCITRAL Model Law on Electronic Transferable Records
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), amending the Electronic Transactions Act 2010
SMEs	Small and medium-sized enterprises
SOGA	Sale of Goods Act 1979
UCC	Uniform Commercial Code (US)

UKJT	UK Jurisdiction Taskforce of the Lawtech Delivery Panel
UKJT Legal Statement	UKJT, <i>Legal Statement on cryptoassets and smart contracts</i> (November 2019)
UNCITRAL	United Nations Commission on International Trade Law
WTO	World Trade Organisation

Websites

All websites referenced in this document were last visited on 9 March 2022.

Electronic trade documents

To the Right Honourable Dominic Raab MP, Lord Chancellor and Secretary of State for Justice

Chapter 1: Introduction

INTERNATIONAL TRADE

1.1 International trade is worth around £1.266 trillion to the UK.¹ The process of moving goods across borders typically involves multiple actors, including those involved in transportation, insurance, finance and logistics.² One trade finance transaction typically involves 20 entities and between 10 and 20 paper documents, totalling over 100 pages.³ In a transaction covered by a bill of lading, for example, it is common to find 50 sheets of paper in a package of shipping documents that must be exchanged between as many as 30 different parties.⁴

1.2 Dr Burcu Yüksel Ripley gives a helpful overview of the parties and documentation involved in a “typical” trade transaction, and the involvement of paper documents:

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

¹ Department for International Trade, “UK Trade in Numbers” (January 2022), <https://www.gov.uk/government/statistics/uk-trade-in-numbers/uk-trade-in-numbers-web-version>.

² E Ganne, World Trade Organisation (“WTO”), *Can Blockchain revolutionize international trade?* (2018) from p 17, https://www.wto.org/english/res_e/booksp_e/blockchainrev18_e.pdf.

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 Digital Container Shipping Association (“DCSA”), *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 3, https://go.dcsa.org/ebook-eb1/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-eb1.

paperwork right but also to get the right paperwork physically delivered on time to the right party or parties.⁵

- 1.3 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 special category of 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 (physical) possession of the document. The document is said to “embody” the obligation, which may be to deliver goods or to pay money. 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.⁶
- 1.4 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.⁷ 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 container ships can carry 24,000 twenty-foot containers at any one time on any one voyage.⁸ For each one of those cargoes, paper transport documentation has to be produced, and must be processed manually to go from the shipper of the goods to the ultimate buyer at destination, sometimes through numerous intermediaries. The effect of the current law is that much of the documentation needs to be in hard copy. The Digital Container Shipping Association (“DCSA”) has estimated that 16 million original bills of lading were issued by ocean carriers in 2020, and that more than 99% of these were in paper form.⁹
- 1.5 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 certain trade documents could lead to significant cost savings and efficiencies, together with improvements in information management and security.
- 1.6 The emergence over the past two decades of central registry systems and more recently of technologies such as distributed ledger technology (“DLT”) has made paperless trade increasingly feasible. The push for digitalisation became particularly acute in 2020 and 2021, with the introduction of global restrictions on movement and

⁵ 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/>.

⁶ We describe the relevant documents in more detail in Chapter 3 below.

⁷ See eg *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1; *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41. See further detail in Chapter 5 below. Scots common law does allow for the “civil possession” of certain intangible (incorporeal) assets eg the taking and holding of a scroll or baton as the possession of an office: see *Stair’s Institutions of the Law of Scotland* (2nd ed 1693) 2.1.15.

⁸ See Marine Insight News Network, “Top 10 World Largest Containerships in 2021” (updated 18 January 2022), <https://www.marineinsight.com/know-more/top-10-worlds-largest-container-ships-in-2019/>.

⁹ DCSA, *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 3, https://go.dcsa.org/ebook-eb1/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-eb1.

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.¹⁰ DCSA has recently observed that DLT could eliminate the risk of a single catastrophic failure or attack that would compromise the security of an electronic bill of lading.¹¹

- 1.7 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,¹² it was noted that “legal challenges were rated as posing a more pressing challenge than any of the other challenges”. In particular, the “lack of legal clarity and enabling regulatory framework” was pointed out.¹³ 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.
- 1.8 In this report, we make recommendations for law reform to allow trade documents in electronic form to have the same legal effect as their paper equivalents, provided that they meet certain requirements to enable their possession in a digital context. We include a Bill which would implement those recommendations, and provide commentary on that Bill.¹⁴

ABOUT THIS PROJECT

Background

- 1.9 The Law Commission first looked at areas of emerging legal technology, and smart contracts in particular, in 2018.¹⁵ Our early research suggested that we would need to consider 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

¹⁰ International Chamber of Commerce (“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 hampered 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 also lead to delays.

¹¹ DCSA, *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 5, https://go.dcsa.org/ebook-eb/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-eb.

¹² D Patel and E Ganne, WTO and Trade Finance Global (“TFG”), *Blockchain & DLT in Trade: Where do we stand?* (October 2020), https://www.wto.org/english/res_e/booksp_e/blockchainanddlte.pdf.

¹³ D Patel and E Ganne, WTO and TFG, *Blockchain & DLT in Trade: Where do we stand?* (October 2020) p 21, https://www.wto.org/english/res_e/booksp_e/blockchainanddlte.pdf.

¹⁴ In this report, the bill we consulted on is referred to as “the consultation Bill”, and the updated bill annexed to this report as “the Bill”, even though the latter has not been introduced into Parliament.

¹⁵ A project on smart contracts was included in the Law Commission’s 13th programme of law reform, published in December 2017. 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 of the High Court of England and Wales, Sir Geoffrey Vos.

blocker to digitalisation.¹⁶ A review of the 1882 Act and related laws was also suggested as a separate project by stakeholders.¹⁷

- 1.10 The Lawtech Delivery Panel’s UK Jurisdiction Taskforce (“UKJT”) published a legal statement on cryptoassets and smart contracts in November 2019 (“UKJT Legal Statement”).¹⁸ The UKJT Legal Statement concluded that, since cryptoassets are a purely “virtual” form of property, they are not capable of being “possessed” under the current law.¹⁹ While their focus was on cryptoassets, a sub-category of digital assets, their analysis and conclusions – with which we agree – are equally applicable to digital assets more generally, including trade documents in electronic form.
- 1.11 As well as our existing work on smart contracts,²⁰ the UK Government subsequently asked the Law Commission to undertake two separate pieces of related work on digital assets.
- (1) Electronic trade documents: to make recommendations to enable the legal recognition of certain trade documents in electronic form. This report contains our final recommendations in respect of this project.
 - (2) Digital assets: to review the law on cryptoassets and other digital assets more generally, and consider what reforms are needed to ensure that the law of England and Wales can accommodate such assets.²¹
- 1.12 The two phases of our work, while distinct, involve similar legal concepts. This report relates only to the electronic trade documents project.

Terms of reference

- 1.13 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. DCMS also asked the Law Commission to prepare draft legislation to implement those recommendations.
- 1.14 Our full terms of reference are included at Appendix 1.

¹⁶ 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.

¹⁷ 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.

¹⁸ UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019) (“UKJT Legal Statement”), <https://technation.io/lawtechukpanel/>.

¹⁹ UKJT Legal Statement, para 17.

²⁰ Smart legal contracts: advice to Government (2021) Law Com No 401.

²¹ More information and the latest updates are available on the Law Commission’s digital assets project page, <https://www.lawcom.gov.uk/project/digital-assets/>.

Consultation

- 1.15 We published a consultation paper in April 2021, seeking views on our provisional proposals.²² The consultation paper included a Bill which would implement those proposals. We received 55 responses to the consultation paper from various industry participants, including businesses, industry associations and groups, academics, law firms and individuals.
- 1.16 We have considered the responses in detail and have developed our thinking and the Bill to reflect many of the points raised. Throughout this report, we reference key points made by consultees which have confirmed our approach, or which have caused us to change direction, whether on matters of policy or drafting.

Acknowledgements and thanks

- 1.17 In Appendix 2 of this report, we provide a list of those who responded to the consultation paper, together with a list of stakeholders we met with during the course of this project. We are extremely grateful to all those who took the time to respond to our consultation, or who otherwise met with us or responded to other requests for assistance or information in support of this work.

Related current and upcoming Law Commission work

Digital assets

- 1.18 We began our work on cryptoassets and other digital assets in March 2021 and published a call for evidence in April 2021. We plan to publish a consultation paper with provisional proposals for reform in summer 2022. Our work on digital assets will expand upon the work undertaken in the particular context of electronic trade documents.
- 1.19 Our work on digital assets will, among other things, consider whether the concept of possession could be extended further – beyond the limited subset of electronic trade documents – to certain other digital assets. While the concept of possession justifiably can be extended to electronic trade documents,²³ it may be that an alternative approach is preferable for other digital assets. These are questions that we will consider in our forthcoming consultation paper.

Conflict of laws

- 1.20 We have agreed with Government that we will undertake a project looking at the rules relating to conflict of laws as they apply to emerging technology, including smart legal contracts and digital assets, and consider whether reform is required. We expect that this future project will consider some of the problems identified in relation to private

²² Digital assets: electronic trade documents (2021) Law Commission Consultation Paper No 254 (“consultation paper”).

²³ See discussion from para 2.79 below.

international law in the context of electronic trade documents. We hope to be in a position to begin this work in mid-2022.²⁴

INITIATIVES AIMED AT DIGITALISING TRADE

- 1.21 We note that significant progress is being made globally in the adoption of initiatives aimed at digitalising trade documents. As G7 President, the UK has been leading the work on legal and regulatory barriers in relation to electronic transferable records. In April 2021, the G7 and digital technology trade ministers agreed to collaborate on electronic transferable records. Together with Australia and the Republic of Korea, the UK has published a roadmap to reform, which lays out practical steps to facilitate the adoption of electronic transferrable records within the G7 and beyond.²⁵
- 1.22 In response to the COVID-19 pandemic and its subsequent impact on trade finance, the International Chamber of Commerce (“ICC”) called on all governments to remove, as an emergency measure, any legal requirements for hard-copy trade documentation.²⁶ They further encouraged all governments to make longer-term changes to their legal frameworks to provide for electronic documents. In a paper published by the WTO and TFG, it was noted that digitalisation efforts could help improve service delivery for micro, small, and medium sized enterprises.²⁷
- 1.23 In terms of legal frameworks, we note the importance of the work done by the United Nations Commission on International Trade Law (“UNCITRAL”). UNCITRAL’s Model Law on 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.²⁸ The Bankers Association for Finance and Trade (“BAFT”) has stressed the importance of the role of the MLETR in its 2021 report on the progress of trade digitalisation.²⁹ Like the WTO, BAFT encouraged governments to remove legal blockers to digitalisation, and to harmonise domestic legal frameworks with the MLETR. The Digital Standards Initiative, which is a cross-industry effort aimed at enabling standardisation in digital trade, also advocates for the global adoption of the MLETR.³⁰

²⁴ In our recent consultation on which areas of law should make up our next programme of law reform, we asked whether such a project would be welcomed: Generating ideas for the Law Commission’s 14th programme of law reform (March 2021), <https://www.lawcom.gov.uk/14th-programme/#introduction>.

²⁵ G7 Digital and Technology, *Ministerial Declaration - Annex 4 Framework for G7 collaboration on electronic transferable records* (28 April 2021).

²⁶ 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>.

²⁷ D Patel and E Ganne, WTO and TFG, *Accelerating Trade Digitisation to Support MSME Financing* (March 2021) p 12, https://www.wto.org/english/res_e/booksp_e/tradedigitaltoismes_e.pdf.

²⁸ We explain the MLETR in more detail in Chapter 2 below.

²⁹ Bankers Association for Finance and Trade, *Progress on Trade Digitization in 2021* (July 2021) p 3, <https://www.baft.org/wp-content/uploads/2021/07/Progress-on-Trade-Digitization-in-2021.pdf>.

³⁰ In March 2020, ICC launched a Digital Standards Initiative in collaboration with the Asian Development Bank, and the Government of Singapore: see the Digital Standards Initiative, available at

- 1.24 In April 2020, the International Trade and Forfeiting Association (“ITFA”) launched its Digital Negotiable Instrument initiative.³¹ ITFA proposes specifications for electronic documents (which use e-signatures, DLT and cryptography) in order to create functionally equivalent electronic negotiable instruments that operate in the same way as paper bills of exchange or promissory notes.³² Relatedly, a framework agreement (put together by the United Nations Economic and Social Commission for Asia and the Pacific on the facilitation of cross-border paperless trade) came into force in February 2021.³³ The objective of the agreement is to increase the digitalisation of trade processes by facilitating the exchange and mutual recognition of trade-related data and documents among paperless trade systems in the Asia-Pacific region.
- 1.25 In February 2022, DCSA, the International Federation of Freight Forwarders Associations, the Baltic and International Maritime Council, ICC and Swift formed the Future International Trade Alliance (“FIT Alliance”), which will focus on standardising digitalisation of international trade.³⁴ While three of these organisations have already devised standards for electronic bills of lading in respect of their own sectors of the industry,³⁵ the FIT Alliance aims to reduce these three sets of standards to a single definitive set of rules for e-bills. In doing so, the FIT Alliance seeks to improve interoperability between all sectors of the trade and transport industries.
- 1.26 The work of LawtechUK on their Smarter Contracts project demonstrates how existing technologies can be used to modernise traditional documents. LawtechUK are

<https://www.dsi.iccwbo.org/about-icc-digital-standards-initiative>. ICC has also set up a Legal Reform Advisory Board to assist in creating a legal environment for the digitalisation of trade: see ICC, “ICC forms legal reform advisory board to support digital standards initiative” (15 December 2021), <https://iccwbo.org/media-wall/news-speeches/icc-forms-legal-reform-advisory-board-to-support-digital-standards-initiative/>.

³¹ International Trade and Forfeiting Association (“ITFA”), *The ITFA Digital Negotiable Instruments Initiative* (2021), https://itfa.org/wp-content/uploads/2021/06/The-ITFA-Digital-Negotiable-Instruments-Initiative-Second-Edition_final.pdf.

³² These are referred to as “electronic payment undertakings” (“ePUs”). It is envisioned that an ePU has all the properties associated with a traditional negotiable instrument, and its underlying technological solution is a cryptographically secure electronic document: see ITFA, *The ITFA Digital Negotiable Instruments Initiative* (2021) p 16, https://itfa.org/wp-content/uploads/2021/06/The-ITFA-Digital-Negotiable-Instruments-Initiative-Second-Edition_final.pdf.

³³ See United Nations Economic and Social Commission for Asia and the Pacific, *Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific*, <https://www.unescap.org/kp/cpta>.

³⁴ ICC, “Future International Trade Alliance launched” (15 February 2022), <https://iccwbo.org/media-wall/news-speeches/future-international-trade-alliance-launched/>; Global Trade Review, “Shipping industry bodies link up with ICC and Swift to form digitalisation alliance” (15 February 2022), https://www.gtreview.com/news/fintech/shipping-industry-bodies-link-up-with-icc-and-swift-to-form-digitalisation-alliance/?utm_source=Exporta+Publishing+%26+Events+Ltd&utm_campaign=dca451d855-EMAIL_CAMPAIGN_2022_02_16_09_41&utm_medium=email&utm_term=0_3e99358e7b-dca451d855-421721220.

³⁵ The Baltic and International Maritime Council, the International Federation of Freight Forwarders Associations and DCSA have created standards for electronic bills of lading for the dry and liquid bulk, multimodal transport and container shipping sectors respectively. See further: Global Trade Review, “Shipping industry bodies link up with ICC and Swift to form digitalisation alliance” (15 February 2022), https://www.gtreview.com/news/fintech/shipping-industry-bodies-link-up-with-icc-and-swift-to-form-digitalisation-alliance/?utm_source=Exporta+Publishing+%26+Events+Ltd&utm_campaign=dca451d855-EMAIL_CAMPAIGN_2022_02_16_09_41&utm_medium=email&utm_term=0_3e99358e7b-dca451d855-421721220.

currently actively exploring use-cases for the application of smart contract technology,³⁶ one of which includes a “smarter bill of lading”.³⁷ In that regard, LawtechUK notes that:

Use cases will help to show why smarter, technology-enabled ways of contracting can add value to business practices and provide a wide range of commercial and societal benefits.³⁸

International harmonisation

- 1.27 We are aware of calls for the international harmonisation of laws and of the need for global recognition of electronic documents. While our recommendations relate to domestic law and are designed to fit within the existing law of England and Wales, we do not make them in a vacuum: our work is informed by the activities and initiatives elsewhere and is intended to be compatible with them.
- 1.28 The jurisdiction 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”.³⁹

THIS REPORT

- 1.29 In this report, we make recommendations for law reform to allow certain documents in electronic form to be recognised in law as possessable, so that they can have the same legal recognition and functionality as their paper counterparts. We call the documents “trade documents”, but in fact they are a subset of documents used in trade and trade finance which are dependent on possession for their operation. That is, the right to claim performance of the obligation recorded in the document (such as the right to claim payment of a sum of money, delivery of goods or an insurance payout) pertains to the person in possession of the document. The documents covered by our recommendations include all documents possession of which is required (as a matter of law or commercial practice) to claim performance of an obligation, such as bills of exchange, promissory notes and bills of lading. However, we recommend the exclusion of bearer bonds and uncertificated securities.

The criteria to qualify as an electronic trade document

- 1.30 We recognise that not every electronic document has the same functionality. What is important about a paper document is that it cannot be double spent, and once possession is passed to another party, the original possessor loses possession and control of the piece of paper. We recommend that only electronic documents which satisfy particular criteria, designed to replicate these salient features of paper documents, should be susceptible to possession. These criteria include that:

³⁶ LawtechUK, “Smarter Contracts” (September 2021), <https://lawtechuk.io/explore/smarter-contracts>.

³⁷ A “smarter bill of lading” utilises blockchain technology to carry out the functions of a traditional bill of lading.

³⁸ LawtechUK, “Smarter Contracts” (September 2021), <https://lawtechuk.io/explore/smarter-contracts>.

³⁹ ICC, *2020 ICC Global Survey on Trade Finance* (July 2020) p 97, <https://iccwbo.org/publication/global-survey/>.

- (1) in order to prevent double spending, it must not be possible for more than one person (or persons acting together) to exercise control of the document at any one time; and
- (2) when the document is transferred, anyone who was able to exercise control of the document prior to the transfer loses the ability to do so.

1.31 “Double spending” occurs where an asset or thing is transferred to two (or more) different entities or places at the same time. For example, a MS Word document may be transferred from Alice to Bob, yet retained by Alice, who can then also transfer it to Caroline. This raises issues such as who received the document, and what it was that Alice lost in the transfer.⁴⁰ In contrast, tangible objects cannot be double spent. If Alice gives Bob an apple, Alice cannot then subsequently give the same apple to Caroline. So that they can function in the same way as paper trade documents, is important to ensure that any system that hosts trade documents in electronic form is designed to prevent double spending.

1.32 A trade document in electronic form that satisfies the relevant criteria qualifies as an “electronic trade document” for the purposes of the Bill. We recommend that an electronic trade document should be possessable as a matter of law. This will engage the existing common law of possession, to be adapted and applied to electronic trade documents. We recommend that an electronic trade document should be treated in law in the same way as those documents in paper form.

The structure of this report

1.33 This report comprises ten further chapters and four appendices.

- (1) In Chapter 2, we explain the need for reform, including a short description of the developments in technology which have made trade documents in electronic form particularly viable. We explain the overarching considerations that have driven our approach, including why we think that possession should be the operative concept at the centre of the recommended reforms.
- (2) In Chapter 3, we introduce the category of documents which we call “trade documents”. We explain the documents to which possession is relevant for their functionality, and give a summary of how these documents are used.
- (3) In Chapter 4, we set out our recommendations as to the types of documents which we consider should fall within the recommended reforms and scope of the Bill.
- (4) In Chapter 5, we discuss in more detail the “legal blocker” to the digitalisation of trade documents based on the current law’s concept of possession. We discuss the law of possession under the law of England and Wales more generally, and begin to consider how it could be expanded to trade documents in electronic form.

⁴⁰ On this point, see J Fairfield, “Bitproperty” (2015) 88 *Southern California Law Review* 805, 817.

- (5) In Chapter 6, we explain the concept of control, and set out the criteria which we think a trade document in electronic form must satisfy in order to be capable of possession. We explain the provisions of the Bill which contain these criteria.
- (6) In Chapter 7, we discuss what it could mean to possess an electronic trade document.
- (7) In Chapter 8, we consider the consequences of an electronic trade document being amenable to possession.
- (8) In Chapter 9, we discuss other issues in relation to electronic trade documents, such as signing and indorsement, and changes of medium between electronic and paper trade documents.
- (9) In Chapter 10, we consider the potential impact of our recommendations, to form the basis of an impact assessment if the recommendations are implemented.
- (10) In Chapter 11, we include a full list of our recommendations.

1.34 Appendix 1 sets out our full terms of reference for both this work and our broader work on digital assets. Appendix 2 includes a list of those who responded to our consultation exercise, and the stakeholders we have met or corresponded with in the development of this report. We include an explanation of DLT in Appendix 3. The Bill is set out in Appendix 4.

Territorial extent

- 1.35 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 to change the law of England and Wales given its widespread, international use. The vast majority of this report focuses on the law of England and Wales.
- 1.36 However, much of the relevant legislation, including the 1882 Act and the Carriage of Goods by Sea Act 1992, extends to the whole of the UK. The law of Northern Ireland similarly associates possession with physical objects. Scots law has recognised possession of certain intangible rights but has done so through deeming possession of certain physical objects to be possession of the intangible rights.⁴¹ We have sought to engage with stakeholders in Scotland and Northern Ireland throughout this project and are grateful for the input received. We are also grateful to David Bartos of the Scottish Law Commission for his input in relation to Scots law.
- 1.37 It is beyond our remit and expertise to analyse how the Bill could or would apply in Scotland or Northern Ireland, and we do not attempt such analysis in this report. If the Bill is extended beyond England and Wales, appropriate legal advice will be required

⁴¹ Thus possession of an office and its rights can arise from possession of the symbols of an office such as an official scroll or baton: Stair, *Institutions of the Law of Scotland* (2nd ed 1693) 2.1.15. Possession of intangible rights over immoveable property can arise, under legal fictions, from certain physical activities on the immoveable property itself (eg possession of fishing rights over a river through fishing in it or possession of a right of access over land through passing over the land): Erskine, *Institute of the Law of Scotland* (1773), 2.9.3.

to consider whether any changes to the Bill are necessary to accommodate differences between the laws of the different jurisdictions.

- 1.38 We are pleased that the Government is engaging with the territorial offices and devolved administrations to explore the possibility of implementing our recommendations throughout the UK.⁴²

The team working on this report

- 1.39 The following members of the Commercial and Common Law team have contributed to this report: Laura Burgoyne (team manager), Daniella Lupini (team lawyer), Siobhan McKeering (team lawyer), William Vaudry (research assistant), James Taylor (research assistant) and Aparajita Arya (research assistant). Professor Miriam Goldby has been seconded to the Law Commission from Queen Mary University of London on a part-time basis to work on this project and has contributed to this report.

⁴² The territorial offices are the Office of the Secretary of State for Scotland, Office of the Secretary of State for Wales and Northern Ireland Office.

Chapter 2: The case for reform

- 2.1 In this chapter, we set out the case for reform. First, we consider why reform in this area is necessary by briefly explaining the “possession problem” and how it affects the use of electronic documents in trade. We explain how the industry is currently navigating its way around this problem through multipartite contractual frameworks, and consider their advantages and disadvantages.
- 2.2 To illustrate the possibility of digitalised trade, we provide an overview of one of the most prominent, current means of creating trade documents in electronic form: distributed ledger technology. We also set out what our recommendations aim to achieve with reference to the Model Law on Electronic Transferable Records (the “MLETR”), an international initiative providing for trade documents in electronic form. Further, we discuss the principles underpinning our reforms, and explain why we recommend using possession as the operative concept in respect of our reforms.

WHY IS THIS REFORM NECESSARY?

A short summary of the possession problem

- 2.3 The subject matter of this report and the Bill is documents used in trade whose functionality depends, as a matter of law or commercial practice, on their being “possessed”.⁴³ This is because the right to claim performance of the obligation recorded in the document (such as the right to claim payment of a sum of money, or delivery of goods) pertains to the person in possession of the document. The right is embodied in the document, and can be transferred by the (physical) transfer of possession of the document.
- 2.4 By way of example, the concept of possession is central to the Bills of Exchange Act 1882 (“1882 Act”). A bill of exchange is a document that orders the addressee of the bill to pay a sum of money either to a specified person, or to the bearer. In the latter case, the right to receive the specified sum of money travels with the document: only the person in possession of the bill of exchange can lay claim to the sum of money specified in it.⁴⁴ This characteristic of a bill of exchange has made it a critical document in international trade and finance. Bills of exchange are commonly sold to a third party at a discount in return for immediate payment. The third party will then, as the holder in possession of the bill, receive the ordered payment from the addressee when it falls due.
- 2.5 This characteristic is not unique to bills of exchange: a variety of documents critical to trade must be capable of possession in order to fulfil their legal and commercial functions. These documents include promissory notes, bills of lading, ship’s delivery orders, warehouse receipts, mate’s receipts, marine insurance policies and cargo

⁴³ The categories of documents with which this report is concerned are discussed in detail in Chapter 4 below.

⁴⁴ Bills of Exchange Act 1882, s 2 defines the concepts of “bearer”, “delivery”, and “holder” in terms of possession (eg, “bearer” means the person in possession of a bill or note which is payable to bearer”).

insurance certificates. We discuss the legal characterisation and practical use of these documents in Chapter 3.

- 2.6 The recognition that something can be possessed as a matter of law determines much about the legal treatment that it subsequently receives, and has implications for its legal functionality. For example, only things that can be possessed are capable of being subject to a bailment, or to a lien. Things capable of possession therefore have a broader range of commercial uses than those which are not.
- 2.7 The problem that prevents the 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 being amenable to possession.⁴⁵ We discuss the historical context that led to this legal position, and the law on possession in general, in Chapter 5. For current purposes, it is sufficient to say 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”.
- 2.8 There are several 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. The current law prevents those benefits from being fully realised.⁴⁶

Existing contractual frameworks

- 2.9 Only a relatively small number of jurisdictions currently recognise trade documents in electronic form as having the same legal effects as paper trade documents.⁴⁷ Accordingly, the industry has developed several contractual workarounds to enable trade documents in electronic form to be used in the same way as their paper counterparts.⁴⁸ Under these contractual frameworks, parties agree that transferring a trade document in electronic form will put the transferee in a similar position to that of the holder of the equivalent paper trade document. The main difference between transferring, for example, a bill of lading in paper form and one in electronic form under a multipartite contractual framework is the nature of the rights involved. Under a contractual framework, the parties have (personal) rights only against those persons who have agreed to the terms of the system. Any proprietary rights obtained depend on whether the intended effects of transactions occurring over the system are legally

⁴⁵ *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1; *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41.

⁴⁶ These benefits and associated costs are summarised in the introductory chapters of this report and examined in Chapter 10 below.

⁴⁷ These include the Abu Dhabi Global Market, Australia, Bahrain, Belize, Germany, Kiribati, Singapore, South Korea, and the United States and many states within the US through amendments made to the Uniform Commercial Code.

⁴⁸ These systems are: Bolero and essDOCs (both considered at https://www.ukpandi.com/-/media/files/imports/13108/circulars/6236---circular-16_10.pdf), CargoX (https://www.ukpandi.com/-/media/files/imports/13108/circulars/39191---uk_circular_3-20b.pdf), edoxOnline (https://www.ukpandi.com/-/media/files/imports/13108/circulars/36970---uk_circular_7-19b.pdf), e-Title (https://www.ukpandi.com/-/media/files/imports/13108/circulars/23446---uk_circular_12-15.pdf), Tradelens (<https://www.ukpandi.com/-/media/files/uk-p-and-i-club/circulars/2021/uk-club-circular-0221--electronic-paperless-trading.pdf>), and WAVE BL (https://www.ukpandi.com/-/media/files/imports/13108/circulars/38852---uk_circular_16-19.pdf).

recognised as providing such rights. By contrast, transfer of possession of a paper bill of lading gives the holder (proprietary) rights which are enforceable against the world.

- 2.10 The International Group of Protection and Indemnity Clubs (“IGP&I”), insurance groups which underwrite risk in the industry, have so far approved seven private technical solutions that provide alternatives to paper bills of lading based on multipartite contractual workarounds. We have been told anecdotally that the use of these solutions accounts for only a small proportion of trade documents, although there appears to have been a significant increase in the usage of trade documents in electronic form as a result of the COVID-19 pandemic. The European Banking Authority noted that 27% of credit institutions that responded to its Spring 2021 risk assessment questionnaire reported that they marketed or distributed trade finance services via a digital platform.⁴⁹
- 2.11 The International Trade and Forfeiting Association has created contractual workarounds that enable parties to use electronic bills of exchange and promissory notes.⁵⁰ These documents, referred to as “Electronic Payment Undertakings”, are governed by the law of England and Wales and replicate three features of those documents. First, they are undertakings to pay (debt obligations) that are independent from the underlying agreement. Second, they create an unconditional obligation to pay. Third, the payment obligation is transmissible through assignment of the instrument itself.⁵¹
- 2.12 While these workarounds provide many of the benefits of digitalisation, in the consultation paper we highlighted three significant shortcomings.⁵²
- (1) Relying on contractual workarounds rather than the law relating to paper trade documents to transfer rights increases the complexity of transacting. Conducting trade under a multipartite contractual framework requires all parties to agree that they will regard electronic documents as having the same effects as their paper counterparts. To achieve the same effect as transfer of the paper document, a “novation” may be required, meaning that the transferor’s rights are extinguished and identical, substitute rights are created in favour of the

⁴⁹ European Banking Authority, *Report on the use of digital platforms* (September 2021) p 16, https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1019865/EBA%20Digital%20platforms%20report%20-%2020210921.pdf. See also International Chamber of Commerce (“ICC”), *ICC Global Survey on Trade Finance* (July 2020) p 18, <https://iccwbo.org/publication/global-survey/>. ICC noted that 36% of respondents to its Global Trade Survey 2020 expected 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.

⁵⁰ Forfeiting is a technique for the monetisation of an exporting seller’s receivables, often undertaken in accordance with standard rules developed by industry. The financier purchases an instrument, such as a bill of exchange or promissory note, embodying an importer’s or a bank’s debt obligation, which is distinct from the commercial transaction that gave rise to it. The purchase is at a discount and without recourse to the exporter.

⁵¹ Template documentation is included in International Trade and Forfeiting Association, *The ITFA Digital Negotiable Instruments Initiative* (2021) appendix 2, https://itfa.org/wp-content/uploads/2021/06/The-ITFA-Digital-Negotiable-Instruments-Initiative-Second-Edition_final.pdf. See also the Bankers Association for Finance and Trade’s work, available at: <https://www.baft.org/policy-news/baft-releases-best-practices-for-new-financial-asset-on-distributed-ledger-technology/>.

⁵² Consultation paper, para 2.40.

transferee. Furthermore, in the case of a document of title to goods, the bailee in possession of the goods must attorn to the transferee.⁵³ Where parties use paper trade documents there is generally no need for these steps.

- (2) As indicated above, the personal rights that parties acquire under these frameworks are enforceable only against their contractual counterparties. While proprietary rights may be transferred by attornment, this depends on the extent to which the applicable law recognises attornment as having this effect. By contrast, the effects of issue and transfer of paper trade documents are much more consistently recognised globally, as they derive from the transnational law merchant.⁵⁴
- (3) The legal validity and consequences of these contractual frameworks are untested in court and so remain relatively uncertain, as compared to the very well-settled position in relation to paper trade documents.

2.13 We asked for consultees' views on the advantages and disadvantages of using private contractual frameworks in this context.⁵⁵ The majority of consultees, including, for example, Professor Michael Bridge QC, the London Maritime Arbitrators Association ("LMAA"), and the Digital Container Shipping Association ("DCSA") considered that we identified the shortcomings of contractual workarounds accurately, and said that our provisional proposals would be welcomed.⁵⁶ While certain electronic documents on these frameworks may be able to achieve the same legal effects as paper trade documents, they are by no means a perfect substitute for legislative reform of the kind we proposed. Vale International SA told us, for example, that the terms on which parties contract can be negotiated and varied by different system users at the time they agree to them. This may lead to inconsistencies in the rights and obligations of the different parties to what should be a uniform multipartite contractual framework, with the same rules for all.

2.14 On the other hand, the City of London Law Society ("CLLS") considered that our provisional proposals "carrie[d] disadvantages in relation to [the advantages of contractual frameworks]". The CLLS considered that protections would be needed in relation to trade documents in electronic form, including:

⁵³ Attornment consists of an acknowledgment by a person in possession of property that they are now holding the property for the attornee. Attornment passes proprietary rights. The acknowledgment may be by the seller of goods where the goods are in the seller's possession. It may also be by a third party (such as a warehouseman) if they are authorised to give acknowledgment by the seller and they agree to hold the goods as a bailee for the buyer.

⁵⁴ See discussion at para 3.6 below.

⁵⁵ Consultation question 1, para 2.44.

⁵⁶ See also: Digital Container Shipping Association ("DCSA"), *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 5, https://go.dcsa.org/ebook-eb1/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-eb1. DCSA observed that all seven of the systems so far approved by the International Group of Protection & Indemnity Clubs ("IGP&I") risk creating "walled gardens" because they lack interoperability. DCSA noted that the lack of interoperability of these systems has been cited as a major reason for not adopting electronic bills of lading by several large shippers.

at least some standards for the systems of record, possibly with regulatory oversight, as well as clear application of money laundering, anti-terrorism and data protection rules.

- 2.15 The CLLS said that the private contractual frameworks discussed in the consultation paper “were no doubt established to provide users with those safeguards”. They noted that the Law Commission’s proposals “do not provide any safeguards in these regards”. Similarly, IGP&I noted that private contractual frameworks offer an “apparent secure system ... on which to build confidence”. They suggested that to “maintain confidence in an open playing field, the [electronic trade documents] legislation must ensure sufficient safeguards”.
- 2.16 With regard to these comments, we consider that the Bill’s remit is simply to remove the legal blocker to the possession of electronic trade documents. Money laundering, anti-terrorism and data protection rules will apply to electronic trade documents that fall within the scope of our recommended reforms where relevant, without the need to refer to such rules expressly in the Bill. None of the issues arising from the application of these laws will be exacerbated by our recommendations, and neither will the “secure system” offered by contractual frameworks be undermined by our recommended reforms. In addition, as discussed below,⁵⁷ we have recommended including express reliability and integrity requirements in the Bill. These additional requirements should alleviate concerns relating to a lack of adequate safeguards in the use of electronic trade documents and related systems.
- 2.17 In any case, we do not intend to suggest that our recommendations would render contractual arrangements redundant. The London Metal Exchange (“LME”) has implemented a contractual framework for warranting metal under the existing law of England and Wales, and has said that it does not require reforms of the kind we provisionally proposed in order to maintain its current approach. The LME raised particular concerns about the impact of our proposals on such systems.
- 2.18 It is important to note that while our recommendations do not mean that parties cannot use alternative contractual arrangements, parties cannot contract out of the provisions of the Bill where they would otherwise apply. As such, if a system purports to enable the issue, transfer and accomplishment of a trade document (such as a bill of lading), and the relevant document qualifies as an electronic trade document for the purposes of the Bill, the provisions of the Bill would apply. Where, however, the document in question does not qualify as an electronic trade document, the Bill does not affect the parties’ ability to use private contractual systems to achieve the same legal result as would be achieved if the document fell within the scope of the Bill. The position is the same under the existing law for paper trade documents. That is, if a document qualifies as a bill of lading, it has certain effects as a matter of law regardless of the parties’ contractual arrangements.

New possibilities from new technology

- 2.19 The current state of the law in relation to possession was not obviously in need of reform when the technology to support electronic documents was at an early stage of development. In our 2001 advice to Government entitled *Electronic Commerce*:

⁵⁷ We discuss the reliability and integrity requirements in more detail from para 6.32 below.

Formal Requirements in Commercial Transactions (“2001 Advice”), we discussed the possibility of electronic bills of lading, and 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.⁵⁸

That passage ended with a footnote which stated: “we are told that there is currently no market demand for such an equivalent”.⁵⁹

- 2.20 Since publishing our 2001 Advice, new technologies have emerged, and industry calls for digitalisation have increased. Consequently, these statements are no longer a true reflection of either the available electronic alternatives to paper, or market demand. Digital technology has developed to the extent that trade documents in electronic form that are a “true electronic equivalent” of paper trade documents can be created. As explained below, the law in this area has become outdated as a result of these technological developments. This has prompted judges to call on the Law Commission to consider the law on possession with a view to reforming it.⁶⁰

Distributed ledger technology (“DLT”)

- 2.21 In recent years, DLT has been suggested as a key technological development which could support trade documents in electronic form.⁶¹
- 2.22 We have included an explanation of this technology in Appendix 3 of this report for the sake of concision. A distributed ledger is a store of information or data. It is shared (that is, “distributed”) among a network of computers (known as “nodes”), and may be available to other participants. DLT is technology that enables the operation and use of a distributed ledger. The ledger contains a record of data, such as a history of transactions involving an electronic promissory note, and each node holds a copy of the ledger. When data is added to the ledger – to, for example, record that an electronic document has been transferred from person A to person B – every node’s copy is updated.
- 2.23 The distinguishing feature of DLT compared to traditional, centralised databases is that the ledger is not maintained or controlled by a central administrator or entity. This means that network participants do not have to reconcile their local databases with a ledger maintained by a central administrator. Under traditional account-based transactions overseen by an intermediary, such as a bank, the authority to update the

⁵⁸ Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper, para 4.8.

⁵⁹ Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper, para 4.8 n 6.

⁶⁰ From para 2.83 below.

⁶¹ E Ganne, World Trade Organisation, *Can Blockchain Revolutionize International Trade?* (2018) https://www.wto.org/english/res_e/booksp_e/blockchainrev18_e.pdf. 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.

ledger is delegated to the bank. It is the bank who is responsible for updating the ledger by debiting the account of the payer, and crediting the account of the payee.⁶²

- 2.24 Instead, in DLT systems, participants approve and eventually synchronise additions to the ledger through an agreed “consensus mechanism”. The consensus mechanism is set by the software underlying the DLT system.⁶³ In general, it requires some or all of the participants to determine the validity of a proposed data entry.⁶⁴ If the participants determine that the proposed entry is valid, it is eventually added to the ledger. The consensus mechanism is typically designed so that, once data is added to the ledger, the data is very difficult to amend.
- 2.25 The immutability of the ledger means that participants in the system can trust in its 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).⁶⁵ Similarly, any attempt to manipulate the contents of the ledger to facilitate a fraud is, practically speaking, impossible.
- 2.26 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 those transactions is for all practical purposes immutable.⁶⁶ Additionally, DLT systems generally place control of an electronic document in the hands of the person with knowledge of the relevant “private key”. In general, participants in a DLT system have a private key, which is a unique string of data that is (at least initially) known only to the participant. Participants also have a “public key”, another string of data which is derived from the private key, and which can be shared with other participants. A participant’s private key can be combined with the data of a transaction to create a digital signature for the participant (which they can then use to digitally sign a transaction). The authenticity of this digital signature can be verified by the recipient of the transaction using the participant’s public key. Public key cryptography can be used to effect dealings with electronic documents, including a transfer of the document to another party. It is possible to

⁶² Bank for International Settlements, *BIS Working Papers No 924, Permissioned distributed ledgers and the governance of money* (January 2021) p 2, <https://www.bis.org/publ/work924.pdf>.

⁶³ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 6, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁶⁴ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 6, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁶⁵ See also: DCSA, *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 5, https://go.dcsa.org/ebook-ebi/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-ebi for a consideration of the potential of distributed ledger technology (“DLT”) systems to reduce risk in the transfer of electronic bills of lading.

⁶⁶ This can be contrasted with the existing contractual arrangements, which we discuss from para 2.9 above, 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.

design systems that make the content of electronic documents invisible to all but the relevant parties, thereby safeguarding commercially sensitive information.⁶⁷

Central registry systems

2.27 Many of the systems hosting trade documents in electronic form already in use, underpinned by multipartite contractual arrangements, are central registry systems which, unlike a distributed or decentralised ledger, are administered centrally. Users sign up for accounts which are accessed with a password or other security credentials. Documents with unique identifiers are allocated to a particular user account upon issue or transfer, and the relevant user can hold or transfer the document. The person or persons with knowledge of the relevant security credentials (and who are therefore able to transact on that account) can control what happens to the document while it is allocated to the relevant account. Updates to registry records (that establish to which user account the document is allocated) can be set up to occur automatically when transactions take place. Not all systems hosting trade documents in electronic form are therefore DLT-based, nor do they need to be to satisfy our recommended criteria for electronic trade documents (discussed in Chapter 6).

OTHER REFORM INITIATIVES

2.28 Over the past few years there have been various initiatives aimed at recognising the use and legal validity of electronic documents. The principal initiatives include the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea 2008 (the “Rotterdam Rules”), the MLETR, developments in Singapore, and the US Uniform Commercial Code. We discussed these in detail in the consultation paper,⁶⁸ and summarised the approach of other countries which have taken steps to provide for electronic trade documents.⁶⁹

2.29 One aspect these legislative efforts have in common is that they all attempt to address the possession problem.⁷⁰ This is because possession is fundamental to the way that trade documents operate internationally, across all legal systems. Given the recent emphasis on the MLETR, we include a brief summary below.⁷¹

The MLETR

2.30 In 2017, UNCITRAL formulated the MLETR, which is aimed specifically at enabling the widespread use of electronic documents. It includes a general provision that provides that:

⁶⁷ M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 2.47.

⁶⁸ Consultation paper, ch 4.

⁶⁹ Including Australia, China, Germany and Japan. Consultation paper, from para 4.85.

⁷⁰ Introduced at para 2.3 above and discussed in detail in Chapter 5.

⁷¹ For further detail, see ch 4 of the consultation paper.

An electronic transferable record shall not be denied legal effect, validity or enforceability on the sole ground that it is in electronic form.⁷²

- 2.31 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”.⁷³ At the time of publication of this report, legislation “based on or influenced by” the MLETR has been adopted in the Abu Dhabi Global Market, Bahrain, Belize, Kiribati, Paraguay and Singapore.⁷⁴
- 2.32 The MLETR applies to “transferable documents or instruments” in electronic form, which does not include straight bills of lading or “documents or instruments, which are generally transferable, but whose transferability may be limited due to other agreements”.⁷⁵
- 2.33 In order to have functional equivalence with a transferable document or instrument, an electronic record must satisfy a number of requirements. It must:
- (1) contain the information that would be required to be contained in its paper equivalent; and
 - (2) a reliable method must be used to (i) identify it as the electronic transferable record; (ii) render it capable of being subject to “control” from its creation until it ceases to have any effect or validity; and (iii) retain its integrity so that the information in the record remains complete and unaltered.
- 2.34 The MLETR also sets out the functional equivalence of possession, being control. Article 11 requires that a “reliable method” be used to establish “exclusive control” of an electronic transferable record by a person, and to identify that person as the person in control. 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 says that it is intended to operate as a functional equivalent to the fact of possession.⁷⁶
- 2.35 The “reliable method” referred to in articles 10 and 11 must be “as reliable as appropriate” having regard to criteria set out in article 12.
- 2.36 Amendments to the Singapore Electronic Transactions Act 2010 were adopted in 2021, implementing reforms in line with the MLETR.⁷⁷ The most significant divergence from the MLETR in the Singapore legislation is that the Singapore legislation envisages the possibility of an accreditation system for reliability. Section 16O provides that, if an electronic transferable record is associated with an electronic

⁷² MLETR, art 7(1).

⁷³ UNCITRAL, “Frequently Asked Questions – UNCITRAL Texts”, <https://uncitral.un.org/en/about/faq/texts>.

⁷⁴ UNCITRAL, “Status: UNCITRAL Model Law on Electronic Transferable Records (2017)”, https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records/status.

⁷⁵ UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records*, para 88.

⁷⁶ See UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records*, para 107. See also paras 13(b), 108, and 119.

⁷⁷ Electronic Transactions (Amendment) Act (No 5/2021), amending the Electronic Transactions Act 2010.

transferable record management system provided by an approved provider, the methods used by that management system are presumed “reliable”. Singapore is yet to introduce an accreditation system and, unless and until such a system is set up, reliability is assessed in the same way as under the MLETR.

CONSULTEES’ SUPPORT FOR REFORM IN ENGLAND AND WALES, AND VIEWS AS TO IMPACT

- 2.37 In the consultation paper, we made provisional proposals for reform of the law in England and Wales to allow for trade documents which depend on possession to be used in electronic as well as paper form. Consultees expressed strong support for this objective and for our proposed approach. Some themes that emerged from their responses include the need for paper and electronic documents to have equivalent effect, a preference for law reform that is technologically neutral, and a preference for the least interventionist approach to reform. These themes are addressed in turn below.
- 2.38 Some consultees, while supportive of the overall aims of our work, queried whether expanding the notion of possession was the correct approach. We address these arguments separately below from paragraph 2.63.
- 2.39 Consultees also told us what they thought the impact of our recommended reforms would be.

General support for reform

- 2.40 Many consultees placed emphasis on the need for electronic trade documents to have the same legal effect as paper trade documents.
- 2.41 The LME expressed support for:
- any initiative that would allow it to create electronic documents of title in respect of metal for use within its own settlement system, in particular where such arrangements are capable of being recognised as valid under other legal systems.
- 2.42 The LMAA said that they were “entirely supportive of the objective behind this draft bill”, and added that there was an “overwhelming case for promoting electronic trade documents in place of their paper equivalents”. The Grain and Feed Trade Association, an international trade association representing nearly 2,000 member companies, said that they were “in favour of measures to facilitate and increase the use of electronic documents to support the international trade in Agri-commodities”. ICC International Maritime Bureau said:
- The IMB supports the Law Commission’s open and public consultation into reform to enable the legal recognition of electronic trade documents such as bills of lading and bills of exchange... . There are clearly benefits in the UK removing the legal blocker to EBsL – particularly for enabling faster trade transactions, cost savings and other efficiencies provided.
- 2.43 As these remarks show, consultees supported the focused aim of enabling electronic documents to be used in the same way as their paper counterparts. Sullivan &

Worcester LLP recommended that the Law Commission should focus on “the issue of possession to enable recognition of electronic trade documents in English law”.

- 2.44 Consultees identified various advantages to reforming the law to ensure that electronic trade documents have the same effect as their paper counterparts. The LMAA said it would save time and money, and noted that “the maritime and financial sectors are pushing for paperless trade to be recognised and enforceable and will welcome this Act”. The British Insurance Law Association said that the speed of electronic documents was an obvious advantage over paper, and that the platforms for electronic trade documents “appear[ed] to be a secure system to adopt”.
- 2.45 The Centre for Commercial Law at the University of Aberdeen set out numerous policy reasons for reform. They said:

We agree that there is a pressing need for law reform in the UK in this area to facilitate the use of technology in trade, provide legal certainty and predictability regarding the legal status of electronic trade documents and give these documents the legal recognition that their paper counterparts have. This will significantly help speed up the overdue transition to paperless trade to better safeguard and maintain the global trade flow of information relating to the trade in goods and build resilience to shocks such as COVID-19.

- 2.46 There was also support for extending our provisional proposals for reform beyond England and Wales. Professor Andrew Steven, former Scottish Law Commissioner, said:

I favour strongly UK-wide implementation. Much of the existing legislation, notably the Bills of Exchange Act 1882 and the Carriage of Goods by Sea Act 1924 applies to Scotland as well as south of the border. Despite the differences in property law this has not proved problematic.

A technology-neutral approach with minimal intervention

- 2.47 The importance of reforming the law in a way that is technology neutral was another theme of consultees’ support for our provisional proposals.⁷⁸ D2 Legal Technology commended the simplicity of the provisional proposals, and supported the aim of “future-proofing” by keeping them technology neutral. The Mining and Metals Digitalisation Forum also agreed that a technology neutral approach was the right one. They considered that the standards for electronic document platforms and systems should be determined by the industry. The LME and DCSA similarly expressed support for a technology neutral approach.
- 2.48 An additional theme that arose from consultee responses was the importance of a restrained approach to law reform in this area.⁷⁹ Professor Sir Bernard Rix said that the Law Commission was:

⁷⁸ We discuss this in more detail from para 2.99 below.

⁷⁹ We discuss this in more detail from para 2.59 below.

in principle right to restrain [itself] from trying to legislate in the new world of ETD, which in any event is changing so fast. And the legislator cannot pretend to be a technologist.

2.49 Dr Simone Lamont-Black agreed that it would be useful to “leave matters as close to undisturbed as possible while bringing [the law] up to date to cater for business reality of the 21st century”. In a similar vein, Linklaters LLP “fully support[ed] the Law Commission’s ultimate objectives as well as its desire to adopt the least interventionist approach”.

The potential impact of reform

2.50 In the consultation paper, we considered the impact of our provisional proposals for reform and sought the views of consultees as to the potential benefits and costs of the transition to electronic trade documents.⁸⁰ Below, we highlight certain themes which arose in those responses, and consider them in more detail in Chapter 10.

2.51 As a preliminary point, we asked consultees about the number of documents that would be covered by our provisional proposals.⁸¹ We estimated that the total global number of paper trade documents used in contained shipping was approximately 28.5 billion.⁸² Although some consultees agreed with our estimate, others said that it was too high, and most consultees agreed that the number of documents used in a transaction would vary depending on factors such as the sector and type of transaction.⁸³ It is clear, however, that a very large number of documents would be covered by our recommendations.

Potential benefits

2.52 Consultees told us that our provisional proposals for reform of electronic trade documents could have the following potential benefits.

- (1) Costs savings, both in relation to resourcing and operational costs (for example, costs associated with paper, printing/photocopying, postage/courier services, filing, storage and staffing).
- (2) Increased productivity (for example, not having to re-enter information, saving time searching for lost documents and eliminating the risk of mistakes).
- (3) Increased efficiency in trade processes and labour. The main efficiency gains identified by consultees were the reduction in instances of time lost to delays, and of documentation arriving only after the shipments to which it relates.
- (4) Increased transparency of supply chains. Most consultees agreed that a shift to trade documents in electronic form, facilitated by our provisional proposals, would increase supply chain transparency. Others noted that supply chain

⁸⁰ Consultation paper, ch 7.

⁸¹ Consultation questions 42 to 45, paras 8.42 to 8.45.

⁸² Consultation paper, para 7.16.

⁸³ We discuss this in more detail in Chapter 10.

transparency would also depend on the systems used, the wishes of parties and the nature of the transactions.

- (5) Environmental benefits. Some consultees said that the transition would mean reduced reliance on paper and couriers which would benefit the environment. Other consultees agreed with this but considered that it is not clear that the transition to electronic documents would create environmental benefits overall, particularly given the energy consumption of some DLT-type systems.
- (6) Benefits for small and medium-sized enterprises (“SMEs”) and consumers. Some consultees agreed that our provisional proposals could provide particular benefits for SMEs and consumers, in the form of lower costs of financing and reduced delays. However, there is a question as to whether these potential benefits would actually be passed on to SMEs and consumers rather than being kept by other players within the supply chain, such as those involved in carrying or storing the goods.

Potential costs

- 2.53 As well as identifying possible benefits associated with adopting our recommended reforms, consultees also mentioned potential costs. In the consultation paper, we said that the most immediate costs would be transitional, arising from the need to train staff on new systems, develop and refine new internal processes, and negotiate with trading partners.⁸⁴
- 2.54 The energy consumption of some DLT platforms continues to be a source of concern. The essential nature of the problem is the power required by network users of some DLT systems employing computational capacity to verify blockchain transactions. At a time of increasing global efforts to combat climate change, the scaling up of a highly energy intensive technology must be carefully evaluated. Consultees noted that not all DLT systems involve the same energy consumption and that systems can be configured to minimise energy consumption by, for example, using proof-of-stake rather than proof-of-work protocols.⁸⁵

The effect of potential reform on fraud

- 2.55 In the consultation paper, we commented on the perceived comparative security of electronic trade documents.⁸⁶ We said the features of trade documents in electronic form which satisfy the requirements of the Bill “will be significantly more secure than their paper counterparts”. As we discuss in Chapter 10,⁸⁷ some consultees made a strong, cogent argument that the nature of fraud in international trade and, in particular, the incidence of collusion, means that electronic documents will not necessarily reduce the risk of fraud. As Professor Michael Bridge QC said, “fraud will

⁸⁴ Consultation paper, para 7.68.

⁸⁵ Eg, some permissioned DLT systems use a “proof of stake” consensus mechanism whereby 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.

⁸⁶ Consultation paper, from para 7.50.

⁸⁷ Para 10.24 below.

always find a way. Computers can be hacked. Imaginary shipments can be concocted out of thin air”.

- 2.56 Our recommendations require the digital architecture of an electronic document system to ensure that no more than one person (or persons acting jointly) at any one time can use, transfer or otherwise dispose of a trade document in electronic form. Additionally, the movements of such documents will be recorded in a manner which makes tampering very difficult to achieve. However, as we explain in Chapter 10, we agree that there are some types of fraud to which paper trade documents and electronic trade documents are equally susceptible.

REFORMING THE LAW TO ALLOW FOR TRADE DOCUMENTS IN ELECTRONIC FORM

- 2.57 The support from consultees, and the evidence received concerning the benefits of reform in this area, have confirmed our provisional view that there is a strong case for law reform in this area. In this report, therefore, we make recommendations for reform which would allow documents in electronic form that satisfy certain criteria to have the same functionality as their paper counterparts.

- 2.58 We have developed our provisional proposals in the consultation paper, and refined our final recommendations in this report and in the Bill, based both on principles and on considerations of how parties use electronic trade documents in practice. In particular, our reforms have been underpinned by three general principles, all of which were generally supported by consultees:

- (1) adopting the least interventionist approach;
- (2) technological neutrality; and
- (3) the importance of international compatibility.

We discuss each below.

THE LEAST INTERVENTIONIST APPROACH

- 2.59 The law of England and Wales functions highly effectively in relation to paper documents, and is currently trusted by a large number of commercial entities engaging in cross-border trade. Throughout this project, we have aimed to take the least interventionist approach to reform. We intend that, if our recommended reforms are implemented, industry can continue to operate in accordance with the same rules and according to the same practices as they currently do, but with a choice as to whether to use electronic or paper trade documents.
- 2.60 Central to this least interventionist approach is our view that trade documents in electronic form should be capable of being possessed, and that the same laws and practices should apply to trade documents whether in paper or electronic form. We explain this approach in more detail below. We then explain why we think there is a need for legislative intervention rather than common law development, although the courts would nevertheless retain an important role.

Allowing for possession of trade documents in electronic form

2.61 In the consultation paper, we provisionally proposed that a trade document in electronic form should be capable of being possessed, provided that it satisfied certain criteria designed to ensure that it replicated the salient features of paper trade documents.⁸⁸ In the following chapters, in particular Chapters 3 and 5, we provide a full explanation of possession and possessory concepts and their fundamental role in relation to the types of documents with which this project is concerned. However, it is helpful to explain up front our reasons and justifications for focusing on possession, as it underpins our approach throughout this report and in the Bill.

Consultees' views

2.62 Below, we draw on responses received to the digital assets call for evidence as well as to the consultation paper on electronic trade documents. We received similar comments in both sets of responses, and many of the concerns raised considered the position of digital assets generally, rather than electronic trade documents as a particular subset of digital assets.

2.63 Some consultees suggested that possession is too intrinsically linked to tangibility, or already too complex and burdened a concept. For example, Dr Michael Crawford said that rendering digital assets possessable “would further complicate the already complex concept of possession”. Professor Kelvin Low said that making digital assets possessable:

would be quite undesirable ... the extension of “possession” unavoidably employs a metaphor which is likely to be difficult to apply. The result would be that the development of the law will be left to the vagaries of litigation.

2.64 Professor Michael Bridge QC said he was “not in favour of introducing possession into the equation: it will have to be defined in terms of control anyway”.

2.65 CLLS said:

We have serious reservations about the application of certain complex and nuanced elements of the law relating to possession (such as, the *animus possidendi*) to modern legal and technological systems that are intended to give primacy to the ledger as a primary record of entitlement to or in relation to a particular digital asset.

2.66 Professor Sir Roy Goode suggested that expanding the concept of possession is unnecessary and that a concept such as control, which does not imply physical custody or control, would be more suitable. Relatedly, some consultees suggested that digital assets should be neither things in action nor things in possession, but belong instead to a third category of personal property which is distinct from either of these.

2.67 In respect of digital assets generally, Professors Fox and Gullifer said:

Our concern is that possession has a highly specialised meaning that has developed to govern its use in transactions involving natural persons and tangible assets such

⁸⁸ Consultation paper, from para 5.43.

as land or goods. Much of the law has developed in relation to situations where tangibles are not in the actual physical control of the person who is claiming to be in possession of them or who is claiming to sue on a possession-based title (eg someone who has temporarily lost something). To accommodate these, the common law has developed subtly different grades of possession (such as actual vs constructive possession and factual vs legal possession) to explain the incidence of rights between the parties and the world at large. It may well be that such accretions are not necessary or desirable for the law relating to digital assets.

- 2.68 Professor Duncan Sheehan said that he agreed that “expanding possession to include [electronic trade documents] more easily brings electronic trade documents into the same regime as paper ones”. However, he sounded a note of caution:

Simply that from a linguistic point of view talk of possession of intangibles is unusual. While it is novel as a proposition given the courts’ predilection for concentrating on tangibility what matters here is use and control of a separable thing. I noted [previously] that other “things” than just electronic trade documents such as bitcoin meet these criteria. That remains my view and it will be important that any legislation specifically make clear that it applies only to these documents.

- 2.69 We agree that the correct approach may differ as between electronic trade documents and other digital assets, including cryptoassets. We also take the view that the existence of “subtly different grades of possession” is a virtue for the purposes of our recommendations. The nature of relative rights to electronic documents is likely to make conclusions about factual possession as fact-dependent as they are in relation to conventional objects of property rights.

Discussion and our recommended approach

- 2.70 We remain of the view that using possession as the operative concept in respect of trade documents in electronic form is the right approach. As explained in the following chapter, possession has a core role in the current functionality of paper trade documents, both at common law and in domestic statutes, in terms of establishing who may have certain rights and entitlements. Possession is also central to a number of other concepts that are relevant to the ways in which paper trade documents are used or protected, including being custodied in possession-based arrangements such as bailment, and used as collateral in possessory security arrangements such as a pledge. It makes them protectable through proprietary torts such as conversion. In order to ensure that electronic trade documents are treated in law as equivalent to their paper counterparts, we think it desirable to maintain the same language and substantive legal characterisation in relation to both.
- 2.71 As discussed in Chapter 5, control is a fundamental element in the assessment of possession and will therefore be relevant for the purposes of establishing what constitutes possession of an electronic trade document. However, using control on its own without any reference to possession could give rise to a situation where, although an electronic document is identical in substance to its paper counterpart, it would be treated differently because it could not be the subject of possessory treatments and remedies.

- 2.72 Using possession as a determinative concept allows electronic trade documents to be plugged directly into an existing legal framework of commercially useful concepts, with which the international trading community is already familiar. This is an especially important consideration given that the law of England and Wales underpins a significant amount of international trade. We think this approach allows for the least disruption to existing legal arrangements and analyses.
- 2.73 As discussed in the following chapter, paper trade documents which function on the basis of possession are already unique in law, being legal claims which take a physical form, and which are therefore characterised as things in possession. We think it is logical to extend this to their electronic equivalents. We demonstrate in Chapters 5 and 7 that many of the factors which are relevant to the possessability of paper documents can be replicated in the electronic environment. The extension can therefore be achieved without significant change to existing concepts which are relevant to assessing possession.
- 2.74 We note also that the MLETR retains a role for the concept of possession in respect of electronic transferable records, given its centrality to their function. Although control is the central concept in the MLETR, it is said to be a “functional equivalent to the fact of possession”, and the MLETR seeks to preserve and plug in to the legal consequences arising from possession in any given jurisdiction.⁸⁹ Under the MLETR, if a document is in someone’s exclusive control, any legal requirement that it be in someone’s possession in order for certain consequences to follow will be treated as met.⁹⁰ In order to benefit from the existing law on possession and to ensure that there is no difference in legal treatment between documents in different forms, we think it is clearer and more direct to extend the application of the concept of possession itself.
- 2.75 Consultees agreed with us that particular arguments point in favour of possession in respect of electronic trade documents. For example, although in favour of a different approach in respect of digital assets more generally, Professors Fox and Gullifer said:

We acknowledge the advantage of using the concept of digital possession to explain the transfer of property in electronic trade documents. The reason is that the proposed electronic regime is modelled directly on existing transactions with tangible documents. The delivery of the documents is the key concept in explaining how title in them is transferred.

- 2.76 Similarly, the Cloud Legal Project in its response to the digital assets call for evidence said:

We recognise that digital possession may bring advantages in terms of facilitating trade ... if a digitised version of [a bill of lading] were also capable of possession these commercial transactions [such as a pledge for an advance of funds] could be expected to continue without any need for further legal change. It may therefore be

⁸⁹ UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records*, paras 106 and 107.

⁹⁰ MLETR, art 11.

helpful to introduce digital possession as a simple way of preventing the need to reinvent those transactions.

- 2.77 Our recommendations will mean that parties can use the law that currently applies to paper trade documents when transacting with electronic trade documents. There will be no need for separate regimes with equivalent effects.

Recommendation 1.

- 2.78 Trade documents in electronic form should be capable of being possessed as a matter of law, provided that they meet certain criteria which ensures that they can replicate the salient features of paper trade documents.

Cryptoassets and other digital assets

- 2.79 We acknowledge that the same arguments do not necessarily apply in respect of other forms of digital assets, including cryptoassets. This is primarily because other digital assets generally do not seek to replicate the legal functionality of a specific and idiosyncratic form of tangible personal property in the way that electronic trade documents attempt to replicate exactly the legal functionality of paper trade documents. In fact, cryptoassets were intentionally created to avoid replicating certain of these features. As a result of this, cryptoassets and certain other digital assets have idiosyncratic features that make drawing wholly-applicable analogies with existing categories of personal property particularly difficult.
- 2.80 These differences and idiosyncrasies might mean that the automatic application of legal rules developed for more traditional assets would be undesirable in the context of certain digital assets. There is therefore an argument (echoed by the responses of consultees above) that the opportunity should be taken to develop concepts, such as that of control, which are better suited to the unique nature of digital property.
- 2.81 In addition, the argument for preserving the status quo has less force in relation to digital assets in general, for which there is less settled market practice compared with trade documents. Indeed, this is particularly the case for nascent digital assets such as cryptoassets, where market practice is evolving almost daily.
- 2.82 In our forthcoming consultation paper on digital assets, we will explore other possible approaches to the legal categorisation and treatment of digital assets more generally. We do not consider that such a fundamental re-think is necessary or justified in respect of electronic trade documents, where a workable solution can be found to bring them within the category of things in possession.

The need for legislation

- 2.83 As we discuss in detail in Chapter 5, the existing law of possession in this area is governed by the common law. The UKJT's legal statement on cryptoassets and smart contracts recognised "the ability of the common law to stretch traditional definitions

and concepts to adapt to new business practices”.⁹¹ We have therefore considered whether it would be possible to leave it to the courts to develop laws allowing for trade documents in electronic form to be capable of possession. However, extending the concept of possession to any type of intangible property would be a significant development.

- 2.84 In two leading cases, it was observed by the court that while there were powerful arguments for extending possessory rights to intangibles, such a step would be too big a one for the courts to take; it needed to be done by Parliament. In *Your Response v Datateam Business Media Ltd*, Lord Justice Moore-Bick included a plea that Parliament develop a statutory means of accommodating digitalised material.⁹² Similarly, both Lord Walker and Baroness Hale in *OBG Ltd v Allan* felt it was more appropriate for such a reform to come from Parliament, after consideration by the Law Commission.⁹³ Given the iterative and mostly incremental nature of common law development, it is perhaps not surprising that judges have been cautious about making such a significant change in a single case, even though it might be justifiable on legal and policy grounds.
- 2.85 In addition, we think that in order to be treated in law as equivalent to a paper trade document, a trade document in electronic form must exhibit the distinctive characteristics that make paper documents and other tangible objects possessable. This means that only electronic documents that satisfy certain criteria should be capable of being used in place of paper trade documents. Given the complexity of the issues, it is important that the criteria for trade documents in electronic form to qualify as “electronic trade documents” are set out clearly, and in a way that generates sufficient market certainty for suitable systems to be developed. Ad hoc development through the common law would not provide the requisite degree of clarity.
- 2.86 We therefore recommend that this step be taken by means of legislative reform so that, provided they fulfil certain criteria, trade documents in electronic form should be treated in law in the same way as their paper equivalents. This would mean that they would give rise, by their issue, transfer and surrender, to the same effects (in statute, common law and commercial practice) as their paper counterparts.

Reform via secondary legislation?

- 2.87 We are aware of suggestions that reform in this context could be facilitated 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. Sections 1(5) and 1(6) of the Carriage of Goods by Sea Act 1992 (“COGSA 1992”)

⁹¹ UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019) para 77, <https://technation.io/lawtechukpanel/>.

⁹² *Your Response v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] 1 QB 41 at [27].

⁹³ *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [271] by Lord Walker and at [316] to [317] by Baroness Hale.

give a power to make regulations to enable bills of lading, sea waybills and ship's delivery orders issued by electronic means.⁹⁴

2.88 As we said in the consultation paper, we do not consider that either of these provisions is wide enough to accommodate the reforms we are recommending.⁹⁵ 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 provide 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.

Recommendation 2.

2.89 There should be legislative reform to allow for trade documents in electronic form that satisfy certain criteria to be possessed and therefore to have the same legal effects as their paper equivalents.

The role of the courts

2.90 Our recommendations are for a statutory “framework” to allow trade documents in electronic form that satisfy certain criteria to be treated as equivalent to paper trade documents.⁹⁶ This would allow them to “plug in” to the existing legal framework for paper trade documents, rather than being made subject to a bespoke set of rules applicable only to trade documents in electronic form.

2.91 If our recommendations are implemented, the courts will be central in interpreting and applying the provisions of such legislation in light of the existing common law applicable to paper trade documents, adapted for digital subject matter. We think this is the least interventionist approach and allows the industry to continue to operate according to laws and practices with which they are already familiar.⁹⁷

2.92 In general, an Act must be read and applied in the context of the general body of law into which it is assimilated.⁹⁸ It has been said that:

⁹⁴ We recommend the repeal of these sections: see discussion from para 9.102 below.

⁹⁵ Consultation paper, para 6.156.

⁹⁶ We note that this is different from instituting a comprehensive legislative scheme (such as that in *Marcic v Thames Water Utilities* [2003] UKHL 66, [2004] 1 All ER 135), which would be taken as an indication that existing common law rights and remedies should not continue to apply in the same circumstances: See D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 25.11.

⁹⁷ See also the discussion from para 2.59 above.

⁹⁸ D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) para 25.1.

it is a sound rule to construe a statute in conformity with the common law, except where or in so far as the statute is plainly intended to alter the course of the common law.⁹⁹

2.93 The overarching requirement is for the court to give effect to the intention of the legislator, as objectively determined having regard to all relevant indicators and aids to construction.¹⁰⁰ These may include, among other things, explanatory notes to legislation,¹⁰¹ as well as any relevant Law Commission reports.¹⁰² In *Cooke v United Bristol Health Care*, Carnwath LJ said:

Where a Bill is based wholly or partly on a Law Commission recommendation, it is appropriate to take account of the report to find the mischief to which the provision was directed.¹⁰³

2.94 In this regard, we are reminded of the words of Lord Scarman in *Duport Steels*:

our law requires the judge to choose the construction which in his judgment best meets the legislative purpose of the enactment.¹⁰⁴

2.95 In particular, where terms are undefined in the legislation, such as the term “possession”,¹⁰⁵ the role of the courts is to apply the existing common law to ascertain the meaning of those terms, and to provide them with suitable content.¹⁰⁶

⁹⁹ *R v Morris* [1867] LR 1 CCR 90, 95, by Byles J.

¹⁰⁰ *Bogdanic v Secretary of State for the Home Department* [2014] EWHC 2872 (QB), [2014] All ER (D) 25 (Sep) at [48] by Sales J.

¹⁰¹ D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 24.14, where it is said that explanatory notes to an Act may be used to understand the background to and context of the Act and the mischief at which it is aimed.

¹⁰² See eg D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 24.9, which makes the point that: “Legislation is often preceded by a government report or a report by a parliamentary committee, the Law Commission or some other official body. Reports of this nature form part of the enacting history and may be referred to in construing the legislation”. This has been judicially approved in *Iceland Foods Ltd v Berry (Valuation Officer)* [2018] UKSC 15, [2018] 3 All ER 192 at [7] by Lord Carnwath.

¹⁰³ [2003] EWCA Civ 1370, [2004] 1 All ER 797 at [54]; see also *R v G* [2003] UKHL 50, [2004] 1 AC 1034 at [29] by Lord Bingham, where the court considered the Report on Offences of Damage to Property (1965) Law Com No 29, to ascertain the Parliament’s meaning of “reckless” in the Criminal Damage Act 1971, s 1. It has been observed that the courts have sometimes gone further in relation to Law Commission reports by presuming that legislation was intended to give effect to Law Commission recommendations and drawing inferences as to legislative intent: see D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 24.9.

¹⁰⁴ *Duport Steels Ltd v Sirs* [1980] 1 WLR 142, 168.

¹⁰⁵ Referenced in clause 3 of the Bill.

¹⁰⁶ See D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 25.1, where the point is made that: “the common law and earlier statutes are potentially relevant to the interpretation of an enactment as they provide the conceptual framework within which it operates. Eg, a word or phrase used in a context dealing with a particular branch of law may need to be interpreted in light of the established meaning that it has in that area of law, which may then have the effect of attracting a large body of law relating to that concept”.

2.96 Where the Bill is silent on how certain concepts apply to electronic trade documents (for example, timing of transfer of possession, delivery, rejection and acceptance),¹⁰⁷ the role of the courts is to apply the existing principles of those concepts to electronic trade documents, subject to any necessary adaptations of the common law to cater for their digital nature. In this regard, Lord Hoffman has noted in *Johnson v Unisys Ltd* that:

judges, in developing the law, must have regard to the policies expressed by Parliament in legislation The development of the common law by the judges plays a subsidiary role. Their traditional function is to adapt and modernise the common law. But such developments must be consistent with legislative policy as expressed in statutes. The courts may proceed in harmony with Parliament but there should be no discord.¹⁰⁸

Other aspects of our recommendations which aim to ensure a smooth introduction of trade documents in electronic form

2.97 As discussed later in this report, we aim to make change of medium of a trade document (that is, a change of form from electronic to paper or vice versa), and cross-border movement of electronic trade documents, easier. This is particularly important in the context of trade documents because it is likely that paper documents will continue to be used alongside electronic documents for a number of years, and the same legal rules should apply regardless of the form of the document. In the interests of consistency and certainty, the medium of the document should not affect its legal treatment.

2.98 Our approach to electronic trade documents is also to create a facilitative, rather than mandatory, regime. If parties wish to continue using paper trade documents, they can do so. Equally, our recommendations do not affect the ability of parties to use an entirely different system for recording and recognising rights and obligations, operating on the basis of contractual arrangements, provided the electronic document does not otherwise fall within the scope of the Bill.¹⁰⁹ Our recommendations, if implemented, will not affect the validity or operation of these systems.¹¹⁰

TECHNOLOGY NEUTRALITY

2.99 The law's current approach to possession made sense when technology did not exist to allow the creation of electronic documents that had the same legally relevant properties as physical pieces of paper. That is, documents capable of a sufficient degree of control, with a mechanism to prevent double spending.¹¹¹

2.100 Digital technology has now, however, reached a point where electronic documents can be created which do indeed represent what the 2001 Advice called a "true

¹⁰⁷ We discuss these concepts in more detail in Chapter 8 below.

¹⁰⁸ [2001] UKHL 13 at [37]; see also D Bailey and L Norbury, *Bennion, Bailey and Norbury on Statutory Interpretation* (8th ed 2020) s 25.16.

¹⁰⁹ We discuss this in more detail from para 2.9 above.

¹¹⁰ Eg, the London Metal Exchange's LMEsword system.

¹¹¹ We discuss "double spending" in more detail in para 1.31 above.

electronic equivalent” of a paper trade document. The law has not kept up with these technological developments.

- 2.101 That said, our recommendations and draft legislation are technology neutral. They are not predicated on the functionality of a particular technology. Instead, the starting point for our work has been the following question: as a matter of law, what features must trade documents in electronic form have in order to be equivalent to paper documents, and therefore amenable to possession? We have not sought to set out in legislation how such features may or must be achieved.
- 2.102 We consider that our approach will foster innovation and allow more flexible commercial arrangements to be reached. It will also circumvent the risks of referring to particular technologies which may quickly become outdated or obsolete, and of excluding other potential existing or future solutions.¹¹²
- 2.103 Consultees have said that users would need to be able to “trust” the relevant systems in order for electronic trade documents to be used widely. We expect that commercial parties will consider questions of security and risk when choosing an electronic trade documents system. However, we also acknowledge that our recommendations constitute a fundamental change to the law. We think that there is a role for legislation in helping to establish that trust, and in Chapter 6 we discuss our recommendations that the Bill should include provisions requiring the integrity of electronic trade documents, and the reliability of electronic trade document systems.¹¹³
- 2.104 We have considered whether including these requirements is compatible with our technology neutral approach. On balance, we think that such requirements are consistent with our approach. We do not suggest that they – or any other requirements in the Bill – can be met only with one particular type of technology.
- 2.105 We also recognise that allowing for the legal recognition of electronic trade documents is not the end of the matter. There are practical considerations which parties will have to take into account, including the reliability of the relevant system and the extent to which it may be compromised. It will also be for industry to facilitate interoperability between different systems.¹¹⁴ We hope, though, that this will be made easier by the legal recognition of electronic trade documents, and the way in which that is likely to lead to greater investment in platform and technology development.

How electronic trade document systems will work

- 2.106 We have developed our recommendations on the basis that electronic trade documents will be issued, held and transferred on systems operated by professional

¹¹² See 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>; G Smith, “Legislating for electronic transactions” (2002) *Computer and Telecommunications Law Review* 58, 59.

¹¹³ From para 6.32 below.

¹¹⁴ 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 United Nations Economic Commission for Europe, “Transfer of MLETR-compliant titles” (November 2019), <https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles>.

providers, much like the existing systems based on the contractual workarounds discussed above.¹¹⁵

- 2.107 Some consultees, including the CLLS and IGP&I, expressed concern that our provisional proposals did not set this assumption out expressly, and that the Bill did not outline the requirements for an electronic trade document system. For example, the CLLS response expressed concern that most of our provisional proposals did not necessarily pre-suppose a “system which holds or records the trade document, rather than it just being an electronic document like this submission or even an email with the relevant content”.
- 2.108 We do not envisage that an electronic trade document system could be, as suggested, “an email with the relevant content”. Nor would the relevant system exist in a vacuum. The Bill (both the version consulted on and our recommended final version which appears at Appendix 4), presupposes the existence of a reliable system which can prevent double spending, and secure the divestibility of electronic trade documents.¹¹⁶
- 2.109 We also expect that an electronic trade document system would be subject to its own internal governance structure, including the terms and conditions agreed to by the operator and users of such a system. We would expect such terms and conditions to include provisions on liability, confidentiality and data protection, as well as service level provisions.¹¹⁷ They could also include requirements that the system must be fit for purpose. Parties making use of electronic trade document systems and agreeing to such terms and conditions would be well-advised to adopt, for example, a provision requiring an operator to ensure that their system satisfies the criteria in the Bill. Adopting such a provision would ensure that parties could be confident that their electronic documents fall within the scope of these recommended reforms.

INTERNATIONAL COMPATIBILITY

- 2.110 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, such as a bill of lading, or a right to payment, such as a bill of exchange – may be transferred by and to multiple parties in various jurisdictions. While the law of England and Wales is chosen very frequently as the governing law of transactions involving these documents,¹¹⁸ the vast majority of jurisdictions have similar laws and recognise the legal effects of being in possession of certain paper trade documents.
- 2.111 Whilst specific issues arising from conflict of laws are beyond the scope of our work, we are conscious of the importance of international compatibility 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 forms of

¹¹⁵ Eg, systems such as Bolero, CargoX, edocOnline, essDOCs and WAVE BL.

¹¹⁶ See recommendations in Chapter 6. We explain “double spending” at para 1.31 and “divestibility” in Chapter 6 at para 6.111 below.

¹¹⁷ See M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) from para 2.9.

¹¹⁸ This was confirmed in our preliminary consultations with a variety of stakeholders, including the IGP&I’s executives and trade finance practitioners.

those documents. We discuss the interaction of our recommendations and private international law in Chapter 8.

Our approach to the MLETR

2.112 In developing our provisional proposals for reform, we have been mindful of international initiatives and similar reforms in other countries, particularly the MLETR, which we discuss above.¹¹⁹ We consider the overall approach of MLETR to be sound in principle, and we have sought alignment with it insofar as possible. However, our recommendations are tailored specifically to the law of England and Wales.

¹¹⁹ From para 2.30 above.

Chapter 3: Current law – trade documents

- 3.1 The documents with which this report is concerned are widely used in trade and finance to perform key commercial functions and rely, for their functionality, on being possessable. This chapter begins with a brief overview of the unique characteristics of the documents to which possession is relevant. It then gives an account of the key documents with which this report is concerned. We make recommendations as to which documents should be covered by our recommended reforms in the next chapter.

DOCUMENTS TO WHICH POSSESSION IS RELEVANT: A BRIEF INTRODUCTION

- 3.2 It is not unusual to reduce performance obligations to writing and to record them in documents. The documents thus produced are recognised as evidence in law, but the paper itself does no more than record the fact that one person owes another person something. If Alice and Bob have entered into a contract, Alice does not herself need to be in possession of the piece of paper in order to enforce her claim against Bob. Conversely, if Charles is in possession of the paper document recording the obligation, Charles would not normally become the person to whom performance is due.
- 3.3 Commercial practice has, however, resulted in certain types of documents being used as symbols (or embodiments) of the right to claim performance of the obligations recorded in them, making such right transferable by transfer of the document itself. Over time this commercial practice came to be recognised in law, so that the transfer of rights upon transfer of the document became legally recognised.
- 3.4 These documents can be issued either as “bearer documents” or as “order documents”. This determines the means whereby the document is transferred.¹²⁰
- (1) A “bearer document” is one in which the party to whom performance is owed is generally designated as “bearer” in the document itself. The obligation is validly performed if performance is made to whoever is in possession of the document at the time of performance. To transfer a bearer document, the bearer simply delivers the document to another party (the “transferee”).¹²¹
 - (2) In an “order document”, the obligation is owed to a person named in the document, who is in possession of it. To transfer the document, this person (the “transferor”) must indorse the document. An “indorsement” is an annotation in writing on the back of a document instructing that the obligation recorded therein be performed either (i) to the order of a named person, or (ii) simply “to order” (called a “blank indorsement”). This instruction must be signed by the transferor, and is usually completed by delivery. If the indorsement is to a named person, any subsequent indorsement must be by that person. This is

¹²⁰ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 5-008.

¹²¹ We discuss “delivery” from para 3.59 below.

what is meant by a “connected and unbroken chain of indorsements”.¹²² If the indorsement is a blank indorsement, the possessor of the document, whoever they may be, may further indorse the document when it is in their possession.

- 3.5 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”.¹²³
- 3.6 The rules governing the effects of issue and transfer of such documents have their origins in the medieval law merchant, a transnational body of customary law, which eventually integrated itself into states’ domestic laws. These origins are significant because they mean that these documents have substantially the same legal effects wherever they are used.
- 3.7 The effect of these rules is that possession of such a document can confer on the possessor certain rights.¹²⁴ This effect is what enables such documents to perform the crucial commercial functions set out in this chapter. Since, as explained in detail in Chapter 5 of this Report, only tangible things are currently recognised as possessable under the law of England and Wales, the assumption at law is that such a document must be in paper form (or in another tangible medium).¹²⁵

Terminology

- 3.8 Various terms have been used to refer to these documents over time. Some of these terms (such as “document of title” or “negotiable instrument”) have specific legal meanings (discussed below) and refer only to certain sub-categories of such documents. Other terms, most notably “documentary intangibles”, have developed as a result of scholarly commentary and debate, and constitute an attempt to refer to the category of documents more generally.¹²⁶
- 3.9 In the consultation paper, we used the term “document of title” generally to refer to a document in 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.¹²⁷ We acknowledged that this meaning does not accord precisely with the technical legal meaning of “document of title”. The fact that we used the term generally and not in accordance with its precise legal meaning may have had an impact on consultees’ responses.

¹²² *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.

¹²³ R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.58.

¹²⁴ R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) paras 2.56 to 2.58, and 32.53.

¹²⁵ See eg J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 2-004.

¹²⁶ The term “documentary intangibles” was first coined by Sir Roy Goode QC in the Crowther Report on Consumer Credit (1971) volume 2, p 577.

¹²⁷ Consultation paper, para 3.8.

- 3.10 Below we discuss in more detail the different terms that may be used to refer to documents of this type, and the context in which each term tends to be used. While we consider it valuable to make these clarifications, it is not our intention to become bogged down in terminology. As discussed below, the intended outcome of our recommendations is that any document, possession of which is required for a person to claim performance of the obligation recorded in it, can be issued and used in electronic form under the law of England and Wales.
- 3.11 As a general, catch-all term, we use “trade documents” to capture the documents with which we are concerned. As discussed in the following chapter,¹²⁸ this is also the terminology used in the Bill.

TRADE DOCUMENTS – NEGOTIABILITY AND TRANSFERABILITY

- 3.12 The law of England and Wales recognises two related but distinct concepts: transferability and negotiability.¹²⁹ Both these concepts relate to the legal rights and entitlements that are consequent on possession of a document. Possession of the document may be insufficient by itself to give rise to these rights and entitlements. For example, the possessor of the document may be required to show that they came into possession of the document pursuant to a valid transfer and that they received it in good faith. However, possession of the document is a necessary condition for a person to be able to lay claim to those rights and entitlements.
- 3.13 As we noted in the consultation paper,¹³⁰ the terms “transferable” and “negotiable” are often used interchangeably but in legal terms they generally mean different things. In this report, we do not use “negotiable” to refer to all transferable documents (its broad meaning) but only to those the transferee of which may acquire rights greater than those of the transferor (its narrow meaning).¹³¹ As we explain below, there are subtle differences in the legal consequences of transfer and negotiation respectively. However, both of these concepts are premised on possession of the document. Since we are mainly concerned with the possessory element, the differences between them are not of any great significance to our project. Our recommendations seek to extend possession to trade documents issued in electronic form. They are not intended to result in any change to the legal effects that ensue when a trade document of a particular type is transferred or negotiated.
- 3.14 That said, we think it is important to include a brief explanation of the different legal expressions which denote that the relevant document is one the possession of which may be required for the exercise of certain rights.

¹²⁸ From para 3.15 below.

¹²⁹ Although these are the principal terms, insurance documents widely used in trade are more commonly referred to as being “assignable” rather than “transferable” or “negotiable”. We discuss this from para 3.22 below.

¹³⁰ Consultation paper, paras 3.9 to 3.15.

¹³¹ See M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 1-028 for a description of the two concepts of negotiability.

Negotiability and negotiable instruments

- 3.15 Negotiability in the law of England and Wales applies to documents embodying the right to claim performance of an obligation to pay a sum of money. They are known as “negotiable instruments”.¹³² The person who owes the obligation (the “obligor”) is deemed to have validly performed the obligation if they pay out the money to the document’s holder, that is, the person in possession of the document to whom the document was validly negotiated. “Negotiation” here refers to the document’s transfer.
- 3.16 As a general rule, a transferor cannot give better title to something than they themselves have.¹³³ This is not the case, however, where the thing in question is negotiable in the strict legal sense.¹³⁴ The key characteristic of negotiability is that the transferee of the document can acquire a better right or entitlement than the transferor had, upon due negotiation of the document.¹³⁵ Due negotiation occurs when all legal requirements are fulfilled when transferring the document. These legal requirements usually include good faith on the part of the transferee.¹³⁶ Where the document is made out to the order of a named person, due negotiation requires an unbroken chain of indorsements,¹³⁷ showing all indorsees down the chain, unless and until the document is indorsed “in blank”, that is, without naming the transferee.¹³⁸ A blank indorsement has the effect of turning the bill into a bearer bill.
- 3.17 If a document is negotiable, the transferee does not have to investigate the history of the transferor’s title in order to rely on the integrity of the transaction. If, 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.¹³⁹

Transferability and documents of title to goods

- 3.18 “Transferability” mainly relates to documents of title to goods. It is distinguishable from negotiability in that the transferee of the document receives no better title to the goods recorded in the document than the transferor had,¹⁴⁰ although certain exceptions apply.¹⁴¹ General or special property in the goods is instead transferred as a

¹³² M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) paras 5-008 to 5-010. Documents of title to goods are generally not considered “negotiable” in the strict sense of the word: see M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 26-030.

¹³³ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 31-002.

¹³⁴ *Picker v London and County Banking Co* (1887) 18 QBD 515.

¹³⁵ *Picker v London and County Banking Co* (1887) 18 QBD 515.

¹³⁶ See Bills of Exchange Act 1882, s 29.

¹³⁷ See Bills of Exchange Act 1882, s 31(3) and (4) and *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.

¹³⁸ Bills of Exchange Act 1882, s 8(3).

¹³⁹ This is subject to satisfying certain conditions: see eg Bills of Exchange Act 1882, s 29.

¹⁴⁰ *Enichem Anic SpA v Ampelos Shipping Co Ltd (The Delfini)* [1990] Lloyd’s Rep 252, 268, by Mustill LJ.

¹⁴¹ See Sale of Goods Act 1979, ss 24 and 25 and Factors Act 1889, ss 2, 8 and 9.

consequence of the underlying contract or arrangement between the transferor and transferee, be it a contract of sale or a pledge.¹⁴²

Documents of title to goods at common law

3.19 Documents relating to goods which are documents of title at common law confer upon the holder “constructive possession” – or the right to immediate possession – of the goods.¹⁴³ This ability to transfer constructive possession of the goods by transferring the document is of crucial importance in international trade, in that delivery of the goods to the buyer is one of the seller’s core obligations under the contract of sale.¹⁴⁴ There is only one type of document which is considered to be a document of title to goods at common law, namely a “shipped” bill of lading (that is, one that contains a statement that the goods have been loaded on board a ship), which is not marked “non-negotiable”. For this reason, its use is central to cross-border sales to which English law applies.

Documents of title to goods under statute

3.20 Other types of bill of lading (for example, received-for-shipment bills and bills marked non-negotiable) as well as other documents containing an obligation to deliver goods are not considered documents of title at common law. They do not therefore give the holder constructive possession of the goods. However, possession of these documents is still considered to have certain effects at law. Some of these documents fall within the scope of statutory definitions of “document of title to goods”,¹⁴⁵ and can function as documents of title for the purposes of those statutes. This means that the exercise of certain rights may be dependent upon possession of the relevant document. The law’s recognition of the effects of possession in these cases tends to be tied to the way in which these documents are used as a matter of business practice. The statutory definition of “document of title” is broader than the common law meaning of the term and encompasses:

any bill of lading, dock warrant, warehouse-keeper’s certificate, and warrant or order for the delivery of goods, and any other document used in the ordinary course of business as proof of the possession or control of goods, or authorising or purporting

¹⁴² See M Bridge, *Personal Property Law* (4th ed 2015) p 81, which describes the distinction between general and personal property as: “In sale of goods transactions, the ownership of the seller, the transfer of which for a money consideration is the hallmark of a sale, is called the general property and is defined as being other than special property. The latter expression is certainly used to signify the possessory entitlement of a pledgee but is also used in a looser way to describe the possessory right of a bailee, who may hold as against the owner but whose rights fall short of ownership. Possession and ownership together exhausting the category of legal property rights in chattel, it follows that the general property is the ownership, in view of the identification of the special property with possession. Apart from defining a sale of goods of agreement, the distinction between special and general property seems largely to be of terminological significance only”.

¹⁴³ *Lickbarrow v Mason* (1787) 2 TR 63, 100 ER 35; *Barber v Meyerstein* (1870) LR 4 HL 317, 332, by Lord Hatherley; *Sanders Bros v MacLean* (1883) 11 QBD 327, 341, by Bowen LJ.

¹⁴⁴ Sale of Goods Act 1979, s 27; United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980) (CISG), art 30.

¹⁴⁵ Factors Act 1889, s 1 and Sale of Goods Act 1979, s 61.

to authorise, either by endorsement or by delivery, the possessor of the document to transfer or receive goods thereby represented...¹⁴⁶

3.21 Possession of a document may also be legally significant in a situation where the document is marked “non-negotiable”. This is because, while the document cannot be freely transferred to anyone of the holder’s choosing, the person entitled by its terms to claim performance of the obligation recorded in it has to surrender it in order to do so. A non-negotiable (or “straight”) bill of lading, discussed in further detail below,¹⁴⁷ is such a document.

Assignable documents

3.22 Insurance documents issued to evidence cover of maritime cargoes may be used to transfer the right to claim against the insurer for damage to or loss of the cargo, when the cargo itself is sold. Accordingly, cargo insurance certificates are often transferred alongside bills of lading relating to the same cargo. Rights against the insurer are therefore assigned by the transfer of the document itself.

3.23 Insurance documents widely used in trade are therefore more commonly referred to as being “assignable” rather than “transferable” or “negotiable”, although the basic notion is the same: if the document is (indorsed and) delivered to the assignee, the latter acquires standing to claim against the insurer, provided additional requirements are satisfied, as discussed below.¹⁴⁸

3.24 Being in possession of the assignable document by itself is not sufficient to entitle the holder to claim against the insurer. The assignee must also have acquired an insurable interest in the subject-matter of the insurance (the cargo), as discussed below.¹⁴⁹ The document by its terms or as a matter of commercial usage, may also require indorsement in the event of assignment. However, possession of the document can be a core requirement for making a claim.

3.25 As with negotiable and transferable documents, we are concerned only with ensuring that the possession requirement relating to the assignment of these documents is capable of being satisfied when they are issued in electronic form. Our recommendations are not intended to change the legal effects consequent upon assignment in any way.

Why are these features useful?

3.26 There are several consequences of a right being embodied in a document.

- (1) Delivery (and, where necessary, indorsement) is sufficient to transfer the right to claim performance of the obligation. The consequent ease with which rights may be transferred promotes efficiency and convenience in commercial dealings. If the document were merely evidence of an obligation, it would

¹⁴⁶ Factors Act 1889, s 1 and Sale of Goods Act 1979, s 61.

¹⁴⁷ From para 3.37 below.

¹⁴⁸ From para 3.46 below.

¹⁴⁹ From para 3.46 below.

require some further step to transfer the obligation,¹⁵⁰ 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).

- (2) In the law of England and Wales, a trade document can be the subject of a bailment.¹⁵¹ A bailment is an arrangement in which one party has voluntary possession of goods belonging to another. Trade documents are often bailed as part of a pledge, which means that the document is held as security.
- (3) A person in possession of a trade document has their right in that document protected from interference in the same way as they would with any other tangible asset. This is because these documents are treated as tangible assets in themselves, meaning they are covered by the strict liability property torts of trespass and conversion,¹⁵² as well as by negligence.¹⁵³ In contrast, interference with purely intangible rights is not covered by the property torts, leaving claimants to resort to the economic torts (such as inducing breach of contract or causing loss by unlawful means), which require establishing a certain type of intention on the defendant's part.¹⁵⁴
- (4) In terms of remedies for interference, trade documents 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 trade documents that embody the right, the measure of damages is the value of the obligation or right embodied in the document.¹⁵⁵
- (5) To discharge an obligation contained in a trade document, the obligor must render performance to the holder of the document. Rendering performance to

¹⁵⁰ R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.57.

¹⁵¹ *Carter v Wake* (1877) 4 Ch D 605; *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653. The concept of bailment does not exist in Scots law: see A J M Steven, *Pledge and Lien* (2008) paras 13.18 to 13.19. While pledge is recognised in Scotland it is not a type of bailment.

¹⁵² 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 the defendant of that right". It follows that only things amenable to possession can be converted. Trespass and conversion are not concepts in Scots law. Professor Andrew Steven explained that the nearest equivalent to conversion in Scots law is the delict of spuilzie. This allows former possessors to recover possession by proving that (1) they were in possession and (2) they were involuntarily dispossessed. In contrast, the principal remedy in conversion is damages. On spuilzie, see eg G L Gretton and A J M Steven, *Property, Trusts and Succession* (4th ed 2021) paras 12.21 and 12.22.

¹⁵³ *Smith v Lloyds TSB Group Plc* [2001] QB 541; M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 1-024.

¹⁵⁴ In Scots law, the delicts of fraud or theft may be relevant.

¹⁵⁵ *OBG Ltd v Allan* [2007] UKHL 21, [2008] 1 AC 1 at [225] to [226] by Lord Nicholls of Birkenhead.

any party other than the holder of the document will not discharge the obligation.¹⁵⁶

TYPES OF TRADE DOCUMENTS AND HOW THE LAW WORKS IN RELATION TO THEM

Bills of exchange

- 3.27 A bill of exchange is an unconditional written order to pay a certain sum of money. It is addressed by one party to another and it requires the party to whom it is addressed to pay the sum of money to a specified person, or to their order, or to the bearer of the bill.¹⁵⁷ It must be signed by the person giving the order and delivered.¹⁵⁸ Delivery of a bill of exchange is defined as “the transfer of possession, actual or constructive, from one person to another”.¹⁵⁹ The person to whom the bill is addressed (the drawee) signifies their assent to the bill by accepting the bill.¹⁶⁰ Such acceptance must be in writing and signed by the drawee.¹⁶¹ Acceptance may be general or qualified.¹⁶² A qualified acceptance varies the terms of the bill as drawn.¹⁶³ Non-acceptance of the bill by the drawee constitutes dishonour of the bill.¹⁶⁴
- 3.28 Bills of exchange are rarely encountered domestically, although one type of bill that has remained popular until relatively recently is the cheque.¹⁶⁵ In contrast to the domestic market, bills of exchange remain in widespread use in international trade.
- 3.29 A bill of exchange has three main characteristics. First, it can be transferred by delivery alone. The transferee will receive the same title to the sum of money specified in the bill that the transferor had. However, the transferee will receive better title than the transferor had if the bill is duly negotiated.¹⁶⁶ Second, if the transferee is a “holder in due course”,¹⁶⁷ they take free from most defects in the title¹⁶⁸ of prior parties and

¹⁵⁶ R Goode and E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) paras 2.56(b) to 2.56(c).

¹⁵⁷ Bills of Exchange Act 1882, s 3.

¹⁵⁸ Bills of Exchange Act 1882, ss 3(1), 3(2) and 21.

¹⁵⁹ Bills of Exchange Act 1882, s 2.

¹⁶⁰ Bills of Exchange Act 1882, s 17.

¹⁶¹ Bills of Exchange Act 1882, s 17(2)(a).

¹⁶² Bills of Exchange Act 1882, s 19.

¹⁶³ Bills of Exchange Act 1882, s 19(2).

¹⁶⁴ Bills of Exchange Act 1882, s 42.

¹⁶⁵ J M Phillips, I Higgins, and R Hanke, *Byles on Bills of Exchange and Cheques* (30th ed 2019) para 1-001.

¹⁶⁶ *Arab Bank LD v Ross* [1952] 2 QB 216, 229, by Denning LJ.

¹⁶⁷ 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”.

¹⁶⁸ 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

from the defences against them.¹⁶⁹ Almost every holder of a bill of exchange is presumed to be a holder in due course.¹⁷⁰ Third, the transfer of a bill of exchange is valid without consideration.¹⁷¹

- 3.30 A bill of exchange has three main functions. Bills of exchange are a means of payment in international trade.¹⁷² They are also frequently used in trade finance where a party does not wish to pay a sum of money immediately. They are also evidence of a payment owed by the drawee to the relevant payee.¹⁷³

Promissory notes

- 3.31 A promissory note is an unconditional promise in writing, signed by the maker, to pay a sum of money to, or to the order of, a specified person or the bearer.¹⁷⁴ A promissory note differs from a bill of exchange in that the maker of the note, rather than a third party, is required to pay.¹⁷⁵ Like a bill of exchange, however, a promissory note is a negotiable instrument,¹⁷⁶ or “document of title to money”.¹⁷⁷
- 3.32 Promissory notes may be transferred by indorsement and delivery or, if payable to bearer, by delivery alone. For the contract in a promissory note to be complete, the note must be delivered to the payee or bearer.¹⁷⁸
- 3.33 In international trade, promissory notes usually serve as security for instalments under medium or long-term credit transactions,¹⁷⁹ and are sometimes used in transactions

means, or for an illegal consideration, or when he negotiates it in breach of faith, or under such circumstances as amount to a fraud”.

¹⁶⁹ E Peel (ed), *Treitel on the Law of Contract* (15th ed 2020) para 15-048.

¹⁷⁰ 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”.

¹⁷¹ *Easton v Pratchett* (1835) 1 Cr M & R 798, 808, by Lord Abinger.

¹⁷² H Beale (ed), *Chitty on Contracts* (34th ed 2021) para 36-003.

¹⁷³ 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.

¹⁷⁴ Bills of Exchange Act 1882, s 83(1). Note also s 83(2), which requires the maker to indorse the note if it is made out to the “maker’s order”.

¹⁷⁵ *Goodwin v Robarts* (1875) LR 10 Exch 337, 348, by Cockburn CJ. 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.

¹⁷⁶ 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.

¹⁷⁷ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 5-015.

¹⁷⁸ Bills of Exchange Act 1882, s 84.

¹⁷⁹ H Beale (ed), *Chitty on Contracts* (34th ed 2021) para 36-004.

covered by export credit guarantees.¹⁸⁰ In domestic trade, where the authors of *Chitty on Contracts* suggest they are more popular, promissory notes serve two main functions.¹⁸¹ First, promissory notes issued by a debtor (such as a purchaser from whom the price of goods is due) can act as security for the discharge of a sum payable pursuant to an underlying contract. The creditor can bring an action to enforce the promissory note, and may prefer this action to suing on the underlying contract as the debtor cannot plead all the defences that would be available to them on an action under the contract.¹⁸² Second, the holder of a promissory note can sell it at a discount (for example, to a financial institution) to raise finance.¹⁸³

Bills of lading

3.34 Bills of lading are documents used in the carriage of goods by sea. A carrier who transports goods will sign and issue a bill of lading to a shipper who wants the goods to be transported.¹⁸⁴ The bill will state that the carrier has received or loaded the goods delivered by the shipper.¹⁸⁵ They began as receipts for goods received by the carrier. 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.¹⁸⁶ A bill of lading is not negotiable in the legal sense, but is transferable by indorsement (where necessary) and delivery.¹⁸⁷ Upon transfer of a bill of lading, the transferee acquires only those interests that the transferor had and does not take free from defects in the transferor's title.¹⁸⁸

3.35 Under the law of England and Wales, bills of lading are governed by the Carriage of Goods by Sea Act 1971 ("COGSA 1971"), the Sale of Goods Act 1979, the Carriage of Goods by Sea Act 1992 ("COGSA 1992") and the common law. COGSA 1971

¹⁸⁰ 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.

¹⁸¹ H Beale (ed), *Chitty on Contracts* (34th ed 2021) para 36-004.

¹⁸² Eg, counterclaim or set-off. *Banque Cantonale de Geneve v Sanomi* [2016] EWHC 3353 (Comm) at [31] by Blair J. For this reason, the role of promissory notes has been limited in certain consumer agreements by the Consumer Credit Act 1974, ss 123 to 125.

¹⁸³ 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 and 30.

¹⁸⁴ 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 *Jl MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423 at [38].

¹⁸⁵ M Goldby, *Electronic Documents in Maritime Trade* (2nd ed 2019) para 1.04.

¹⁸⁶ *Lickbarrow v Mason* (1787) 2 TR 63; *Barber v Meyerstein* (1870) LR 4 HL 317; *Sanders Bros v Maclean & Co* (1883) 11 QBD 327.

¹⁸⁷ M Bridge (ed), *Benjamin's Sale of Goods* (11th ed 2020) para 18-225; *Jl MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2003] EWCA Civ 556; [2004] QB 702 at [1] ("traditionally but idiosyncratically referred to as 'negotiability'") by Rix LJ.

¹⁸⁸ *Enichem Anic SpA v Ampelos Shipping Co Ltd (The Delfini)* [1990] Lloyd's Rep 252, 268, by Purchas LJ; *Picker v London and County Banking Co* (1887) 18 QBD 515. See exceptions in the Sale of Goods Act 1979, ss 24 and 25.

implements the Hague-Visby Rules,¹⁸⁹ an international convention that applies to bills of lading and sets out requirements of form and content.¹⁹⁰ The Hague-Visby Rules do not say that a bill of lading must be in paper form, but the need to be able to possess the document, enshrined in section 5(2) of COGSA 1992, implies such a requirement.

- 3.36 Traditionally, bills of lading are said to have three functions. They are a receipt for the goods taken by the carrier,¹⁹¹ evidence of the contract of carriage,¹⁹² and a document of a title to the goods described in the bill.¹⁹³ Since a bill of lading is not negotiable in the strict legal sense, however, as mentioned above, the transferee obtains no better title to the goods than the transferor had.¹⁹⁴ Exceptions apply where the bill is transferred by a person who has previously sold the goods but remains in possession of the bill of lading.¹⁹⁵ Alternatively, by a person who has received the bill of lading having contracted to purchase the goods, even though that person has not yet acquired ownership of them.¹⁹⁶ The transferee in these cases is required to receive the bill in good faith.
- 3.37 As mentioned above,¹⁹⁷ a shipped bill of lading that is not marked “non-negotiable” is a document of title at common law. However, some bills of lading are not considered documents of title at common law, such as “straight” bills of lading. “Straight” bills of lading specify a named consignee to whom the goods are deliverable. The essential difference between order or bearer bills and straight bills is that the latter “either contain no words importing transferability or contain words negating transferability”.¹⁹⁸

¹⁸⁹ 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 (“COGSA 1971”), s 1(1). The Hague-Visby Rules are reproduced in COGSA 1971, sch 1.

¹⁹⁰ Hague-Visby Rules, art III(3). Moreover, s 1(5) of the Carriage of Goods by Sea Act 1992 (“COGSA 1992”) gives the Secretary of State a power to make provision for electronic documents that fall under the Act. This section may be read as implying that, unless such provision is made, bills of lading must be in paper form.

¹⁹¹ M Bridge (ed), *Benjamin’s Sale of Goods* (11th ed 2020) para 18-089; *Smith v Bedouin Steam Navigation Co* [1896] AC 70,77, by Lord Watson.

¹⁹² *Crooks & Co v Allan* (1879) 5 QBD 38,40, by Lush J; *Hansson v Hamel and Horley Ltd* [1922] 2 AC 36, 47, by Lord Sumner.

¹⁹³ See M Bridge (ed), *Benjamin’s Sale of Goods* (11th ed 2020) para 18-161. There is no authoritative definition of “document of title” at common law. It is used in its traditional sense here to mean a document that is transferable. The distinctive feature of a transferable document is that it can perform a conveyancing function, whereby its transfer can operate as a transfer of the constructive possession of the goods, and, if intended, the property in them. See *Lickbarrow v Mason* (1787) 2 TR 63 in relation to bills of lading.

¹⁹⁴ The transferee of a “to order” or “bearer” bill of lading does not get better title than that held by the transferor. The situation is different with a non-negotiable “straight” bill of lading, where the bill is deliverable only to specified person. See *Jl MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11, [2005] 2 AC 423 at [1] by Lord Bingham of Cornhill and at [59] by Lord Rodger of Earlsferry.

¹⁹⁵ Sale of Goods Act 1979, s 24 (seller in possession after sale).

¹⁹⁶ Sale of Goods Act 1979, s 25 (buyer in possession after sale).

¹⁹⁷ See para 3.19 above.

¹⁹⁸ M Goldby, *Electronic Documents in Maritime Trade: Law and Practice* (2nd ed 2019) para 5.41.

A straight bill of lading is not a document of title at common law.¹⁹⁹ However, having possession of it, and being able to demonstrate that one is in possession of it, is an essential part of using it, because it must be surrendered by the named consignee when the latter claims delivery of the goods from the carrier.²⁰⁰ Where the consignee is the buyer of the goods, and the bill of lading is issued to the seller (who has shipped them), possession of the bill of lading must be transferred to the consignee before the latter can claim delivery. In this sense, therefore, straight bills of lading are considered to be “a bill of lading or similar document of title” for the purposes of COGSA 1971.²⁰¹

3.38 Bills of lading are often issued in sets of three originals, each stating “any one of which being accomplished, the others shall be void”.²⁰² If the carrier delivers the goods against any one of the three originals, they are considered to have fully performed their obligations under the carriage contract and as bailee on terms. However, the practice of issuing bills of lading in sets has long been criticised by the courts because it has the potential to cause confusion and difficulty by separating title to the goods from possession of the bill.²⁰³ Legal recognition that bills of lading are capable of being in electronic form may well reduce the need to issue them in triplicate and lead to a change of practice in this regard.

Ship’s delivery orders

3.39 A ship’s delivery order is issued typically by the holder of a bill of lading to the carrier to instruct them to deliver different parts of a bulk cargo to different persons, each one being named in a different delivery order.²⁰⁴ If the delivery order is signed by (or on behalf of) the carrier and is made out “to order”, the right to claim delivery of the goods can be transferred to another person by indorsement and delivery of the delivery order.²⁰⁵ The transferee of a ship’s delivery order may claim from the carrier delivery

¹⁹⁹ 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 [at common law]; 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)

²⁰⁰ “Surrendering” a bill of lading means submitting it to the carrier in exchange for delivery of the goods. Once the goods are delivered against surrender of a bill of lading, the bill becomes “accomplished”: See G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 6-035 and 6-036.

²⁰¹ *Jl MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S)* [2005] UKHL 11.

²⁰² 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).

²⁰³ 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; see *Barber v Meyerstein* (1870) LR 4 HL 317, 331 to 332, by Lord Hatherley LC.

²⁰⁴ *Glencore International AG v MSC Mediterranean Shipping Co SA* [2017] EWCA Civ 365, [2017] 2 All ER (Comm) 881 at [14] by Sir Christopher Clarke.

²⁰⁵ *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.

of the goods to which that order relates,²⁰⁶ although the order is not a document of title at common law. Transfer of a ship's delivery order by valid indorsement and delivery will not give the transferee title to the goods at common law.²⁰⁷ It will, however, confer on the transferee contractual rights against the carrier under COGSA 1992.²⁰⁸ It is also worth noting that a ship's delivery order is considered to be a document of title by section 1(4) of the Factors Act 1889 (which governs the activity of mercantile agents, through which commercial goods are often sold) and section 61 of the Sale of Goods Act 1979.

- 3.40 As with a bill of lading, the assumption for a ship's delivery order made out "to order" is that possession of it is key to claiming delivery from the carrier. Additionally, the existence of section 1(5) COGSA 1992 may imply that ship's delivery orders must be in paper form, unless the Secretary of State exercises the power set out in that provision.²⁰⁹

Warehouse receipts

- 3.41 A warehouse receipt (also called a warehouse warrant²¹⁰ or a warehouse-keeper's certificate²¹¹) is a document issued by a warehouse keeper acknowledging that they hold the goods as "bailee" for the person to whom the receipt is issued (the "bailor").
- 3.42 Warehouse receipts are not documents of title at common law, although the definition of "document of title" in the Factors Act 1889²¹² encompasses warehouse receipts,²¹³ and they have been described by the courts as "effectively documents of title".²¹⁴ The transfer of a warehouse receipt will not give the transferee constructive possession of the goods.²¹⁵ However, warehouse receipts can be made out to a named person (the bailor) "or order", making them transferable and required for the purpose of claiming delivery of the goods.²¹⁶ Constructive possession may be transferred by attornment by

²⁰⁶ COGSA 1992, ss 2(1)(c) and 2(3)(a).

²⁰⁷ *Comptoir d'Achat et de Vente du Boerenbond Belge SA v Luis de Ridder Limitada (The Julia)* [1949] AC 293, 316, by Lord Simonds; G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 8-060.

²⁰⁸ COGSA 1992, ss 2(1)(c) and 2(3)(a).

²⁰⁹ See para 3.35 above.

²¹⁰ 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.

²¹¹ See the Factors Act 1889, s 1.

²¹² Factors Act 1889, s 1(4).

²¹³ See *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [235] by Bryan J.

²¹⁴ *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] by Blair J.

²¹⁵ *Mercuria Energy Trading Pte Ltd v Citibank NA* [2015] EWHC 1481 (Comm), [2015] 1 CLC 999 at [57] to [60] by Phillips J citing *Farina v Home* (1846) 16 M & W 119 and *Dublin City Distillery (Great Brunswick Street, Dublin) v Doherty* [1914] AC 823.

²¹⁶ M Bridge (ed), *Benjamin's Sale of Goods* (11th ed 2020) para 8-013.

the warehouse keeper to the indorsee.²¹⁷ Multipartite agreements may be entered into to enable this attornment to occur easily upon a transfer being effected.²¹⁸

Mate's receipts

- 3.43 A mate's receipt is a document issued by a shipowner when they receive a shipment of goods. It serves as an acknowledgment of receipt of the goods but also contains a description of the goods and states their order and condition. A mate's receipt was described in *Naviera Mogor SA v Society Metallurgique de Normandie (The Nogar Marin)* as a "simple receipt",²¹⁹ and in *Kum v Wah Tat Bank Ltd* as "not ordinarily anything more than evidence that the goods have been received on board".²²⁰ However, a mate's receipt may later be presented to the shipowner in exchange for bills of lading²²¹ and so, in addition to its function as a receipt, can be good evidence of the contract of carriage before bills of lading are issued.²²²
- 3.44 Possession is relevant to the function of a mate's receipt if transferring it results in property in the shipped goods passing. The general position is that a mate's receipt is not a document of title at common law,²²³ although there is no reason in principle why a document of title should not be created by local custom, as was accepted by the Privy Council in *Kum v Wah Tat Bank Ltd*.²²⁴ In the circumstances of that case, it was found to be a usage of the trade in Singapore that mate's receipts were documents of title,²²⁵ although the usage did not apply to the particular documents issued in the case, which were marked as "non-negotiable".²²⁶ It should also be noted that mate's receipts fall within the definition of "document of title" that applies for the purposes of section 61 of the Sale of Goods Act 1979 and section 1(4) of the Factors Act 1889.

²¹⁷ *Natixis v Marex Financial and others* [2019] EWHC 2549 (Comm), [2019] 2 Lloyd's Rep 431 at [230] by Bryan J. This is not the case in Scots law, where all that is needed for there to be constructive delivery of goods held in a warehouse is for the possessor to tell the warehouse to hold for the person to whom possession is being transferred. The warehouse does not need to confirm to that person. See Scottish Law Commission, *Report on Moveable Transactions* (Scot Law Com No 249, 2017) para 25.6.

²¹⁸ As with the arrangement between members of the London Metal Exchange ("LME"), whereby all members of the Exchange agree that possession of a paper warrant issued and authorised by the LME will give the transferee possession of the goods to which it relates.

²¹⁹ *Naviera Mogor SA v Society Metallurgique de Normandie (The Nogar Marin)* [1988] 1 Lloyd's Rep 412, 420, by Mustill LJ.

²²⁰ *Kum v Wah Tat Bank Ltd* [1971] 1 Lloyd's Rep 439, 442, by Lord Devlin.

²²¹ G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 8-018.

²²² *Sunrise Maritime Inc v Uvisco Ltd (The Hector)* [1998] 2 Lloyd's Rep 287, 299, by Rix J.

²²³ *FE Napier v Dexters Ltd* (1926) 26 Lloyd's List Law Reports 184, 189, by Scrutton LJ; *Nippon Yusen Kaisha v Ramjiban Serowgee* [1938] AC 429, 445, by Lord Wright; see also G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 8-021 and D Foxtton, H Bennett, S Berry, C Smith, and D Walsh, *Scrutton on Charterparties and Bills of Lading* (24th ed 2019) para 9-160.

²²⁴ [1971] 1 Lloyd's Rep 439, 443, by Lord Devlin.

²²⁵ *Kum v Wah Tat Bank Ltd* [1971] 1 Lloyd's Rep 439, 444, by Lord Devlin.

²²⁶ *Kum v Wah Tat Bank Ltd* [1971] 1 Lloyd's Rep 439, 445, by Lord Devlin.

3.45 A seller may retain a bill of lading until payment of the price of the goods to which it relates, and thereby retain property in the goods.²²⁷ By way of analogy, we consider that the terms of a mate's receipt and the terms of the contract of sale may give rise to inferences that retention of that document may similarly prevent the passing of property even after the goods have been delivered by the carrier to the buyer.

Marine insurance policies

3.46 An insurance policy is a document issued by insurers that contains the terms of their contract with the insured person to compensate them for loss caused by a covered risk. The Marine Insurance Act 1906 ("MIA 1906") applies to policies concerning "the losses incident to marine adventure".²²⁸ The rights under such a policy may be assigned by assigning the document itself,²²⁹ which involves indorsing it and delivering it to the assignee. The case law suggests that indorsement may not be necessary unless expressly required by the document itself.²³⁰

3.47 In 2010, a joint issues paper published by the Law Commission of England and Wales and the Scottish Law Commission concluded that the MIA 1906 probably did not prevent a marine policy from being in electronic form.²³¹ However, the authors of that paper were of the view that "the issue is not entirely beyond doubt".²³²

Cargo insurance certificates

3.48 A cargo insurance certificate is evidence that a cargo is insured. If goods are being shipped under a cost, insurance, freight ("CIF") contract, the seller must tender to the buyer a document demonstrating that insurance cover has been obtained,²³³ and often this document will be a cargo insurance certificate.

3.49 Certificates are assignable at common law.²³⁴ It appears that delivery of a certificate is sufficient to transfer the benefit of the insurance, unless the certificate expressly requires indorsement.²³⁵ Transferring cargo insurance certificates is effected in practice through (indorsement and) delivery of the paper document. An electronic

²²⁷ Sale of Goods Act 1979, s 18 sets out rules for ascertaining intention of the parties as to the time at which the property in the goods is to pass to the buyer. Rule 5(2) provides that a seller may "reserve the right of disposal" of the goods such that property in them does not necessarily pass to the buyer upon delivery; G Treitel and F M B Reynolds, *Carver on Bills of Lading* (4th ed 2017) para 6-051.

²²⁸ Marine Insurance Act 1906, s 1.

²²⁹ Marine Insurance Act 1906, s 50.

²³⁰ *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".

²³¹ 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.

²³² 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.

²³³ International Chamber of Commerce ("ICC") International Commercial Terms (Incoterms) 2020, Cost Insurance and Freight ("CIF") ch, art A5.

²³⁴ *D&J Koskas v Standard Marine Insurance Co* (1927) 27 LI L Rep 59, 60, by Bankes LJ.

²³⁵ *D&J Koskas v Standard Marine Insurance Co* (1927) 27 LI L Rep 59, 60, by Bankes LJ.

cargo insurance certificate would therefore need to be capable of possession and delivery in order to be used in the same way as its paper counterpart.

HOW TRADE DOCUMENTS ARE USED IN PRACTICE

Use between buyers and sellers

- 3.50 As between buyers and sellers in cross-border sales of goods, the documents discussed above are mainly used to perform, or to evidence performance of, contractual obligations.
- 3.51 The contract of sale will often require the seller to load the goods on board a ship by a certain date, in a certain place and bound for a certain destination.²³⁶ The contract may also specify the kind of sea-going vessel to be used for transportation. The seller can use a bill of lading, signed and issued by the carrier, to evidence that all these stipulations have been fulfilled.²³⁷ Similarly, the contract may require the seller to insure the goods in transit and the insurance document tendered by the seller to the buyer will provide evidence to the latter that this contractual term has been performed.²³⁸ Negotiable instruments can be used by the buyer to defer payment, giving the seller a liquid promise to pay that can be discounted before maturity.
- 3.52 If the contract is what is called a “documentary sale”,²³⁹ the seller will be required to tender certain documents to the buyer (including “a transport document” or “proof of insurance”). The specific type of document to be tendered will sometimes be named in the contract²⁴⁰ (for example, “a shipped bill of lading issued to order”). When documents are required to be tendered under the contract, obtaining the documents and tendering them to the buyer is itself required for the seller to perform the contract of sale,²⁴¹ and the documents do not just provide evidence of performance.
- 3.53 As discussed above, documents of title to goods which give the holder constructive possession of the goods can be used by the seller to deliver the goods to the buyer under the contract of sale.²⁴² In this sense, the document is being used to perform the delivery obligation under the contract of sale and a valid transfer of the document to the buyer is a key element of such performance.

²³⁶ See eg ICC International Commercial Terms (Incoterms) 2020, Free On Board (“FOB”) ch, arts A2 and B10, and CIF ch, arts A2 and B10.

²³⁷ See eg ICC International Commercial Terms (Incoterms) 2020, FOB ch, art A6.

²³⁸ See eg ICC International Commercial Terms (Incoterms) 2020, CIF ch, art A5.

²³⁹ Sales on CIF terms are documentary sales. M Bridge (ed), *Benjamin’s Sale of Goods* (11th ed 2020) para 19-001, explains that “the essential feature of such a contract is that a seller, having shipped or bought afloat, goods in accordance with the contract, can (and must) fulfil his part of the bargain by tendering to the buyer the proper shipping documents: if he does this, he is not in breach even though the goods have been lost before such tender. In the event of such loss the buyer must nevertheless pay the price on the tender of the documents, and his remedies, if any, will be against the carrier or against the underwriter, but not against the seller on the contract of sale”.

²⁴⁰ See eg ICC International Commercial Terms (Incoterms) 2020, CIF ch, art A6.

²⁴¹ See *Manbre Saccharine Co Ltd v Corn Products Co Ltd* [1919] 1 KB 198, 202, by McCardie J.

²⁴² Para 3.19 above.

Use by banks

- 3.54 Banks act as service-providers in international trade transactions by (i) processing payments, (ii) collecting documents for the buyer, and/or (iii) financing transactions. Banks perform these roles within a context of long-standing practice and usage, much of which has been codified in bodies of rules by the industry, mainly by the International Chamber of Commerce (“ICC”). These rules include the Uniform Rules for Collection,²⁴³ the Uniform Customs and Practices for Documentary Credits,²⁴⁴ and the International Standard Banking Practice.²⁴⁵ They become binding by their incorporation into contracts between relevant parties. These rules envisage the relevant documents being examined manually, whether they are in paper or electronic form, but supplemental rules have been adopted to provide for electronic presentation.²⁴⁶ A more recent set of rules adopted by ICC, the Uniform Rules for Digital Trade Transactions, have moved away from the paper form entirely and envisage submission of electronic records rather than presentation of paper documents. They contemplate “control” of an electronic record as meeting a legal requirement for possession of a document.²⁴⁷
- 3.55 In practice, banks will expect to take possession of documents of title to the goods being traded, most commonly the bill of lading, for a number of reasons. In a documentary collection arrangement, they will simply be checking the documents’ compliance with agreed terms on behalf of the buyer. If they are financing the transaction, they may wish to take possession of the documents in order to obtain legal rights or entitlements. For example, if a bank obtains possession of a bill of lading pursuant to a valid transfer so as to become the holder, it effectively has a possessory security over the goods. In this case, the transfer of possession of the document to the bank is an essential element of transferring the document itself. As discussed below,²⁴⁸ merely being in possession of the document may not be enough to make the bank its holder and to give the bank constructive possession of the goods. Other elements (such as indorsement and acceptance by the bank) may also be required. However a transfer of possession remains essential.

²⁴³ ICC, Uniform Rules for Collection (“URC 522”), 1995.

²⁴⁴ ICC, Uniform Customs and Practices for Documentary Credits (“UCP 600”), 2007. The UCP 600 is a set of standard terms ubiquitously incorporated into documentary credit agreements.

²⁴⁵ ICC, International Standard Banking Practice for the Examination of Documents under UCP 600 (“ISBP”), (ICC Publication 745E, 2013).

²⁴⁶ See the UCP 600: Supplement on Electronic Presentation (eUCP), v 2.0 (2019) and URC 522: Supplement on Electronic Presentation v 1.0 (eURC).

²⁴⁷ See ICC, Uniform Rules for Digital Trade Transactions, v 1.0 (October 2021), art 7(f). See also Preliminary Considerations which specify that the Rules “are designed to be compatible with the UNCITRAL Model Laws”.

²⁴⁸ Para 3.55 below.

- 3.56 However, it should be noted that banks may also wish to take possession of documents of title without also obtaining title to the goods. As Norton Rose observed in their consultation response:²⁴⁹

The ability for documents to be held to order, or indorsed in blank, is important in the trade finance world. Some banks do not wish to be named [sic] on bills of lading, fearful of potential liability (eg for environmental matters) but are happy to take possession of the documents (which does not transfer title to the goods) with the ability for the documents to be transferred to a third party on enforcement.

As discussed in the following chapters, our recommendations and the Bill are concerned with possession as a matter of fact (rather than being concerned with legal rights).

- 3.57 It is worth noting here that as a matter of industry practice, “full sets” of bills of lading are required to be submitted when a documentary presentation is made to a bank.²⁵⁰ This ensures that banks effectively obtain an assurance, in situations where multiple originals are issued, that nobody else may lawfully claim delivery of the cargo, whether the bank obtains title to the goods or not.
- 3.58 One final observation to be made about the ways in which banks use trade documents is in relation to the discounting of bills of exchange and promissory notes. Since these documents are negotiable instruments and embody unconditional undertakings to pay a certain sum of money, banks do not need to concern themselves with the underlying transaction pursuant to which the document was issued. This means that they can buy these documents at a discount from the holder, and claim the full amount from the obligor when the document matures. This facilitates the provision of liquidity to businesses involved in international trade.²⁵¹

DELIVERY AND BEING A HOLDER

- 3.59 Putting the intended transferee in (physical) possession of the trade document is an essential step in transferring the document. However, a valid transfer of the document will require not only that the transferee receives possession of the document, but also that they accept the transfer. If a document is made out to order, indorsement will also be required. It is only once a valid transfer has taken place that the transferee becomes the document’s holder. For example, section 5(2)(b) of COGSA 1992 provides:

References in this Act to the holder of a bill of lading are references to any of the following persons, that is to say ... (b) a person with possession of the bill as a result

²⁴⁹ We asked consultees whether they agreed with our provisional proposals to include ship’s delivery orders and warehouse receipts in the list of trade documents without an express restriction to those that have been made out to order: consultation question 8, para 3.99.

²⁵⁰ The UCP 600, art 20(a)(iv). See also the ISBP, art E11. See also ICC International Commercial Terms (Incoterms) 2020, CIF ch, art A6.

²⁵¹ On discounting of negotiable instruments by banks see *Banco Santander v Banque Paribas* [2000] 1 All ER (Comm) 776.

of the completion, by delivery of the bill, of any indorsement of the bill or, in the case of a bearer bill, of any other transfer of the bill... .

- 3.60 A transferee who receives the document in good faith may also qualify as the document's "lawful holder",²⁵² or "holder in due course".²⁵³
- 3.61 A transfer of possession is therefore a necessary but insufficient condition for a valid transfer of the document to take place. "Delivery" of a trade document is defined in domestic law slightly differently for different purposes. As mentioned above,²⁵⁴ for the purposes of the Bills of Exchange Act 1882, delivery is defined as "transfer of possession, actual or constructive, from one person to another".²⁵⁵ The Sale of Goods Act 1979 defines delivery as a "voluntary transfer of possession from one person to another".²⁵⁶ The Sale of Goods Act 1979 is not just concerned with the delivery of goods but also with the delivery of documents, including documents of title as therein defined.²⁵⁷ For the purposes of section 5(2) of COGSA 1992, quoted above,²⁵⁸ the courts have held that:

completion of an indorsement by delivery requires the voluntary and unconditional transfer of possession by the holder to the indorsee and an unconditional acceptance by the indorsee.²⁵⁹

- 3.62 While these definitions differ, all of them require a transfer of possession. This transfer of possession will usually take place in performance of an underlying contractual obligation. For example, under a free on board ("FOB") sale contract,²⁶⁰ the seller has the obligation of shipping the goods on board the vessel nominated by the buyer,²⁶¹ thus obtaining the bill of lading which the seller then tenders to the buyer.²⁶² In order to obtain payment under a documentary credit arrangement, a beneficiary (seller)

²⁵² See Carriage of Goods by Sea Act 1992, s 5(2).

²⁵³ See Bills of Exchange Act 1882, s 29.

²⁵⁴ See para 3.27 above.

²⁵⁵ See Bills of Exchange Act 1882, s 2.

²⁵⁶ Sale of Goods Act 1979, s 61(1).

²⁵⁷ See Sale of Goods Act, s 24.

²⁵⁸ See para 3.35 above.

²⁵⁹ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 at [28] by Moore-Bick LJ. We understand that a Scottish court would likely reach the same result but on the basis that to acquire possession there must be an act of the body (detention and holding) and an act of the mind (an inclination or affection to make use of the thing detained), and that the act of the mind was not present to make the claimant/recipient of the bills of lading a possessor of them (Stair, *Institutions of the Law of Scotland* (2nd ed 1693), 2.1.16).

²⁶⁰ M Bridge (ed), *Benjamin's Sale of Goods* (11th ed 2020) 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".

²⁶¹ Sale of Goods Act 1979, s 32(1); ICC, International Commercial Terms (Incoterms) 2020, FOB ch, arts A1 and A2.

²⁶² ICC, International Commercial Terms (Incoterms) 2020, FOB ch, art A6. See also *Concordia Trading BV v Richco International Ltd* [1991] 1 Lloyd's Rep 475.

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.²⁶³

3.63 However, such tender or presentation by itself is not enough for the transfer of the document to be completed. *The Erin Schulte* case provides that if one is in possession of a bill of lading without having accepted it, one is not the holder.²⁶⁴ The court essentially held that the language of section 5(2)(b) of COGSA 1992:

is inconsistent with the proposition that an indorsee in possession of the bill becomes the holder regardless of his wishes or of the circumstances in which that has come about.²⁶⁵

We discuss acceptance and rejection below.

Acceptance and rejection

3.64 It would appear that while, as indicated above, acceptance is necessary for a transfer of the document to be complete, it does not need to be explicit, and it does not require any action dependent on the document's tangibility.

3.65 If one does not reject explicitly, that person may be presumed to have accepted. A lapse of time may be important, but no positive action appears to be required by the recipient to accept.²⁶⁶ Therefore, there may be an interval of time when it is not clear whether the documents have been accepted or not, even though they are in the possession of the intended transferee.²⁶⁷

3.66 Rejection, on the other hand, must be explicit, although it may be accomplished by a simple notice.²⁶⁸ Return of the documents to the tenderer or presenter normally follows rejection.²⁶⁹ We have been told that in practice, banks rejecting documents for non-compliance can simply transfer physical possession of the documents back to the transferee (with any necessary indorsement).

²⁶³ The UCP 600, arts 20 and 28.

²⁶⁴ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382 at [28] by Moore-Bick LJ.

²⁶⁵ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 at [20] by Moore-Bick LJ.

²⁶⁶ The UCP 600 suggests that a bank is deemed to have accepted a presentation of documents if it does not explicitly reject it within five banking days: arts 14 and 16.

²⁶⁷ Scots law would say "whether the documents were in the possession or not of the intended transferee who was physically detaining them".

²⁶⁸ The UCP 600 provides that should the bank determine that the presentation is not compliant, it must give notice under art 16(c) and indicate what it is going to do with the documents (the options include returning them or holding them pending further instructions from the presenter).

²⁶⁹ If the notice indicates that the bank is returning the documents, it was held in *Fortis Bank and Stemcor UK Limited v Indian Overseas Bank* [2011] EWCA Civ 58, [2011] 2 All ER (Comm) 288 at [41] by Thomas LJ that this must be done "with reasonable promptness". Failing this, art 16(f) applies. See *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 for another example of a case involving rejection of documents.

Amendment and curing of errors

3.67 In general, paper documents can be amended by inserting an amendment in writing on the document. With documents of title, amendments to the document must be acceded to by the document's issuer or acceptor. Unilateral amendments by the person in possession of the document would be considered alterations that make the document void. Section 64(1) of the Bills of Exchange Act 1882 provides:

Where a bill or acceptance is materially altered without the assent of all parties liable on the bill, the bill is avoided except as against a party who has himself made, authorised, or assented to the alteration, and subsequent indorsers.

Provided that, where a bill has been materially altered, but the alteration is not apparent, and the bill is in the hands of a holder in due course, such holder may avail himself of the bill as if it had not been altered, and may enforce payment of it according to its original tenor.²⁷⁰

3.68 Thus, where the document contains an error, the issuer and/or acceptor(s) of the document will need to be involved in correcting the error. In practice, correcting errors in a trade document may involve cancelling and reissuing the document with the correct information.²⁷¹

Surrender and accomplishment

3.69 Once paper trade documents have served their purpose, they are considered spent. Bills of lading, for example, are usually stamped as "accomplished" and taken out of circulation, once the cargo is delivered. From that point, they no longer give the person in possession of them the right to claim the goods described in the document.²⁷² The Bills of Exchange Act 1882 Act provides for "discharge" of a bill including by payment,²⁷³ or cancellation,²⁷⁴ but does not require any particular process to be followed to mark the bill as discharged.

FURTHER CONSEQUENCES OF PAPER TRADE DOCUMENTS BEING CAPABLE OF POSSESSION

3.70 Possession is important not only in the context of the legal effect and functionality of trade documents, but also in other respects.²⁷⁵ If the law recognises that something is possessable, it is capable under the law of England and Wales of being the subject of, for example:

- (1) bailment;

²⁷⁰ See also *Slingsby and Others v District Bank and Manchester District Registry* [1932] 1 KB 544.

²⁷¹ This happens with paper bills of lading, a practice called "switching". See discussion in M Goldby, "Managing the Risks of Switch Bills of Lading" (2019) *Lloyd's Maritime and Commercial Law Quarterly* 457.

²⁷² *The David Agmashenebeli* [2002] EWHC 104 (Admty), [2003] 1 Lloyd's Rep 92; see also *The Delfini* [1990] 1 Lloyd's Rep 252 regarding the meaning of "accomplished".

²⁷³ Bills of Exchange Act 1882, s 59.

²⁷⁴ Bills of Exchange Act 1882, s 63.

²⁷⁵ See Chapter 5.

- (2) possessory security interests; and
- (3) wrongful interference (conversion).²⁷⁶

We discuss each briefly below, including their relevance to paper trade documents.

Bailment

- 3.71 A bailment arises whenever one person (the bailee) takes voluntary possession of goods belonging to another (the bailor).²⁷⁷ The bailor (or their agent) must give actual or constructive possession (that is, the right to possession)²⁷⁸ of the thing bailed to the bailee.²⁷⁹ The bailor retains ownership²⁸⁰ of the thing, but wholly divests themselves of possession in favour of the bailee.²⁸¹ The bailor also has a reversionary interest in the thing,²⁸² which means that at the end of the bailment, the bailee must either return the thing²⁸³ to the bailor or deal with the thing as the bailor directs.²⁸⁴
- 3.72 The law of bailment applies to things in possession²⁸⁵ – that is, things which are capable of possession.²⁸⁶ As a result of their special status, paper trade documents (including bills of lading) can be pledged under English law,²⁸⁷ a pledge (discussed further below) being a type of bailment.

²⁷⁶ Bailment and conversion are not part of Scots law. Scots law does allow the transfer of a negotiable instrument to a creditor in security of a debt owed to that creditor. It also recognises a general right of lien to retain all negotiable instruments in their possession in security of a general balance owed to the possessor by the transferor to them of the instruments: Gloag and Irvine, *Law of Rights in Security* (1897) pp 602 to 610. Although not part of Scots law. Scots law also recognises a creditor's right in security arising through a pledge of corporeal (tangible) moveable property (ie goods).

²⁷⁷ 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] by Mance LJ.

²⁷⁸ We explain constructive possession from para 5.57 below.

²⁷⁹ *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".

²⁸⁰ 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".

²⁸¹ 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".

²⁸² M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-008.

²⁸³ Either the identical goods or an equivalent, depending on the type of bailment: M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-018.

²⁸⁴ *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.

²⁸⁵ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-004. 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.

²⁸⁶ We explain things in possession and things in action from para 5.3 below.

²⁸⁷ *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653.

Security interests

- 3.73 Security can be taken over paper trade documents in various ways. The relevant securities can be possessory or non-possessory.²⁸⁸ As the name suggests, under a possessory security, the party taking security has possession of the subject of security. As such, only things that are possessable can be the subject of possessory security arrangements.
- 3.74 Pledges and liens are possessory securities which, unlike non-possessory securities such as charges,²⁸⁹ do not require registration to be perfected. Both are regularly used in international trade and trade finance. In addition, as discussed below, a security interest to which possession is relevant arises under section 39 of the Sale of Goods Act 1979.

Pledges

- 3.75 A pledge involves a debtor (the pledgor) transferring possession of the property serving as security to the creditor (the pledgee).²⁹⁰ It is therefore a type of bailment, as indicated above. The concept of pledge is particularly important in the international trade context. For example, in international sale transactions where the seller requires an undertaking from a bank as to payment, or where the buyer wants to obtain credit to finance the sale transaction, arrangements may be made for the seller to 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 the goods sold as collateral.²⁹¹
- 3.76 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 and give the holder constructive possession of the goods in respect of which they are issued. 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.²⁹²
- 3.77 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.²⁹³

²⁸⁸ M Bridge, *Personal Property Law* (4th ed 2015) p 269.

²⁸⁹ The only form of charge recognised in Scotland is the floating charge.

²⁹⁰ M Bridge, *Personal Property Law* (4th ed 2015) p 277.

²⁹¹ Collateral here means security for payment under the personal obligation.

²⁹² *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.

²⁹³ R King, *Gutteridge and Megrah's Law of Bankers' Commercial Credits* (8th ed 2001) para 8-20.

3.78 By issuing a trust receipt, the debtor undertakes to hold the goods or the proceeds of their sale, in trust for the bank.

Liens

3.79 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.²⁹⁴

3.80 For example, under the MIA 1906, a marine insurance policy is capable of being the subject of a broker's lien.²⁹⁵ In 2001, the Law Commission concluded that the nature of liens implied that a marine insurance policy must be in tangible form.²⁹⁶ This was on the basis that, as a lien consists of a right to retain possession of goods, it cannot exist over intangible property.²⁹⁷

3.81 In 2010, however, the joint report of the Law Commission of England and Wales and the Scottish Law Commission instead concluded 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.²⁹⁸ This argument is supported by the provision in the MIA 1906 for parties to dispense with the broker's lien by agreement.²⁹⁹

Possessory security arising by operation of law

3.82 A security right involving possession can arise as a matter of statutory law under the Sale of Goods Act 1979. Section 39(1) provides that, notwithstanding that the property in the goods may have passed to the buyer, the unpaid seller of goods has various rights including a lien on the goods or right to retain them for the price while he is in possession of them.³⁰⁰ "Possession" under section 39(1)(a) includes constructive possession of the goods as holder of a bill of lading. Indeed, in order to retain the lien after having shipped the goods the seller must retain the right of disposal,³⁰¹ usually

²⁹⁴ L Gullifer and R Goode, *Goode and Gullifer on Legal Problems of Credit and Security* (6th ed 2017) para 15-027.

²⁹⁵ 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.

²⁹⁶ Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper, paras 7.9 and 7.10.

²⁹⁷ 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 2.83 above.

²⁹⁸ 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.

²⁹⁹ Marine Insurance Act 1906, s 50(2) begins "unless otherwise agreed".

³⁰⁰ Other rights are (i) in case of the insolvency of the buyer, a right of stopping the goods in transit after he has parted with the possession of them (see also Sale of Goods Act 1979, s 44); and (ii) a right of re-sale as limited by the Act. Section 39(2) provides that where the property in goods has not passed to the buyer, the unpaid seller has (in addition to other remedies) a right of withholding delivery similar to and co-extensive with his rights of lien or retention and stoppage in transit where the property has passed to the buyer.

³⁰¹ Sale of Goods Act 1979, s 43(1)(a).

through being the holder of the bill of lading or the person entitled to claim delivery under it.³⁰² Section 41(2) provides that the seller may exercise the lien or right of retention notwithstanding that the seller is in possession of the goods as agent or bailee or custodian for the buyer.

- 3.83 Section 39(1)(b) also provides the unpaid seller, in the event of the buyer's insolvency, with a right of stoppage in transit, if at this time the goods are still in transit to the buyer. Section 46(1) provides that:

the unpaid seller may exercise his right of stoppage in transit either by taking actual possession of the goods or by giving notice of his claim to the carrier or other bailee or custodian in whose possession the goods are.

- 3.84 Although it was not a case to which the Sale of Goods Act 1979 applied, in *AP Moller Maersk AS (trading as Maersk Line) v Sonaec Villas Cen Sad Fadoul*³⁰³ the unpaid seller recovered possession of the goods by requesting from the carrier cancellation of a straight bill of lading naming the buyer as consignee and the issue of one to the order of the seller in substitution. The contract of carriage in the bill of lading was governed by English law and the consignee sued in the English courts.

Conversion

- 3.85 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. As discussed in Chapter 5, *OBG Ltd v Allan* confirmed that, under the current law, there can only be a claim in conversion in respect of things capable of being possessed.³⁰⁴
- 3.86 Interference with a paper trade document can give rise to an action in conversion.³⁰⁵ Importantly, though, the damages available will be calculated based on the value of the obligation embodied by the document, rather than on the (negligible) value of the piece of paper itself.³⁰⁶

³⁰² Sale of Goods Act 1979, s 19(2).

³⁰³ [2010] EWHC 355 (Comm), [2010] 2 All ER (Comm) 1159.

³⁰⁴ [2007] UKHL 21, [2008] 1 AC 1. We discuss this case in more detail from para 5.13 below.

³⁰⁵ See eg, *Glencore International AG v MSC Mediterranean Shipping Co SA* [2017] EWCA Civ 365, [2017] 2 All ER (Comm) 881 at [42] by Sir Christopher Clarke.

³⁰⁶ See eg, *Bavins, Junr. & Sims v London and South Western Bank, Limited* [1900] 1 QB 270, 275 to 276, by Smith LJ; *United Australia v Barclays Bank* [1941] AC 1.

Chapter 4: Recommendations – the types of documents covered by our recommended reforms

4.1 In the previous chapter, we explained the concept of “trade documents” generally, their legal status, the relevance of possession and how they are used in practice. In this chapter, we make recommendations as to the trade documents which we consider should be captured by our recommended reforms. We explain that we have developed our thinking since the consultation paper based on consultees’ responses and, in particular, why we now recommend a general “umbrella” provision as well as a specific list of documents.

OUR PROVISIONAL PROPOSALS IN THE CONSULTATION PAPER

4.2 In our consultation paper, we provisionally proposed that our reforms should apply to a defined list of documents, which we labelled “trade documents”. We provisionally proposed that that list should cover bills of exchange, promissory notes, bills of lading, ship’s delivery orders, marine insurance policies, cargo insurance certificates and warehouse receipts.³⁰⁷ This list was set out at clause 1(2) of the consultation Bill.

4.3 We provisionally proposed to include an exhaustive list of documents for two reasons. First, to provide certainty for users of the legislation. Second, because as explained in Chapter 3 of this report, not all of the documents which we wish to capture have precisely the same legal character, although possession is an important part of how they all function.

4.4 We did not include documents such as sea waybills and air waybills in 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.³⁰⁸ We also did not include bearer bonds, or other documents such as banker’s drafts, traveller’s cheques, and dividend warrants. Our discussions with stakeholders suggested that their legitimate commercial use has diminished, and there is no need for them to be made electronic.³⁰⁹

4.5 We acknowledged that, in the future, evolving trade practices may warrant a variation of the categories of document included in this list. We provisionally proposed, therefore, that the Secretary of State should have the power to vary the list by adding, removing, or amending an entry.

Consultees’ views

General approach

4.6 Some consultees commented specifically that they approved of our provisional proposals. Dr Simone Lamont-Black, for example, considered that using a list was a

³⁰⁷ Consultation paper, para 3.18.

³⁰⁸ Consultation paper, from para 3.66.

³⁰⁹ Consultation paper, from para 3.71.

“very attractive” proposal and “eliminates other lengthy discussions and the need for slow development via case-law of what may fall within”. However, Dr Lamont-Black also made suggestions for additional documents to be included, particularly multimodal bills of lading.³¹⁰

4.7 The majority of consultees agreed with the list of documents in clause 1(2). Bolero International Ltd, for example, said “[i]n the context of facilitation these documents are most commonly used”.

4.8 Other consultees raised concerns that our provisional proposals were insufficiently flexible, in that they resulted in the Bill being applicable only to a closed list of document types. For example, Dr Jenny Jingbo Zhang and Dr Liang Zhao suggested that the Bill should adopt a broader approach:

As long as the criteria for electronic documents in the Bill are met and the substantive law recognises their paper counterparty as a document of title to transfer constructive possession of goods or monetary commitments, they should fall into the scope of this Bill. The explanatory note for the Bill can certainly provide an indicative list of documents to guide the practice.

4.9 Linklaters LLP also noted that not all of the documents in the proposed list “have the same legal status in relation to the rights that they represent”. They gave the example of a bill of exchange (a “negotiable instrument”), a bill of lading (which is “not negotiable in the full sense”), and a warehouse receipt (which they considered “sometimes constituting a document of title and sometimes not”). They also suggested that the list should provide for the possibility of evolution through the law merchant, rather than being added to by means of a statutory instrument.

4.10 Professor Christian Twigg-Flesner, answering “other”, considered our provisional proposals to be workable in practice. However, he suggested that it might be preferable to adopt an approach closer to the MLETR, which would involve including a non-exhaustive list of documents in a schedule to the Bill. Professor Twigg-Flesner considered that this approach was preferable for “future-proofing” purposes and avoiding the delays of using the power to make delegated legislation.

Sea and air waybills

4.11 Most consultees agreed that sea and air waybills need not be included.³¹¹ A small number of consultees considered that they should be included. For example, the London Maritime Arbitrators Association said that the Bill should cover all three documents covered in the Carriage of Goods by Sea Act 1992 (that is, bills of lading, sea waybills and delivery orders) “for consistency”.

4.12 WAVE BL considered that sea waybills should be included so as to “encourage the market adoption and transforming to the digital world”, as well as to make the law of

³¹⁰ Multimodal bills of lading are likely to be considered received for shipment bills under the Carriage of Goods by Sea Act 1992, and therefore to fall within its scope (and that of the Bill) as bills of lading. In any case, to the extent possession is relevant they will be caught by the umbrella provision discussed below.

³¹¹ We asked whether consultees agreed that sea waybills and air waybills need not and should not be included: consultation question 3, para 3.86. Eighteen consultees answered “yes”, four consultees answered “no” and seven consultees answered “other”.

England and Wales as competitive with other jurisdictions that had recognised electronic sea waybills.

Bearer bonds and other documents of title

4.13 In the consultation paper, we provisionally proposed:

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.

We asked consultees if they agreed, and a majority did.³¹²

4.14 Minerva Global Ltd said that "[w]e do not have a need for those electronic documents at the moment". The Law Society of Scotland agreed, so long as the documents included were intended to be confined to those used in relation to trade in goods, and the City of London Law Society ("CLLS") said that confining the scope of the reforms in this way was the correct policy.

4.15 Two consultees argued strongly in favour of including bearer bonds: the International Capital Market Services Association ("ICMSA") and International Capital Market Association. The ICMSA said that definitive bearer bonds have "virtually disappeared in terms of new issuance of bonds",³¹³ but that global bearer bonds,³¹⁴ "as a valid form of immobilisation, represent a significant portion of the overall current volumes in the international market". They said that around 40% of the total individual securities held in global form are bearer bonds, and that physically storing global bearer bonds was "unsustainable" and caused "operational inefficiencies".

4.16 The CLLS, in contrast, said that bearer bonds in particular should be excluded, as there were "existing regulatory requirements" in place such that "these forms of instrument are [not] suitable for the proposed treatment". They made the further point that bearer bonds:

are already capable of being safely, efficiently and effectively dealt with electronically and inclusion in these schemes would simply cause anomalies and confusion.

4.17 Some consultees (including Norton Rose Fulbright, the Institute of International Shipping and Trade Law at Swansea University ("IISTL"), and Dr Lamont-Black) suggested a relatively wide range of other documents that should be added to the list.

³¹² Consultation question 4, para 3.87. Eight consultees answered "yes", six consultees answered "no" and seven consultees answered "other".

³¹³ Bearer bonds may be either certificated or global. 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".

³¹⁴ 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).

These include bills of exchange, CMR consignment notes, certificates of origin, bank guarantees, stand by letters of credit, powers of attorney, freight forwarder's certificates of receipt, warehouse warrants, multimodal transport bills of lading, health certificates and other certificates presented to customs.

- 4.18 The Digital Container Shipping Association (“DCSA”), answering “other”, recognised that the documents listed were “the most important and urgent documents to be included in the draft Bill”. However, they expressed concern that these documents “cannot be fully separated from waybills, consignment notes or other forms of contracts of carriage”, as the latter documents were “an integral part of the sets of documents needed to move and trade goods in an international environment”. DCSA worried that their exclusion would indicate that “only part of the needed documentation can be digital”, leading to a “slower uptake of digital documentation and efforts to digitalise the listed documents might be lost”. DCSA considered it should remain possible for these documents, at least, to be included at a later stage.

POTENTIAL RISK OF ACCIDENTALLY CREATING DOCUMENTARY INTANGIBLES

Our position in the consultation paper

- 4.19 In our initial discussions with stakeholders, a small number asked whether 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 concern arose because the statutory definition of a bill of exchange is potentially capable of being met by a diverse range of electronic payment instructions. It was suggested to us 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 Bills of Exchange Act 1882.
- 4.20 In the consultation paper, we said we did not think that our provisional proposals would create any additional risk that documents which are not intended to be documentary intangibles would become so by virtue of the Bill. We did not propose any changes to the content or form of the relevant trade documents, nor to their function.

Consultees' views

- 4.21 Most consultees did not think that our provisional proposals for reform created an additional risk that documents which are not intended to be documentary intangibles will become so by virtue of the Bill.³¹⁵ As the Centre for Commercial Law at the University of Aberdeen observed, the proposals “do not attempt to change the nature of a document”, but instead “introduce the possibility of having an electronic format of it functionally equivalent to its paper format”. A few consultees raised concerns, however.

³¹⁵ We suggested 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 Bill and asked if consultees agreed: consultation question 41, para 6.175. Twenty consultees answered “yes”, two consultees answered “no” and four consultees answered “other”.

- 4.22 Dr Jenny Jingbo Zhang and Dr Liang Zhao were concerned that our provisional proposals would blur the boundary between what they regarded as true documentary intangibles and documents that embody mere contractual rights and potential proprietary rights.
- 4.23 The CLLS expressed a concern that, under our Bill, documents that are not connected with trade in goods will become treated as if they were. For example, they observed that bills of exchange and promissory notes have different uses in the financial markets and may be dealt with under the arrangements applicable to eligible debt securities set out in the Uncertificated Securities (Amendment) (Eligible Debt Securities) Regulations 2003.

Discussion

- 4.24 In the consultation paper, we defined a “documentary intangible” as a document that is recognised in law as embodying the right of which it is also evidence.³¹⁶ Taking into consideration the comments raised by Dr Zhang and Dr Zhao, in this report we have sought to emphasise that what is important is the fact that transfer of possession of all of the documents with which we are concerned can result in a transfer of rights. We have therefore minimised our use of the term “documentary intangibles”, as we can see that this caused concern among consultees.
- 4.25 We do not consider that our recommendations create a risk that does not already exist for paper documents. We do not recommend any changes to the content or form of the relevant trade documents, or to their function. Indeed, we recommend that a trade document in electronic form must contain all the information that would be required to be contained in a paper equivalent.³¹⁷
- 4.26 The extent to which our recommendations impinge on the different uses of such documents outside the context of international trade, and certain modifications to our provisional proposals to avoid affecting those different uses, are considered below.³¹⁸

OUR RECOMMENDATIONS

- 4.27 Having considered these concerns, we have revised the provision on the scope of the Bill. We no longer suggest an exhaustive list of documents. Rather, we recommend that the scoping provision should include:
- (1) an “umbrella” provision;
 - (2) a non-exhaustive list of documents; and
 - (3) an exclusion for certain documents.
- 4.28 We explain our revised approach below.

³¹⁶ Consultation paper, from para 3.3.

³¹⁷ Clause 1(3) of the Bill.

³¹⁸ See para 4.38 below.

General approach

4.29 As seen above, several consultees expressed concerns that the provisionally proposed list of “trade documents” was too narrow, as any document of a type not listed would be automatically excluded. They indicated that certain documents, the functioning of which depended to some extent on possession, were not listed despite being subject to the same legal blocker as the documents originally included in our proposed list.

4.30 Some consultees made arguments about the desirability of having a more expansive approach such as that adopted in the MLETR. Article 2 of the MLETR provides as follows:

“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.

4.31 Our further research confirmed that our provisionally proposed list of documents excluded certain documents, possession of which may be relevant in certain circumstances to claim performance of an obligation, even though that relevance is not always clear-cut. While we do not go through each in turn in this report, since a comprehensive list may in any case be impossible, we accept that any fixed list risks excluding documents possession of which is or may sometimes be relevant. In the case of warehouse receipts and ship’s delivery orders, some, but not all, of these documents operate as transferable documents. As we acknowledged in the consultation paper, the way they are made out and the context in which they are used can be crucial to the determination of the question of whether possession matters. The relevance of possession in each case will depend on the express statements included in the document. This applies equally to mate’s receipts, which were excluded from our proposed list.

4.32 Some consultees suggested that we should list only “true documentary intangibles” at common law. This would include bills of exchange, promissory notes and bills of lading, possession of which is relevant as a matter of law to claim performance of an obligation.³¹⁹ Historically, for example, “a custom of merchants” developed whereby a bill of lading was used to transfer constructive possession of the goods while they were at sea, and this custom became recognised by law.³²⁰ However, for some documents (such as warehouse receipts) while similar custom may not be recognised at law, possession may be relevant as a matter of commercial practice.³²¹ Although they are not strictly speaking documents of title at common law, possession of these

³¹⁹ See eg, Bills of Exchange Act 1882, s 2, which says “‘Delivery’ means transfer of possession, actual or constructive, from one person to another”.

³²⁰ *Lickbarrow v Mason* (1787) 2 TR 63; *Barber v Meyerstein* (1870) LR 4 HL 317 *Sanders Bros v Maclean & Co* (1883) 11 QBD 327; also see the consultation paper, para 3.33.

³²¹ In M Bridge (ed), *Benjamin’s Sale of Goods* (11th ed 2020) para 8-013, Professor Bridge suggests that an endorsee of a warehouse receipt might be able to enforce the issuer’s promise to deliver “to order” under the Contracts (Rights of Third Parties) Act 1999. As such, the inclusion of “to order” may make the document capable of transferring contractual rights through its endorsement and delivery.

documents remains relevant to the determination of legal rights as a matter of commercial practice.³²² For example, in the context of warehouse receipts, it has been noted that:

At common law, warehouse receipts are not treated as negotiable documents of title (unlike bills of lading). However, though not in itself conferring possession of the goods on the holder, possession of a warehouse receipt in effect gives the holder the right to possession of the goods.³²³

- 4.33 For some of these documents, the relevance of possession is recognised in statute, in that they fall within the definition of “document of title” in section 61 of the Sale of Goods Act 1979 and section 1(4) of the Factors Act 1889. Our research suggests that the legal blocker prevents these documents from being used in electronic form in the same way as they would be used in paper form.³²⁴ While these documents are not necessarily capable of precise legal categorisation, we do not think that is a reason to exclude them. If we did not take this opportunity, such documents could be left in a limbo. In this respect, we take a pragmatic rather than purist approach. Our approach was supported by consultees who approved of the list of documents, including the IISTL, Professor Djakhongir Saidov, the British Insurance Law Association, and industry stakeholders.³²⁵
- 4.34 Indeed, other consultees suggested that we should be much more inclusive in our approach and include all documents used in trade. These consultees were concerned that concentrating on a sub-category of documents could suggest that other documents, which are already used in electronic form, are not in fact legally valid. We do not agree that we should adopt this approach. Our recommended reforms are aimed at documents which rely on possession in order to fulfil their legal and commercial functions, and are irrelevant to documents that are already able to function in electronic form. These documents are and should be unaffected by our recommended reforms. Our recommended reforms set out certain criteria intended to ensure that documents which rely on possession are susceptible to a particular type of control when issued in electronic form, which would make them capable of being possessed as a matter of fact. It is unnecessary for documents that do not rely on possession to meet these criteria. We wish to avoid a situation where documents which can already be used in electronic form become subject to these additional

³²² See eg, a discussion of warehouse receipts in the consultation paper, para 3.52.

³²³ *Impala Warehousing and Logistics (Shanghai) Co Ltd v Wanxiang Resources (Singapore) Pte Ltd* [2015] EWHC 25 (Comm), [2015] 2 All ER (Comm) 479 at [55] by Blair J.

³²⁴ We are advised that, under Scots law, a warehouse certificate is nothing more than evidence of the warehouse keeper possessing the goods on behalf of the civil possessor, namely the owner. The owner can only pledge the goods effectively if the certificate is endorsed in favour of the pledgee and the endorsed certificate is notified to the warehouse keeper (*Inglis v Robertson & Baxter* (1897) 20 R 758 upheld at (1898) 25 R (HL) 70). The notification to the natural possessor (the keeper) acts as the constructive delivery – delivery being essential for the creation of a right in security over a tangible moveable in Scots law. The Scottish Law Commission has recommended reform of this rule in its Moveable Transactions Bill, see Report on Moveable Transactions Volume 3: Draft Bill (2017) Scot Law Com No 249, <https://www.scotlawcom.gov.uk/law-reform/law-reform-projects/completed-projects/security-over-corporeal-and-incorporeal-moveable-property/>.

³²⁵ Including Enigio Time AB, China Systems, Minerva Global Ltd, Phillips 66 Ltd, Rio Tinto Commercial, Bolero International Ltd, Vitol Services Ltd and Vale International SA.

burdens. Our recommendations and the Bill should not be taken to suggest that, for example, sea waybills, air waybills, customs documents or certificates of origin, quantity or quality cannot be used in electronic form unless they meet these criteria. These documents are already routinely digitalised.

4.35 We have therefore revised our approach based on the following two propositions.

- (1) Our recommendations and the Bill should cover only those documents in relation to which possession is relevant for a person to claim performance of an obligation. In practice, we think it is likely that this obligation will be set out in or referred to in the document.
- (2) The approach should be sufficiently broad such that any paper document used in trade to which possession is relevant (as a matter of law or commercial practice) for a person to claim performance of an obligation can have the same effect in electronic form.

4.36 We consider that the best way to do this is to adopt an “umbrella” provision to extend application of the recommended reforms to any document possession of which is relevant for a person to claim performance of an obligation. We consider that this addresses consultees’ concerns that we might otherwise inadvertently exclude particular documents.

4.37 That said, we think that including a list of specific documents that function on the basis of possession and which we know to be routinely used in trade is beneficial, as it will provide industry with the certainty that was desired by consultees. Intended to be used in combination with the umbrella provision, this list is illustrative rather than exhaustive.

An “umbrella” provision

4.38 As we noted above and in Chapter 3, not all of the documents encompassed by our recommended reforms are capable of legal categorisation by use of a single term such as “document of title” or “negotiable instrument”. This was one of the reasons in the consultation paper for not proposing a general definition.³²⁶ In particular, straight bills of lading, warehouse receipts and ship's delivery orders are not documents of title at common law, but possession is an important part of how they function. It is our intention (subject to certain specific exceptions) that any document to which possession is relevant for a person to claim performance of an obligation should be caught, regardless of its precise legal or commercial nature. Accordingly, we recommend that the reforms and Bill should cover all documents, possession of which is relevant as a matter of law, custom and/or practice, to the determination of rights and entitlements.

4.39 We have considered whether the scope of such an umbrella provision should be limited by the use of expressions such as “documents used in trade (and trade finance)”, given that this industry is the focus of our recommendations. However, these expressions do not have any precise definition and we consider that their inclusion in legislation could lead to unnecessary uncertainty. A phrase such as

³²⁶ See consultation paper, from para 3.81 and in particular para 3.83.

documents “in commercial use” is unlikely to add anything of substance because all the relevant documents are, almost exclusively, commercial in nature.³²⁷ We do not, therefore, recommend a qualification of this nature. Instead, we think that certain types of document should be explicitly excluded, and we discuss this below.

4.40 Our recommendations may, therefore, be used to enable the digitalisation of documents that are not routinely used in trade and not among those discussed in Chapter 3, but which are not specifically excluded. The recommended reforms are intended to be facilitative, not mandatory, so users of such documents would not be forced to switch from paper if they or their industry do not wish to do so. However, where electronic documents would be beneficial for the relevant users, our recommendations as to the criteria that such documents must satisfy in order to be possessable will ensure that the same legal effects can be achieved if the document is used in electronic form.

A non-exhaustive list

- 4.41 While recommending a broad umbrella provision, we nevertheless consider that we should also retain a list of specific documents, albeit non-exhaustive. Consultees said that such a list of documents would provide certainty with respect to key documents in widespread use.
- 4.42 We recommend that the list should contain all the documents listed in the consultation paper, with the addition of one further document: mate’s receipts. We recommend including mate’s receipts because, like ship’s delivery orders and warehouse receipts, they are explicitly mentioned in the definition of “document of title” that applies for the purposes of the Sale of Goods Act 1979 and the Factors Act 1889.³²⁸ Therefore, for statutory purposes, possession of mate’s receipts can have certain legal consequences. Additionally, a number of consultees indicated that they should be included. We discuss mate’s receipts in more detail in Chapter 3.
- 4.43 There are other documents, for example, consignment notes, that we have not included within the list because our research yielded no evidence that these rely on possession for the purposes of law. However, they would be covered by the umbrella provision if there were circumstances in practice where they need to be possessed in order to function effectively.
- 4.44 We continue to think that possession is not relevant to sea and air waybills, and our research shows that these documents are already used in electronic form with no difficulty. We do not therefore recommend including them in the list. However, if possession were ever relevant to them, they would be captured by the umbrella provision. We hope that this will satisfy consultees who were of the view that such documents should be included for completeness.
- 4.45 Since possession is only relevant to some of the documents in our list in certain circumstances, we consider that a document which falls within the list should only be caught by our recommendations if possession is required for a person to claim

³²⁷ The main exception is personal cheques, electronic presentment of which is dealt with specifically at s 89A of the Bills of Exchange Act 1882.

³²⁸ See the Sale of Goods Act 1979, s 61 and the Factors Act 1889, s 1(4).

performance of an obligation. That is, the non-exhaustive list should be subject to the umbrella provision.

Recommendation 3.

- 4.46 Subject to certain explicit exclusions, legislation should make provision to allow for electronic forms of trade documents, possession of which is required as a matter of law or commercial practice for a person to claim performance of the relevant obligation, to be treated in law as equivalent to their paper counterparts.

Recommendation 4.

- 4.47 Legislation should specifically allow for the following documents to be used in electronic form, provided that possession is required as a matter of law or commercial practice for a person to claim performance of an obligation:

- (1) bills of exchange;
- (2) promissory notes;
- (3) bills of lading;
- (4) ship's delivery orders;
- (5) warehouse receipts;
- (6) mate's receipts;
- (7) marine insurance policies; and
- (8) cargo insurance certificates.

The Bill provisions

- 4.48 The overall effect of the Bill is to provide that a trade document in electronic form is capable of being possessed if it meets certain criteria. A document that satisfies these criteria is an "electronic trade document" within the meaning of the Bill.

- 4.49 The first criterion relates to the types of trade documents which, when in electronic form, can qualify as electronic trade documents. Clause 1 defines the documents in paper form which, under our recommendations, should be equally capable of taking electronic form.

- 4.50 Clause 1 provides for the definition of a "paper trade document" as:

- (1) A document is a "paper trade document" for the purposes of this Act if —

- (a) it is in paper form, and
 - (b) possession of the document is required as a matter of law or commercial custom, usage or practice for a person to claim performance of an obligation.
- (2) The following are examples of documents that, if they fall within subsection (1), will be paper trade documents —
- (a) a bill of exchange;
 - (b) a promissory note;
 - (c) a bill of lading;
 - (d) a ship's delivery order;
 - (e) a warehouse receipt;
 - (f) a mate's receipt;
 - (g) a marine insurance policy; and
 - (h) a cargo insurance certificate.

4.51 The reference to “paper trade documents” excludes bare legal rights such as debts.³²⁹ Note that clause 1(1)(b) deliberately avoids the use of the word “entitles” which features in the equivalent MLETR provision. This is because, as explained above, our definition is intended to include not just documents possession of which is significant as a matter of law, but also documents which are not documents of title for all legal purposes. We think that “entitles” might narrow the definition unnecessarily by suggesting that the document must be a document of title or negotiable instrument for all legal purposes in order to be included.

Exclusions

4.52 We consider it important also to exclude certain types of documents that may otherwise be caught by our recommendations and the scope of the Bill. This is for two reasons. First, the way in which negotiable instruments are defined in the law of England and Wales may have the unintended effect of extending the application of our recommendations to documents which should not be included, as they are already provided for separately in specialist legislation. Second, the fact that we now recommend an umbrella provision necessarily means that our recommendations and the Bill may capture documents that are not explicitly listed. We think there are some documents which, while arguably falling within the scope of the umbrella provision, are

³²⁹ In the consultation paper, we provisionally proposed that bare legal rights should be excluded from the scope of our reforms: consultation paper, from para 5.49. This proposal gave rise to confusion among some consultees. As we discussed in the consultation paper, it is not necessary to specify this since trade documents are not bare legal rights. We do not therefore make recommendations in this regard. We will discuss bare legal rights in our separate work on digital assets.

better dealt with separately rather than in legislation intended principally to apply to documents used in international trade.

Instruments entered under a relevant system

4.53 The first type of instruments we recommend should be excluded explicitly from our recommendations are instruments which are entered under a “relevant system” under the Uncertificated Securities Regulations 2001 (“USRs”).³³⁰ In their response to the consultation, the CLLS said that bills of exchange and promissory notes “have uses in the financial markets outside of the field of international trade in goods”. In particular, the CLLS said that:

certain instruments which are technically of these types are used in the money markets and may be dealt with under the arrangements created for “eligible debt securities” by the Uncertificated Securities (Amendment) (Eligible Debt Securities) Regulations 2003.

4.54 The “money market” is “the unsecured deposit market, including the issue of, and trading in, certificates of deposits and commercial paper”.³³¹ It is a market which deals with short-term investments. Commercial paper is a type of debt security and is “a promissory note issued by a large corporation or financial institution usually for a short period but cannot be issued for longer than 364 days”.³³²

4.55 Commercial paper may be issued in the same way as bonds (discussed below in relation to bearer bonds).³³³ Most commercial paper are³³⁴ issued as bearer instruments, which are then held physically by a common depository.³³⁵ Entitlements to a share or unit of a bond are maintained on an electronic register.

4.56 The USRs provide the legal regulatory framework for securities (such as shares) held and transferred in electronic “book entry” form.³³⁶ Securities which are held on CREST, an electronic register, must comply with the USRs. These regulations also apply to certain debt securities following amendment by the Uncertificated Securities (Amendment) (Eligible Debt Securities) Regulations 2003.³³⁷ They define “eligible debt security” in regulation 3 as:

a security that satisfies the following conditions —

³³⁰ SI 2001 No 3755.

³³¹ Bank of England, *The UK Money Markets Code* (2021), Glossary at <https://www.bankofengland.co.uk/-/media/boe/files/markets/money-markets-committee/uk-money-markets-code.pdf>

³³² Bank of England, *The UK Money Markets Code* (2021), Glossary at <https://www.bankofengland.co.uk/-/media/boe/files/markets/money-markets-committee/uk-money-markets-code.pdf>.

³³³ See from 4.63 below.

³³⁴ A plural as a term of art.

³³⁵ As described in *Intermediated securities: who owns your shares?* (2020) Law Commission Scoping Paper, at para 2.66.

³³⁶ SI 2001 No 3755, reg 2.

³³⁷ SI 2003 No 1633.

- (i) the security is constituted by an order, promise, engagement or acknowledgement to pay on demand, or at a determinable future time, a sum in money to, or to the order of, the holder of one or more units of the security; and
- (ii) the current terms of issue of the security provide that its units may only be held in uncertificated form and title to them may only be transferred by means of a relevant system;

4.57 Section 83(1) of the Bills of Exchange Act 1882 defines “promissory note” as:

an unconditional promise in writing made by one person to another signed by the maker, engaging to pay, on demand or at a fixed or determinable future time, a sum certain in money, to, or to the order of, a specified person or to bearer.

4.58 Therefore, commercial paper (which is technically a promissory note) may meet the requirements of both regulation 3(i) and fall within our umbrella provision.³³⁸ Depending on whether the other requirements are met, two statutory regimes in relation to electronic instruments could apply.

4.59 We have considered whether this could cause problems in practice. On balance, we think that it would be pertinent to exclude the application of the Bill to instruments entered in a “relevant system” under the USRs, in order to avoid potential confusion. We have not consulted on the application of the Bill to such instruments and their inclusion could cause issues for the special procedure given that at least one stakeholder has concerns.

Recommendation 5.

4.60 Instruments entered in a “relevant system” under the Uncertificated Securities Regulations 2001 should be excluded from the scope of legislation allowing for trade documents in electronic form.

The Bill provisions

4.61 Clause 5(1) and 5(2)(b) exclude instruments entered in a “relevant system” under the Uncertificated Securities Regulation 2001 from the scope of the Bill. They provide:

- (1) Sections 1 to 4 of this Act do not apply in relation to a document or instrument listed in subsection (2).
- (2) The list is as follows —
 - (b) an uncertificated unit of a security that is transferable by means of a relevant system in accordance with the Uncertificated Securities Regulations 2001 (S.I. 2001/3755).

³³⁸ In their response, the City of London Law Society also referred to bills of exchange being used in the money markets. Although we have not been able to find an example, we note that the explanatory notes to the 2003 regulations refer to bills of exchange.

4.62 Clauses (or, once implemented, sections) 1 to 4 are the operative clauses of the Bill.

Bearer bonds

4.63 The second type of instrument which we recommend that the Bill should exclude from its application is bearer bonds, which otherwise may fall within the new umbrella definition of “trade documents”. The reason for excluding this document type is that it is used in the financial markets and not in trade.

4.64 The majority of consultees said that bearer bonds should not be within the scope of the Bill. Although some consultees argued strongly that they should be included,³³⁹ we think that bearer bonds are better dealt with in the Law Commission’s general digital assets project.

4.65 As we discuss above in relation to commercial paper, bearer bonds are usually issued as a global bond in paper form which is held physically by a common depository. Entitlements to a share or unit of a bond are then maintained on an electronic register.

4.66 We have considered whether excluding instruments entered under a “relevant system” under the USRs would necessarily exclude all bearer bonds. Although bearer bonds may be covered by the USRs, to the extent that they are not, we do not think that they should come under the Bill (in contrast with, for example, promissory notes).³⁴⁰

4.67 We also took into account the fact that the MLETR similarly excludes instruments that are mainly used for the purposes of finance and investment. Article 1(3) of the MLETR provides:

This Law does not apply to securities, such as shares and bonds, and other investment instruments

4.68 This exclusion would seem to cover both instruments covered by the USRs and bearer bonds. However, we considered that using the word “securities” might give rise to uncertainty in the English law context. For example, section 14 of the Banking Act 2009 defines “securities” as including “any other instrument creating or acknowledging a debt” which we thought might be too broad for our purposes, as it would seem to include bills of exchange and promissory notes.

Recommendation 6.

4.69 Bearer bonds should be excluded from the scope of legislation allowing for trade documents in electronic form.

³³⁹ See para 4.15 above.

³⁴⁰ Note that bearer shares were abolished in 2015 by s 84 of the Small Business Enterprise and Employment Act 2015.

The Bill provisions

4.70 Clause 5(1) and 5(2)(a) exclude bearer bonds from the scope of the Bill. They provide:

- (1) Sections 1 to 4 of this Act do not apply in relation to a document or instrument listed in subsection (2).
- (2) The list is as follows —
 - (a) a bearer bond

POWER TO ADD, REMOVE OR AMEND AN ENTRY IN THE LIST OF DOCUMENTS

4.71 In the consultation paper, we acknowledged that in the future, evolving trade practices may warrant a variation of the categories of document included by virtue of what was, under our provisional proposals, an exhaustive list. We therefore provisionally proposed that the Secretary of State should have the power to vary the list by adding, removing, or amending an entry in the list. Although consultees generally agreed with this provisional proposal, the same reasoning no longer applies. Given that we now recommend a non-exhaustive list with a general umbrella provision, we no longer consider that such a power is required.

4.72 However, we do consider that a power is needed to allow for the exclusions to be added to, removed from, or otherwise amended in future. For example, the Uncertificated Securities Regulations 2001 may be amended, necessitating consequential amendments to the exception provision in the Bill. The power could also be used to remove the exclusion of bearer bonds from the scope of the reforms if this was considered desirable at a future point.

4.73 More generally, it may be determined that some documents which fall within the umbrella provision require more bespoke provisions to allow for their digitalisation, or that they should not be capable of being used in electronic form. We have not identified any such documents beyond those for which we have already recommended exclusions. However, given that the Bill could lead to a significant change in practice for certain types of documents, we think it is important that the legislation includes a power to make further carve-outs if it proves necessary or desirable. We recommend that any secondary legislation laid pursuant to such a power should be subject to the affirmative rather than negative parliamentary procedure.

Recommendation 7.

4.74 Legislation should contain a power to make secondary legislation, subject to the affirmative procedure, to add to, remove from, or otherwise amend the list of documents which are excluded from the scope of the Bill.

The Bill provisions

4.75 Clauses 5(3), (4) and (5) of the Bill provide:

- (3) The Secretary of State may by regulations made by statutory instrument add, remove or amend an entry in the list in subsection (2).
- (4) Regulations under this section may make incidental, consequential, transitional or saving provision.
- (5) 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.

Chapter 5: Current law – possession

- 5.1 The subject matter of this report and the Bill is documents whose functionality depends on their being possessed, whether as a matter of law or commercial practice.³⁴¹ As explained briefly in Chapter 2, the law of England and Wales – like that of many other significant trade jurisdictions around the world – does not recognise intangible things as being amenable to possession. This means that electronic 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”.
- 5.2 In this chapter, we explain the possession problem in detail. We trace its origins and explain the consequences for the type of documents with which we are concerned. We then provide a summary of the complex area of possession in the law, identifying elements which we think can be extrapolated to electronic trade documents. In Chapter 7, we explain our recommendations for expanding possession to electronic trade documents.

CATEGORIES OF PROPERTY: THE DISTINCTION BETWEEN “THINGS IN ACTION” AND “THINGS IN POSSESSION”

- 5.3 Property can be divided into two categories: real property (interests in land) and personal property. Personal property is further divided, at least traditionally, into:
- (1) things in possession; and
 - (2) things in action.

As we will see below, things in possession and things in action are susceptible to different types of legal treatment.

- 5.4 The concept of possession has long been used as a proxy to distinguish between claims that were enforceable only against a particular party (*in personam*), and those which were enforceable against the whole world (*in rem*), the former giving rise to personal rights and the latter to proprietary rights. A bare personal right has no independent form and exists only insofar as it is recognised by a legal system as a claim against a specified person (hence “*in personam*”). This means that its presence in the world is dependent upon there being both a party against whom it can be claimed and a legal system willing to recognise the claim. Such claims are categorised as “things in action”. A “thing in action”, at least traditionally, describes any personal property that can only be claimed or enforced through a court action.³⁴² Common

³⁴¹ The categories of documents with which this consultation paper is concerned are discussed in detail in Chapter 4 above.

³⁴² M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 4-002, citing *Torkington v Magee* [1902] 2 KB 427, 430, by Lord Alverstone CJ, Darling and Channel JJ.

examples of “things in action” are debts, rights to sue for breach of contract, and shares in a company.

- 5.5 A proprietary right, by contrast, applies in relation to a thing that has an existence of its own, independent of any individual or claim. Such things are categorised as “things in possession”. The distinctive feature of things in possession, and what sets them apart from things in action, is that they exist regardless of whether anyone lays claim to them, and regardless of whether any legal system recognises such claims. Under the current law, a “thing in possession” is any object which the law considers capable of possession.³⁴³ This category includes assets which are “tangible, moveable and visible and of which possession can be taken”.³⁴⁴ An example of this is a bag of gold: possession of a bag of gold gives its possessor a property right which is good against the whole world.³⁴⁵ A paper trade document is a thing in possession.³⁴⁶
- 5.6 Whilst a bag of gold is obviously tangible, a contractual right is obviously intangible. Until relatively recently, this tangible/intangible dichotomy tracked precisely the distinction between those things that have an independent existence and those that are bare rights, dependent for their existence on legal recognition and enforcement. It is perhaps not surprising, then, that, over time, 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.
- 5.7 To some extent, this distinction between tangible things and everything else makes sense. If a person has possession of a tangible object such as a bag of gold or a paper trade document, they are generally in physical control of it by, for example, holding it in their hand. For larger objects, such as goods in a warehouse, it could be sufficient physically to control the key to the warehouse in order factually to possess everything inside.³⁴⁷ An intangible object, however, cannot be physically possessed in this way, and at first glance this may justify a difference in legal treatment. It is factually possible for someone to interfere with tangible property, by grabbing the piece of paper or other item from a person’s hand, or breaking into the warehouse and stealing its contents. By contrast, because a thing in action (as traditionally defined)

³⁴³ Whilst this might seem question-begging, the point is simply that the category is broad enough to encompass all of those things capable of possession, as opposed to any subset.

³⁴⁴ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 1-018; and *Armstrong DLW GmbH v Winnington Networks Ltd* [2012] EWHC 10 (Ch), [2013] Ch 156 at [44] by Stephen Morris QC. 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.

³⁴⁵ This is the standard account of the effect of a property right. A full account also needs to recognise that, in the common law’s system of relative title, this really means a right good against the whole world except against those with a superior, possessory right. Eg, the finder of a gold watch has a right by virtue of possession of the gold watch. This right is good against the world except against the person who lost the watch (and anyone with a valid right prior to the person who lost the watch, and so on).

³⁴⁶ Paper trade documents also represent legal rights. However, as discussed in Chapter 3, they are unique in that they embody the rights rather than merely evidence them. They are not therefore bare legal rights, and are things in possession rather than things in action.

³⁴⁷ *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [18] and [23] by Moore-Bick LJ.

has no existence independent of legal persons or systems, such interference is not factually possible; the thing itself is not separable from the person who holds it.

- 5.8 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”.³⁴⁸ As a result, the current law assumes that all objects must fall within one or other of the two categories.³⁴⁹ As discussed below, the courts have held that intangibles cannot be things in possession.³⁵⁰ This means that the category of things in action, perhaps necessarily, has been described as something of a residual category encompassing everything that is not a thing in possession.³⁵¹
- 5.9 Tangibility has therefore 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.³⁵²
- 5.10 Although not currently capable of being possessed as a matter of law, 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. Certain types of electronic document and other digital assets may be susceptible to similar types of control, and to similar means of interference, as tangible objects. They are things over which parties have rights, rather than being bare rights in themselves. The same cannot be said of a debt or of a right to sue. The question therefore arises as to whether the legal distinction between things in action and things in possession is sustainable in all cases, merely on the basis that the former cannot be physically possessed. A further question is whether electronic documents and other digital assets can properly be said to be things in action.
- 5.11 Some recent judgments have recognised a potential third category of property, such as *Armstrong v Winnington*, which held that EU carbon emission allowances could be characterised as “other intangible property”, distinct from a thing in action or thing in possession.³⁵³ We also note that, in the recent case of *AA v Persons Unknown*, the High Court of England and Wales said that “[cryptocurrencies] are neither [things] in

³⁴⁸ (1885) 30 Ch D 261, 285, referring to Sir William Blackstone, *Commentaries on the Laws of England* (vol 2) p 389.

³⁴⁹ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 4-002. In this report, we use the terms “thing in action” and “thing in possession” instead of “choses in action” and “choses in possession”. The meaning is identical.

³⁵⁰ From para 5.13.

³⁵¹ See eg, M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 4-006, and generally UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019), <https://technation.io/lawtechukpanel/>.

³⁵² M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 4-006.

³⁵³ *Armstrong v Winnington* [2012] EWHC 10, [2013] Ch 156. See also *A-G of Hong Kong v Chan Nai-Keung* [1987] 1 WLR 1339, 1342 where Lord Bridge of Harwich 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’”.

possession nor are they [things] in action”.³⁵⁴ Nonetheless, in that case, the court held that cryptocurrencies were a form of property.³⁵⁵ It is sufficient for current purposes to recognise that electronic trade documents cannot, under the current law, be things in possession.

5.12 This can be seen from two main cases.

Key cases

5.13 The leading authority is the 2007 case of *OBG Ltd v Allan*.³⁵⁶ In this case, the House of Lords considered whether an action in the tort of conversion could lie where the relevant property was intangible (on the facts, a set of contractual rights). 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. The bare contractual rights in question were deemed to be classic things in action. However, the case did not concern digital property, and so the court was not asked to consider the nature of such property. Neither did the court address the question of whether assets in digital form could be possessed, regardless of the fact that they are regarded as intangible.

5.14 That issue did, however, come before the Court of Appeal in *Your Response Ltd v Datateam Business Media Ltd* (“*Your Response*”).³⁵⁷ The relevant question was whether a possessory lien, a form of security which requires the holder of the security to be in physical possession of the secured property, could be exercised over an electronic database. The question of whether an intangible (digital) asset could be possessed was therefore central to the outcome of the case.

5.15 Lord Justice Moore-Bick 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.³⁵⁸

5.16 The key question was therefore whether the intangible property could be “possessed”. Lord Justice Moore-Bick found, following *OBG Ltd v Allan*, that it could not.

5.17 In particular, he rejected *Your Response Ltd*’s argument that the database was a form of intangible property different from a thing in action, and the consequential argument that the reasoning in *OBG Ltd v Allan* therefore 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

³⁵⁴ *AA v Persons Unknown* [2019] EWHC 3556 (Comm), [2020] 4 WLR 35 at [55] by Bryan J.

³⁵⁵ *AA v Persons Unknown* [2019] EWHC 3556 (Comm), [2020] 4 WLR 35 at [61] by Bryan J.

³⁵⁶ [2007] UKHL 21, [2008] 1 AC 1.

³⁵⁷ [2014] EWCA Civ 281, [2015] QB 41.

³⁵⁸ *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [12].

decision in *OBG Ltd v Allan* prevents us from holding that property of that kind is amenable of possession so that wrongful interference can constitute the tort of conversion. It follows, in my view, that it is equally not amenable to the exercise of a possessory lien.³⁵⁹

5.18 Lord Justice Moore-Bick recognised that this and other arguments made by Your Response Ltd:

owed a debt to a scholarly volume entitled *The Tort of Conversion*, in which Sarah Green³⁶⁰ 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.³⁶¹

5.19 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.³⁶²

5.20 The current relationship 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.

5.21 The decision in *OBG Ltd v Allan* 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 persons or the legal system. However, the decision has the effect of excluding all intangible property from the category of things in possession. As a result, the Court of Appeal in *Your Response* (being bound by *OBG Ltd v Allan*) was not able to consider arguments that digitised material, while intangible, also has features that make it in some senses comparable to a tangible object.

5.22 In our consultation paper, we suggested that the court in *OBG Ltd v Allan* might have been more inclined to make a modest expansion to conversion, or to the concept of possession generally, to cover electronic versions of certain trade documents. We described this hypothetical expansion as modest because the law already recognises documents in paper form as belonging to a special category of property.³⁶³ We think there is a strong case for this expansion, and it forms the basis of our

³⁵⁹ *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.

³⁶⁰ 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.

³⁶¹ *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [27].

³⁶² *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [27].

³⁶³ See consultation paper, from para 5.85.

recommendations for reform. However, as the current law stands, intangible assets, including trade documents in electronic form, are not possessable.

Consequences of the current law

- 5.23 Whatever the nature of the relationship that may exist between a person and an electronic document, the law does not currently recognise it as "possession". Possession is not necessarily synonymous with ownership; a person can be in possession of an object that is owned by someone else. For example, if A borrows a car from B, A is in possession of the car while B remains the owner. While the possessor is not necessarily an owner, possession can nevertheless have significant consequences in determining the legal relationship between the possessor and the thing possessed³⁶⁴ and, as such, amounts to a very valuable interest.
- 5.24 Under the law of England and Wales, the recognition that something can be possessed as a matter of law determines much about the legal treatment that it subsequently receives, and has implications for the legal functionality and treatment of different forms of property. Things which cannot be possessed are excluded from a range of commercially useful legal concepts.
- 5.25 Critically for our purposes, the documents with which we are concerned depend on possessability for their basic functionality. However, electronic versions of trade documents currently cannot be used in the same way as their paper counterparts to embody an obligation. For example, unlike its paper counterpart, an electronic document:
- (1) cannot, as a matter of property law, be delivered or held. For example, a party cannot be the "holder" of such a document for the purposes of statutory provisions, such as section 29 of the Bills of Exchange Act 1882;³⁶⁵
 - (2) cannot be negotiable instruments or documents of title, either at law or under statute, and therefore cannot derive the benefits associated with these documents, as set out in Chapter 3;
 - (3) cannot be the subject of a possessory security;
 - (4) cannot be bailed; and
 - (5) cannot be protected by the property torts such as conversion (nor by the special rule concerning the measure of damages for interference with a document embodying a debt or obligation).

POSSESSION BEYOND TANGIBILITY

5.26 In the consultation paper, we considered two key questions.

³⁶⁴ Even where that possession has been acquired unlawfully.

³⁶⁵ We explain the concept of "holder" from para 3.59 above.

- (1) What are the salient properties of physical things which make them possessable as a matter of law?
- (2) How can those properties be extrapolated to electronic trade documents?

We consider the first of these questions in this chapter. We look at how the concepts can be extended to electronic trade documents in Chapter 7.

5.27 In order to consider how the concept of possession could be extended to certain electronic documents, an obvious place to start is to consider what possession “means” and how it is established. Unfortunately, this is not straightforward. As Earl Jowitt has observed, “in truth the English law has never worked out a completely logical and exhaustive definition of ‘possession’”.³⁶⁶ It is used in a range of legal contexts, including in statute,³⁶⁷ and is sometimes qualified or forms part of a legal fiction (as in the case of constructive possession, discussed below). In most case law in which possession is a relevant issue, it is considered a matter to be proved by evidence as 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.

The core case of possession

5.28 It is important to make clear that we are concerned with the “core case” of possession (sometimes called “actual” or “de facto” possession), which is a factual relationship between a person and an object, and from which certain legal consequences follow.³⁶⁸ This is because our recommendations are aimed at enabling trade documents in electronic form to function in the same way as their paper counterparts. To achieve this, we need to identify the criteria that they must fulfil so as to be capable of possession in fact, and then ensure that such possessability is recognised in law. We do not wish to affect in any way the existing legal consequences of possessing a trade document.

5.29 As we discuss below, the law on “actual” possession (which in this report we generally refer to as “possession”) indicates that, in order to be possessable, a thing must be capable of exclusive control, which is a matter of fact. Establishing whether a person is in possession of a thing may, however, require the examination of rights rather than, or in addition to, facts. That is, one may have possession of a thing as a matter of law albeit not in fact. We discuss this type of “legal” or “constructive” possession below for

³⁶⁶ *United States of America v Dollfus Mieg et Cie* [1952] AC 582, 605, by Earl Jowitt.

³⁶⁷ J P H Mackay (ed), *Halsbury’s Laws of England, Carriage and Carriers, Bills of Lading* (2020) para 845. We might compare, for example, the rules on acquiring possession of real property or chattels, with the rules defining the criminal offence of being in possession of a controlled drug contrary to section 5 of the Misuse of Drugs Act 1971. For a detailed list of the different statutory contexts in which the term “possession” appears, see n 5 to para 845. A particularly complicated instance of the concept appears in regulation 3 of the Financial Collateral Arrangements (No 2 Regulations) 2003, as amended by the Financial Markets and Insolvency (Settlement Finality and Financial Collateral Arrangements) (Amendment) Regulations 2010.

³⁶⁸ “Possession is a matter of fact rather than a matter of law”: S Green and J Randall, *The Tort of Conversion* (2009) p 108. See also Douglas’s assertion that possession “simply describes a factual state of affairs”: S Douglas, *Liability for Wrongful Interference with Chattels* (2011) p 32; and Penner’s view that “possession refers to a situation of fact which describes the control that a person may have over an object”: J Penner, *The Idea of Property in Law* (1997) p 144.

completeness, as it is relevant to electronic trade documents. However, our recommendations and the Bill are concerned directly with possession as a matter of fact.

5.30 Possession as the factual relationship between a thing and a person is made up of two parts – an exclusive control element and an intention element.³⁶⁹ In respect of a paper trade document or any other tangible object, it is not enough merely to be in physical possession of it or to have the means to control it.

5.31 In the recent case of *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* (“MSCC”), the 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.³⁷⁰

5.32 MSCC was a case about real property (land) rather than personal property. 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. Similar descriptions of possession comprising these two elements appear in a number of personal property cases.³⁷¹

5.33 In general, then, the law will deem a person to have acquired possession of a paper trade document or other object when they have a sufficient level and type of control over it, and when this control is accompanied by the requisite intention.³⁷²

³⁶⁹ We note that Dr Crawford has recently developed a new theory of possession, which he has labelled an “expressive” theory of the concept: M Crawford, *An Expressive Theory of Possession* (2020) p 9. This theory is put forward as a “challenge to the standard ‘control plus intention’ explanation” of possession. Dr Crawford suggests that possession “describes those relations between people and tangible things which, as a matter of social fact, constitute accepted ways of claiming some form of entitlement to them”. While we have found this work interesting and helpful in addressing some difficult questions in the standard account of possession, we limit our discussion to the notion of possession as set out in case law.

³⁷⁰ [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.

³⁷¹ Eg, “It is common ground that, to have possession of land or a chattel, a person must have not only the requisite degree of actual custody and control but also an intention to exercise that custody and control on his own behalf and for his own benefit”: *Mainline Private Hire Ltd v Nolan* [2011] EWCA Civ 189, [2011] CTLR 145 at [1] by Arden LJ (as she then was). In Scots law, possession similarly has two main aspects: corpus (physical element) and animus (mental element): see eg *Gloag and Henderson: The Law of Scotland* (14th ed 2017) para 30.09.

³⁷² L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 15, albeit Dr Rostill refers to the first element as “exclusive physical control” (emphasis added).

The first element of possession: control

- 5.34 The first element of possession requires a person to exhibit a certain type of control over the relevant object of property.³⁷³ Such control must be “exclusive”, although it can be consensually shared or “joint”.³⁷⁴ In other words, “exclusive” possession does not necessarily mean “singular” possession (in other words, possession by a single person). Exclusivity describes the nature of the relationship between persons and a thing; not its extent. In addition, possession does not need to be unassailable: common law title is relative and not absolute, as discussed further below.
- 5.35 As Pollock and Wright observed, in their seminal work on possession in the common law:
- Exclusive occupation or control, in the sense of a real unqualified power to exclude others, is nowhere to be found. All physical security is finite and qualified.³⁷⁵
- 5.36 In *MSCC*, all members of the Supreme Court agreed that a person in possession has “a sufficient degree of physical custody and control” over the relevant object of property.³⁷⁶
- 5.37 Although this formulation refers to “physical” control, the nature of the relevant control will correspond to the nature of the property in question. It must be judged against “the nature of the relevant subject matter and the manner in which that subject matter is commonly enjoyed”.³⁷⁷
- 5.38 For land, the relevant type of control will be physical control. In *J A Pye (Oxford) Ltd v Graham*,³⁷⁸ for example, the farming land in question was enclosed by hedges and

³⁷³ This exclusive control element is sometimes referred to as the “factual possession” element (see eg, *The Manchester Shipping Canal Co v Vauxhall Motors Ltd* [2019] UKSC 46, [2020] AC 1161 at [42] by Lord Briggs). We have not adopted this usage as it could give rise to confusion, in that it allows for a sentence such as: “Alice was in factual possession of the cup but, because of a lack of intention, not in possession”. It seems preferable to label this element “control”, and to say: “Alice was in control of the cup but, because of a lack of intention, not in possession”.

³⁷⁴ *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [38] by Lord Bingham; *Bannerman Town v Eleuthera Properties Ltd* [2018] UKPC 27 at [52] by Lord Briggs. Joint possessors exert control over an object to the exclusion of all others apart from each other. The concept of joint possession is discussed below at para 5.55.

³⁷⁵ F Pollock and R Wright, *An Essay on Possession in the Common Law* (1888) p 12. The phrase “real unqualified power” should be understood as referring to a factual power (or perhaps, an ability), rather than a legal power. See also L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 17, n 62.

³⁷⁶ *The Manchester Shipping Canal Co v Vauxhall Motors Ltd* [2019] UKSC 46, [2020] AC 1161 at [42] and [55] by Lord Briggs and at [89] by Lady Arden. This case is about possession of land, but the statement is of a more general application. See also equivalent formulations of the exclusive control limb in *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30 at [40] by Lord Bingham (“a sufficient degree of physical custody and control”), and *Mainland Private Hire Ltd v Nolan* [2011] EWCA Civ 189 at [1] by Arden LJ (“the requisite degree of actual custody and control”).

³⁷⁷ *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [41] by Lord Bingham; see also *The Tubantia (No 2)* [1924] P 78, 89, by Sir Henry Duke.

³⁷⁸ [2002] UKHL 30, [2003] 1 AC 419.

accessible only through a padlocked gate.³⁷⁹ The key was held by the defendants and so the land was “within their exclusive physical control”.³⁸⁰ This can be contrasted with the decision in *Red House Farms (Thorndon) Ltd v Catchpole*.³⁸¹ In this case, a possessor’s control of a piece of land was rooted in the fact that they had regularly shot at birds over the land for a number of years, and had determined when others could do the same. This somewhat unusual factual basis was found to be sufficient because:

what constitutes possession of any particular piece of land must depend upon the nature of the land and what it is capable of use for ... the only profitable use of this land was for shooting.³⁸²

- 5.39 For tangible chattels, the relevant type of control will also be physical control, and each case will similarly turn on its facts. The way that control is exerted over a small object such as a paper trade document will be different from the way that control is exerted over larger objects. This is borne out in the case law. In *Parker v British Airways Board*, for example, Parker found a gold bracelet on the floor, picked it up, and then handed it over to an official in British Airways’ lost property department.³⁸³ These acts were sufficient to constitute control.³⁸⁴
- 5.40 In contrast, some objects are less amenable than a bracelet or piece of paper to being held in one’s hand, and control becomes more than a matter of tactile contact. In *The Tubantia*, for example, the relevant object was the wreck of a Dutch steamship which had sunk to the bottom of the North Sea.³⁸⁵ Work on the wreck was rendered intermittent by the depth to which the vessel had sunk, as well as by adverse weather conditions and changing tidal patterns. Nevertheless, the claimant salvage company was found to have the level of control necessary for possession. This was grounded in the fact that the claimant had worked on the wreck when conditions permitted, placed buoys to mark the wreck’s position, and kept vessels and divers at the site of the wreck both to work upon it and to prevent any opportunistic “new-comers” (competitors) from doing work upon it.³⁸⁶

³⁷⁹ The land also allowed some modest pedestrian access through a footpath, but this was deemed immaterial in the context of a dispute about farming land. See also *The Manchester Shipping Canal Co v Vauxhall Motors Ltd* [2019] UKSC 46, [2020] AC 1161, especially at [57] by Lord Briggs.

³⁸⁰ *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30; [2003] 1 AC 419 at [41] by Lord Bingham.

³⁸¹ [1977] 2 EGLR 125.

³⁸² *Red House Farms (Thorndon) Ltd v Catchpole* [1977] 2 EGLR 125, 126, by Cairns LJ.

³⁸³ [1982] 1 QB 1004, 1007, by Donaldson LJ.

³⁸⁴ Parker relinquished possession by the act of handing the bracelet over. However, the fact that Parker was able to hand the bracelet over to another indicated that, prior to so doing, Parker was in exclusive control of it. Exercising a factual ability to transfer an object is an act of exclusive control.

³⁸⁵ *The Tubantia (No 2)* [1924] P 78.

³⁸⁶ *The Tubantia (No 2)* [1924] P 78, 90, by Sir Henry Duke.

- 5.41 One may also have possession of a something which is locked in a safe or a warehouse, for example, by having the key to the safe or warehouse, rather than having the thing in one's immediate physical possession.³⁸⁷
- 5.42 Not all objects are amenable to the same types of control. Pollock and Wright say that:
- it is not possible, as a matter of fact, to possess a house, a wood, or a field in the same manner as we possess money in our pockets, or the owner of a cart and horse possesses them when he is driving the horse in the cart. There can only be a more or less discontinuous series of acts of dominion. What kinds of acts, and how many, can be accepted as proof of exclusive use, must depend to a great extent on the manner in which the particular kind of property is commonly used.³⁸⁸
- 5.43 Similarly, Rostill, writing much more recently, says:
- what counts as effectively determining how a thing is dealt with depends, in part, upon the nature of the thing, for divergent things admit of different forms and degrees of control.³⁸⁹
- 5.44 Importantly, as we sought to draw out in our consultation paper, the fact that control is object-sensitive does not mean that there are not overarching themes that apply across different types of property. Those that emerge as the most salient to the assessment of exclusive control are the ability to *access* and *use* the object, judged against the nature of the particular object under consideration (including the way in which that type of object is commonly dealt with). As we said in the consultation paper and explain in the following chapters, we think that electronic trade documents that meet certain criteria can be susceptible to control according to the same standards. Lady Justice Arden (as she then was) in *Mainline Private Hire Ltd v Nolan* said of the relevant object (in this case, a Peugeot taxi):
- It is common ground that, to have possession of land or a chattel, a person must have ... the requisite degree of *actual* custody and control.³⁹⁰
- 5.45 The reference to “actual” rather than “physical” control allows this test to be read as a more universal concept, not reliant on tangibility.³⁹¹ It also makes clear that control is

³⁸⁷ *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 at [18] and [23] by Moore-Bick LJ.

³⁸⁸ F Pollock and R Wright, *An Essay on Possession in the Common Law* (1888) p 30. This passage was cited with approval by Lewison LJ in *Chambers v Haverling London Borough Council* [2011] EWCA Civ 1576, [2012] 1 P & CR 17.

³⁸⁹ L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 17.

³⁹⁰ *Mainline Private Hire Ltd v Nolan* [2011] EWCA Civ 189; [2011] CTL 145, at [1] by Arden LJ (emphasis added). Arden LJ did go on to quote, in passing, the phrase “physical custody or control” from Lord Browne-Wilkinson’s judgment in *J A Pye (Oxford) Ltd*. However, her Ladyship’s own formulation of the test omitted the adjective “physical”.

³⁹¹ In this context, the phrase “custody or control” should be interpreted as two ways of expressing the same idea. In this report, we have decided to refer only to “control” to denote the situation where a person satisfies the exclusive control element of possession but not the intention element, to avoid any confusion with the use of the term “custody”.

factual or conduct-based, rather than based on the rights or claims a person has to the relevant object.

The second element of possession: intention

5.46 Control is a necessary condition for possession. However, it is not sufficient on its own. For possession, that control must also be accompanied by the requisite intention,³⁹² being “intention to exercise such custody and control on one’s own behalf and for one’s benefit”.³⁹³ This intention is referred to in older authorities as the “*animus possidendi*”.³⁹⁴ In *J A Pye (Oxford) Ltd*,³⁹⁵ the House of Lords approved the description given by Slade J in the earlier case of *Powell v McFarlane*:

the *animus possidendi* involves the intention, in one’s own name and on one’s own behalf, to exclude the world at large ... so far as is reasonably practicable and so far as the processes of the law allow.³⁹⁶

5.47 A possessor does not have to demonstrate an intention to *own* the relevant paper trade document or other object; a person’s intention to possess can co-exist with the knowledge that there is a person with a better title to the object. Additionally, intention is, like control, a question of fact that, in the event of dispute, falls to be proved by the party asserting possession. Intention is demonstrated by way of inference from facts about the world, including a person’s actions and, in particular, those actions through which a person satisfies the control element of the test.³⁹⁷ Intention can also be passive in the sense that a person can be deemed to have the requisite intention, for example, to possess everything in a particular drawer, safe or warehouse.³⁹⁸

5.48 The question of intention is less dependent on the nature of the thing compared to the question of what amounts to control. The existence of intention is perhaps also less likely to be disputed; however, debates as to intention do arise³⁹⁹ and, if challenged, intention would have to be demonstrated in order for possession to be established.⁴⁰⁰

³⁹² The label commonly used to describe the factual relationship between a person in control of an object, but lacking the requisite intention, is “custody”: D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 11, giving the example of dinner guests having custody (but not possession) of items of cutlery.

³⁹³ *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2018] EWCA Civ 1100, [2019] WLR 330 Ch 331 at [59] by Lewison LJ, approved in *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2019] UKSC 46, [2020] AC 1161 at [42] and [55] by Lord Briggs.

³⁹⁴ *The Tubantia (No 2)* [1924] P 78, 89, by Sir Henry Duke; *Powell v McFarlane* (1979) 38 P & CR 452 (Ch), 471, by Slade J; *Parker v British Airways Board* [1982] 1 QB 1004, 1019, by Donaldson LJ.

³⁹⁵ [2002] UKHL 30; [2003] 1 AC 419.

³⁹⁶ *Powell v McFarlane* (1979) 38 P & CR 452 (Ch), 471 to 472; approved in *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30; [2003] 1 AC 419, at [43] by Lord Browne-Wilkinson.

³⁹⁷ “Intention may be, and frequently is, deduced from the physical acts themselves”: *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [40] by Lord Browne-Wilkinson.

³⁹⁸ See also below at para 5.75.

³⁹⁹ See eg *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30; [2003] 1 AC 419; *Parker v British Airways Board* [1982] 1 QB 1004.

⁴⁰⁰ Note that intention is also a key element of the Scots law on possession: see H MacQueen and The Right Hon Lord Eassie (eds), *Gloag and Henderson: The Law of Scotland* (14th ed 2017) para 30.09.

5.49 When a person has exclusive control over something, and the requisite intention towards it, the law will deem them to have acquired possession of it. The next issue is how possession is lost.

Losing possession of an object – dispossession and abandonment

5.50 In *J A Pye (Oxford) Ltd v Graham*, Lord Hope stated that:

Once possession has begun ... possession is presumed to continue. But it can be transferred from one person to another, and it can also be lost when it is given up or discontinued.⁴⁰¹

5.51 The law therefore recognises two ways in which possession can be lost:⁴⁰²

- (1) dispossession, which includes both (a) consensual delivery from one person to another, and (b) non-consensual taking by one person from another; and
- (2) deliberate abandonment.

5.52 Thus, a possessor remains in possession of a paper trade document or other object until they give it away, have it taken away, or throw it away. Again, this is to say nothing about the transfer of a person's *legal* interests in the object – here, we are concerned only with the factual state of affairs.

5.53 Once a person has acquired possession of an object, they need not continually retain the same degree of control over it in order to remain in possession. As possession can only be lost as a matter of law in one of the two ways outlined above, “once the requisite degree of control [over an object] has been established, it is unnecessary to prove its continuance”.⁴⁰³ The discussion of this point in *The Law of Personal Property* is worth quoting at length:

It has been observed that the law of possession is concerned primarily with its acquisition or loss, and not retention. Once acquired, a person with possession will readily be assumed as a matter of law to have retained his possessory interest. Oliver Wendell Holmes stressed that once acquired possession is easily retained: “the general tendency of our law is to favour appropriation. It abhors the absence of proprietary or possessory rights as a kind of vacuum”. Holmes went on to give the example of [a] finder of a purse of gold leaving it unattended in a remote and unsecure country house. Nonetheless until a burglar takes active steps to take the purse it remains in possession of the finder. Sir Frederick Pollock went a stage further, instancing the careless banker who leaves the bank “open and unguarded”. Nonetheless the banker remains in possession of the cash and securities.⁴⁰⁴

⁴⁰¹ *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [70].

⁴⁰² L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 15. See also E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.46.

⁴⁰³ E McKendrick, *Goode and McKendrick on Commercial Law* (6th ed 2020) para 2.46. See also M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 29-009.

⁴⁰⁴ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 30-009.

5.54 Having now considered the core case of possession, we look briefly at a number of related terms which may be relevant to electronic trade documents if they are amenable, as a matter of law, to being possessed as a matter of fact. Possession is a complex area and it is beyond the scope of this report to cover it in detail. Instead, we highlight the key issues that we think will be important to the use of electronic trade documents. We talk in this chapter about the general law as it applies now to paper trade documents and other objects. In the following chapters, when explaining our recommendations, we touch on how these concepts could apply to electronic trade documents. Below, we generally refer to “objects”, which includes paper trade documents.

Other concepts of possession

Joint possession

5.55 Whilst control of a paper trade document or other object needs to be exclusive, the law recognises that possession can be consensually shared between a group of persons acting in concert.⁴⁰⁵ As Professor Sheehan explains, although “adverse claimants cannot share possession”, parties acting as a group can.⁴⁰⁶ Two or more people will acquire possession jointly when, together, they exercise exclusive control over an object and when they have a common intention to exercise that exclusive control in both their names.⁴⁰⁷

Custody and vicarious possession

5.56 When a person has exclusive control of an object, but is not in possession of it, they are said to have merely “custody” of the object.⁴⁰⁸ This occurs in three situations: (a) where a person has exclusive control without the requisite intention;⁴⁰⁹ (b) where a person has exclusive control but an intention to exercise that control in someone else’s name⁴¹⁰ (“vicarious possession”⁴¹¹); and (c) where a person has exclusive

⁴⁰⁵ *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30; [2003] 1 AC 419 at [38] by Lord Browne-Wilkinson; *Bannerman Town v Eleuthera Properties Ltd* [2018] UKPC 27 at [52] by Lord Briggs. See also M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 2-040.

⁴⁰⁶ D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 11.

⁴⁰⁷ L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 22.

⁴⁰⁸ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-014. Note, however, that in this paragraph the authors refer to the exclusive control element of possession as “physical possession”. See also M Crawford, *An Expressive Theory of Possession* (2020) p 67.

⁴⁰⁹ See eg D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 11. Professor Sheehan gives the example of a guest at a dinner party having custody, but not possession, of items of cutlery whilst they eat.

⁴¹⁰ *Bannerman Town v Eleuthera Properties Ltd* [2018] UKPC 27 at [54] by Lord Briggs. Consider also Penner’s observation that “although possession is a matter of fact, one can count on legal systems to deem certain circumstances to constitute possession in order to reflect the interests of owners”: J Penner, *The Idea of Property Law* (1997) p 144.

⁴¹¹ *Malik v Malik* [2019] EWHC 1843 (Ch) at [38] by Falk J. See also L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 21.

control and the requisite intention, but acquires the object in the course of their employment or agency⁴¹² (a second form of “vicarious possession”⁴¹³).

The right to possession (legal possession / constructive possession)

5.57 This is a particularly significant issue for our purposes. It is important to distinguish between: (a) a person *in* possession of an object; and (b) a person with the (unconditional) *right to* possession of an object. A person with an unconditional right to possession is often said to have “legal possession” or “constructive possession” of the object.⁴¹⁴ Professor Sheehan explains this as follows:

A party is either in possession or at law entitled to possession. Alongside actual possession the right to take immediate possession, otherwise referred to as constructive possession, also counts as possessory title. Such rights to possession may be created by contract. My right as a bailee to possess the asset may be, and usually is, founded in contract. An example of this might be the right of a warehouseman to retain possession of assets belonging to his clients and stored in the warehouse.⁴¹⁵

This distinction is important in circumstances where one person has (actual) possession of an object, but another person has a (better) right to possession of it.

5.58 Often, a person in possession and a person with the right to possession will be one and the same. This is because the legal interest acquired by the act of independently taking possession includes a right to possession, so that someone who independently acquires actual possession of an object thereby acquires legal possession of it.⁴¹⁶ Additionally, although this legal interest is generated by taking possession, it does not depend upon a person remaining in possession – that is, it is not extinguished when someone is dispossessed. This right is normally transferred as part of any transfer of an object (for example, by way of gift). This is why “a person in legal possession will usually be in actual possession”.⁴¹⁷

5.59 However, Bob could take possession of a cup in circumstances where Alice nevertheless retains the right to possession of the cup because, for example, the goods are held to her order on terms that she can have re-delivery at once.⁴¹⁸ In this case, Alice will have constructive possession of the goods but will not be in (actual)

⁴¹² *Parker v British Airways Board* [1982] 1 QB 1004, 1017, by Donaldson LJ. See also M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 17-011.

⁴¹³ L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) pp 21 to 22.

⁴¹⁴ S Green and J Randall, *The Tort of Conversion* (2009) p 86. It has also been referred to as “proprietary possession”: see *Hall v Cotton* [1987] QB 504, where it was contrasted with “custodial possession”, by which the court seemed to mean the core case of factual possession.

⁴¹⁵ D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 10.

⁴¹⁶ If the object is taken wrongfully, the person in possession acquires a right to possession against the whole world other than the person that they dispossessed and anyone else with better rights than the dispossessed person. An example of the latter is an owner if the dispossessed person was a bailee.

⁴¹⁷ D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 13.

⁴¹⁸ *Towers & Co Ltd v Gray* [1961] 2 QB 351, 365, [1961] 2 WLR 553, 561, by Lord Parker CJ.

possession.⁴¹⁹ A useful way to identify the person with legal or constructive possession is to look for the person with “the ultimate right to decide who has the factual use of the asset at a given time”.⁴²⁰ For this reason, a term bailor does not have constructive possession during the term of the bailment,⁴²¹ because the bailor does not have the right to take back the bailed property during this time.⁴²² It is only once the term bailment comes to an end that the bailor regains the right to possession, and so once more has legal or constructive possession. Similarly, the right to possession is not retained by a pledgor in a security arrangement; indeed, this would defeat the purpose of such an arrangement.

- 5.60 What is important about legal or constructive possession is not (actual) possession, but the *right* to (actual) possession. Legal possession is therefore a “rights-based”, rather than a “facts-based”, concept,⁴²³ unlike the core case of possession with which our recommendations and Bill are directly concerned. That said, if our recommendations are implemented such that electronic trade documents will be amenable to (factual) possession, then the concept of legal or constructive possession will apply in the same way as it currently does in relation to paper documents.
- 5.61 We understand that similar issues arise in Scots law, but the language is different. In Scots law, possession can either be natural or civil. Natural possession arises where a party has actual physical possession of an item. Civil possession arises where a party does not physically hold an item, but the item is held on their behalf by another party. To give some examples, an employer may possess goods which are in the custody of their servants, or a landlord may possess a house, although it is lived in by their tenant.⁴²⁴

Vindicatory possession

- 5.62 The concept of possession plays an important role in the various means by which the law protects objects of property against unlawful interference. A person will have standing to bring a claim in trespass or conversion, for example, only if they have either possession or the right to (immediate) possession of the relevant object.

⁴¹⁹ Bob will be in (actual) possession *and* have a right to possession, but his right to possession will be lesser than Alice’s because it arose after her right, and because it is limited to the duration of the bailment.

⁴²⁰ D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 13. The adjective “ultimate” should not be understood as referring to the *very best* right to possess the object (which is a right enjoyed by the person with the very best title – the owner). Instead, it simply refers to a right to possession that is better than that of the (actual) possessor.

⁴²¹ As discussed above at para 3.71, a bailment arises whenever one person (the bailee) takes possession of goods belonging to another (the bailor). The bailor is the person entrusting possession of the goods to another, and the bailee is the party accepting responsibility for the goods so entrusted: see M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 12-005.

⁴²² *Gordon v Harper* (1796) 7 TR 9, 101 ER 828. See also *Brierly v Kendall* (1852) 17 QB 937, 117 ER 1540, where it was held that, if a term bailor dispossesses their bailee before the expiration of the term, the term bailor may themselves be sued by the bailee.

⁴²³ “The essence of legal possession ... lies in the element of [legal] control exercised over an asset ... legal possession is rights-based, not facts-based”: S Green and J Randall, *The Tort of Conversion* (2009) p 86.

⁴²⁴ H MacQueen and The Right Hon Lord Eassie (eds), *Gloag and Henderson: The Law of Scotland* (14th ed 2017) para 30.09.

5.63 In this context, some writers use the additional label of “vindictory possession” to encompass the two (sub-) types of possession that can give a person standing to bring such a claim: that is, (actual) possession and constructive possession (meaning the right to possession).⁴²⁵ In fact, it might be more accurate, and perhaps less confusing for our purposes, to note simply that a party can bring a claim in trespass or conversion if their possessory right is superior to the defendant’s.⁴²⁶

Competing claims to an object: relativity of title and hard cases of possession

5.64 The law is frequently required to deal with competing claims to an object of property. We distinguish between two types of situations that can be said to involve “competing claims”:

- (1) multiple concurrent interests: situations where the law must rank competing interests in an object; and
- (2) hard cases of possession: situations where it is unclear which (if any) parties have an interest in an object, and the law must adjudicate the parties’ “competing claims” to different interests.

Multiple concurrent interests

5.65 The law of England and Wales employs a system of relative title. This means that the law recognises that different persons can, at the same time, have different titles to the same object,⁴²⁷ and that the law has rules to rank these concurrent titles.⁴²⁸ In theory, all possible titles to an object could be ranked but, in practice, when disputes are litigated, the court will generally only concern itself with which of the two parties before it has the better title.⁴²⁹

5.66 For things in possession, including paper trade documents and other objects, the priority rule for concurrent titles is straightforward: a title created earlier in time is

⁴²⁵ See eg, M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-005.

⁴²⁶ “Legal possession ... [is] the interest which determines which party has title to sue in Conversion” and “the rule about title to sue in Conversion is very simple: it attaches to the superior *possessory* right in the assets concerned”: S Green and J Randall, *The Tort of Conversion* (2009) p 88 and p 106, respectively (emphasis added).

⁴²⁷ See eg *Gordon v Harper* (1796) 7 TR 9, 101 ER 828. In Professor Sheehan’s words, there can be “several co-existent titles to property”: D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 15.

⁴²⁸ See eg W Swadling, “Unjust Delivery” in A Burrows & A Rodger (eds), *Mapping the law: Essays in Memory of Peter Birks* (2006) p 281.

⁴²⁹ See eg *Ocean Estates Ltd v Pinder* [1969] 2 AC 19, 25, by Lord Diplock; *Waverley Borough Council v Fletcher* [1996] QB 334, 345, by Auld LJ. See also S Douglas, *Liability for Wrongful Interferences with Chattels* (2011) p 24; M Crawford, *An Expressive Theory of Possession* (2020) p 55.

stronger (that is, it ranks higher) than a title created later in time.⁴³⁰ The rule is the same for titles to things in action: an earlier title takes priority over a later title.⁴³¹

- 5.67 The term “ownership” is often used to designate the best interest in an object that exists, and the person with the best interest in an object is accordingly described as the object’s owner.⁴³²

Hard cases of possession

- 5.68 This final section focuses on the following categories of factually complicated possession cases.

- (1) Has a person acquired possession of an object?
- (2) Does a person retain possession of an object?
- (3) What is transferred and at what moment in time does a change of possession occur?

- 5.69 We discuss each question briefly, but the answer in any given situation will be highly fact-specific. The important point for our purposes is that the courts have mechanisms by which to consider these matters, and would have analogies to draw on if faced with questions in the context of electronic trade documents – including cases and circumstances that involved paper trade documents. We discuss possession of electronic trade documents in Chapter 7.

Has a person acquired possession of an object?

- 5.70 The question of whether a particular person has acquired possession of a particular object is an entirely fact-sensitive question. As we have explained above, it will depend on the nature of the object and the surrounding circumstances. Essentially, a person in possession will be the person who enjoys a “sufficient” level of exclusive factual control over the object; they can determine where it is in the world at any given moment in time, and when and how it is dealt with.⁴³³ The fact that the required level of control is a “sufficient level” means that possession is to some extent a question of policy. The law identifies what, for a particular type of object, is sufficient.

- 5.71 Imagine a lost wallet on a table surrounded by Alice, Bob, and Caroline, each of whom wants it. While the wallet is on the table, it is difficult to say that any one of them is in

⁴³⁰ *Armory v Delamirie* (1722) 1 Strange 505, by Pratt CJ. See further eg *Halsbury’s Laws of England, Tort Vol 97A* (5th ed 2021) para 216; L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) pp 34 to 35.

⁴³¹ Subject to the rule in *Dearle v Hall* (1828) 3 Russ 1, which provides that, where there are two purported assignments of a thing in action, the first assignee to give notice to the trustee or debtor has priority over the other assignee, unless the former has notice of the latter’s assignment at the time he took his assignment.

⁴³² See eg D Sheehan, *The Principles of Personal Property Law* (2nd ed 2017) p 6. However, this has been challenged in eg S Green and J Randall, *The Tort of Conversion* (2009) p 81: “In a system where title is relative, there is no room for the concept to which non-lawyers would refer as ‘ownership’”.

⁴³³ This is the case as a matter of fact. There may be somebody else with a legal right over the object, which means that the person with possession as a matter of fact should not actually deal with the object according to their own fancy. However, the emphasis is on the “should” – the person with factual possession is not prevented from dealing with the object however they wish as a *matter of fact*.

possession. If Caroline reaches out and takes the wallet, it seems reasonable to say that she has taken possession of it (assuming she has the requisite intention in relation to it). If so, the type of control to which the wallet is amenable is being grasped in one's hands and put in one's pocket or bag. Thus, if Caroline does this – thereby preventing Alice and Bob from doing the same – she will be exercising the sort of exclusive control over it that, when combined with the requisite intention, can amount to possession.

- 5.72 Suppose instead that the wallet is locked in a safe. It seems fairly uncontroversial to say that, in most cases, the person who has put it in there and who has the key or knows the passcode has possession of the wallet, particularly if there is only one key (or nobody else knows the passcode).⁴³⁴

Does a person retain possession of an object?

- 5.73 Where matters become more complicated is when a person is in possession of an object, and another person acquires the very same means of accessing and dealing with that object. In the tangible world, this could be the case where another person has, for example, a copy of the relevant key, or knowledge of the code for a safe. In such a case the question becomes: does the possessor remain in possession? We have seen above that the possessor remains in possession until they abandon the object, or are dispossessed of it. In the scenario under consideration, the possessor has neither abandoned the object nor have they been dispossessed of it. They therefore remain in possession unless and until the third party uses the means of access to exercise control of the asset, at which point the third party takes (actual) possession of the object (assuming they have the requisite intention). However, in doing so, the third party does not, without more, usurp the original possessor's right to possession.⁴³⁵

What is transferred and at what moment in time does a change of possession occur?

- 5.74 When an object of property is intentionally transferred, the transferee normally acquires the transferor's title. Conversely, when an object of property is subject to an unauthorised transfer, the transferee (who we will assume has taken possession of the object) acquires instead an original legal interest which is relatively weaker than the transferor's subsisting interest.
- 5.75 There are also ancillary questions about the moment in time at which a person acquires possession. A person can take possession of an object despite not initially knowing of its existence – for instance, where a person exercises control over an area and has an intention to exercise control over objects that end up in that area from time

⁴³⁴ The same argument could apply in relation to electronic trade documents hosted on a distributed ledger or other online system. The private key holder in a DLT system who has set up the relevant public address, or (in a central registry system) the person with knowledge of the relevant security credentials who has set up a user account, is likely to be in possession. We discuss control and possession of an electronic trade document in Chapter 7.

⁴³⁵ This could be important in the context of electronic trade documents, where a third party learns the private key or other security credentials required to take control of the document, but has not yet taken steps to use them to exercise control. We discuss this from para 7.84 below.

to time.⁴³⁶ For example, if Alice sets up a mailbox outside her front door, her intention to possess whatever is put in the mailbox can be inferred, even though she might not know what is in there. This analogy might also apply to a person that exercises control over digital assets associated with a particular public address – the purpose of creating and using a public address (and related private key) being to enable the exercise of control in the first place. We discuss this in relation to electronic trade documents in Chapter 7.

⁴³⁶ See eg *Parker v British Airways Board* [1982] 1 QB 1004. See also the special land law rule that a possessor of land is in possession of chattels that are under or attached to the land: *Waverley Borough Council v Fletcher* [1996] QB 334, 346, by Auld LJ.

Chapter 6: Recommendations – the “gateway” criteria

6.1 In the previous chapter, we considered the current law on possession. We explained that things which are currently possessable are susceptible to exclusive control which can be transferred from person to person. In this chapter, we introduce the first part of our recommendations for reform to solve the “possession problem” for trade documents in electronic form.⁴³⁷ We examine the requirements that such a document must satisfy in order to qualify as an “electronic trade document” for the purposes of the Bill. We consider that trade documents in electronic form that satisfy these criteria are capable of performing the same functions as their paper counterparts. These requirements – including amenability to exclusive control and divestibility – are referred to as the “gateway criteria”. In the next chapter, we explain our recommendations to make electronic trade documents (those that satisfy the gateway criteria) “possessable”, and discuss what that would mean in practice.

THE “GATEWAY” CRITERIA

6.2 The starting point for our approach has been the following question: what requirements must trade documents in electronic form satisfy to be considered capable of performing the same functions as their paper counterparts? Below we discuss each of the “gateway criteria” that a document in electronic form must satisfy in order to qualify as an “electronic trade document” for the purposes of our recommendations and the Bill.⁴³⁸

6.3 If the gateway criteria are not satisfied, the trade document in question would not qualify as an electronic trade document for the purposes of the Bill. This does not, however, necessarily mean that the document has no validity or effect, nor that underlying transactions executed pursuant to it are invalid or null and void. The parties could nonetheless agree, as they currently do, that a particular action taken over an electronic system will put the transferee in a similar position to that of a holder of a paper trade document.⁴³⁹ Outside of such a specific contractual arrangement, however, the electronic document would not be able to have the same legal effect, or function in the same way as, a paper trade document. As discussed above,⁴⁴⁰ the

⁴³⁷ The “possession problem” is discussed in more detail in Chapter 2 and Chapter 5.

⁴³⁸ In the consultation paper, from para 5.49, we also discussed that an electronic trade document must have an “independent existence”. We think that this requirement is satisfied by the requirement that an electronic trade document must be a “trade document” (eg, a bill of lading), and contain all the information that would be required to be contained in a paper trade document. Electronic documents are things over which parties have rights, rather than being bare rights in themselves. In other words, 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. We do not discuss this requirement in any further detail in this report. We also do not think it is necessary to make any recommendations in relation to this requirement.

⁴³⁹ We discuss contractual frameworks in more detail from para 2.9 above.

⁴⁴⁰ The “possession problem” is discussed in more detail in Chapter 2 and Chapter 5.

existing law of England and Wales does not permit the possessability of trade documents in electronic form.

FIRST CRITERION: THE INFORMATION CONTAINED IN AN ELECTRONIC TRADE DOCUMENT, AND THE MEANING OF “DOCUMENT”

- 6.4 Some paper trade documents which fall within our recommendations have requirements as to the information they must contain in order to qualify as that trade document.⁴⁴¹ These requirements may derive from statute, the common law, or custom or practice.

The information contained in an electronic trade document

Our position in the consultation paper

- 6.5 In the consultation paper,⁴⁴² we provisionally proposed that information required to be contained in a paper trade document must also be contained in any electronic form of such documents for them to fall within the scope of the Bill. We said this requirement was important to ensure that electronic trade documents were treated in the same way as their paper counterparts. We also noted that this provision establishes the link between the document in electronic form and its paper counterpart. It entails 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 1882.⁴⁴³ 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 scope of the Bill.⁴⁴⁴
- 6.6 Our provisional proposal was also consistent with the approach in the MLETR, which provides that an electronic record must contain the information that would be required to be contained in a transferable document or instrument.⁴⁴⁵
- 6.7 We asked consultees if they agreed that there should be a statutory requirement that trade documents in electronic form must contain the same information as would be required to be contained in a paper equivalent.⁴⁴⁶

Consultees' views

- 6.8 The majority of consultees who responded to this question agreed with our provisional proposals. For example, Enigio Time AB strongly agreed with our proposal, saying

⁴⁴¹ We discuss the documents with which our recommendations are concerned in detail in Chapter 4.

⁴⁴² Consultation paper, para 6.29.

⁴⁴³ Consultation paper, para 6.31.

⁴⁴⁴ Consultation paper, para 6.32.

⁴⁴⁵ MLETR, art 10.

⁴⁴⁶ We asked consultees whether they agreed 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. Consultation question 23, para 6.33. Thirty consultees responded to this question. Twenty-three consultees answered “yes”, one consultee answered “no” and six consultees answered “other”. We also included a provision in clause 1(3)(b) of the consultation Bill which provided that: (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... .

that this is “an absolute requirement for electronic trade documents to be accepted widely”.

- 6.9 Some consultees, including the British Insurance Law Association (“BILA”), Dr Simone Lamont-Black and Dr David Gibbs-Kneller, said that such a requirement would provide certainty. For example, BILA said that our provisional proposals “will bring certainty, will ease the transition period and will increase the efficiency in adapting to the new system”. Dr Lamont-Black said that our proposals “will ensure that all legal requirements will be met by the electronic document and that this can be established easily”. The Centre for Commercial Law at the University of Aberdeen noted that our provisional proposals will enable a change of medium.
- 6.10 Professor Michael Bridge QC said that there was no reason to exclude the information that is essential to paper trade documents. However, he noted that certain types of trade documents are “highly variable as to content”. He said that the question of whether the Bill deals with “nominate type of document or, generically, with all purportedly transferable documents” is relevant.
- 6.11 While there was general support for this requirement, some consultees queried whether it was essential. Linklaters LLP asked whether documents in electronic form need to contain “precisely the same information as would be required to be contained in a paper equivalent” in order to qualify as electronic trade documents. Legal Innovation Ltd said such a requirement was not necessary, so long as “all the information that a buyer/financier needs” is included in the document in electronic form.
- 6.12 Rio Tinto Commercial provided a detailed response, discussing what is meant by “information” in the context of electronic trade documents and smart contracts. They assumed that “information” meant “all information including both data points [such as “quantity of goods”] and legal verbiage/text which would be included in a paper document”. They said:

We note that this would tend to exclude smart contracts ... as being taken to be one of the electronic trade documents (since such contracts are purely code-based and therefore probably don't contain the required legal verbiage, despite the fact they may be intended by the parties to have the same legal effect).

Discussion and our recommended approach

- 6.13 After considering consultee responses, we remain of the view that it is important that a trade document in electronic form contains the same information as would be required to be contained in the paper equivalent. Such a requirement establishes the link between the document in electronic form and its paper counterpart, and should therefore be one of the gateway criteria. We agree with consultees that including such a requirement will:
- (1) provide certainty as to content requirements for documents in electronic form to qualify as electronic trade documents;
 - (2) increase parties' confidence and facilitate wider acceptance of electronic trade documents;

- (3) reduce the potential for conflicts and disagreements as the market transitions to using electronic trade documents; and
 - (4) facilitate change of medium and ensure consistency.
- 6.14 Of course, such a requirement would only apply to the extent that a paper trade document must contain certain information in order to qualify as such. Our recommendations would not introduce any new requirements as to the information that a document in electronic form should contain.
- 6.15 Whether a smart contract can constitute an electronic trade document for the purposes of the Bill will depend, in part, on whether the smart contract includes all the information required to be contained in its paper equivalent.⁴⁴⁷ Put differently, a smart contract in the form of executable code will not constitute an electronic trade document if the paper equivalent of such document requires content to be included that cannot be coded (for example, prescribed legal wording). However, where the document in electronic form is not required to contain information that cannot be coded, or where the smart contract is not comprised solely of code but includes natural language terms or components,⁴⁴⁸ we see no reason why such a smart contract cannot in principle constitute an electronic trade document.

Recommendation 8.

- 6.16 In order to qualify as an electronic trade document, a document in electronic form must contain the same information as would be required to be contained in the paper equivalent.

Meaning of “document” in the electronic context

- 6.17 In practice, a document in electronic form may be comprised of multiple components.⁴⁴⁹ One component will always be the particular instance of a data string or data structure consisting of functional code, which is logically associated with (and specifically identifies) the human readable part of the document.⁴⁵⁰ There might also be other components made up of human readable text (for example, a .pdf file or other type of data that can be accessed and displayed in a human readable way by a computer). Depending on the technology being used, this could be a unique

⁴⁴⁷ Eg, if parties wish to create a bill of exchange in the form of a smart contract comprised entirely of code, the smart contract code must include all the information required under section 3(1) of the Bills of Exchange Act 1882.

⁴⁴⁸ Natural language comments are frequently included in source code to explain its workings. However, there is no reason why such comments cannot also be used to contain contractual terms, or other provisions which form part of the smart contract. For more information on natural language comments, see Smart legal contracts: Advice to Government (2021) Law Com No 401, paras 2.7 and 2.51(2).

⁴⁴⁹ These components might be broken down into further sub-components, such as multiple human readable elements or a data structure constituted across multiple “layers”.

⁴⁵⁰ Eg, a promissory note on the Enigio system appears as “8734020cbb664025cb94765f7859a224d16bfdc0bd9a50030bb7770b3cc361af”.

cryptographic “token” allocated to a system user. The data string or data structure is recorded on or across one or more ledgers, structured records or registers.

- 6.18 When we refer below to an electronic trade document being amenable to exclusive control, it is likely that control will be exercised by means of the document’s underlying data structure (such as the token). On the other hand, the requirement that a trade document in electronic form must contain the same information as would be required to be contained in the equivalent paper trade document will likely be fulfilled by the human readable component of the document. This component is logically associated with the controllable data structure. For our recommendations to be workable, these two components of an electronic trade document must be regarded as a single document.
- 6.19 Our analysis of certain consultation responses has confirmed the importance of addressing how the concept of “document” includes both components of the document in electronic form corresponding to the paper itself. These are: the functional data structure, or “token”, and the human readable component.
- 6.20 Article 2 of the MLETR deals with the relationship between the components through the definition of “electronic transferable record”, which:

means information generated, communicated, received or stored by electronic means, including, where appropriate, all information logically associated with or otherwise linked together so as to become part of the record, whether generated contemporaneously or not... .

This definition captures both constitutive parts of the electronic transferable record.

- 6.21 The law of England and Wales already defines “document” for various other purposes.⁴⁵¹ For example, section 13 of the Civil Evidence Act 1995 and Rule 31.4 of the Civil Procedure Rules 1998 both provide that “document” means anything in which information of any description is recorded”.⁴⁵² These definitions are broad, and have been taken to include electronic documents.⁴⁵³ Similarly, section 7C of the Electronic Communications Act 2000 defines a document as “anything stored in electronic form, including text or sound, and visual or audiovisual recording”.
- 6.22 Despite this, and taking into account the approach adopted in the MLETR, we have concluded that the Bill should include an explicit provision addressing this point. This is because the Bill deals with a new area of law (that is, possession of certain intangible assets) and existing definitions of “document” may not adequately capture the importance of the document’s underlying data structure.

⁴⁵¹ See, eg, Civil Evidence Act 1995, s 13; Electronic Communications Act 2000, s 7C; Civil Procedure Rules, SI 1998 No 3132, r 31.4.

⁴⁵² The Civil Evidence Act 1995 makes information generated by, or stored in, a computer admissible as evidence in civil litigation.

⁴⁵³ See, eg, *Fairstar Heavy Transport NV v Adkins* [2013] EWCA Civ 886, 2 CLC 272 at [56] by Mummery LJ, where the court notes that the term “document”, within the meaning of Civil Procedure Rule 31.4, extends to electronic documents.

Recommendation 9.

- 6.23 Where a trade document in electronic form comprises separate, but linked elements – a data structure consisting of functional code, and a human readable part which contains or specifies certain rights – these elements together should comprise “the document”.

The Bill provisions

- 6.24 Clause 1(3) of the Bill contains the requirement that a trade document in electronic form must contain the same information as would be required to be contained in the paper equivalent. It also sets out the concept of a “document” in electronic form for the purposes of the Bill:

Where information in electronic form is information that, if contained in a document in paper form, would lead to the document being a paper trade document, that information, together with any other information with which it is logically associated that is also in electronic form, constitutes a “qualifying electronic document” for the purposes of this Act.

- 6.25 By “logically associated” we mean electronically connected to, linked to, or otherwise cross-referenced to. This wording enables the use of different models for electronic trade documents’ management systems, in line with the principle of technological neutrality.⁴⁵⁴

Additional consultee views

- 6.26 Separately, some consultees, including Professors Louise Gullifer and David Fox (joint response) and Linklaters LLP, encouraged us to consider the relationship between the “document” (as described above) and the rights and/or obligations that are specified in that document (including when specified in the human readable component of that document).
- 6.27 For example, Professor Fox and Professor Gullifer suggested that, because the electronic trade documents’ regime is modelled on the existing paper trade documents’ regime, a principal focus for the law would be the transfer of a “document”. They noted that “the delivery of the documents is the key concept in explaining how title in them is transferred”.
- 6.28 Linklaters LLP also emphasised the importance of the relationship between the particular electronic data structure and the rights set out in the human readable component of the document in electronic form, by analogy with the existing legal regime applicable to paper trade documents:

⁴⁵⁴ “Logically associated” is also consistent with terminology used in existing legislation. See, eg, Electronic Communications Act, ss 7, 7A and 7B. “Logically associated” is also used in the Prisons (Interference with Wireless Telegraphy) Act 2012, s 4, and the Investigatory Powers Act 2016, ss 5, 16, 137, 261, and 262 (in the context of various definitions of data).

Documentary intangibles themselves (i.e. in paper form) involve the “stapling” of legal rights or proprietary interests to a piece of paper (through the writing of the legal terms onto the piece of paper, and the associated legal fiction that any claim is “bound up” in the piece of paper) and the clear suggestion of the [Electronic Trade Documents Consultation Paper] is that electronic trade documents involve the “stapling” of legal rights or proprietary interests to [a data structure that is capable of constituting personal property].⁴⁵⁵

- 6.29 We agree with the analogy with paper trade documents. For example, the transfer of possession of a paper trade document which represents a debt (a bill of exchange or promissory note) is required in order to effect a transfer of the right to be paid that debt. Similarly, the transfer of possession of a paper bill of lading is required in order to effect a transfer of constructive possession of the goods to which it relates.
- 6.30 Our recommendations recognise that an electronic trade document may consist of multiple components: the underlying data structure which makes it amenable to exclusive control and the human readable element which may evidence rights or obligations. This amenability to exclusive control is an essential part of the document’s functionality as a trade document.
- 6.31 As we discuss in Chapters 7 and 8, any legal effect that would be achieved by the transfer of possession of a paper trade document should similarly be achievable in respect of an electronic trade document. When we talk about transfer of control (and of possession) of an electronic trade document, we effectively mean the transfer of the underlying data structure.

SECOND CRITERION: RELIABILITY OF AN ELECTRONIC TRADE DOCUMENT SYSTEM

Our position in the consultation paper

- 6.32 In the consultation paper,⁴⁵⁶ we discussed the “reliability” of an electronic trade document system.⁴⁵⁷ By “reliable” we mean that an electronic system meets certain standards in the way that it operates. We said that the notion of reliability features in the existing law of England and Wales applicable to electronic records in the context of the admissibility and evaluation of evidence in a dispute.
- 6.33 We provisionally proposed not to include an express statutory requirement for the reliability of an electronic trade document system.⁴⁵⁸ Although we acknowledged the importance of reliability, we considered that the existing law of England and Wales already deals sufficiently with questions of the reliability of systems, and that an

⁴⁵⁵ Note that Linklaters LLP use the term “Stapled Cryptos” which we have paraphrased for the purposes of this quote.

⁴⁵⁶ Consultation paper, from para 6.14.

⁴⁵⁷ We intend “system” to be a generic term for the platform or digital architecture on which the document is created and held. Similarly, the MLETR refers to the “system” and the “information system”: see eg MLETR arts 12(a)(iii) and 14.

⁴⁵⁸ Consultation paper, from para 6.4, and 6.14.

express legislative provision requiring an electronic trade document system to be reliable was therefore unnecessary.

6.34 We also suggested that to require reliability of the system to be assessed as a condition precedent to a document in electronic form qualifying as an electronic trade document could disadvantage new systems or technologies. We said that users should be free to determine the level of risk they are prepared to take on when selecting a suitable system, with due awareness that selecting an unreliable system may harm their prospects of success in the event of a dispute.⁴⁵⁹

The MLETR approach to reliability

6.35 The MLETR contains an express requirement in relation to the reliability of the relevant system.⁴⁶⁰ Article 10 requires that a reliable method is used to identify an electronic transferable record, to make it capable of being subject to control, and to retain the integrity of that electronic record.⁴⁶¹ Article 11 requires a reliable method to be used to establish exclusive control of the electronic transferable record, and to establish who has that control. Article 12(a) provides a list of factors which may be considered to establish reliability:

- (i) any operational rules relevant to the assessment of reliability;
- (ii) the assurance of data integrity;
- (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

6.36 Article 12(b) provides a “safe harbour” provision such that, where the method has in fact achieved the function for which it was adopted, the enquiry as to the method’s reliability need not be undertaken.⁴⁶²

⁴⁵⁹ We noted in our 2019 Report on Electronic Execution of Documents that this is also the position of the law relating to electronic signatures: the law of England and Wales does not impose reliability requirements on the type of electronic signature used: *Electronic Execution of Documents (2019) Law Com No 386*, from para 2.33.

⁴⁶⁰ MLETR, arts 10 to 12. Other jurisdictions, including Germany and the US, require that electronic documents used in trade must be subject to requirements of reliability and/or integrity: see our discussion in the consultation paper at paras 6.7 and 6.15.

⁴⁶¹ MLETR, art 10(1)(b).

⁴⁶² 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”: *Electronic Transactions (Amendment) Act (No 5/2021) (Singapore)*, s 6 (inserting s 16O(2)); *Electronic Communications and Transactions Law (Bahrain)*, ss 20 and 21.

Consultees' views

6.37 The majority of consultees agreed that it was not necessary to include an express statutory requirement for reliability.⁴⁶³ Some consultees, including the International Shipping and Trade Law – Swansea University (“IISTL”), the Digital Container Shipping Association (“DCSA”) and HSBC, said that such a requirement would increase complexity and add burdens to the use of electronic trade documents. Vale International SA said that the reliability of a system would be a question for industry, and Phillips 66 Ltd said that in any case industry participants would not use electronic trade documents unless the system was reliable.

6.38 Other consultees argued that the Bill should include an explicit reliability requirement. For example, the City of London Law Society said that a reliability requirement would be “prudent and would not prevent the use of a variety of systems”. The International Group of P&I clubs (“IGP&I”) strongly argued in favour of a reliability requirement to provide certainty for the market. They said:

The consultation has focused a lot on the legal theories of possession but does not seem to have considered the practical issues nor the market need for confidence and trust amongst users and safeguards from cyber-crime.

6.39 Some consultees, including Minerva Global Ltd and Legal Innovation Ltd, suggested that there should be a regulated system for electronic trade documents. For example, Minerva Global Ltd said:

If you are referring to the reliability of the implementation of the electronic trade document system, we think it is crucial that the system complies with certain reliability requirements, which would be deemed sufficient by regulators to ensure that the system can be fully trusted by users.

6.40 Similarly, some consultees, including Minerva Global Ltd, IGP&I and HSBC, were in favour of an accreditation process. HSBC said that “ideally the law should include at least parameters as to how to provide accreditation” and referred to the cross-border nature of trade. In relation to accreditation processes, Minerva Global Ltd said:

Parties offering electronic trade document management and transfer service should undergo a process of accreditation, involving technical evaluation of the solution to ensure that the system implementing the service does indeed function in the way it should, preventing double-spending of the electronic documents, and ensuring there is at most one possessor at any given time. This will require government-designated experts to look “under the hood” of the systems to confirm that the logic is correct.

6.41 On the other hand, some consultees did not think that an accreditation process should be expressly provided for in our legislative reforms. For example, Enigio Time AB said that whether an accreditation body is required is “an open question”, and that such a

⁴⁶³ We asked consultees if they agreed with our proposal not to impose an express statutory reliability requirement. We also asked consultees, if they disagreed, when they thought a party should be required to prove that their electronic trade document is reliable, and whether they thought that our proposals should include an accreditation process and, if so, what form that process should take: consultation question 22, para 6.28. Twenty-six consultees responded to this question. Nineteen consultees answered “yes”, three consultees answered “no” and four consultees answered “other”.

requirement could “significantly hamper” the adoption of electronic trade documents. Dr Simone Lamont-Black said that “to rely on an accreditation process seems too limiting”.

Discussion and our recommended approach

- 6.42 After considering consultees’ responses and undertaking further stakeholder engagement, we recommend that the Bill should include a requirement that an electronic trade document system be reliable. Although consultees were broadly in favour of our provisional proposal not to include such a requirement, several consultees made cogent and ultimately persuasive arguments in favour of such a requirement.
- 6.43 A common theme arising from consultee responses was that users would need to be able to “trust” systems for electronic trade documents to be used widely, especially given the potential risk of cybercrime identified by IGP&I. Although we expect that commercial parties will consider questions of security and risk when choosing an electronic trade document system, consultees suggested that this trust would be more likely to arise if the Bill contained a provision in relation to reliability.⁴⁶⁴
- 6.44 Whilst considering consultation responses, we corresponded with technology companies that deal with trade documents in electronic form. We asked these companies for their views on the list of factors in article 12 of the MLETR. We suggested that these might be used to demonstrate reliability, and we asked whether there were any factors in that list which could be onerous to meet. None of the organisations which responded said that they would find any of the factors difficult to satisfy. It is clear from the stakeholders we engaged with on this topic that satisfying a reliability requirement would be achievable in practice, even though some stakeholders (including some of the technology providers) thought reliability was better dealt with by industry outside the context of the Bill.
- 6.45 We also spoke to Mr Justice Fraser, the former Judge in charge of the Technology and Construction Court, who has recent and extensive experience of litigation dealing with questions of reliability of electronic systems.⁴⁶⁵ Mr Justice Fraser said that, although parties are capable of sorting out their positions from a commercial and contractual perspective, our recommended reforms would constitute a sufficiently significant change to the law that we should consider including an express reliability requirement. He suggested that, without such a provision, there could be uncertainty during a transition period as the common law catches up with electronic trade documents.⁴⁶⁶ Significantly, he also said that his view was that guidance as to the factors that a court could usefully consider when deciding whether a system is “reliable” would be helpful. Such an approach would provide welcome guidance to the judiciary as a whole.

⁴⁶⁴ Similar points were made in relation to an express integrity requirement, which we discuss in more detail from para 6.54 below.

⁴⁶⁵ See eg *Bates v Post Office Ltd (No 6) (“Horizon Issues”)* [2019] EWHC 3408 (QB).

⁴⁶⁶ Similar points were made in relation to an express integrity requirement, which we discuss in more detail from para 6.54 below.

- 6.46 We further recommend that the Bill should set out a list of factors which may be taken into account when assessing whether a system is reliable. Mr Justice Fraser said that this would be useful to judges in determining these matters. It is important to note that, in requiring a system to be reliable and in setting out various factors that may be taken into account when assessing reliability, we do not intend to prescribe any particular type of technology. We simply intend to provide a non-exhaustive list of factors that the court may take into account when assessing the reliability of a particular system. These factors are based on the factors set out in article 12(a) of the MLETR. This approach is therefore consistent with our general guiding principle that the Bill should be technology neutral.
- 6.47 We do not, however, think the Bill should make separate provisions for an accreditation process, which would guarantee a certain level of objectivity in the assessment of the reliability of the system used. Requiring specific systems to be accredited by a national regulator or state-appointed regulator would be burdensome, and could lead to delays in a move to electronic trade documents while such an accreditation system was set up. Operators could also face having to get accredited in multiple jurisdictions. We think that such issues are better dealt with by industry standards which can reflect more dynamically the development of technology to support electronic trade documents.
- 6.48 Standards specific to the use of trade documents in electronic form are already emerging, and significant progress has been made in this regard. For example, DCSA has created standards for an e-bill of lading,⁴⁶⁷ which consist of data and process standards for the submission of shipping instructions and the issuance of bills of lading.⁴⁶⁸ Other industry initiatives include ICC's Digital Standards Initiative,⁴⁶⁹ which is designed to establish standards to govern cross-border trade. Furthermore, ICC, DCSA, Swift, the Baltic and International Maritime Council ("BIMCO") and the International Federation of Freight Forwarders Associations have recently formed the Future International Trade ("FIT") Alliance to bring together their various sets of standards, and create one universal set of rules for the digitalisation of international

⁴⁶⁷ Digital Container Shipping Association ("DCSA"), *Standard for the Bill of Lading: a roadmap towards eDocumentation*, <https://dcsa.org/wp-content/uploads/2020/12/20201208-DCSA-P4-DCSA-Standard-for-Bill-of-Lading-v1.0-FINAL.pdf>.

⁴⁶⁸ These standards are intended to achieve a harmonised framework for communications among all stakeholders involved in trade transactions, including carriers, cargo owners, banks and insurers. See also: DCSA, *Streamlining international trade by digitalising end-to-end documentation* (February 2022) pp 7 to 9, https://go.dcsa.org/ebook-ebi/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-ebi. DCSA has launched an eDocumentation programme aimed at mitigating the challenges involved in standardising and digitalising international trade documents. DCSA's e-bill of lading standards are part of the eDocumentation programme. Subsequent releases of DCSA eDocumentation programme will include data and process standards for booking request and confirmation, arrival notice and release shipment.

⁴⁶⁹ ICC, "Digital Standards Initiative", <https://www.dsi.iccwbo.org>.

trade.⁴⁷⁰ Standards are also being developed by international organisations in the area of distributed ledger technology.⁴⁷¹

6.49 In addition, it is our understanding that industry participants are unlikely to want to use trade documents in electronic form unless the system that hosts such documents is reliable.

Recommendation 10.

6.50 In order to qualify as an electronic trade document, a reliable system must be used to ensure that the document contains certain functionality designed to replicate the salient features of a paper trade document.

Legislation should include a non-exhaustive list of factors which may be taken into account when considering whether a system is reliable, being:

- (1) any rules of the system that apply to its operation;
- (2) any measures taken to secure the integrity of information held on the system;
- (3) any measures taken to prevent unauthorised access to and use of the system;
- (4) the security of the hardware and software used by the system;
- (5) the regularity of and extent of any audit of the system by an independent body;
- (6) any assessment of the reliability of the system made by a body with supervisory or regulatory functions;
- (7) the provisions of any voluntary scheme or industry standard that apply in relation to the system.

The Bill provisions

6.51 The Bill contains the reliability requirement in clause 2(1). It provides that:

⁴⁷⁰ ICC, “Future International Trade Alliance launched” (15 February 2022), <https://iccwbo.org/media-wall/news-speeches/future-international-trade-alliance-launched/>; Global Trade Review, “Shipping industry bodies link up with ICC and Swift to form digitalisation alliance” (15 February 2022), https://www.gtreview.com/news/fintech/shipping-industry-bodies-link-up-with-icc-and-swift-to-form-digitalisation-alliance/?utm_source=Exporta+Publishing+%26+Events+Ltd&utm_campaign=dca451d855-EMAIL_CAMPAIGN_2022_02_16_09_41&utm_medium=email&utm_term=0_3e99358e7b-dca451d855-421721220.

⁴⁷¹ A prime example is the work of the Technical Committee of the International Organisation for Standardisation on Blockchain and Distributed Ledger Technologies. See International Organisation for Standardisation (“ISO”), “Technical Committee ISO/TC 307, Blockchain and Distributed Ledger Technologies”, <https://www.iso.org/committee/6266604.html>.

A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to ...⁴⁷²

6.52 Clause 2(4) sets out various factors that a court may take into account when determining whether a system is reliable for the purposes of clause 2(1):

- (4) When determining whether a system is reliable for the purposes of subsection (1), the matters that may be taken into account include —
 - (a) any rules of the system that apply to its operation;
 - (b) any measures taken to secure the integrity of information held on the system;
 - (c) any measures taken to prevent unauthorised access to and use of the system;
 - (d) the security of the hardware and software used by the system;
 - (e) the regularity of and extent of any audit of the system by an independent body;
 - (f) any assessment of the reliability of the system made by a body with supervisory or regulatory functions;
 - (g) the provisions of any voluntary scheme or industry standard that apply in relation to the system.

Do we need a “safe harbour” provision similar to article 12(b) of the MLETR?

6.53 We have decided not to include a “safe harbour” provision in the Bill similar to that contained in article 12(b) of the MLETR.⁴⁷³ In our opinion, including such a provision could produce an unintended result in that, where the system could be shown to have done what is required in a particular case, the system’s reliability would not need to be assessed. Given that we require a system to be reliable in order for the document in electronic form to qualify as an electronic trade document, we think that an assessment of the system’s reliability should not be excluded in such cases.

THIRD CRITERION: INTEGRITY OF AN ELECTRONIC TRADE DOCUMENT

6.54 In the consultation paper, we also discussed whether there should be a requirement as to the “integrity” of an electronic trade document.⁴⁷⁴ By this, we mean that the document cannot be interfered with or altered without the requisite authority. We said that integrity is important for establishing that a document is original or authentic.⁴⁷⁵

⁴⁷² A “qualifying electronic document” is a document that has satisfied the first criterion.

⁴⁷³ See the discussion from para 6.35 above.

⁴⁷⁴ Consultation paper, from para 6.4.

⁴⁷⁵ See *Promontoria (Oak) Ltd v Emanuel* [2020] EWHC 104 (Ch) and *Peter J Stirling Ltd v Brinkman (Horticultural Service) UK Ltd* [2020] CSOH 79, both of which suggest that as far as electronic documents

From a practical perspective, the courts are unlikely to admit a trade document which is highly susceptible to alteration as evidence, and such a document would not be trusted by intended users.

- 6.55 We provisionally proposed not to include an express statutory requirement for the integrity of a trade document in electronic form. Although we acknowledged the importance of integrity, we considered that the existing law of England and Wales already sufficiently deals with questions of the integrity of documents, and that an express legislative provision requiring a trade document in electronic form to retain its integrity was therefore unnecessary.

The MLETR approach to integrity

- 6.56 The MLETR contains an express requirement in relation to the integrity of an electronic transferable record. The “criterion for assessing integrity” is:⁴⁷⁶

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.

Consultees’ views

- 6.57 The majority of consultees agreed that it was not necessary to include an express statutory requirement for integrity.⁴⁷⁷ Some consultees said that any integrity requirement is best left to industry, while others said that such a requirement may introduce unnecessary complexity. For example, Phillips 66 Ltd said that industry participants would not use electronic trade documents unless they had confidence in the underlying system, and that “requirements are likely to evolve over time”. Bolero International Ltd also said that an integrity requirement would introduce “an unnecessary complexity”.
- 6.58 Other consultees argued that the Bill should include an explicit integrity requirement. For example, the Centre for Commercial Law at the University of Aberdeen said that integrity is “an important element” and thus considered it “useful” to have an explicit statutory requirement for integrity. Enigio Time AB said that the draft Bill should contain “an explicit legal requirement that an electronic trade document must maintain its integrity throughout its life cycle”. IGP&I raised concerns that the lack of any provision in the Bill for the integrity of an electronic trade document and the reliability of an electronic trade document system would undermine industry confidence in using them. They said:

are concerned, the crucial question is whether the document has retained its integrity, rather than whether it is the original. The underlying data structure discussed above at para 6.17 can be essential to securing the document’s integrity.

⁴⁷⁶ MLETR, art 10(2).

⁴⁷⁷ We asked consultees if they agreed that electronic trade documents should not be subject to an explicit statutory requirement for integrity: consultation question 21, para 6.13: Twenty-six consultees responded to this question. Sixteen consultees answered “yes”, three consultees answered “no” and seven consultees answered “other”.

Although there is no integrity requirement for paper bills it is perhaps historical; partly because you can physically see and hold the bill and perhaps partly because the sophisticated schemes and technologies did not exist to create such elaborate scams.

Discussion and our recommended approach

- 6.59 After considering consultees' responses, and after further stakeholder engagement, we now recommend that the Bill should include a requirement that a trade document in electronic form must retain its integrity, and must therefore be protected from unauthorised alteration or amendment. Although consultees were broadly in favour of our provisional proposal not to include an express integrity requirement, as with reliability, several consultees made cogent and ultimately persuasive arguments in favour of such a requirement. These arguments were similar to those made in relation to a reliability requirement discussed above.⁴⁷⁸
- 6.60 Importantly, consultees thought that an integrity requirement would be valuable in ensuring trust in the widespread use of electronic trade documents, and combatting the risk of cybercrime and related scams. Even though such a requirement does not exist in the context of paper documents, consultees pointed out that this could be primarily due to historical reasons. In addition, even though we consider integrity to be an existing requirement under the law of England and Wales, it is less clear whether it would operate as pre-condition to a document in electronic form qualifying as an electronic trade document. We think it is important for integrity to play such a role in relation to electronic trade documents. Mr Justice Fraser also supported the inclusion of an express integrity requirement for similar reasons to those provided in support of an express reliability requirement.⁴⁷⁹

Recommendation 11.

- 6.61 In order to qualify as an electronic trade document, a document in electronic form must be protected against unauthorised interference or alteration.

The Bill provisions

- 6.62 The Bill contains the integrity requirement in clause 2(1)(b). It provides that:
- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to —
 - (b) protect the document against unauthorised alteration

⁴⁷⁸ From para 6.32.

⁴⁷⁹ Discussed from para 6.32 above.

FOURTH CRITERION: CAPABLE OF EXCLUSIVE CONTROL

The concept of “control”

6.63 Control is fundamental to our recommendations in two different ways.

- (1) First, as explained in Chapter 5, control is one of the two elements which are required at common law in order for someone to be in possession of something (the other being intention). What constitutes sufficient control in respect of a particular asset will depend on the type of asset. This is a common law assessment which will be for the courts to make, assisted by existing case law, which we think can be extrapolated to electronic trade documents. We discuss what constitutes control of, and possession of, an electronic trade document in Chapter 7.⁴⁸⁰
- (2) Second, as discussed below, we recommend that amenability to exclusive control should be a necessary criterion for a trade document in electronic form to qualify as an electronic trade document. We include a concept of control in the Bill for this purpose alone (although the concept is based on notions such as “use” which are referred to in common law assessments of control/possession).

Our position in the consultation paper

6.64 In the consultation paper, we provisionally proposed that, for the purposes of our reforms, control in the context of the gateway criteria should be used in a factual sense and not in the sense of a legal right distinct from possession.⁴⁸¹ We therefore provisionally proposed that “control” (for the purposes of the gateway criteria) should be defined as the ability (as a matter of fact) to “use, and transfer or otherwise dispose of the document”.⁴⁸²

6.65 We also provisionally proposed that, in order to be amenable to possession, an electronic document must be capable of being the subject of exclusive occupation or use; that is, of exclusive control.⁴⁸³ We discuss this criterion in more detail below.⁴⁸⁴

⁴⁸⁰ We have suggested that having the private key/password, for example, can amount to having “control” of an electronic trade document.

⁴⁸¹ Consultation paper, paras 5.87 to 5.89. This is for the purpose of determining whether a document in electronic form is susceptible to exclusive control, in order to qualify as an “electronic trade document” for the purposes of the Bill. Under the Bill, an electronic trade document is capable of possession – both of possession as a matter of fact, and of legal or constructive possession. We explain legal possession from para 5.57 above.

⁴⁸² We asked consultees if they agreed 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: consultation question 11, para 5.90. We also provided a definition of control in clause 1(4) of the consultation Bill, which provided that 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.

⁴⁸³ Consultation paper, from para 5.63.

⁴⁸⁴ From para 6.79 below.

Consultees' views

- 6.66 Some consultees (including Linklaters LLP, the Centre for Commercial Law at the University of Aberdeen and Dr Jenny Jingbo Zhang and Dr Liang Zhao) suggested that it is not necessary to define “control” in the Bill. For example, Dr Zhang and Dr Zhao said that the Bill should focus on the legal effect of electronic trade documents rather than introducing a new concept of “control”. Similarly the Centre for Commercial Law at the University of Aberdeen, answering “other”, queried whether there is a “real need” to define control, noting that the MLETR does not do so.
- 6.67 However, the majority of consultees supported our provisional proposal for the inclusion of a definition or concept of control.⁴⁸⁵ For example, Professor Djakhongir Saidov said that the provisional proposal is “a good and workable solution”. Dr Michael Crawford said that the proposed definition is “very good”.
- 6.68 Although the majority of consultees agreed with our provisional proposal, the definition of “control” in the consultation Bill prompted a significant number of comments (including from consultees in favour of it). These comments included whether the definition of control should include an express element of exclusivity, whether access to a document to read or view its contents constitutes “use”, and whether the definition of control should include positive and negative control.
- 6.69 We discuss each of these points below, before setting out our recommendations and conclusions on the concept of control in the context of the gateway criteria.

Exclusivity of control

- 6.70 Dr Crawford, the Centre for Commercial Law at the University of Aberdeen (both answering “other”) and WAVE BL (answering “no”), referred to the concept of exclusive control. WAVE BL said:

We agree but the most important thing about control is having the exclusive ability effectively in a way that cannot be interrupted by any third party including the service provider. We think this should be added [to] the definition because that is the exact same value proposition of its equivalent paper document.

- 6.71 Dr Crawford said that it is not clear that an exclusivity requirement is included in the proposed definition. He asked:

If, for instance, several people are able to use or dispose of the document because they have access to the relevant encryption key, would we say that each “controls” it, or that none “controls” it?

Does “ability” mean a legal right?

- 6.72 Legal Innovation Ltd emphasised that the definition of control should focus on functionality, and not the legal right to do something with the document:

I would strongly recommend not using a definition that talks about an “ability” to do anything - particularly in light of the chain of contractual arrangements that give

⁴⁸⁵ Thirty-four consultees responded to the question, with nineteen answering “yes”, six answering “no” and nine answering “other”.

different “abilities” to different people at different times. We need one definition that focuses only on who from a technical perspective has the “functionality” to cause something to happen to the asset - ie we need to exclude everyone who may have contractual rights giving them the right to cause someone else to do something.

Positive and negative control

6.73 Some consultees raised the question of whether our proposed definition includes the correct type of control. For example, Professor Duncan Sheehan, answering “other”, said that to be possessable, it is necessary that the document must be “susceptible to control (positive or negative control)”.

6.74 In contrast, Professor Bridge (who agreed with our provisional proposals) said that there is “no reason for being diverted by vexed questions of negative and positive control in this context”. He made the point that:

Certainly as far as trade documents are concerned (ship's delivery orders, warehouse receipts), we are looking at short-term documents passing from hand to hand (metaphorically speaking) and therefore about positive control.

Control and existing electronic systems

6.75 “The London Metal Exchange, answering “other”, raised concerns about the effect of the definition of control on existing electronic systems. In particular, they cautioned against unintentionally excluding “closed” systems.

To benefit existing systems (like LMEsword) it would need to be permissible under law to restrict the transfer of electronic documents to within that system between members (for their own account or for the account of their clients) – i.e. to have a “closed” as opposed to an “open” system, without prejudice to the intended treatment of the electronic document.

The concept of “use”

6.76 Rio Tinto Commercial asked about the significance of “use” and suggested removing “use” from the proposed definition of control, and instead relying on the ability to transfer or otherwise dispose of the electronic trade document. They asked:

What is the intended consequence if, in an electronic system, a person has the ability to transfer an electronic trade document but does not, for whatever reason, have the ability pursuant to the system to “use” it (and nobody else has the ability to “use” at that time)? Who is then in possession? Because there are two limbs, there can be situations where one limb is fulfilled and not the other. What is the consequence for each situation?

6.77 Some consultees, including Sullivan & Worcester LLP, Matthew Wright from the UK Chamber of Shipping (who responded in a personal capacity) and the London Maritime Arbitrators Association (“LMAA”), asked whether viewing or accessing a document would fall within the definition of “control”. For example, Sullivan & Worcester LLP, answering “other”, said that the Bill should distinguish between “control” and “access”:

Access may be needed by a number of parties e.g. system administrator, both transferor and transferee and other parties to read the document, to check its terms before and after a transfer. Other officials may also need sight of it even if they are not the holder or owner. This, we understand, could be done by provision of a public key, in some systems.

6.78 In contrast, Dr Crawford, answering “other”, and Professor Saidov suggested adding the ability to access an electronic trade document to the definition of control.

Discussion and our recommended approach

The concept of control

6.79 After considering consultees’ responses to our provisional proposals, we remain of the view that it is necessary to include a concept of control for the purposes of the gateway criteria. Given that the concept of control is used in different ways in the law of England and Wales, explaining what we mean by control is necessary to ensure that stakeholders are clear as to what requirements must be met for an electronic trade document. We do not, however, think it is necessary for the concept of control to refer expressly to exclusivity. This is addressed by other elements of our recommendations including, in particular, the criterion discussed below that no more than one person can exercise control at any one time.⁴⁸⁶

6.80 The essence of the concept of control within the meaning of our recommendations and Bill is that it is a factual rather than a legal or rights-based enquiry. The references in the consultation Bill to something that a person “is able to” do were intended to convey this point. However, as is clear from consultees’ responses, the wording led to confusion. It was interpreted by some consultees as meaning a legal right. In light of consultees’ feedback, we have revised our drafting in this context to make it clearer that control is unrelated to legal rights for the purposes of the gateway criteria.

6.81 We agree with Professor Bridge that it is unnecessary to complicate matters by including concepts of “positive” and “negative” control in the Bill. The concept of control in the gateway criteria is concerned with what, as a matter of fact, someone who is able to exercise control over a trade document in electronic form can do in relation to that document. What is important in each case is the factual matrix in which control is present. For example, some arrangements might be structured such that control can only be exercised when all or a combination of the persons involved in the arrangement act together. This means that, although no one person can use, transfer or dispose of the document, factual control can still be exercised over the document when the requisite number of persons act together. However, this is a separate question about the person or persons who can exercise factual control, rather than being a question about whether the document is one over which it is factually possible to exercise control, or what it means to exercise control.

6.82 In addition, although it has provoked sophisticated reflection on the notion of control, the provision on control in the Financial Collateral Arrangements (No 2) Regulations

⁴⁸⁶ See from para 6.94.

2003 (the “FCARs”) (as interpreted by courts in this jurisdiction and by the CJEU)⁴⁸⁷ has proved problematic for marketplace actors. In our view, it would be undesirable to try and build upon the concept of control that appears in the FCARs because it does not capture the type of control with which we are concerned in relation to the gateway criteria. Instead, our recommended approach is to employ a concept of control for the purposes of the gateway criteria that is more closely aligned with the factual notion of control that forms part of the common law concept of possession.

- 6.83 We also do not agree that the proposed drafting applied only to “open” systems, in that it implied a requirement that there must be an unfettered ability to use, transfer or dispose of a document in electronic form. The Bill presupposes the existence of a system that is reliable. It does not prescribe how particular transfers or disposals of an electronic trade document are to take place within that system. The Bill would therefore apply to all systems, regardless of whether they are “open” or “closed”.

The concept of “use”

- 6.84 After considering consultees’ feedback on the concept of “use”, we remain of the view that “use” should form part of the concept of control. In particular, there may be situations where a party is able to use the document without also being able to transfer or dispose of it. This would be the case where, for example, a party is able to hold or retain the document in order to prevent any dealings in the document by anyone else. In such a case, we think the party who has the ability to use the document should be considered to have control (and the ability to exercise control) of the document. For example, where a pledge is granted, the pledgee, to whom the document is transferred, may be precluded by the system from further transferring or disposing of it until the debtor has either repaid the loan or defaulted. This does not, however, change the fact that the document has been transferred to the pledgee and that nobody else is able, as a matter of fact, to deal with the document. The pledgee retains the document, thereby preventing any dealings in the document by anyone else. In this case, the pledgee should be considered to be using and therefore exercising control of the document, notwithstanding that they cannot transfer or dispose of it.
- 6.85 Other examples of acts that we think should constitute “use” of the document include requesting a change of medium, requesting an amendment of the document, adding an indorsement or an acceptance to the document, and presenting or surrendering the document.
- 6.86 However, our view is that reading or viewing a trade document in electronic form should not, without more, constitute “use” of the document. Reading or viewing a trade document could arise both where a person does not otherwise have factual control of the document (and therefore the ability to exercise control), and where they do. For example, a person could have read-only access to a document, allowing them to view and read the document but nothing more. Such a person should not be considered to have the ability to use that document. This would mean that they do not have control (or the ability to exercise control) for the purposes of the Bill. For example, a

⁴⁸⁷ See *Gray v GTP Group Ltd* [2010] EWHC 1772 (Ch), [2011] BCC 869; *Re Lehman Brothers International (Europe) (In Administration)* [2012] EWHC 2997 (Ch), [2014] 2 BCLC 295; and *Private Equity Insurance Group SIA v Swedbank AS* (C-156/15) [2017] EU:C:2016:851, 1 WLR 1602 (CJEU).

stevedoring service provider (who loads and offloads cargo to or from a ship) might need to check the information in a bill of lading in the course of unloading the goods. If they are only given access to the document over the system for this limited purpose and simply view the document, this should not constitute “use” of the document for the purposes of the Bill.

- 6.87 In other cases, a person who has the ability to use, transfer or otherwise dispose of the document (and therefore the ability to exercise control) would ordinarily also be able to access the document to read or view it. If, however, the person only reads or views the document in a particular instance, that should not constitute “use” of the document and, as such, the person should not be said to be exercising control of the document. This should be the case notwithstanding the fact that the person would otherwise have control of the document that they *could* exercise (because they could, for example, transfer or dispose of it). In theory this means that someone could exercise control of a document while another party with control is simply reading or viewing it.
- 6.88 We think this is the right result, and could occur in the paper world too. For example, someone could be reading a piece of paper and someone else could come along and snatch it away, even if they were not supposed to. Since we are concerned with factual control, we do not think the Bill should necessarily preclude or prevent such a situation. If the industry wants to avoid such a result, and ensure that a person could not exercise control while another person with control was reading or viewing the document, system providers could design systems to prevent such an occurrence.
- 6.89 To “use” a trade document in electronic form should, therefore, be to utilise or retain the document to achieve a particular purpose. It should include causing something to happen (or preventing something from happening) to the document. For example, requesting an amendment of the document, surrendering the document, or simply retaining the document to exclude anyone else from transferring, presenting or surrendering it. Merely reading or viewing the document should not, in and of itself, constitute “use” of the document in a particular instance.

Recommendation 12.

- 6.90 For the purposes of the gateway criteria, a person should be taken to exercise control of a trade document in electronic form when the person uses, transfers or otherwise disposes of the document (regardless of whether they have the legal right to do so).

Recommendation 13.

6.91 “Use” of a trade document in electronic form should comprise utilising or retaining the document to achieve a particular purpose. It should include causing something to happen (or preventing something from happening) to the document, but exclude merely reading or viewing the document.

The Bill provisions

6.92 Clause 2(2)(a) of the Bill contains the concept of control for the purposes of the gateway criteria. It provides that:

- (2) For the purposes of subsection (1) —
- (a) a person exercises control of a document when the person uses, transfers or otherwise disposes of the document (whether or not the person has the legal right to do so)

6.93 Clause 2(3) of the Bill deals with use. It provides that:

Reading or viewing a document is not, of itself, sufficient to amount to use of the document for the purposes of subsection (2)(a).

Exclusivity of control as part of the gateway criteria

Our position in the consultation paper

6.94 In the consultation paper,⁴⁸⁸ we provisionally proposed that a trade document in electronic form must be capable of exclusive control in order to constitute an electronic trade document. We said that, to satisfy the requirement, the document in electronic form must not support concurrent use or control by multiple parties at one time independently of one another. In personal property law, a thing which has this quality is sometimes referred to as “rivalrous”.⁴⁸⁹

Consultees’ views

6.95 While consultees were supportive of the requirement for exclusive control and, in particular, the notion that a document in electronic form must be susceptible to exclusive control, it was clear that our provisional proposals caused some confusion. Specifically, there were concerns that our proposals excluded various situations where multiple persons could be said to have control of a document in electronic form

⁴⁸⁸ Consultation paper, from para 5.63.

⁴⁸⁹ We asked consultees if they agreed 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: consultation question 10, para 5.72. We also asked consultees if they agreed 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: consultation question 12, para 5.95. We included a provision in clause 1(3)(c)(i) of the consultation Bill, which provided 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... .

because, for example, they all have the relevant private key or other security credentials. Similarly, there were concerns that our proposals did not cover a situation where a group of persons acting jointly could exercise control of the document (for example, in a multi-signature arrangement).⁴⁹⁰ Below we discuss consultees' responses, before setting out our recommendations and conclusions on the requirement for exclusive control.

Concurrent control by multiple parties

6.96 Some consultees, including Linklaters LLP, WAVE BL and Dr Crawford, asked how our provisional proposals would apply to a situation where more than one person has access to the document. Dr Crawford said:

One could imagine a situation in which numerous people have access to a private key, password or decryption device. It is not clear how the digital architecture of any particular platform would prevent people sharing this sort of information.

6.97 WAVE BL said:

Concurrent control by multiple parties doesn't necessarily oppose the thought of unique control of the ETR held by a single party or by several parties acting together (or requiring approval from all "controlling parties" to perform "control-oriented action"). The ability to hold control together with another party simultaneously would allow (1) one out of a list or (2) all or some of a list to perform a transfer possession/apply signature or endorsement signature action together for them to take place. As long as, the set of rules applying to the specific ETR are visible and known to its holder there would be no reason to fully exclude the concept of multiple party control.

Exercising control jointly and multi-signature arrangements

6.98 Several consultees, including Professor Andrew Steven, the IISTL, Professor Sheehan, HSBC and WAVE BL, suggested that the Bill should provide for the situation where two or more parties are acting together. For example, Richard Gwynne said:

There is no obvious reason why parties with a joint interest (eg. partners in an unincorporated partnership or trustees) may not enter into a contract of carriage or be parties to a bill of exchange and so become the joint holders of a bill of lading (or bill of exchange or other trade document). It is also difficult to see any good reason why that should be precluded where there is an electronic trade document.

6.99 Professor Steven, answering "other" said:

it seems odd ... to exclude co-control. Two companies in a joint venture may co-own vehicles and co-possess them, so why should it not be possible to have co-control an electronic document if that is what is desired?

6.100 Linklaters LLP, answering "other", said:

⁴⁹⁰ We discuss multi-signature arrangements in more detail from para 7.80 below.

The requirements do not seem to cater for multi-sig wallet arrangements, under which multiple (separate) persons have negative control over the asset and no single person has positive control over the asset.

System administrator

6.101 Sullivan & Worcester LLP, the LMAA, Vale International SA and HSBC suggested that we consider the position of the person or organisation which administers or operates the electronic trade documents system (the “system administrator”). For example, Sullivan & Worcester LLP agreed that the provisional proposal “seems sensible” but said:

The system administrator will have to have some access in case of mistaken transfers or IT issues, but the control or access by that party should not constitute control for the purposes of the definition of “possession” in the Bill, so we propose you carve this out of either the relevant definition of possession or control.

Companies and agents

6.102 Vale International SA said that “person should also include Party (company), which may have several employees”. Rio Tinto Commercial pointed out that there could be “an individual or multiple individuals who have access to represent the Party that has possession under the digital platform”.

Discussion and our recommended approach

6.103 After considering consultees’ responses, and on further reflection, it is clear that our provisional proposals caused some confusion. These proposals, and the relevant provisions in the consultation Bill, were interpreted to mean that where multiple persons have the relevant password or private key (for example), their control is not exclusive, and therefore the document could not qualify as an electronic trade document. However, what we meant by exclusive control was that it must not be possible for more than one person (other than joint actors) to *exercise* control at any one time – that is, the document must be amenable to exclusive control.

6.104 That is not the same as precluding multiple people from having control at the same time. As we discuss in Chapter 5, it is possible in the tangible world for multiple people to have control (and possession) of an asset at the same time. In Chapter 7, we explain that, where multiple persons have the relevant password or private key, they can all be said to have control of the electronic trade document.⁴⁹¹ However, the question of who “has control” is separate from the question of the features a document must have in order to qualify as an electronic trade document. The function of the exclusive control criterion is to address the “double spend” problem so that, for example, two people with the private key could not both transfer the document to two different places independently of each other.

6.105 In light of consultees’ feedback, and after further stakeholder engagement, we have refined our policy on exclusive control as follows.

⁴⁹¹ See from para 7.77 below.

- (1) A document in electronic form must be capable in fact of being subject to exclusive control.
- (2) Multiple people could have control of a document in electronic form (because, for example, of all of them have the security credentials or private key necessary to transact).
- (3) Even though multiple people could have control of a document in electronic form, only one person (or persons acting jointly) must be capable of exercising that control at any one time.

6.106 In addition, while we think that “person” in the Interpretation Act 1978 would cover an individual, or a body of persons (corporate or incorporate), it would most likely not extend to other situations, such as multi-signature arrangements. We think that this should be addressed.

Recommendation 14.

6.107 In order to qualify as an electronic trade document, a trade document in electronic form must be susceptible to exclusive control; that is, only one person (or persons acting jointly) must be able to exercise control of a document in electronic form at any one time.

The Bill provisions

6.108 Clause 2(1)(c) of the Bill provides that:

- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to —
 - (c) secure that it is not possible for more than one person to exercise control of the document at any one time

6.109 Clause 2(2)(b) of the Bill covers the situation where a group of persons acting jointly can exercise control of the trade document in electronic form (for example, in a multi-signature arrangement). It provides that:

- (2) For the purposes of subsection (1) —
 - (b) persons acting jointly are to be treated as one person.

6.110 In relation to system administrators or operators, it is important to ensure that a system is not excluded from the scope of the Bill simply because its operator, as well as its user, is able to exercise control of a document in electronic form. However, given that we recommend the Bill focuses on exercising control, rather than having control, we think that this removes any concern that such a system would be excluded. Those systems where the system administrator or operator is able to exercise control of a document in electronic form may fall within the scope of the Bill (assuming they meet the other criteria and provided that it prevents double-spending).

The requirement that no more than one person can exercise control of a document in electronic form at the same time (unless they are acting jointly) ensures that where, for example, the user is transferring or otherwise using the document, the system administrator cannot do so. This links to our next criterion of divestibility.

FIFTH CRITERION: DIVESTIBILITY

Divestibility criterion

Our position in the consultation paper

- 6.111 “Divestibility” means that, as a matter of fact, a transfer of an object must entail the transferor being deprived of it. In the consultation paper,⁴⁹² we provisionally proposed that a trade document in electronic form must also be “divestible”, by which we meant that a transfer necessarily entailed a transfer both of the document and of the ability to control the document.⁴⁹³ This feature prevents an electronic trade document from being transferred more than once by the same party, or by another party having concurrent control with the transferor – the “double spend” issue.⁴⁹⁴ Divestibility singularises the right to claim performance of the obligation recorded in the document.
- 6.112 Suitable objects of property rights are necessarily divested on transfer. For physical objects, this is inherent in their material nature. For example, in the paper world, if Alice gives a paper bill of lading to Bob, Bob then has the bill of lading and Alice does not. The bill of lading is no longer in Alice’s physical possession, nor does she have factual control over it. Alice has been divested of the paper trade document and cannot purport to transfer it to another party, Charlie. Similarly, if a paper bill of lading is in a vault and both Alice and Daisy have the passcode to the vault (and therefore concurrent control and possession of the bill of lading), if Alice were to give the paper bill of lading to Bob, both Alice and Daisy would lose factual control and possession of the document.
- 6.113 We said that the divestible nature of a paper trade document was crucial to its ability to be possessed, and should therefore be replicated in the context of trade documents in electronic form. As such, when an electronic trade document is transferred to another person, the transferor (and any person who is able to exercise control concurrently with the transferor) must be fully divested of the document, and must not be able to purport to transfer it to another party. For trade documents in electronic form, divestibility will be a consequence of their technological design.

⁴⁹² Consultation paper, from para 5.97.

⁴⁹³ We asked consultees if they agreed 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: consultation question 14, para 5.103. Thirty-three consultees responded to this question. Twenty-five consultees answered “yes”, and eight consultees answered “other”. No consultees disagreed with our provisional proposals. We also included a provision in clause 1(3)(c)(ii) of the consultation Bill, which provided that: (3) An “electronic trade document” is a trade document that – ... (c) is held by means of a system that secures that (ii) after the document is transferred from one person to another person, the transferor no longer has control of it... .

⁴⁹⁴ We discuss “double spending” in more detail in para 1.31 above.

Consultees' views

6.114 While the majority of consultees agreed with our provisional proposals on the divestibility criterion, not all consultees thought that such a requirement was necessary.

6.115 A number of consultees, including Professor Bridge and Dr Crawford, indicated that the divestibility criterion is essential to how trade documents are meant to work. For example, Dr Crawford said that the element of divestibility is “essential”. Professor Bridge said that, on the basis that we adopt the concept of possession, he agreed with our provisional proposals. Phillips 66 Ltd agreed from an industry perspective. They said that:

The system must ensure that a party cannot perform fraudulent acts by using the trade document as security for party B but unbeknown to party B transferring the trade document to party C and not accounting for the proceeds. Electronic trade documents will not be accepted in the industry without safeguards to prevent such practices.

6.116 In contrast, Dr Tatiana Cutts, answering “other”, suggested that we remove the divestibility criterion:

It is not clear to me that the third [divestibility] characteristic adds anything for the purposes of the electronic trade documents consultation: I can think of no good example of a case in which an electronic trade document could be susceptible to exclusive control, but yet not fully divested on transfer.

6.117 Legal Innovation Ltd said:

There must be a transfer of “control” in the strict legal sense of losing the ability to give direct instructions to the system - but that does not mean that the first holder loses control in the wider sense of having rights to control indirectly the same asset.

6.118 Sullivan & Worcester LLP, answering “other”, said:

We generally agree with this but we would like clarification on how this is envisaged in reality. For example, is there an interim step, (i) the transferor has to send an instruction to transfer and then (ii) the transferee has to do something to accept the document and on that acceptance the transfer occurs which may be needed to fix the time of acceptance. We are thinking either a tick box/ click on the system, rather than just a send or indorsement instruction from the transferor. This could be relevant for erroneous instructions or mistakes in the system. Could the Law Commission consider this in relation to the Bill and how systems operate in practice.

6.119 The CLLS, answering “other”, said:

This would be the effect of system rules. However, a system may also allow the system administrator to respond to legal requirements to rectify its records in case of fraud etc. In some cases this could restore control to a transferor.

Discussion and our recommended approach

- 6.120 After considering consultees' responses, we remain of the view that it is necessary to include a divestibility criterion in the Bill. However, in light of our revised approach to the exclusive control requirement,⁴⁹⁵ we think the divestibility criterion needs to be revised to refer to "exercise control" rather than "has control". In addition, the divestibility criterion should provide for the fact that when a transfer occurs, the transferor can no longer exercise control of the document; and neither can any of the persons who were also able to do so. We think it is important that both the person who is actually exercising control, as well as any of the persons who shared the factual ability to exercise control (because, for example, they had the relevant private key), are no longer able to do so. This ensures that, following a transfer, the electronic trade document is fully divested.
- 6.121 To Dr Cutts' point, we have revised our policy on control and explained that, while the document in electronic form must be capable of exclusive control as part of the gateway criteria, there may be situations in which multiple parties have control of it. This could be, for example, because multiple people have the private key to the document. In such a case, we think it is important to provide that if the transferor effects a transfer, the transferor can no longer exercise control of the document, and neither can any of the persons who shared the ability to exercise control with the transferor. As such, all those previously in control are divested of it (except to the extent that a person re-acquires control by virtue of being a transferee). While we take the point that it may be unlikely that a document susceptible to exclusive control is not fully divested on transfer, we cannot guarantee that this will always necessarily be so. As such, we think it is necessary to include an express divestibility requirement to ensure the point is covered; including a divestibility requirement is not, in our view, superfluous. Rather, we think it is particularly important to ensure there is no potential risk that a system divests the transferor of control, but not the additional persons who shared the transferor's ability to exercise control.
- 6.122 In relation to Legal Innovation Ltd's response, since we are referring to factual control, the divestibility criterion entails that the transferor (and any person who shared the transferor's ability to exercise control) lose factual control of the electronic trade document. In Chapter 7, we explain that a person who transfers factual control (and consequently possession) to another person may in certain situations retain legal control (that is, legal rights) in relation to the object in question.⁴⁹⁶
- 6.123 With regards to Sullivan & Worcester LLP's query as to how divestibility would work in practice, we think this will largely depend on the type of electronic trade document system, and its functionalities. For example, if the system permits the transferor to transfer control of an electronic trade document to the transferee for the purposes of inspecting the document, with a view to accepting or rejecting it, the transferor is divested of control. This situation can be contrasted with one where the system permits the person who has control of the document to show the document to the intended recipient for inspection purposes only. As we discuss above,⁴⁹⁷ a person who

⁴⁹⁵ We discuss exclusivity in more detail from para 6.94 above.

⁴⁹⁶ From para 7.100 below.

⁴⁹⁷ We discuss "use" and inspection in more detail from para 6.84 above.

is able *only* to read or view a document in electronic form is not able to “use” that document, and does not have control for the purposes of the Bill. In this case, control remains with the person showing the document. We discuss acceptance of a document for the purposes of delivery in Chapter 8.⁴⁹⁸

6.124 The CLLS noted that system rules may allow an administrator to intervene for certain purposes. We do not think there is anything in the Bill that would exclude such a system. Our revised approach to the concept of control focuses on the actual exercise of that control. This approach removes any concern that a system with an operator or administrator who is able to exercise control of a document in electronic form would be automatically excluded.

Recommendation 15.

6.125 In order to qualify as an electronic trade document, a trade document in electronic form must be divestible; that is, after the document is transferred, any person who before the transfer was able to exercise control of the document is no longer able to do so (except to the extent that a person is able to exercise control by virtue of being a transferee).

The Bill provisions

6.126 The Bill contains the divestibility criterion in clause 2(1)(e). It provides that:

- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to —
 - (e) secure that a transfer of the document has effect to deprive any person who was able to exercise control of the document immediately before the transfer of the ability to do so (except to the extent that the person is able to exercise control by virtue of being a transferee).

6.127 It is to be noted that the word “transfer” in this context is being used in a factual and not a legal sense. As discussed elsewhere in this report,⁴⁹⁹ this is an important distinction because a transfer of the document in the legal sense (so as to make the transferee the holder) may require elements additional to a transfer of possession in order to be effective.

How divestibility is achieved in practice

Our position in the consultation paper

6.128 In the consultation paper,⁵⁰⁰ we made the point that the divestibility requirement ensures that any system that supports electronic trade documents must be designed

⁴⁹⁸ From para 8.59 below.

⁴⁹⁹ From paras 7.100 and 8.56 below.

⁵⁰⁰ Consultation paper, para 5.102.

to exclude “double spending”. We said that we were interested to know how current systems for electronic trade documents, and those in development, achieved this.⁵⁰¹

Consultees’ views

6.129 Several consultees confirmed that existing systems could ensure that our divestibility criterion is met, but emphasised the importance of technological neutrality in the Bill. For example, the IISTL said that the obvious ways that current technology could meet the divestibility requirement would be:

control by password access to a central registry, or the use of block analogous to its incorporation of devices for the prevention of double-spending of Bitcoin or Ethereum.

However, the IISTL warned that this matter is best left undefined by the law because it is a technical issue and legislation is likely to become outdated.

6.130 Robert Parson said that:

there are a variety of approaches from unmoderated blockchain to secure depositaries, all of which are technically capable of ensuring that the transferor loses the ability to control a document post transfer.

He agreed with our proposed “technology neutral” approach, and added that “this is a technical area which will likely develop over time”.

6.131 IGP&I said that divestibility is achieved under existing systems “by contractual terms and by system software”.

6.132 In relation to DLT, HSBC said:

DLT rules can establish the consent principle, meaning that an electronic record can only be created and filed on the ledger (or chained to the blockchain) if both parties have consented to the change (i.e. the transfer). In this respect, the electronic record becomes immutable on the system and is outside of the control of the transferor.

6.133 WAVE BL explained:

On WAVEBL, using a blockchain dlt [distributed ledger technology] based ledger ensures that a token representing the unique possession over a document is transferred from the transferor to the transferee thus, ensuring control of the transferor over electronic documents has ended and transferred (without approval of the transferee) to the transferee.

6.134 Sullivan & Worcester LLP suggested that some clarification may be necessary:

In relation to cryptoassets, we understand that every time a digital document is transferred a new set of keys is issued, which, could mean there is effectively a new

⁵⁰¹ We asked consultees for their 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: consultation question 15, para 5.104. Eighteen consultees responded to this question.

cryptoasset and the old one is destroyed, however it is still meant to be binding on the issuer. We would be interested in some clarification on the point and whether the Law Commission is expecting that the control element would mean that new keys or a new password were issued and until that were done, there was not adequate “control”. If that were so, then the possession would not have passed until control was achieved. Clearly, it would be helpful to have systems input at this stage.

Discussion and our recommended approach

6.135 Consultees provided helpful responses explaining how, in practice, existing systems ensure that an electronic trade document is divestible, and that control is lost by the transferor when the latter effects a transfer or disposal of the document. Consultees explained that how divestibility is achieved depends on the underlying technology of the system, and its functionality. Consultees also reinforced the importance of the Bill remaining technology neutral in this regard.

6.136 In relation to Sullivan & Worcester LLP’s point, in some systems, when a cryptoasset is transferred or “spent”, the specific data comprising the cryptoasset is consumed and replaced by new data (or is updated or modified) on each transfer.⁵⁰² As such, the “same” cryptoasset does not persist through a transfer. However, the notional quantity unit does.⁵⁰³ Similarly, in account-based systems, adjustments in balances in accounts resulting from transactions mean that the pre-transfer cryptoasset and the post-transfer cryptoasset are not necessarily the “same” cryptoasset.

6.137 This issue also arises within the context of electronic trade documents, albeit in a slightly different way. We have noted above that a trade document in electronic form would likely comprise multiple parts: a human readable part and a data string or data structure.⁵⁰⁴ On transfer, the data structure that forms part of the “document” will cease to have value or function. Post transfer, any human readable element of the “document” will instead be related to a new (or derivative) data structure.

6.138 In those cases, we recognise that a transfer “on-chain”, or within the electronic trade document system, might necessarily include a different process to a physical transfer of a paper trade document. In particular, a transfer might include replacing, modifying, destroying, cancelling, or eliminating at least the data structure element of that electronic trade document, and the resulting and corresponding derivative creation of a new electronic trade document (a derivative electronic trade document).⁵⁰⁵ Nevertheless, we consider that such a transfer is capable of effecting a transfer of

⁵⁰² See annexure 2 of the UKJT’s consultation paper for a detailed explanation of “UTXO” (“unspent transaction output”): *Public consultation: The status of cryptoassets, distributed ledger technology, and smart contracts under English private law* (2019). The UKJT observed that, in relation to cryptoassets within UTXO-based systems, spending a UTXO causes that UTXO to “cease to have value or function because the cryptoasset is treated by the consensus as spent or cancelled so that any further dealings in it would be rejected”: UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019) para 45, <https://technation.io/lawtechukpanel/>.

⁵⁰³ See A Antonopoulos, *Mastering Bitcoin* (2nd ed 2018) p 120 for a further detailed consideration of transactions within the Bitcoin system.

⁵⁰⁴ From para 6.17 above.

⁵⁰⁵ For a similar analysis, see Principle [X.1D] in UNIDROIT, Study LXXXII – W.G.4 – Doc 2: Revised Issues Paper (October 2021) at p 38, and the related commentary at p 40 and 41, <https://www.unidroit.org/work-in-progress/digital-assets-and-private-law/#1622753957479-e442fd67-036d>.

control of the document.⁵⁰⁶ Such a result preserves the equivalent legal functionality of paper trade documents and electronic trade documents, and is in line with the reasoning adopted in the digital asset project undertaken by the International Institute for the Unification of Private Law (“UNIDROIT”).⁵⁰⁷

SIXTH CRITERION: IDENTIFICATION OF THE DOCUMENT

Retention of copies

6.139 We understand that many of the existing systems in development allow users to retain access to copies of documents for their records. This may be particularly useful where parties wish to retain a copy after they have transferred or disposed of the electronic trade document itself. This is equivalent to a party being able to take a photocopy or scan of a paper document before it is transferred or disposed of, which does not interfere with possession of the original.

Our position in the consultation paper

6.140 In the consultation paper,⁵⁰⁸ we said that the ability to retain a copy of the electronic trade document after transfer or disposal would not prevent the divestibility requirement from being satisfied, and would not constitute retention of control of the document itself. We did not think it was necessary to make provision in the Bill for retained copies of electronic trade documents; there is no issue with taking copies in the paper world. Even so, we asked whether consultees thought that the ability to retain a copy of an electronic trade document upon transfer or disposal could lead to problems in practice.⁵⁰⁹

⁵⁰⁶ A similar approach was adopted in the context of paper bills of lading. In *Finmoon Ltd v Baltic Reefers Management Ltd* [2012] EWHC 920 (Comm), 2 Lloyd’s Rep 388, an arrangement was in place between the parties whereby the carrier would issue “loadport” bills of lading to the seller, who would retain them until paid by the buyer, whereupon the seller would return them to the carrier marked “null and void”. The carrier would then replace the bills of lading with “disport” bills of lading issued directly to the agents of the buyers at the port of discharge. A dispute arose as to whether the “disport” bills of lading were capable of giving the holder direct rights against the carrier under section 2(1) of the Carriage of Goods by Sea Act 1992. The court held that they were, finding that, although the loadport bills ceased to have validity, they were replaced by the disport bills which were duly issued on behalf of the owners. These became valid bills binding on the owners, and containing or evidencing the original contract of carriage. The court found that the replacement of the bills of lading was a matter of mechanics and convenience only, and did not affect the existence of the underlying contract of carriage.

⁵⁰⁷ See UNIDROIT, Study LXXXII - Digital Assets and Private Law project, <https://www.unidroit.org/work-in-progress/digital-assets-and-private-law/#1488897069871-af7a84cf-bd9a>. In 2020, the UNIDROIT Governing Council approved the Digital Assets and Private Law project with the aim of providing legislative guidance and developing principles relating to the legal nature, transfer and use of digital assets. This would include a legal taxonomy of digital assets and an analysis focusing on proprietary interests while considering specific issues arising in various contexts, such as secured transactions, applicable law in cross-border transactions, insolvency, and the legal position of intermediaries. The preparation of a guidance document on this project is expected to take place over four in-person sessions of a Working Group in 2020-2021 and to be adopted by early 2022.

⁵⁰⁸ Consultation paper, para 5.107.

⁵⁰⁹ We asked consultees for their 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: consultation question 16, para 5.109.

Consultees' views

6.141 The majority of consultees did not think that the ability to retain a copy of an electronic trade document after transfer or disposal of the document would lead to problems in practice.⁵¹⁰ Even so, some consultees expressed concerns about whether the retention of copies of electronic trade documents in general would enable parties to exercise the rights associated with the original document more than once. For example, Minerva Global Ltd said that the key is to prevent multiple transmissions of the possession of the electronic document. Only one transmission of possession should be possible.

6.142 DCSA was of the view that the retention of copies would not cause a problem provided that there was a clear separation between the original and the copy in terms of “use” rights and legal validity. Similarly, Legal Innovation Ltd did not consider that the retention of copies would create a problem so long as a copy did not give the holder “any rights to give instructions to the system”.

6.143 In the DLT context, Rio Tinto Commercial noted:

In a DLT system, what actually should matter from a legal perspective is the most recent validated record in the ledger which shows who the current holder is (because that holder will have the power to sign the next transaction e.g. to use or transfer the document). The fact that someone has a copy of the content of the document from a previous time or has a copy of an earlier part of the ledger would have no legal effect.

6.144 Professor Bridge agreed that “there is no immediate problem” if a copy is for a record only, and “no practical steps in relation to it can be taken by the person retaining it”. BILA answered similarly, saying that they could “see no problems with this proposal if ‘retaining a copy’ of an electronic trade document does not constitute retention of control of the trade document itself”.

6.145 Several consultees said that it would be important to ensure that an original electronic trade document and its copy were easily distinguishable. For example, WAVE BL said:

Nevertheless, it should be stated the actual file held by one as a copy and another as the unique documents would appear to be the same file. Similarly, to copying a PDF file without the ability to distinguish which file was the original one the copy was made of. It isn't possible without the ledger.

6.146 Matthew Wright from the UK Chamber of Shipping (who responded in a personal capacity), and other consultees including Sullivan & Worcester LLP and IGP&I, all answering “other”, agreed that there should be a way of identifying that an electronic trade document is a copy. The Centre for Commercial Law at the University of Aberdeen said that the system should ensure that users can only view, and not edit, the copy. The LMAA said, “If the document, when downloaded, looks like the original, that is clearly a concern and that would be unacceptable”. Enigio Time AB said that all

⁵¹⁰ Twenty-eight consultees responded to this question. Two consultees answered “yes”, fifteen consultees answered “no” and eleven consultees answered “other”.

original electronic documents must fulfil the “requirement of singularity”, which means that it must be possible to distinguish a copy from an original.

- 6.147 DSCA noted that different parties should be able to hold copies of an electronic trade document without control or the ability to alter its contents.
- 6.148 Phillips 66 Ltd and Bolero International Ltd, answering “no”, and Vale International SA and Sullivan & Worcester LLP, answering “other”, said that the ability to retain a copy would be useful or even necessary for internal record keeping and compliance and audit purposes. Sullivan & Worcester LLP said that it should “still [allow] for contractual confidentiality between parties”.
- 6.149 Enigio Time AB and Minerva Global Ltd both said that retaining a copy would be useful. For example, Enigio Time AB said that a “verifiable copy” could be useful if the electronic trade document were to be lost.

Discussion and our recommended approach

- 6.150 After considering consultees’ responses, we remain of the view that there is no need to make explicit provision for retaining copies of electronic trade documents in the Bill. While we agree with consultees that retaining copies is likely to be useful in practice, we do not think there is anything in the Bill that prevents different parties from doing so. Holding a copy would not constitute an exercise of control for the purposes of the Bill. The ability to retain a copy of the document after transfer or disposal would therefore not prevent the divestibility requirement from being satisfied, and would not constitute retention of control of the document itself.
- 6.151 However, after considering consultees’ feedback, we now consider it necessary to include, as part of the gateway criteria, a requirement that a trade document in electronic form is identifiable so that it can be distinguished from any copies. We think that further drafting is required to ensure that copies of electronic trade documents do not enable “double spending” or use of the copy as the original. We acknowledge the importance of being able to determine which is “the document” and which is a copy in order to ensure that double spending does not occur. In addition, even though any system that supports electronic trade documents is likely to, as a commercial imperative, be designed to ensure this result, we think the Bill should provide for it expressly. This is especially so given the centrality of avoiding double spending in our recommended reforms. We note also that the MLETR contains a provision to this effect.⁵¹¹

Recommendation 16.

- 6.152 In order to qualify as an electronic trade document, a document in electronic form must be identifiable as “the document” so that it can be distinguished from any copies.

⁵¹¹ MLETR, art 10(1)(b)(i).

The Bill provisions

6.153 This requirement is captured in clause 2(1)(a) of the Bill. It provides that:

- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to —
 - (a) identify the document so that it can be distinguished from any copies ...

SEVENTH CRITERION: IDENTIFICATION OF THE PERSONS WHO COULD EXERCISE CONTROL OF A DOCUMENT IN ELECTRONIC FORM

6.154 In addition to the criteria discussed above, we now think it is necessary to include an additional requirement for a document in electronic form to qualify as an electronic trade document for the purposes of the Bill. This additional criterion is intended to capture the idea that the system in question should be capable of allowing for the identification of any person who is able to exercise control of the document, regardless of whether any person is in fact exercising that control.

6.155 This requirement reflects the association between the trade document in electronic form and the person or persons who are able to exercise control of that document. It ensures that, for a trade document in electronic form to qualify as an electronic trade document, the document is capable of being uniquely associated with the person or persons who are able to exercise control of it. Depending on the underlying technology, this association could be achieved by the system linking the trade document in electronic form with a particular address or security credentials, and a person being able to demonstrate that they have the relevant security credentials or other means of control. We did not include such a requirement explicitly in the consultation Bill but, on further reflection, we think an express requirement to this effect is necessary to give proper effect to our policy on control.

6.156 We do not mean that, by looking at the system itself, it should be possible to see who could exercise control. Rather, we mean that, if asked to evidence their ability to exercise control, a person could prove this on the system. For example, if three people have access to the private key to a document, the system should allow each of those three persons to identify themselves as persons who are able to exercise control by showing or using their private key.

Our recommended approach

Recommendation 17.

6.157 In order to qualify as an electronic trade document, the trade document in electronic form must be capable of being uniquely associated with the person or persons able to exercise control of it.

The Bill provisions

6.158 This requirement is captured in clause 2(1)(d) of the Bill. It provides that:

- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to —
- (d) allow any person who is able to exercise control of the document to demonstrate that the person is able to do so

ANY OTHER CRITERIA?

6.159 In this chapter, we have identified the criteria that we think a document in electronic form needs to satisfy in order to qualify as an electronic trade document for the purposes of the Bill. In the next chapter, we recommend that electronic trade documents as defined in clause 2 of the Bill should be capable of possession.

6.160 In the consultation paper, we invited consultees to provide their views on whether they thought any criteria were necessary in addition to those we provisionally proposed.⁵¹²

Consultees’ views

6.161 The majority of consultees did not think that the possessability of electronic trade documents should depend on any other factors or criteria.⁵¹³ A few consultees did, however, mention additional criteria that they thought should be included in the Bill.

6.162 The LMAA said that:

Possession and control are the key concepts in the marine industry and this is reflected well in the draft bill (save perhaps for the definition of control including “use”).

6.163 Professor Saidov agreed that “all the essential criteria of possessability have been identified”. He added:

Some other possible characteristics of a document, flowing from its functions - eg, movability (an ability to be delivered and rejected) or an ability to be rectified or replaced - may either logically flow from the chosen criteria or may be too detailed/specific to be included as part of the general essential criteria.

6.164 Israel Cedillo Lazcano suggested that there should be a requirement that:

an electronic trade documents has to [be] definable, identifiable by third parties and stable item within a network-based computer environment, which is structured around a set of sequences of bits or elements, each of which constitutes structured data interpretable by a computational facility. Among these sequences, at least one has to denote a unique, persistent identifier for that object, which in the case of digital means of payment will configure the basis for the principle of formality.

⁵¹² We asked consultees for their views on whether the possessability of electronic trade documents should depend on any other factors or criteria: consultation question 17, para 5.111.

⁵¹³ Twenty-four consultees responded to this question. Four consultees answered “yes”, thirteen consultees answered “no” and six consultees answered “other”. One consultee selected “not answered” but gave a substantive response.

- 6.165 Three consultees suggested that the criteria should include a requirement that an electronic trade document system must have certain functionality or meet certain technical standards. IGP&I, answering “other”, said that they currently vet systems “to ensure they maintain the integrity of a paper bill of lading and have adequate safeguards in place”. They said that there “is a concern that the legislation could encourage e-bill providers that do not have sufficient safeguards in place”.
- 6.166 HSBC, answering “other”, said that this could “possibly depend upon certain technical minimum standards for systems”.
- 6.167 Enigio Time AB suggested that there should be a requirement that an electronic trade document system “offers the possibilities of making text and signature additions to enable endorsements or include other evidence of transfer of title”.

Discussion and our recommended approach

- 6.168 After considering consultee responses, we remain of the view that the possessability of electronic trade documents does not depend on any other factors or criteria beyond those that we now recommend.
- 6.169 With regards to IGP&I’s suggestion to include a requirement that an electronic trade document system must meet certain technical standards, we think this is adequately addressed by the new reliability and integrity recommendations, which we have added in response to such consultee comments.⁵¹⁴ Specifically, an integrity requirement in the Bill would, we think, address the concern that providers of electronic trade documents may not have sufficient safeguards in place. Similarly, we think HSBC’s concern is addressed by the recommended reliability requirement, which suggests certain technical minimum standards for systems to meet in order to be considered “reliable”.
- 6.170 In relation to Enigio Time AB’s comment regarding text amendments, signatures and indorsements, we think that these are features that an electronic trade document system may (and is likely to) offer. We agree that electronic trade documents must be capable of being signed, amended and indorsed. We discuss these issues in Chapters 8 and 9.⁵¹⁵ However, we do not think these features should be elevated to criteria the system has to secure or provide for in order for the document in electronic form to qualify as an electronic trade document. It is also not the case (and neither do we think it should be) that a document in electronic form has to be indorsed as part of the gateway criteria.
- 6.171 Israel Cedillo Lazcano indicated that the document should be given a “unique persistent identifier”. In our view, requiring expressly that the document has to have a “unique persistent identifier” carries the risk of not being technology neutral, as whether such a requirement is necessary to identify the document in question would necessarily depend on the underlying technology. What is important is the fact that the document is identifiable, rather than the specific means of carrying out that

⁵¹⁴ We discuss the inclusion of reliability and integrity requirements from para 6.32 above.

⁵¹⁵ For amendment, see from para 8.74; for signature, see from para 9.13; and for indorsement, see from para 9.26 below.

identification. The former is covered by the requirement that the document must be identifiable, and distinguishable from any copies.

Chapter 7: Recommendations – possession of electronic trade documents

- 7.1 In Chapter 6, we set out the requirements that we think that a trade document in electronic form must satisfy in order to qualify as an “electronic trade document” within the meaning of our recommendations and the Bill. We consider that a document which is an electronic trade document (that is, one which satisfies the gateway criteria) will have all the salient features of a paper trade document and should therefore be recognised by law as something capable of possession.
- 7.2 In this chapter, we discuss our recommendations on possessability. Our recommendations and the Bill have developed from our provisional proposals and the consultation Bill, and we therefore begin with a very brief overview of our revised position. We then explain our provisional proposals, the reasons for our change of approach, and our final recommendations. We demonstrate how these are reflected in the Bill and what we think it means to possess an electronic trade document in practice, drawing on the common law as it applies to tangible property.

AN OVERVIEW OF OUR RECOMMENDATIONS REGARDING POSSESSION OF ELECTRONIC TRADE DOCUMENTS

- 7.3 We recommend that an electronic trade document (that is, one which satisfies the criteria set out in the previous chapter) should be capable in law of being possessed. We recommend that this principle is set out explicitly in statute.
- 7.4 We consider that possession should be assessed as a matter of common law. We do not recommend setting out in legislation what constitutes possession of an electronic trade document because possession is a fact-specific concept and one which has always been notoriously difficult to define in abstract terms.
- 7.5 When considering whether a person possesses an electronic document as a matter of fact, the common law approach to establishing possession considers two elements: factual control and relevant intention. We consider, for example, that anyone with the ability to exercise control over an electronic document (such as anyone with knowledge of the private key or other security credentials) may thereby claim to have control, and in turn a claim to possession. Where multiple people have competing claims to possession, existing rules on relativity of title should apply to determine the superior interest in any given situation.
- 7.6 Parties may also have other possessory interests in electronic trade documents, including legal possession (being the right to possess rather than possession in fact). The range of potential relationships between persons and electronic trade documents should, as a result of our recommendations, be analogous to that between persons and paper trade documents (or indeed any other tangible object).
- 7.7 We recommend that electronic trade documents and paper trade documents should have the same legal functionality in every respect. The form of the document should

make no difference to the ways in which the document can be used, or the remedies available in respect of it, other than where form necessarily dictates some slight difference of approach. For example, an electronic trade document cannot be subject to “physical” control and it may be difficult to determine its geographical location. These matters, while helpful in establishing possession of a paper trade document, may not be relevant in the electronic context.

OUR POSITION IN THE CONSULTATION PAPER

- 7.8 In the consultation paper, we provisionally proposed that someone who has control of an electronic trade document should be taken to have “possession” of it.⁵¹⁶ In consequence, the consultation Bill provided 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”.⁵¹⁷
- 7.9 Our provisional proposals effectively equated control with possession. However, this raised two issues. First, as discussed in Chapter 5, possession at common law has two elements: factual control and intention. Intention is an integral part of the enquiry whether a document is in fact possessed by a particular person. Given that intention is a common law concept, we preferred not to refer to it explicitly in legislation. In the consultation paper, we said that we did not intend to exclude intention from the concept of possession in the context of electronic trade documents.⁵¹⁸ We were concerned that the drafting in the consultation Bill could be read as having this effect. We asked consultees for their views.⁵¹⁹
- 7.10 Second, it is clear from consultees’ responses that our approach was interpreted as excluding constructive possession, which was not our intention.

Consultees’ views

The relationship between control and possession

- 7.11 Consultees generally agreed that a person with factual control of an electronic document should have possession of it. However, many consultees raised queries about the drafting and about how this provision would impact parties’ legal rights – that is, the right to possession.
- 7.12 It was clear from the comments on drafting that it was not always clear to consultees what the provision was meant to achieve, or what the relationship would be between

⁵¹⁶ Consultation paper, para 5.113; we asked consultees whether they agreed with our provisional proposal that a person in control of an electronic trade document is the person in possession of it: consultation question 18(1), para 5.115. Thirty-two consultees responded to this question. Twenty-two consultees answered “yes”, one consultee answered “no” and nine consultees answered “other”.

⁵¹⁷ Consultation Bill, clause 2(1).

⁵¹⁸ Consultation paper, from para 5.124.

⁵¹⁹ We asked consultees whether they agreed with our provisional proposal that there is no need to make explicit in the legislation that the requirement of intention to possess applies to electronic trade documents: consultation question 19, para 5.129. Thirty-one consultees responded to this question. Eighteen consultees answered “yes”, two consultees answered “no” and 11 consultees answered “other”.

possession and control. The Centre for Commercial Law at the University of Aberdeen, answering “other”, asked:

Does this mean that “possession” and “control” are treated as the same? If so, why is there a need for two separate provisions/definitions? If not, what is the difference between them and why does the former need to be defined dependent on the latter?

- 7.13 Similarly, the Law Society of Scotland, answering “other”, said that “the proposed definition appears to be circular”.
- 7.14 Some consultees thought that by equating possession with factual control (defined in the consultation Bill at clause 1(4)) we were excluding other types of possessory interests. Professor Duncan Sheehan raised this point and illustrated his concerns with an example based on bailment. As it is a critical point, it is helpful to set out the quote at some length:

The bailor (and particularly if this is a bailment at will) will not have factual control, but will have legal or “constructive” control by virtue of being able to instruct the bailee to give up the document (either at will or because the terms of the bailment allow for this). ... By putting this incomplete definition of control into cl 1(4) of the draft bill and thereby excluding bailors/pledgers from being in possession (albeit constructive) you may have created control as a functional equivalent of possession rather than as a definition of possession. ... [I]f the bailee is in control – and has therefore had the document transferred to him on the system by the bailor – and transfers to a third party after he ought to have re-transferred to the bailor (because the loan underlying the pledge has been repaid) the situation is presumably analytically different to the paper-based scenario. ... If ability to sue in conversion is governed by being in control of the electronic document on the system, the bailor, who should just have the document back, should have a right to sue in conversion – he really does now have a right to immediate possession of the document – but may find himself stymied by the very fact he is complaining about.

Need for specific reference to intention

- 7.15 Over half of consultees agreed that there was no need to make specific reference to “intention” in the drafting. For example, the London Maritime Arbitrators Association pointed out that the Carriage of Goods by Sea Acts 1971 and 1992 do not include a requirement of intention and “we would not expect the draft bill to do so either. Intention is a common law concept”.
- 7.16 The Institute of International Shipping and Trade Law at Swansea University (“IISTL”), answering “other”, noted the relevance of intention. They commented that in relation to tangible assets, “if a bill of lading is transferred and taken up in error this does not count as a transfer for the purposes of (for example) COGSA 1992”. They referred to *The Aegean Sea*,⁵²⁰ which dealt, in part, with the intention of the parties to a transfer.

⁵²⁰ *Aegean Sea Traders Corp v Repsol Petroleo SA* [1998] 2 Lloyd’s Rep 39. In that case, one party sold a cargo covered by a bill of lading to a second party, who had in turn sold it to a third party. The first party mistakenly indorsed the bill to the third party and sent it to the second party, who then forwarded it to the third party. Thomas J held that the third party transferee had not become the holder of the bill of lading

7.17 WAVE BL and Dr Michael Crawford noted that, without an intention requirement, a party could obtain physical control of a document without intending to possess it. This suggests that they read the draft as excluding intention. Similarly, Sullivan & Worcester LLP said that intention to possess should not be “removed from the law” and suggested a provision in the Bill addressing how intention to possess can be demonstrated in the system in relation to electronic trade documents.

7.18 Professor Andrew Steven disagreed with our approach and said that intention should be referenced explicitly. He emphasised that, as in the law of England and Wales, intention or “*animus*”⁵²¹ is necessary for possession in Scots law:

Possession in civil law or mixed legal systems like Scotland has two main aspects: corpus (physical element) and animus (mental element). It can be seen from the Supreme Court decision in *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2019] UKSC 46 that the English approach is near identical. As an aside, that is a land law case. ... Given that intention is so core to possession, it seems odd to have express provisions on the physical element but not the mental element. Clause 2(1) read literally requires only control. Intention is irrelevant. I have misgivings about this.

Discussion and conclusions on intention and different types of possession

7.19 It appears that there is a more than negligible risk that our original drafting would or could be taken as a comprehensive “definition” of possession for the purposes of electronic trade documents, equating possession with (factual) control to the exclusion of all other considerations. Our main concerns and those of consultees relate to:

- (1) intention and other factors relevant to possession; and
- (2) legal entitlement to possession.

7.20 We discuss each below. We then explain our final recommendations as expressed in the Bill. Based on consultees’ comments and our own further consideration and research, we have decided to take a different approach to our recommendations. Our revised approach is intended to avoid confusion and misunderstanding in drafting and to address more directly the possession problem without introducing unnecessary doubt.

under s 5(2)(b) of the Carriage of Goods by Sea Act 1992 because they had only received the bill in their possession. They had not also accepted delivery, as was required by s 5(2)(b). This reasoning was affirmed by the Court of Appeal in *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 at [20] where Moore-Bick LJ held that the judgment in *The Aegean Sea* “tends to support the conclusion that section 5(2)(b) requires both an intention on the part of the indorser to transfer the document and an intention on the part of the indorsee to accept it”. See also the discussion at para 3.59 to 3.69 above.

⁵²¹ See H MacQueen and The Right Hon Lord Eassie (eds), *Gloag and Henderson: The Law of Scotland* (14th ed 2017) para 30.09.

Intention

- 7.21 As we have already explained, control is necessary in order to have possession, but it may not be sufficient; an element of intention is also required.⁵²² Although there is an argument that intention might commonly be implied from control, that is not the same thing as saying that intention is necessary in order for a person to have control. The possibility of someone having control but not the intention necessary for possession must follow from the fact that there are two elements to possession.
- 7.22 Under clause 2(1) of the consultation Bill, the person who has control was said to be the person who has possession. We do not think that this wording necessarily allowed for other rules of law to supplement it, such as the common law rule that possession requires intention. On the face of that drafting, a party with (factual) control of an electronic trade document has possession of that document. Arguably, under that drafting, nothing else is required.
- 7.23 This could have had the effect of excluding consideration of intention. It is clear that several consultees read it in this way. We do not want to exclude intention, or to leave the issue open to confusion.
- 7.24 As we noted in the consultation paper, the definition of 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.⁵²³
- 7.25 We are not aware of a suggestion that this definition has the effect of excluding the need for intention. The context, however, is 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 Bill is extending the ambit of possession to a new set of assets. It could therefore be interpreted as a complete codification of possession in this context. Our new approach, described below from paragraph 7.32, attempts to avoid this potential outcome.

Other consultee comments in relation to intention

- 7.26 In the consultation paper, we focused on whether we should refer explicitly to intention in the draft legislation. On the basis that it is an integral part of possession, we did not ask whether consultees agreed that intention should be relevant to possession of electronic trade documents, or how it should operate. Even so, some consultees made comments on these matters.
- 7.27 A small number of consultees suggested that intention should not be relevant in the context of electronic trade documents. For example, the Law Society of Scotland said

⁵²² See eg Slade J’s statement in *Powell v McFarlane* [1977] 38 P & CR 452, approved by the House of Lords in *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [43] by Lord Browne-Wilkinson: “the animus possidendi involves the intention, in one’s own name and on one’s own behalf, to exclude the world at large”.

⁵²³ Factors Act 1889, s 1(2).

that “in the context of a centralised dematerialised programme intention is not necessary”.

7.28 The City of London Law Society (“CLLS”) said:

We think this concept was considered by the courts in somewhat unusual circumstances. We do not think it should have a place in a statutory scheme related to electronic trade documents ... [M]odern legal and technological systems ... are intended to give primacy to the ledger as a primary record of entitlement to or in relation to a particular digital asset.

7.29 Some consultees emphasised that the requirement for intention should not pose any additional practical impediment to the use of electronic trade documents. WAVE BL said that “for the market to function it has to allow automatic transfer of possession without the need obtain confirmation of the transferee”. Similarly, Minerva Global Ltd said that “having to declare the intention to possess for every single electronic trade document would be cumbersome”.

7.30 HSBC preferred a different approach. They suggested that:

the concept of intention should be replaced by the principle of authorisation/authentication (i.e. access to the electronic system) and the authority to introduce action to the system (i.e. who is entitled to file for electronic records and what are the criteria).

7.31 Vale International SA said that providing for intention in the Bill might solve the fact that “system admin (backend) may need to acquire control in order to solve technical issues”.

Conclusion on intention

7.32 We continue to think that intention should not be excluded from possession in the context of electronic trade documents, explicitly or by implication. As we explain in Chapter 2, we think that expanding possession to electronic trade documents is the best way to ensure that their legal effect is the same as that of paper trade documents. Excluding intention would leave factual control as the sole requirement for possession; something that would create a substantive difference between electronic and paper trade documents. Even though intention is rarely an explicit issue when determining possession, it remains an integral part of the common law concept.

7.33 There may also be circumstances in which it is necessary to undertake an assessment of intention to possess an electronic trade document. Consultees gave the example of situations where there has been an unintentional transfer. A similar assessment may also be relevant where multiple people have the relevant private key or password, thereby having control of the electronic trade document as a matter of fact. Those people may have different types of intention which could assist in identifying who has possession, or who has the superior possessory interest. As Vale International SA implied, a system operator who has the factual ability to control the electronic trade document for administrative purposes, would be unlikely to have the requisite intention to control the document in their own name and on their own behalf.

It is therefore unlikely that they would be deemed to be in possession of the document.

- 7.34 We agree with the CLLS that “the ledger” will generally be the “primary record of entitlement to or in relation to a particular digital asset”. It will generally constitute prima facie (but rebuttable) evidence that the record on the system is synchronised with the location of legal title. However, we are not concerned, in our recommendations or in the Bill, with entitlement to an electronic trade document. That is a question of legal right. We are concerned with possession as a matter of fact. While the party associated with the public key may be presumed to be the “owner” of the electronic trade document, or at least the person with the best interest, it does not necessarily mean that they are the (only) party with control or possession.
- 7.35 Some consultees emphasised that we should not place hurdles on acquiring possession of electronic documents, such as the need to indicate intention to possess, or to confirm acceptance of, an electronic trade document. We do not suggest making additional elements necessary for the possession of electronic trade documents that do not already exist as part of the general law for paper trade documents, or for possession more generally. In particular, if a debate arises (in the scope of a dispute) as to whether a party had the requisite intention, this will be a question of fact based on what can be imputed from the evidence available. Given the difference in practice between the different media, different evidence may be considered when seeking to determine the question of intention in relation to electronic trade documents. As we discuss briefly in Chapter 5, the different “degrees” of intention may in some (though probably rare) circumstances serve to determine which party has the better possessory interest.
- 7.36 As HSBC recognises, any system hosting electronic trade documents will need to have in place requirements for authorisation and authentication. However, these are practical matters of security rather than issues of law and serve a different function. For example, they will be relevant to ensuring that the electronic document satisfies the gateway criteria,⁵²⁴ and for determining whether transfers were properly authorised. Although we agree that requirements for authentication and authorisation will be necessary as a matter of system security, we do not think that they should replace the requirement for intention, although they can be indicative of an intention to possess.
- 7.37 Reverting to our original question in the consultation paper as to whether we should refer explicitly to intention in the Bill, we have concluded that this is unnecessary and potentially undesirable. As is evident from the discussion in this chapter, it is very difficult to formulate any kind of statutory explanation or description of possession which does not risk confusion. This is particularly so given the various ways in which possession and its associated terms are used in both the cases and the literature. We think it is best to say as little as possible, leaving it to the common law to determine what constitutes possession in relation to electronic trade documents. We want to ensure only that we do not inadvertently exclude intention by way of drafting.

⁵²⁴ We discuss the reliability and integrity requirements in more detail in Chapter 6. There we recommend that an electronic trade document system must be “reliable”, and that one of the factors for assessing reliability is any measures taken to prevent unauthorised access to and use of the system.

Recommendation 18.

- 7.38 Intention should be an element of possession in the context of electronic trade documents in the same way that it is for paper trade documents, but it need not be referenced expressly in legislation.

Different types of possession

- 7.39 As we explain in Chapter 5, “possession” is a complex concept, and the term itself does not have clear boundaries. It appears in a range of different legal contexts and is sometimes modified by a variety of different adjectives (such as “factual”, “constructive” or “legal”, “joint”, and “vindicatory”).⁵²⁵ Where in our provisional proposals and consultation Bill we linked control with possession, we meant possession as a matter of fact.
- 7.40 It appears from some consultee responses that our provisional proposals and associated drafting could be read as excluding legal/constructive possession from applying to electronic trade documents, so that the only type of possession relevant to such documents would be possession as a matter of fact. To return to Professor Sheehan’s bailment example, this would mean that a bailor would lose their right to possession (that is, they could not claim to have legal/constructive possession). We can see that the drafting can be read this way, but it was not our intention and is not our policy position. We intend that the rights of the bailor should be exactly the same regardless of whether the trade document is in electronic or paper form. We intend that the bailee is in possession if they have factual control together with the requisite intention. The bailor still has legal possession.⁵²⁶
- 7.41 We think the potential confusion arises from the following elements of our provisional proposals and the related drafting.
- (1) A person who has “control” was said to have possession of an electronic trade document “for the purposes of any statutory provision or rule of law”.
 - (2) Control for our purposes was (and continues to be) defined as factual control.⁵²⁷

Given the breadth of what could be encompassed by “possession” for the purposes of any statutory provision or rule of law, we can see that equating it with factual control could be read as excluding any other type of possession or possessory interest.

⁵²⁵ See from para 5.26 above.

⁵²⁶ In a bailment at will, the bailor retains the immediate right to possession, but does not have factual control (or therefore possession as a matter of fact), which lies with the bailee. In a term bailment, by contrast, the bailee receives the immediate right to possession for the duration of the term, as well as factual control/possession. During a term bailment, the bailor’s right is limited to that of the reversion.

⁵²⁷ See discussion from para 6.64 above.

Conclusion on different types of possession

7.42 It is crucial to the operation of electronic trade documents that all possessory interests apply in the same way as they do to paper documents. To ensure there is no risk of confusion, possession should not be equated with (factual) control.

Recommendation 19.

7.43 Once electronic trade documents are regarded by the law as possessable as a matter of fact, all other possessory interests, such as constructive possession, should also apply to them.

OUR RECOMMENDED APPROACH

The possessability of electronic trade documents

7.44 We do not intend to provide a comprehensive definition of possession in our recommendations and the Bill – either in respect of electronic trade documents or at all. Rather, our intention is simply to remove the legal blocker that currently prevents electronic documents from being possessed.

7.45 We therefore recommend that the law provides explicitly that an electronic trade document (that is, an electronic document that satisfies the criteria in clause 2 of the Bill) is capable of being possessed for the purposes of any statute or rule of law.

Recommendation 20.

7.46 Legislation should provide expressly that an electronic document is capable of being possessed.

The Bill provisions

7.47 Clause 3(1) of the Bill provides that:

A person may possess ... and part with possession of an electronic trade document.

COULD THERE EVER BE A QUESTION ABOUT WHO POSSESSES AN ELECTRONIC TRADE DOCUMENT?

7.48 In the consultation paper, we considered whether there could be a question about who possesses an electronic trade document. Some consultees suggested that, given that the system will allocate control to a user in a binary (all or nothing) way, and that possession (insofar as we are concerned with it) is a question of fact, it would be apparent from the system who was in possession.

7.49 We suggested that the person (natural or legal) identified on the system would likely be presumed to be in possession of the electronic trade document. However, we noted that there may be some situations in which there may be competing claims

(for example, if two or more parties have access to a private key or password). We asked consultees for their views on the possible circumstances where there could be a debate about who is in possession of an electronic trade document.⁵²⁸

Consultees' views

7.50 It is clear from consultees' views that there are a wide range of situations in which different parties could have competing claims to possession. Examples provided by consultees included the following.

- (1) Where several parties have access to a private key (Dr Crawford).
- (2) Where a person obtains an electronic trade document without the intention to receive it (as in, for example, *Aegean Sea Traders Corp v Repsol Petroleo SA*⁵²⁹) (the IISTL).
- (3) In the cross-border context, where "there is a risk that the governing law of each sale contract may not be the same". For example, "if one or more of the sale contracts is governed by a country which has adopted the MLETR then there is a risk that if the position under English law diverges from the MLETR then there could be uncertainty as to which party is in possession of the electronic trade document" (Phillips 66 Ltd, noting that such a situation is "unlikely").
- (4) Where there is a dispute about whether the person registered on the system has granted rights to another person. Rio Tinto Commercial said that in that situation, "the registered account holder ought not to be legally regarded as in 'control'. Yet the registered account holder would still be factually in control from the point of view of the system if they still hold the private key (or account login details connected to the private key) necessary to use or transfer the document. We expect that would result in some kind of action demanding that the account holder hand over the account / private key to the other person".
- (5) Situations which may "enable multiple banks or insurance companies to claim possession of an electronic trade document" (the Centre for Commercial Law at the University of Aberdeen).
- (6) Situations involving security interests granted over the electronic trade document. For example, Sullivan & Worcester LLP said, "the owner or holder v the secured creditor, or the security trustee or security agent for the secured creditors". HSBC also noted that documents of title are often held on trust or pledged as security in trade finance transactions.
- (7) Where an issuer unwittingly issues the same document twice, simultaneously (WAVE BL).

⁵²⁸ We asked consultees in 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: consultation question 20, para 5.130. Thirteen consultees responded to this question.

⁵²⁹ [1998] 2 Lloyd's Rep 39.

- (8) Document fraud, which may mean that a transfer takes place “in dubious or fraudulent circumstances” (Enigio Time AB).
- (9) Where issues arise in the system or network or transfers between different systems (Vale International SA) and a transaction fails (Legal Innovation Ltd).
- (10) Where “an external IT solution provider which provides a ‘cloud/SAAS (software as a service) solution’” is used. The Digital Container Shipping Association (“DCSA”) said that “in such a case the party possessing the document is not the owner of the database on which the document is stored nor is it (fully) in control of the database”.

7.51 DCSA pointed out that although there are multiple circumstances in which there could be a debate about which party is in possession of an electronic trade document, these situations are not, in general, different from situations that could arise with paper trade documents. Even in relation to their example of an external provider, they said:

Nonetheless, this is again comparable to the example with the keys to the motorbike. The IT solution provider might hold the keys, but should not have the legal possession or control over the object/document.

7.52 We agree that there is at least the potential for debate in all of the situations mentioned above. However, we think that there are principles in the common law which point towards an answer. It is therefore important to consider how the existing rules that deal with such issues in respect of paper trade documents and other tangible objects could be adapted to accommodate and apply to electronic trade documents. We turn now to this issue and consider what constitutes possession in the context of electronic trade documents.

7.53 With regard to Phillips 66 Ltd’s point, we think that any uncertainty in relation to who is in possession of an electronic trade document arising as a result of a foreign governing law would be resolved by the courts in the ordinary course. That is, by applying the substantive provisions of the applicable law, once the same has been determined by application of the relevant private international law rules.

WHAT CONSTITUTES POSSESSION IN THE CONTEXT OF ELECTRONIC TRADE DOCUMENTS?

7.54 We do not now think that the Bill should define or explain what possession is in the electronic trade document context.

7.55 From one perspective it would be desirable for the legislation to give some indication of what possession looks like in the context of electronic trade documents, given that possession has not previously applied to anything intangible. However, we think that any attempt to do this could lead to the confusing effects identified in the drafting of the consultation Bill.

7.56 We have concluded that leaving the application of the concept of possession to electronic trade documents to the courts and to the common law is the better course of action. Possession is a common law concept that is generally and highly flexible. There is no fixed and discrete definition of possession for the purpose of tangible

assets. As discussed in Chapter 5,⁵³⁰ it is a relative and fact-specific concept. Who has possession of something at any one time will depend on the type of control they have in respect of it and their intentions in relation to it, assessed against the control and intentions of other people who may also have a claim.

- 7.57 We think it would be difficult, if not impossible, to frame legislation to cover the range of possible situations that could arise in relation to electronic trade documents, particularly given the potential for technology to develop and give rise to different forms of “control”. And as we have explained above, the complex landscape within which these terms are used means that even attempting to describe possession of electronic trade documents at a high level could lead to more confusion rather than less.
- 7.58 The role of the courts will be to adapt the existing common law rules on possession and control, in order to apply them to electronic trade documents. In so doing, the court will determine what it means to possess, and be in possession of, an electronic trade document. This will be a common law assessment for the courts to make, assisted by existing case law principles which, as discussed below, can be extrapolated and applied to electronic trade documents.
- 7.59 Although the common law of possession may need to be adapted in order to accommodate electronic trade documents, we think that this is achievable without an explicit account of its relationship with control. In other words, we envisage the application of the existing law to digital subject matter.
- 7.60 This is largely because control is one of the two elements of possession at common law.⁵³¹ We think it is therefore sufficiently clear that, when considering what amounts to possession of an electronic trade document, the starting place is control (to be established alongside the requisite intention).⁵³²
- 7.61 As a basic principle therefore, we consider that application of the existing principles of common law leads to the conclusion that having control of an electronic trade document, coupled with the requisite intention, constitutes having possession of an electronic trade document. How then should that be assessed?

Intention to possess an electronic trade document

- 7.62 We consider intention before control because we consider that intention is less likely to give rise to novel questions in the context of electronic trade documents and can therefore be dealt with relatively briefly.
- 7.63 In the consultation paper, we noted that possession disputes in respect of tangible assets are more likely to turn on the issue of (physical) control than intention.⁵³³ We expect this will be the same in the context of electronic trade documents. Intention will

⁵³⁰ See, in particular, paras 5.64 and 5.69 above.

⁵³¹ We discuss the two different ways in which we use control in this report in more detail in Chapter 6 from para 6.63.

⁵³² In Scots law, the first (corpus) element is often referred to as “physical detention”, but “control” is also used (see eg *Gloag and Henderson: The Law of Scotland* (14th ed 2017) para 30.09 and n 80).

⁵³³ Consultation paper, para 5.123.

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, with no consequent need for a different approach.

- 7.64 Indeed, we therefore think that the application of existing law relating to intention is likely to be unproblematic for electronic trade documents, not least because the case law on intention does not tend to make any reference to the “physical” nature of the property. We consider that there is no problem in finding that electronic trade documents are amenable to the type of intention that, when combined with the necessary control, can amount to possession.
- 7.65 Whether a party with the ability to control an electronic trade document has the requisite intention to possess it will depend on the facts of the case and the evidence available as to their state of mind. Their intention may also need to be assessed relative to that of others.
- 7.66 For example, an employee of a shipping company may have the means to control an electronic bill of lading. If the employee is acting within the scope of their role (and is not seeking to use the bill of lading for their own personal benefit) it does not appear that the employee has the necessary intention. That is, the intention to exercise that custody and control on their own behalf and for their own benefit. It is true that the company, as a legal person, would likely be found to have the requisite intention and would therefore have the better claim to possession. That does not however mean that the employee has no relevant intention. They may well have, for example, a stronger relative intention than an administrator, who may only be accessing the bill of lading to check the system’s technological function. If one or more people have competing claims to possession (for example, if they share the same means of control) then it may be necessary to compare the extent of their relevant intentions. These are situations that could equally arise in the case of a paper document.

Control

- 7.67 As we have explained, it is clear from the case law that the type of exclusive control that (when combined with the requisite intention) can constitute possession is assessed by reference to the types of control to which the relevant object is amenable. Different types of objects will be amenable to different types of control. This is a fundamentally factual assessment. Broadly speaking, someone in control of an object determines, as a matter of fact, “how [an object] is kept, whether it is used and, if so, the manner in which it is used”.⁵³⁴ The legal rights that any person may have in relation to the object are not relevant to this assessment.
- 7.68 We consider that it is possible to assess who determines, as a matter of fact, how an electronic trade document is kept, whether it is used, and, if so, the manner in which it is used.
- 7.69 In practice, electronic trade documents are likely to be created and hosted on an electronic system, access to which is exclusive, and secured, for example, by means of a private key or other password system. This means that the electronic trade document is capable of being controlled by the person or persons with knowledge of

⁵³⁴ L Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) p 17.

the private key.⁵³⁵ A person or persons with the private key will be able to determine how an electronic document is kept and whether and how an electronic document is used. For example, a person with the private key could refrain from doing anything with the document. Alternatively, they could transfer it to another location (wallet) to which they have access and over which they have control, or they could transfer it to another party, thereby relinquishing factual control (and consequently possession).⁵³⁶

- 7.70 We therefore consider that knowledge of the private key is likely to give a party control of an electronic trade document. This is not because they “possess” or can exercise control over the private key in itself,⁵³⁷ but because they can exercise control over the relevant electronic trade document using the private key. The private key is the means by which a person exercises control over the electronic trade document.
- 7.71 A few consultees, including Dr Crawford, said explicitly in their consultation responses that where multiple people have knowledge of the private key, this means that multiple people have control of the electronic trade document. This is correct. What we recommend is that even if multiple people “have control”, only one of them can exercise that control at any one time, and if the document is thereby transferred, all those who previously had control are divested of it.

Exclusive control

- 7.72 In the tangible world, it is generally said that the control necessary for possession must be “exclusive”.⁵³⁸ Exclusivity means one person, or group of persons acting in concert, can exclude others from having control of that object.⁵³⁹
- 7.73 However, although possession is often described in terms of exclusive control, the existing common law already admits many situations in which more than one person has control. Dr Tatiana Cutts pointed out that tangible assets may support concurrent assertions of occupation or use and gave various examples.

Sofas, dining tables and board games are all designed to be used by multiple persons; the point is that I (as owner) can decide who (if anyone) gets to share. Digital assets can be designed in precisely the same way, such that the “owner” gets to decide who is granted access. An asset is not rivalrous because it is impossible for multiple persons to use it. It is rivalrous if use by one person necessarily limits use by another. If someone else is sitting on the sofa, I cannot lounge with my book; if my usual seat at the dining table is occupied, I must take my lunch elsewhere. An asset is rivalrous if use or consumption by one person, or a specific group of persons, inhibits use or consumption by others.

⁵³⁵ Amenability to exclusive control is one of the gateway criteria; see discussion from para 6.63.

⁵³⁶ Although, as discussed below, they may still have constructive possession, as in certain security arrangements.

⁵³⁷ As a private key is pure information which can be known by many people at the same time, it is not capable of being subject to the same level of control as an asset such as an electronic trade document. We will discuss pure information in our work on digital assets, due to be published in mid-2022.

⁵³⁸ See from para 5.56 above.

⁵³⁹ “Exclusive” shares a common ancestry with “exclude”, both of which can trace their etymology back to the Latin term *excludere*, which means to shut out.

- 7.74 It is important to remember we are concerned here primarily with who has control of an electronic document as a matter of fact, and not who owns it or otherwise has rights to it. The owner gets to decide what happens to their property – to an extent. For example, if you let people sit on your sofa, your level of factual control over your sofa is compromised. You have the right to ask them to get off the sofa and the right to take steps to remove them, or sue in trespass or conversion if they refuse, but as a matter of fact you have lost exclusive control. You have not lost possession because you have not abandoned the sofa; it is likely that you would still have the best legal right to it (unless, for some reason, one of the visitors has a superior possessory right to yours). If someone left your house taking the sofa with them, even if against your will, you would have lost factual control and therefore possession as a matter of fact – but not your immediate possessory right. It is this possessory right that gives rise to your ability to sue for wrongful interference with the sofa. Similarly, if you share your private key or password to your electronic trade document, your level of *factual* control is compromised; the other person could use the key or password to tamper with the electronic trade document or transfer it out of your control.
- 7.75 As we have explained elsewhere,⁵⁴⁰ we discuss “control” in two different contexts: as one of our recommended gateway criteria and as part of the existing common law of possession. The gateway criterion requires that only one person (or persons acting jointly) can *exercise* control at any one time: that is, the document must be amenable to exclusive control. However, this is not the same as precluding multiple people from having control of that document at the same time. Under our recommendations, such multiple instances of control would be possible in relation to an electronic trade document (as in relation to a paper trade document or other tangible object) – by means, for example, of multiple people knowing the private key. What is important about our recommendations is that they prevent “double spending” of an electronic trade document by ensuring that no more than one instance of control can be *exercised* at any one time.⁵⁴¹ If, for example, an employee uses the company private key to transfer a bill of lading to a third party, nobody else who shares control of that document can then exercise control over it: that ability shifts to the transferee (and anyone sharing control with them).
- 7.76 Control can be consensually shared or “joint”.⁵⁴² As discussed in Chapter 5, exclusive control is not the same as singular control. The important feature of exclusive control is the ability it provides to limit access and use; it is not nullified simply by virtue of being widely shared on any given set of facts. For instance, a car whose key has been copied and distributed to 20 of the owner’s friends is still subject to exclusive control. It is still only possible to use the car by having the key, and only one person can drive it at any one time.

⁵⁴⁰ From para 6.63 above.

⁵⁴¹ We discuss “double spending” in more detail in para 1.31 above.

⁵⁴² *J A Pye (Oxford) Ltd v Graham* [2002] UKHL 30, [2003] 1 AC 419 at [38] by Lord Bingham; *Bannerman Town v Eleuthera Properties Ltd* [2018] UKPC 27 at [52] by Lord Briggs. See also M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 2-040.

Joint possession and concurrent possession of electronic trade documents

- 7.77 We consider that two or more persons acting jointly should be able to have control of an electronic trade document. We think this would cover situations in which multiple people acting together all have knowledge of the private key and any one of them may use it in furtherance of mutual objectives.⁵⁴³
- 7.78 Consultees referred to the following situations in which multiple people could have the private key or security credentials:
- (1) one person has a private key to a document in electronic form, and they share their key with others within their organisation;
 - (2) one person has a private key to a document in electronic form, and they share their key with others outside of their organisation;
 - (3) two (or more) persons each have (different) security credentials or log in details which allow access to the document in electronic form;⁵⁴⁴
 - (4) two (or more) persons each have a private key to a document in electronic form, and some or all private keys need to be used in order to interact with the electronic trade document (a multi-signature arrangement);⁵⁴⁵ or
 - (5) a system operator has, as a matter of fact, the ability to control the document in electronic form because it is on their system, either when acting as agent on behalf of the holder of the document, or to perform administrative tasks such as resetting passwords.
- 7.79 On a system other than a DLT-based system (such as a central registry system), the same issues could arise with multiple people having the password or other security credentials necessary for accessing the account.

Multi-signature arrangements

- 7.80 One particular instance of joint control is where a party or parties hold their electronic trade document through a “multi-signature” arrangement. For example, a multi-signature arrangement could involve several different people having different (fragments of) keys, with a certain combination or number of them being necessary to effect a transfer of (or otherwise deal with) the electronic trade document. Here it does not seem, as a matter of personal property law, that any one of that number has a sufficient level of exclusive control to be in control individually, since none can effect a dealing with the document unilaterally. However, each person could be able to prevent a dealing with the document, by refusing to contribute their (fragment of a) key. If

⁵⁴³ If their interests diverged and they no longer acted together, a different analysis would apply. We consider this from para 7.83 below.

⁵⁴⁴ We note that this would not be possible with a private key, of which there would only be one (albeit that multiple people might know it). It is at least theoretically possible that there could be multiple passwords to the same account on a closed system.

⁵⁴⁵ We note that there are multiple different ways to achieve this technical outcome. Eg, at a very high level, private key sharding is a technical process under which a private key is split into separate pieces, or shards, rendering each shard useless unless enough are assembled to reconstruct the original private key.

three out of three private keys were required for an exercise of control, and all three private keys were combined, control could be exercised by the persons in the multi-signature arrangement acting jointly.

- 7.81 We do not think this is problematic, as comparable situations can arise in respect of tangible objects. The response from the IISTL referred to *Dublin City Distillery v Doherty*,⁵⁴⁶ which involved whisky stored in a warehouse. Lord Parker described the situation as follows:

The warehouse was secured by means of two locks. The company had the key of one, and the officer in charge had the key of the other. Neither could obtain access to the warehouse without the assistance of the other. The officer in charge kept a book containing particulars of the spirits in the warehouse. If so requested by the company as to any parcel, he transferred it in his book to the name of the company's assignee, and after so doing recognized the assignee as sole proprietor of the parcel so transferred, and did not allow the parcel to be dealt with otherwise than by the order of such assignee. Until transfer he recognized no title but that of the company. Under these circumstances it is, I think, difficult to hold that the possession of any spirits after being placed in the warehouse remained solely in the company. It would rather appear that such possession was thereafter at most the joint possession of the company and the officer in charge, the spirits being held on account of the company or of its transferee in the books of the officer in charge.

- 7.82 The situation is more complicated if the multi-signature arrangement is a 2/3-style arrangement, where a combination of any two of the three (fragments of) keys is necessary to deal with the document. Here, no one of the three can effect a dealing alone, but also none of the three is able necessarily to prevent a dealing (for example, if the other two agree to combine their keys). Such a situation is likely in practice to be regulated by contract, but the property law questions of who has what legal interests in the object (and whether anyone is in possession of it) remain relevant. We consider that the parties would still be considered to have joint control.

Multiple people not acting together

- 7.83 Although control and possession can be consensually shared or “joint”, this does not accommodate situations in which multiple people who are not acting together or in agreement with each other have the same method of access to an asset. In the tangible world, this could arise where multiple people have knowledge of a code to access a piece of paper in a vault or copies of a key giving access to a warehouse storing goods. For our purposes, it could arise where multiple people have knowledge of the private key or security credentials allowing for control of an electronic trade document.
- 7.84 The easier situation is where initially only one person knows the private key and has control plus the intention necessary to give them possession, and then at a later point another person learns the private key but has not yet taken steps to use it to transfer it out of the control of the original possessor. As we explained in Chapter 5, a person does not lose possession of an object unless they have abandoned it or been dispossessed of it, even if their level of control becomes significantly undermined

⁵⁴⁶ [1914] AC 823, 858.

(such as by someone else acquiring the means of control).⁵⁴⁷ It therefore appears that the original possessor remains in possession unless and until the third party uses the private key to exercise control, at which point the third party takes (actual) possession of it (assuming they have the requisite intention).⁵⁴⁸ However, they will not (generally) usurp the original possessor's right to possession since the latter retains the better possessory interest, having been first in time.

- 7.85 More complicated are scenarios where multiple people know the private key from the outset, such as where the electronic trade document is sent to an account where the private key is known by a number of people not necessarily acting together. To whom does possession transfer when a digital object is sent to an account where the private key is known by a number of people (not necessarily acting in concert with each other)? It appears that they are in joint/concurrent possession.
- 7.86 The response from Dr Jenny Jingbo Zhang and Dr Liang Zhao implied that such situations should not be overly problematic. They said that if the purpose of the Bill is to ensure that there is "an equivalent concept to paper trade documents, there is no reason to deny concurrent control by multiple parties at the same time". They gave the example of a paper bill of lading, which may be issued in a set of three originals:

If the three originals are separately transferred to more than one party, it is the circumstance that multiple parties are concurrently holding the same document. If one holder presents a bill of lading to the carrier for delivery of goods, the other originals of the bill of lading become spent, deprived them from being a document of title except special circumstances in Carriage of Goods by Sea Act 1992, section 2(2). Neither the common law nor the statutes deny the concurrent holding of paper bills of lading by multiple parties. There is no reason to deny so for electronic bills of lading. Multiple holders of one set of bills of lading may result in fraudulent risks in transactions, but they are commercial risks, not the risk that law was supposed to intervene (See *Sanders Brothers v Maclean & Co* [1883] 11 QBD 327).

- 7.87 We think therefore that, although the private key situation is apparently less than straightforward, it is no more so than it often is in relation to tangible objects. As a consequence, there are existing rules in common law to assist with the analysis if it becomes necessary to say which of multiple people with knowledge of the private key "has possession".

⁵⁴⁷ From para 5.73 above.

⁵⁴⁸ If the third party uses the private key to amend the document but not to transfer it away from the original possessor, from a property law perspective this may amount to an interference with the electronic trade document as a thing in possession, potentially actionable in conversion, should the interference be sufficiently extensive. Lesser interferences could amount to actionable trespass. The basic difference is that, for conversion, the interferer needs to act towards the object as if they were the owner. For trespass, the interference is one which affects, but does not usurp, the rights of the owner. In the electronic trade documents context, if a person exercised control so as to amend an electronic trade document unilaterally, they would invalidate it. This is likely to be deemed sufficient interference to amount to a conversion. Systems would normally be set up to preclude amendment by the person in control, because issuers/accepters of the document would have to accede to any request for amendment from the holder for it to be valid, so in reality all the person in control may be able to do is to request an amendment.

How can disputes be resolved?

- 7.88 Where multiple people all have knowledge of the private key or other means of access, they all, at least potentially, have possession. As we have said, possession is a relative concept. If there were to be a dispute on the matter, the court would take evidence about who had the best claim to possession at the time, considering for example who had the private key first.⁵⁴⁹ This could equally arise in the tangible world, for example, if multiple people know the code to a safe or all have keys to a car or warehouse.
- 7.89 In practice, trade documents are relatively short-lived creatures which are unlikely to sit with a single party for very long. In addition, parties should have the option to keep their private keys private (although this option does not apply in a multi-signature arrangement). It might be therefore that debates about who has possession or who had possession at a particular time are unlikely to arise in practice. Nonetheless, it is important for courts to have tools for dealing with the broad range of situations and cases that could arise.
- 7.90 In his 1961 essay, “Possession”, Professor Donald Harris identified nine factors which the courts have considered in the context of identifying possession.⁵⁵⁰ Although the list does not have the force of precedent in terms of what must be considered, it is nevertheless a useful exercise for discussion purposes to consider whether and how they could be applied to electronic trade documents. They are inevitably framed in relation to tangible property and refer to “chattels” throughout, but we do not think that this prevents the same or very similar considerations being applied to electronic trade documents.
- (1) *The degree of physical control which the plaintiff exercises or is able to exercise given the nature of the chattel.* The reference to “physical control” is of course not applicable to electronic trade documents in the same way as it is to conventional chattels. It would be possible, however, to assess the degree of control which a party exercises or is able to exercise over the electronic document. The nature of the requisite control must be judged against “the nature of the relevant subject matter and the manner in which that subject matter is commonly enjoyed”.⁵⁵¹ Although so far this has only been applied in the context of tangible property, there is no reason why this subjective assessment could not also be applied in the electronic context. Indeed, we have suggested that knowledge of the private key would indicate a significant degree of control. However, if both (or all) relevant parties have knowledge of the

⁵⁴⁹ *Armory v Delamare* (1722) 1 Strange 505. See further eg *Halsbury’s Laws of England, Tort Vol 97A* (5th ed 2021) para 216; Rostill, *Possession, Relative Title, and Ownership in English Law* (2021) pp 34 to 35. See discussion above from para 5.66.

⁵⁵⁰ D R Harris, “The Concept of Possession in English Law” in A G Guest (ed), *Oxford Essays in Jurisprudence* (1961) p 70. The nine factors are set out in M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 11-009.

⁵⁵¹ *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2019] UKSC 46, [2020] AC 1161 at [42] by Lord Briggs, approving *The Manchester Ship Canal Co Ltd v Vauxhall Motors Ltd* [2018] EWCA Civ 1100, [2019] WLR 330 at [59] by Lewison LJ.

private key, this would not be enough on its own to point the courts towards an answer as to who has the better possessory interest.

- (2) *The degree of physical control actually or potentially exercised by the defendant or others.* Again, reframing the reference to “physical” control, it would be possible to consider what degree of control a party actually exercised or could have exercised in a particular situation. Consideration of this issue could include whether a party has taken steps to exercise control or to ensure that another party could not exercise control (for example, by transferring the electronic trade document to another location with a different private key).
- (3) *The plaintiff’s knowledge of the existence, major attributes and location of the chattel.* It would clearly be possible to assess these factors in relation to an electronic trade document. A court could consider what the party knew about the existence of the document, its attributes (such as the type of document, its subject matter, when and by whom it was issued) and its “location” (where it is hosted). This may be relevant particularly where an electronic trade document has been mistakenly transferred to a person who initially did not have knowledge of the existence of the document or of its transfer.
- (4) *The plaintiff’s intention with regard to the chattel.* As with a chattel, it would be possible to assess the nature of a party’s intention with regard to an electronic trade document. For example, did the party intend to possess the electronic trade document on their own behalf, or were they acting as agent for another? Was the party aware that the document was in a location which allowed them to control it given their knowledge of the private key? Just as with chattels, intention must be inferred from surrounding evidence.
- (5) *The defendant’s or another’s knowledge of the existence, major attributes and location of the chattel.* As for factor (3), these factors could be assessed in the context of an electronic trade document, and the respective knowledge of different parties compared.
- (6) *The defendant’s or another’s intention with regard to the chattel.* As above for factor (4), intention could be assessed, and the respective intention of different parties compared.
- (7) *The plaintiff’s legal relationship to the premises where the chattel is at the relevant time (owner, occupier, licensee, or trespasser).* Here, the relevant analogous relationship in the context of electronic trade documents is that between the party and the system on which the document exists. In assessing this, it would be necessary to ask, for instance, whether the system identified the party as the party logically associated with the electronic trade document (in distributed ledger systems, the location of the public key). Similarly, a party may be equivalent to a “trespasser” if they have sought to hack into the system.
- (8) *Any special relationship (employee, bailee, mercantile agent).* This factor could be assessed in the context of electronic trade documents in the same way as for paper documents or other chattels.

- (9) *The policy behind the legal rule.* This requires a judge to consider what the rule in question is intended to achieve, and to ask themselves whether a finding in favour of possession would advance that policy. As Professor Harris points out:

in the practical world ... the judges realise that justice and expediency compel constant modification of the ideal pattern ... the plaintiff may have a very limited degree of physical control over the object; or he may have no intention in regard to an object of whose existence he is unaware, though he does exercise control over the place where the object is lying; or he may have a clear intention to exclude other people from the object, though he has no physical control at the moment.

So, for instance, where a party who has knowledge of a private key does not immediately have the requisite intention to give them possession of the object to which that key is linked, a judge may nonetheless deem them to be in possession. This could be the case if nobody else has a superior combination of control and intention, and to do otherwise would contradict commercial expectation or business efficacy.

Security arrangements

- 7.91 Some consultees noted that competing claims to possession may arise in the context of security arrangements. Sullivan & Worcester LLP gave the examples of “the owner or holder v the secured creditor, or the security trustee or security agent for the secured creditors”. HSBC also noted that documents of title are often held on trust or pledged as security in trade finance transactions.
- 7.92 We discuss the use of trade documents in possessory securities in more detail in Chapter 8. Suffice it to say here that we think the same analysis will apply to electronic trade documents in such situations as it currently does to paper trade documents. Depending on the nature of the arrangements, it is likely that the secured creditor will take control and (actual) possession of the electronic trade document, but the debtor may retain the right to possession – constructive possession – in situations such as bailment at will where they can take the asset back at any time. We discuss below what might constitute transfer of possession of an electronic trade document, for the purposes of effecting a possessory security or for any other purpose.
- 7.93 We note that the secured creditor may not have unqualified control of the asset. For example, Professor David Fox gave the example of a situation in which the creditor holds the asset in their account for the duration of the security, but their ability to deal with it is limited by the system – for example they are not factually able to transfer it on to a third party (unless and until the debtor defaults). In the paper world, although a creditor ought not to transfer the paper trade document to a third party, it is likely that they have the factual ability to do so. Whether the creditor has the requisite degree of control (and intention) in the circumstances to amount to possession will depend on the facts of the case, but we do not think that the analysis will be materially different from that in respect of paper trade documents. This is another instance in which the degree of control will be assessed against the benchmark of what the nature of the object allows: in such a situation, given the system constraints imposed on the documents, the pledgee is likely to have a better level of control than anyone else.

TRANSFER OF POSSESSION OF AN ELECTRONIC DOCUMENT

- 7.94 In the consultation paper, we provisionally proposed that possession of an electronic trade document is transferred from one person to another when the transferee gains control of that electronic trade document.⁵⁵² The consultation Bill provided that “possession of the electronic trade document is transferred from one person to another when the transferee gains control of it”.⁵⁵³
- 7.95 It is clear from consultees’ responses that this provision gave rise to the same type of confusion as did our provision equating control and possession. The responses suggested that it was not clear whether the provision related only to the transfer of possession as a matter of fact, and how it interacted with, for example, the transfer of legal rights. Consultees noted the range of different situations in which control might be transferred and queried whether the provision could accommodate them. In addition, in order to gain possession, the transferee must not only gain control but must also have the requisite intention to possess.
- 7.96 For example, the International Group of Protection and Indemnity Clubs, answering “other”, sought clarification that the provision would be subject to the usual rules of pledges and wrongful transfer. Dr Zhang and Dr Zhao suggested that it is not necessary to provide for the transfer of electronic trade documents, and noted difficulties with linking transfer of possession to the notion of control as defined in the consultation Bill. They gave the following example:
- For example, the consignee of a straight bill of lading received an electronic bill of lading transferred from the shipper. He can use it for delivery of goods, but he cannot transfer it further because a straight bill is not transferable to third parties and therefore the consignee has no “control” of it. Thus, there is no transfer of possession under ... the draft Bill because the consignee does not gain the control of it (due to the lack of transfer under the concept of control defined in [the Bill]).
- 7.97 The issue raised by these consultees was founded on our provisionally proposed definition of “control”, which required a person in control to have the ability to “transfer or otherwise dispose of” the document. A consignee of a straight bill cannot transfer the rights in a straight bill of lading because it is non-negotiable, so they cannot legally transfer the document. However, they would have the ability to transfer possession of the document itself in fact (that is, to do the electronic equivalent of handing over the piece of paper to another person). This is the case even if it does not have the effect of transferring the relevant legal rights or making the person receiving it its holder. This response demonstrates that our previous drafting was not clear. In particular, it was not clear whether the clause was referring only to transfer of possession of a document as a matter of fact, or also to the transfer of legal rights. It was intended to deal only with possession as a matter of fact.

⁵⁵² We asked consultees whether they agreed with our provisional proposal that possession of an electronic trade document is transferred from one person to another when the transferee gains control of it: consultation question 18(2), para 5.115. Thirty-two consultees responded to this question. Twenty-two consultees answered “yes”, one consultee answered “no” and nine consultees answered “other”.

⁵⁵³ Consultation Bill, clause 2(2)(a).

7.98 Given the potential for confusion, we no longer recommend that the Bill should provide for the transfer of possession of an electronic trade document, or to try to explain what would constitute such a transfer.

What amounts to transfer of possession of an electronic trade document in practice?

7.99 While we do not recommend that the Bill should provide for what amounts to transfer of possession, we think it is important that we give some consideration in this report to what it would mean in practice.

What is being transferred?

7.100 The divestibility criterion, one of the recommended gateway criteria, ensures that when a person exercises control of an electronic trade document to transfer it to someone else, the transferor must as a result necessarily lose the ability to control the document. So too must all the people who knew the private key which previously gave them control (unless they are themselves a transferee). Transfer of possession therefore entails a loss of control by the transferor. Depending on the circumstances, they may retain some rights over the document, for example if actual possession of the document is transferred pursuant to a bailment, or if the document is released to a debtor subject to a trust in favour of the creditor.

7.101 In his consultation response, Professor Andrew Steven asked:

What is being ‘transferred’? For example, we hear that Albert has transferred his car to his wife. Does that mean transfer of ownership or transfer of possession? From a Scottish property law standpoint we would need to be clear.

7.102 Our recommendations are concerned with the transfer of possession as a matter of fact. Transfer of (factual) possession of an electronic trade document will require a transfer of control and for the transferee to have the requisite intention to possess the document. The legal consequence of that occurrence will then be established by the application of existing law relating to the implications of possession as a matter of fact.

7.103 As we saw in Chapter 3, transfer of possession of the document is a necessary (albeit not always sufficient) condition to becoming the holder of the document and obtaining attendant legal rights. We discuss delivery in the context of electronic trade documents in the following chapter. Whether and which legal rights are transferred will depend on the facts of the case. For example, in relation to the transfer of title to goods, the only title that passes under a contract of sale (or any manner in which the legal title to goods passes) is the title which the seller or transferor has, which may or may not be the best title.⁵⁵⁴ In other cases (for example, in the context of section 24 of the Sale of Goods Act 1979), the transferee obtains better title than the transferor had.⁵⁵⁵ As we saw in Chapter 3, for negotiable instruments, where the document is negotiated “in due course”, the transferee can also obtain better title than the transferor. This will equally be the case in respect of electronic negotiable instruments which are electronic trade documents within the meaning of the Bill.

⁵⁵⁴ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 31-002.

⁵⁵⁵ M Bridge, L Gullifer, K Low, and G McMeel, *The Law of Personal Property* (3rd ed 2021) para 31-002.

What constitutes a transfer of possession of an electronic trade document

- 7.104 At its most basic level, transfer of possession as a matter of fact requires a transfer of control from the transferor. To have possession, the transferee(s) must also have the requisite intention.
- 7.105 We think that, on a DLT-based system, this will generally be effected by the transferor using their private key to send the electronic trade document to the account of the transferee, thereby divesting themselves of the electronic trade document. On a central registry system, it will be similar: once the transfer is effected, only the transferee's security credentials (that is, login details) will provide the ability to transfer or otherwise exercise control over the document. As we explain in Chapter 6, a transfer in this context might include replacing, modifying, destroying, cancelling, or eliminating at least the data structure element of that electronic trade document, and the resulting and corresponding derivative creation of a new electronic trade document (a derivative electronic trade document). We consider that such a transfer is capable of effecting a transfer of control of the document.⁵⁵⁶
- 7.106 We have considered whether an “off-chain transfer” – where the transferor effectively hands over their account and everything in it to the transferee by sending them the private key – constitutes transfer of possession of the electronic trade document contained in the account. Professor Louise Gullifer has said of this situation:⁵⁵⁷

Of course, if the parties want “hidden” ownership, this can be effected by a transfer in equity ie off the system. It is much more appropriate for the transfer of legal title to digital assets to only take place when there is the equivalent of delivery. A delivery of goods is a transfer of possession, but since there can't be a transfer of possession of an intangible digital asset, there needs to be a transfer of control instead. This has the benefit that, at least prima facie, the record on the system will be synchronised with the location of legal title. However, it is only prima facie.

- 7.107 If our recommendations are implemented then it will no longer be the case that there cannot be a transfer of possession of an electronic trade document, and the question will be whether an off-chain transfer constitutes a transfer of possession at common law. It is difficult to see how this could constitute a transfer of possession as it does not appear to divest the transferor of control. The answer may depend on the specific facts of the case. Perhaps, for example, if it is very clear on the evidence that the transferor no longer has knowledge of the private key so that they are not still capable of exercising control over the electronic trade document, the court may consider it a transfer of possession.

To whom has possession been transferred, and at what moment in time does a change of possession occur?

- 7.108 Where an electronic trade document is intentionally transferred to a public address for which only one person knows the private key, this seems to be capable of being

⁵⁵⁶ See discussion from para 6.120.

⁵⁵⁷ Professor Louise Gullifer QC, “The private law of digital assets: what is it and what should it be?”, Gray's Inn annual Birkenhead Lecture (15 November 2021), [https://www.graysinn.org.uk/sites/default/files/documents/education/The private law of digital assets 17.11 - Birkenhead Lecture.pdf](https://www.graysinn.org.uk/sites/default/files/documents/education/The%20private%20law%20of%20digital%20assets%2017.11%20-%20Birkenhead%20Lecture.pdf).

straightforwardly analysed as involving a change in possession from the transferor to the transferee.

7.109 More complicated, however, are situations when multiple people (not necessarily acting together) know the private key for the account to which a digital object is transferred. This may be simply because the intended transferee is careless with their private key, or because the transferee deliberately employs a multi-signature arrangement for their account.

7.110 When Alice sends an electronic trade document to an account to which Bob, Caroline, and Dave know the private key: (a) to whom is Alice's legal interest transferred; and (b) who acquires possession of the electronic trade document? The former question must turn on Alice's intention, given that intention is a core feature of consensual transfers of legal interests.⁵⁵⁸ If Alice intends to transfer her legal title to Dave, then Dave receives it. If Alice intends to transfer it to Bob, Caroline, and Dave jointly, then that is how they receive it. And perhaps if Alice intends more generally to transfer it to the first person to access it, then that is the case.

7.111 However, the possession question is harder because it cannot turn on the *transferor's* intention. Although these may be difficult decisions, we think that existing rules and the factors listed by Professor Harris will aid courts in this context. The answer may well be that Bob, Caroline and Dave have some kind of joint possession, but it will always turn on the exact facts of the case.

Timing of transfer of possession

7.112 There are ancillary questions surrounding the process of transfer, such as the moment in time at which a person acquires possession.

Our position in the consultation paper

7.113 In the consultation paper, we said that the timing of transfer of possession 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. We said we should not attempt to provide for this in legislation.

7.114 We said, however, that given the prominence of DLT as the basis of many platforms currently in development, it was appropriate to comment on when the transfer would take place on a distributed ledger. We used as an example 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 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.

⁵⁵⁸ See eg Sale of Goods Act 1979, s 17; *Irons v Smallpiece* (1819) 2 B & Ald 551; 106 ER 467; *Cochrane v Moore* (1890) 25 QBD 57.

7.115 We are concerned here with the timing of transfer of possession of an electronic trade document, not with the timing of transfer of the document itself which may require other elements to be satisfied, such as acceptance. Likewise, we are only concerned with the timing of delivery insofar as it involves a transfer of possession. As discussed elsewhere in this report, delivery has different meanings for the purposes of different statutes.⁵⁵⁹ That said, all include a transfer of possession of a document and to that extent the timing of that transfer will be relevant.

Consultees' views

7.116 Minerva Global Ltd noted that, if a system uses blockchain technology, “there can be a small delay, of a few minutes, between the ‘sending of possession’ and ‘receiving of possession’”. They said that, technically, there is no one with possession of the document during that time. Bolero International Ltd made the same point, asking “at which point in time is the transfer made, when control is relinquished or when the new party receives it. In most cases this will be instantaneous but it is conceivable that the shipper transfers control but the transferee is not immediately in control”.

7.117 The Centre for Commercial Law at the University of Aberdeen said, in the context of their response on delivery, that a statutory provision may be desirable in relation to timing given the importance of delivery to the use of trade documents. They said:

These timings are important particularly in documentary sales to determine the point the risk and property pass. The assumption under s 20 of the UK's Sale of Goods Act 1979 is that risk and property in goods pass at the same time. However, under a CIF contract subject to English law, the property in goods normally passes from seller to the buyer when the seller delivers the documents to the buyer whereas the risk normally passes once the goods are delivered over the ship's rail. Under this default assumption (unless parties agree otherwise), the risk will pass before the property in the goods is transferred. In the absence of a physical delivery for electronic trade documents, we think that statutory provisions on the timings of delivery and transfer might be needed for legal certainty and predictability and would also be useful for the allocation of risk and liability in cases of delays in electronic/digital systems.

7.118 The Law Society of Scotland, answering “other”, said that timing of transfer of possession and delivery and would be “dependent on the platform used”. They said, “it would be best to expressly state when both occur (i.e. when processed in the relevant platform)”.

Discussion and our recommended approach

7.119 We consider that the timing of transfer will depend entirely on the type of system being used to transact and, potentially, what has been agreed in this regard between the parties. Some useful insight can be gleaned from examining the principles governing acceptance of contractual terms using electronic communications. In many

⁵⁵⁹ See from para 3.59 above on delivery generally, and from para 8.59 below on the delivery of electronic trade documents. Some definitions of delivery (such as that in the Carriage of Goods By Sea Act 1992) require acceptance in addition to transfer of possession.

jurisdictions, presumptions have been created as to when an electronic message is deemed to have been sent or received.⁵⁶⁰

- 7.120 The business community, having used electronic communications now for several decades, has developed its own practices regarding when a contract is deemed to be concluded. The practice in non-consumer commercial transactions would appear to be that communications have operative effect when received.⁵⁶¹ Where the automated systems of communication are designed for business-to-business electronic commerce, their use is likely to be subject to pre-established protocols or to contractual agreements between the parties.⁵⁶²
- 7.121 Such protocols and user agreements appear to be ubiquitous. Indeed, a number of responses, most notably that of DCSA, noted that systems providing electronic trade documents “must have clear rules of governance for these points”.
- 7.122 We have considered whether the law should *require* the system to “have clear rules of governance for these points”. We think that this approach would be overly prescriptive and, assuming that it is considered by users to be a valuable feature of system design, then we consider that sufficient incentives exist to ensure that these rules are put in place by system providers.
- 7.123 We have also considered whether the law should create default rules that will apply in the absence of express stipulations in the system’s operational rules and protocols. We consider that it would be premature at this stage to set out rules in statute when practices are still developing and in light of the need to maintain technological neutrality. We would therefore favour the adaptation of existing principles of the common law and consider that the courts are equipped to deal with these questions, although we acknowledge that this might reduce certainty and predictability for present day users.
- 7.124 We also acknowledge that it could be problematic if different systems had different rules, as this might lead to inconsistencies in market practice and usage. However, we consider that this issue would best be dealt with by an industry standard-setting body with a deep knowledge of technical issues as well as market practice and market

⁵⁶⁰ See eg Electronic Commerce (EC Directive) Regulations 2002, art 11, implementing art 11 of the EU Electronic Commerce Directive, which sets out default rules for determining the time of conclusion of a contract formed by electronic means. The order and acknowledgement that form the contract are deemed to be received when the parties to whom they are addressed are able to access them. See also United States’ Uniform Electronic Transactions Act 1999 (UETA), §15 re electronic messages, the Australian Electronic Transactions Act 1999, ss 14 and 14A, and the United Nations Convention on the Use of Electronic Communications in International Contracts (New York, 2005), arts 10(1) and (2).

⁵⁶¹ See C Reed, ‘Electronic Commerce’, in C Reed (ed) *Computer Law* (7th ed 2011) ch 4, p 273: it appears that this practice has developed from electronic data interchange (EDI) standards. See also Uniform Rules of Conduct for Interchange of Trade Data by Teletransmission (UNCID), art 7(a).

⁵⁶² Various examples of models of such agreements have been developed over the years since the late 1980s. See eg American Bar Association (ABA), Electronic Messaging Services Task Force, ‘The Commercial Use of Electronic Data Interchange: A Report and Model Trading Partner Agreement’ (1990) 45 *The Business Lawyer* 1645, 1717; see also UN/ECE Recommendation no 26, The Commercial Use of Interchange Agreements for Electronic Data Interchange: Model Interchange Agreement, Geneva, March 1995, ECE/TRADE/WP.4/R.1133/Rev.1 [Edition 96.1] and UN/ECE Recommendation no 31, Electronic Commerce Agreement, Geneva, May 2000, ECE/TRADE/257.

understanding, which could establish standardised rules that could be (adapted and) incorporated into system protocols and user agreements.⁵⁶³

7.125 We therefore do not consider that the timing of transfer of possession should be dealt with in the Bill. The responses from Bolero International Ltd and Minerva Global Ltd suggest that the delay between “pressing send” on a transfer and the transferee gaining the ability to control the electronic trade document is likely to be negligible, amounting to minutes. Given the circumstances in which trade documents are used, it may be that uncertainty over the precise moment when transfer of possession occurs is more of a problem in theory than in reality. In any event, given that the timing issue is likely to be system-dependent, this is something best dealt with through the adaptation of existing principles of the common law.

7.126 Although, as the Centre for Commercial Law at Aberdeen noted, there will be no physical delivery of electronic trade documents, our reforms would make transfer of possession of electronic documents possible, and this will be relevant for determining delivery in the same way as it is for paper trade documents.

7.127 It is worth noting that it is not necessary for the transferee to know or acknowledge that they have acquired possession. As discussed in Chapter 5,⁵⁶⁴ a person can take possession of an object despite not initially knowing of its existence. Take, for example, a party who registers a user account with an electronic system or platform which enables them to exercise control over electronic trade documents in the account. If an electronic trade document is transferred into the account without their knowledge, they have control of it as a matter of fact. Their intention to possess documents that are allocated to their account on the system may be inferred, whether they are aware that they have been so allocated or not.⁵⁶⁵

Other approaches: settlement

7.128 Legal Innovation Ltd suggested that there is a need for the transfer and settlement of electronic trade documents, as exists in the context of securities:

There must be a point in time when (like DVP [delivery versus payment] settlement) one person gains those rights and one person loses them. Ideally we need settlement finality on this (rather than the less clear notion of being a holder in due course, which creates less certainty over insolvency law challenges etc) - and it seems to me that there is no reason in principle why digital trade instruments being managed in a regulated system should not have the same benefits of settlement finality as other negotiable instruments held and traded as digital assets in similar systems.

7.129 This response suggests that electronic trade documents should be treated like instruments under the Uncertificated Securities Regulations 2001, discussed in

⁵⁶³ For instance, the Digital Standards Initiative of the International Chamber of Commerce is currently “working with importers, exporters, banks and carriers to create a uniform rulebook that enables parties to exchange title documentation electronically”. See: <https://www.dsi.iccwbo.org/executives>.

⁵⁶⁴ From para 5.75 above.

⁵⁶⁵ See eg *Parker v British Airways Board* [1982] 1 QB 1004.

Chapter 4. Settlement finality is the discharge of an obligation by a transfer of funds that is both unconditional and irrevocable.

7.130 While there are clear benefits to that system, we are not aware of calls from the trade industry to move to such an arrangement. To implement such a system would be a significant undertaking and would result in paper and electronic trade documents being treated differently which we think is undesirable in the absence of a clear need. We do not consider that such a need has been made out. As we seek to demonstrate in this report, we think that electronic trade documents are capable of being used and transferred in a way that is closely analogous with paper trade documents and that transfer can be achieved by transfer of possession, with common law rules answering questions on timing and other details.

Chapter 8: Recommendations – consequences of an electronic trade document being possessable

- 8.1 In this chapter, we discuss the consequences of an electronic document being possessable. As we have explained already in this report, it is our policy that electronic trade documents, when capable of possession, should be treated in law in a manner equivalent to their paper counterparts.
- 8.2 Central to our recommendations is that possessory concepts should apply equally to electronic trade documents as to paper trade documents. Furthermore, electronic and paper trade documents should have the same effects and be subject to the same treatment and dealings in all respects. In this chapter, we discuss the application of possessory concepts to electronic trade documents, as well as other actions that can be taken in respect of trade documents, including delivery, acceptance and rejection, amendment and rectification, and discharge and surrender. We explain that we do not think that express provisions are necessary to cover any of these matters, provided that it is clear that electronic and paper trade documents have legal and practical equivalence.
- 8.3 We also consider the interaction with private international law if our recommendations are implemented.

USING ELECTRONIC TRADE DOCUMENTS IN THE SAME WAY AS PAPER TRADE DOCUMENTS

- 8.4 If our recommendations are implemented, electronic trade documents will become things in possession. The key consequence of electronic trade documents being capable of being possessed, as a matter of law, is that their possession will determine who is entitled to claim performance of the relevant obligation. Similarly, if transfer of the right to claim performance of an obligation recorded in a paper trade document can be achieved by transfer of possession of the document itself, the same result can be achieved by transfer of possession of an electronic trade document. This means that, for example, novation will not be necessary to transfer contractual rights, and attornment will not be necessary to transfer constructive possession of goods (unless either or both is required when the document is used in its paper form).
- 8.5 In short, depending on the nature of the trade document, electronic trade documents may be used as negotiable instruments, documents of title or assignable insurance documents, and they should be capable of being dealt with in exactly the same way as those documents in paper form.
- 8.6 The existence of several electronic systems (albeit reliant on contractual arrangements), designed to replicate the functions of paper bills of lading and other trade documents, demonstrates that it is perfectly possible to mirror paper processes in the electronic space. These systems enable the common processes of trade (such as the selling of goods while in transit) and trade finance (such as the pledging of goods on a ship or in a warehouse to a bank) to take place without the need to use

paper. They are designed with the needs of users in mind; the same needs which trade documents were created to meet in the first place. All we intend to do with these recommended reforms is to ensure that users of documents which meet the criteria in the Bill are able use them safe in the knowledge that they will have the same legal effects as their paper counterparts, without the need to engage legal workarounds.

Recommendation 21.

- 8.7 An electronic trade document should be treated in law as equivalent to a paper trade document, and anything that can be done to a paper trade document should have the same effect if done to an electronic trade document.

The Bill provisions

- 8.8 Clause 3(2) provides that:

An electronic trade document has the same effect as the equivalent paper trade document.

- 8.9 Clause 3(3) provides that:

Anything done in relation to an electronic trade document that corresponds to anything that could be done in relation to the equivalent paper trade document has the same effect in relation to the electronic trade document as it would have in relation to the paper trade document.

- 8.10 These provisions are broadly termed and represent our overarching intention. They are intended to ensure that possessory concepts can be applied to electronic trade documents. They also ensure that actions corresponding to actions that can be done to or with a paper trade document have the same effect in relation to an electronic trade document. Examples include the manner of transfer of a trade document, and the process of accepting or rejecting it.

“so far as practicable”

- 8.11 The consultation Bill included a provision almost identical to that now contained in clause 3(3). In the consultation paper, we asked whether we should include the phrase “so far as practicable” in the relevant clause, 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.⁵⁶⁶

Consultees’ views

- 8.12 The majority of consultees who responded to this question, including Enigio Time AB, Professor Michael Bridge QC, and the Law Society of Scotland, said that we should

⁵⁶⁶ Consultation question 31, para 8.31.

not include the phrase “so far as practicable”.⁵⁶⁷ The main reasons given were that the phrase was vague and could cause uncertainty, could give system providers leeway to avoid replicating all functionality of paper documents and that practicability did not come into the question of a comparison between electronic and paper trade documents.

- 8.13 HSBC said that “so far as practicable” should be included and said that this would “overcome perfection requirements for creating a valid security interest”.

Discussion and our recommended approach

8.14 After analysing consultee responses, we remain of the view that the phrase “so far as practicable” should not be included in the wording of clause 3(3) of the Bill. The aim of the Bill is to establish equivalence between paper and electronic trade documents. It is therefore important that acts done in the context of electronic trade documents should correspond with the equivalent acts done in the context of paper trade documents. Including the term “so far as practicable” dilutes the requirement for correspondence.

8.15 We consider that any security taken in respect of electronic trade documents should be perfected in the same way as it would be for a paper trade document. In particular, clause 3(3) is not intended to overcome or circumvent (statutory or other) requirements applicable to paper trade documents. Rather, it is intended to mean that corresponding acts done in relation to paper and electronic trade documents have the same effect.

APPLICATION OF POSSESSORY CONCEPTS TO ELECTRONIC TRADE DOCUMENTS

8.16 As discussed in Chapter 3, because paper trade documents are capable of possession, they are capable of being the subject of, for example:

- (1) bailment;
- (2) possessory security interests; and
- (3) wrongful interference (conversion).

8.17 It is our intention that, if our reforms are implemented, the legal rights and remedies available to those in possession of or having the right to possess paper trade documents should also be available in respect of electronic trade documents.⁵⁶⁸ In the consultation paper, we provisionally proposed that electronic trade documents should be capable of being the subject of possessory concepts including bailment, pledges, liens, and conversion, and that this should be provided for in legislation. We asked whether consultees agreed.⁵⁶⁹

⁵⁶⁷ Twenty-six consultees responded to this question. Five consultees answered “yes, it should be included”, sixteen consultees answered “no it should not be included”, and five consultees answered “other”.

⁵⁶⁸ *Bristol and West of England Bank v Midland Rly Co* [1891] 2 QB 653; *Brandt v Liverpool Steam Navigation Co* [1924] 1 KB 575.

⁵⁶⁹ We provisionally proposed that electronic trade documents should be capable of being the subject of possessory concepts including bailment, conversions, pledges and liens, and that this should be provided

Consultees' views

8.18 The majority of consultees agreed with our provisional proposals that these concepts should apply to electronic trade documents. The need for complete equivalence was noted by several consultees, including Bolero International Ltd, the Digital Container Shipping Association (“DCSA”), HSBC, the London Maritime Arbitrators Association (“LMAA”), Philips 66 Ltd, and Rio Tinto Commercial. For example, HSBC said that “universal legal recognition” of electronic trade documents “would allow the possession, control and most importantly the taking of a security interest in an electronic document, vital for the financing of international trade”. The LMAA said that they “firmly agree[d]” with the provisional proposal, saying:

They must be capable of replicating the type of security interests that are taken by banks and third parties over paper trade documents, on a day-to-day basis. The ability to lien the documents for a variety of rights (payment, delivery up of cargo) is a concept of fundamental value in the context of shipping and trade. The same point can be made in the context of trade finance, where cargoes are bought and sold with the aid of loans from trade finance banks who take security for the loan over the original paper bill of lading, but who hypothecate it back to the cargo interests to enable it to be traded.

Scope of application

8.19 A small number of consultees reiterated their general concerns, discussed in Chapter 2, about making electronic trade documents possessable in the first place. The City of London Law Society (“CLLS”) made a similar point specifically in relation to “digital assets that have been expressly and deliberately constituted as registered dematerialised assets”, which we now recommend should be excluded from the scope of our recommendations and the Bill.⁵⁷⁰

The position in Scotland

8.20 Three consultees, the Centre for Commercial Law of the University of Aberdeen, Professor Andrew Steven, and the Law Society of Scotland, indicated that these concepts and doctrines are not the same in Scots law. We do not think, and consultees did not suggest, that this in itself means that the Bill does not work for Scots law. This is because the Bill (either as consulted upon or in the form appended to this report) does not explicitly name these doctrines and concepts. It simply provides that electronic documents are capable of possession, with all the consequences that flow from that.⁵⁷¹

for in legislation: consultation question 33, para 6.110. Seventeen consultees responded to this question. Twelve consultees answered “yes,” one consultee answered “no” and four consultees answered “other”. We also asked consultees how paper trade documents are currently used in security arrangements: consultation question 32, para 6.102. Fifteen consultees responded to this question. The summary of responses below incorporates consultee answers to both questions.

⁵⁷⁰ See discussion from para 4.52 above.

⁵⁷¹ That said, it will be necessary for Government to determine, with appropriate advice, whether anything additional is needed to ensure that the Bill can be extended to Scotland (or Northern Ireland) if the decision is taken to do that.

Security interests

- 8.21 Security can currently be taken over paper trade documents in various ways. We asked consultees about the types of security interests typically taken over paper trade documents.⁵⁷²
- 8.22 In view of the purpose of our project (to address the possession problem as it applies to trade documents in electronic form), our focus is on those security interests the formation or perfection of which depends on possession of the document by the creditor. We consider that non-possessory securities such as fixed and floating charges can be formed and perfected in the usual way, regardless of the form of the document, as the possession problem would not constitute an obstacle in their regard. Consultees did not disagree with us on this point.
- 8.23 It is our intention that electronic trade documents within the meaning of the Bill should be capable of being the subject matter of a possessory security in the same ways and for the same purposes as paper trade documents.

Pledging an electronic trade document

- 8.24 A pledge involves a debtor (the pledgor) transferring possession of the property serving as security to the creditor (the pledgee).⁵⁷³ It is therefore a type of bailment, as explained in Chapter 3. The transfer of possession of a 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.⁵⁷⁴
- 8.25 It is worth noting that in order for the goods covered by a bill of lading to be pledged to the pledgee as collateral, or otherwise bailed, the bill of lading itself must be transferred to the pledgee/bailee, such that the pledgee/bailee becomes the holder. This transfer requires a transfer of possession (and therefore control) but other elements (such as indorsement, if required, and acceptance of the document) would also need to be satisfied for the pledge to be created.
- 8.26 The response of Sullivan & Worcester LLP noted that:

we assume the security document would be outside the system but that the effect of it, the required transfer, is done within the system and a security trustee, security agent or secured party would be noted as the holder. We would be interested to hear your views on how far the Bill should cover these issues.

In this response we take “the security document” to mean the contractual document recording the pledge agreement. We agree that, for instance, a contract of sale in pursuance of which the document is transferred, may well be “outside the system”. However, as in the paper world, the pledgee would have to become the holder of the document for their security to be perfected. In the context of electronic trade

⁵⁷² Consultation question 32, para 6.102.

⁵⁷³ M Bridge, *Personal Property Law* (4th ed 2015) p 277.

⁵⁷⁴ *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.

documents, this would involve the pledgee taking possession of the electronic trade document.⁵⁷⁵

8.27 Dr Michael Crawford said that electronic trade documents could and should be capable of being the subject of possessory concepts by:

surrendering the means of accessing the electronic document to the pledgee or other bailee. So for, instance, the thing pledged may be the private key enabling transfer of, for instance, a bill of lading recorded on a blockchain, or some other form of DLT.

8.28 Even if our recommendations are implemented, the private key itself will not be capable of being the subject of a pledge: a private key is pure information and would not satisfy the criteria in the Bill and would not be possessable as a matter of law.⁵⁷⁶ We discuss what amounts to a transfer of possession of an electronic trade document in Chapter 7, including whether it could be effected by sharing the private key.⁵⁷⁷ In the context of security arrangements, if the purported bailor or pledgor simply shares the private key rather than effecting a transfer of control over the system it is difficult to see how the bailee could acquire exclusive control (and therefore possession) of the document. This is because the transferor has not divested themselves of (the means of) control. Courts may however be willing to consider evidence relating to the particular circumstances, based on which they might reach a different conclusion. For example, if the bailor does not merely share but also divests themselves of the private key and has no way of gaining knowledge of it after giving it to the pledgee.

The position in Scotland

8.29 Speaking specifically about the position in Scots law, Professor Steven said:

According to *Hamilton v Western Bank* (1856) 19 D 152, pledge can only be effected in Scotland by actual delivery of the property. Therefore goods cannot be pledged by means of delivering a bill of lading. The case has never been overruled but in practice is ignored. The rule will be removed as and when legislation based on the draft Moveable Transactions (Scotland) Bill in the Scottish Law Commission Report on Moveable Transactions is passed. See chapter 25 of the Report. The draft Electronic Trade Documents Bill need not deal with this issue unless implementation of the draft Moveable Transactions (Scotland) Bill is significantly delayed. In its legislative programme for 2020-21 the Scottish Government gave an undertaking to bring forward the legislation after the May 2021 election.

8.30 The Law Society of Scotland said:

Under Scots law, when [trade documents] embody a physical asset they are typically pledged (and there is controversy about whether such a pledge is a true

⁵⁷⁵ As we discuss from para 3.59 above, possession is required to be a “holder”, but it is not always sufficient.

⁵⁷⁶ The UKJT made this point forcefully: “[A private key] is no more than an item of pure information and, like a password or a telephone number, it cannot itself be treated as property”: UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019) para 65, <https://technation.io/lawtechukpanel/>. A private key would not satisfy the gateway criteria in our Bill.

⁵⁷⁷ From para 7.94 above.

pledge or an outright transfer), a negotiable instrument and certain warrants may be endorsed and certain other rights may be assigned and all (and any assets they represent) may be subject to floating charges.

Further comments on pledges and liens

- 8.31 The CLLS noted that, while charges created by UK companies under any system of law require registration at Companies House, "pledges and liens that depend on physical possession ... are accepted as legally distinct from charges". They do not require registration in order to perfect the security. The CLLS noted:

There are good policy reasons for pledges, liens and bailments of trade documents not to be registrable – namely their short term nature, the fact that the security taker is the holder of the documents as both documents of title and instruments of transfer (and so there is a minimal "false wealth"/fraud risk) and the well-recognised market practice in relation to their use.

- 8.32 Although the CLLS did not generally agree that electronic trade documents should be possessable, they agreed that there would be value in allowing electronic trade documents to be the subject of an unregistrable security interest, provided that:

the electronic document is held in the relevant system by the taker of security or a person (other than the security giver) acting on its behalf: this is to exclude the "false wealth" concern where assets over which security has been given remain held in the name of the security giver.

- 8.33 It is worth noting that the CLLS's concern regarding "false wealth" and the need for the secured asset to be held by the security taker and not in the name of the security giver suggests that they would consider that merely giving the private key to the security taker should not amount to transfer of possession for these purposes.

- 8.34 The CLLS suggested that allowing for "virtual" pledges would require specific statutory provision. As discussed, we think this is already allowed for by our Bill, by virtue of making electronic trade documents possessable and providing for them to have the same legal and practical functionality as paper trade documents.

- 8.35 The CLLS also said that to ensure that "virtual" pledges are not subject to any registration requirements:

This could be done by expressly creating the right to create "virtual" pledges and liens etc over these ETDs, with a clear description of what is required and expressly providing that such rights do not require registration in the UK.

- 8.36 However, the CLLS expressed the concern that:

This will, however, only cover documents created under English law, but UK companies will also increasingly deal with foreign law dematerialised trade documents, which will not be covered without express language. It may be more appropriate to simply create an express exemption from registration requirements for UK companies in respect of security given over electronic trade documents whether or not governed by the law of any UK jurisdiction.

8.37 As we note above, we intend for electronic trade documents within the meaning of the Bill to be capable of being the subject matter of a possessory security in the same way, and for the same purposes, as paper trade documents. As such, we do not think there is a need to expressly provide for the fact that “virtual” pledges and liens over electronic trade documents do not require registration in the UK. However, we do not think that it would be appropriate for the Bill to rule out or override registration requirements that may otherwise apply by virtue of the application of other legal rules, including private international law rules on possessory securities.

Trust receipts

8.38 A number of responses to the consultation question on security interests mentioned trust receipts. Trust receipts are issued to the bank holding a bill of lading, by the debtor/buyer of the goods when the bank releases the bill of lading to the debtor.

8.39 By issuing a trust receipt, the debtor undertakes to hold the goods or the proceeds of their sale, in trust for the bank. We consider that, if our recommendations are implemented, there is no reason why trust receipts would not be capable of being used in the same way in a scenario where the bill of lading is in electronic rather than in paper form.

8.40 Norton Rose Fulbright’s response asked the following question:

Does that concept of “control” mean that the trust constituted by the trust receipt is no longer effective?

This suggests some uncertainty about the sense in which “control” was used in the consultation Bill, which we have sought to clarify in the updated Bill and in this report.⁵⁷⁸

8.41 The functioning of trust receipts would only be affected by our recommendations if “control” in this context were to mean legal rather than factual control (that is, the right to control and possess a thing which is in the possession of another person as a matter of fact). If “control” were understood in this sense, it may give rise to doubts as to whether the bank retains the right of control over the goods or their proceeds when it relinquishes control (in the factual sense) of an electronic bill of lading to the debtor for the latter to take delivery of the goods. In the paper world, this right of control is retained by constituting a trust so that the bank retains some rights (so legal rather than factual control) in spite of relinquishing possession of the document.

8.42 However, as emphasised in Chapters 5, 6 and 7, our recommendations and Bill are concerned only with control as a factual state. This being the case, this issue does not arise because, by relinquishing control (in the factual sense) of the document the bank does not relinquish legal control (in the sense of a retained right over the goods and their proceeds).

⁵⁷⁸ In particular, we have removed the provision in the Bill that appeared to equate control with possession. See the discussion from para 7.54 above.

Conversion

8.43 Professor Bridge and Dr Crawford said that they would not favour an extension of conversion to electronic trade documents.⁵⁷⁹ As we explain in Chapter 5, we consider that it is important that all legal treatment, including remedies such as conversion, that are available in respect of paper trade documents should be available in respect of electronic ones.

8.44 Dr Luke Rostill raised two questions with regard to conversion of electronic trade documents. First, what is the “thing” that one must not interfere with? He noted that:

there are different ways of conceptualising what electronic trade documents are and how they relate to the technology that underpins them. Consequently, there are different ways of understanding the thing that people should refrain from interfering with.

8.45 This concern should be dealt with by the new clause 1(3) which provides that the contents of a trade document, and information held in electronic form with which those contents are logically associated, are to be treated for the purposes of the Bill as constituting a single document.⁵⁸⁰

8.46 Dr Rostill also asked what counts as interference in respect of electronic trade documents. He noted that “under the present law, some central forms of ‘interference’ involve a physical interference”. While he noted that analogies may be drawn with physical interferences and that in some cases the interference with an electronic trade document may be similar, he emphasised that “one cannot simply apply the existing law concerning the ‘wrongful interference’ torts to electronic trade documents”. He continued:

A host of questions would arise: is the alleged interference with an electronic trade document in this case sufficiently similar to a type of interference in respect of tangible chattels that the law prohibits? Are there any relevant differences? If so, how important are these? Are they more significant than the similarities?

The consultee suggested that if the Bill does not address this “the answer to an important question would be left open” until the courts answered it. While we acknowledge this concern, we do not think it necessary or appropriate for the legislator to undertake the role of anticipating what wrongful interference might look like in the electronic sphere. We consider that these questions are best dealt with on a case-by-case basis, as occurred with respect to the development of the law relating to tangibles, where the understanding of what constitutes wrongful interference developed over decades (if not centuries) of judicial activity. Once such documents are recognised as being possessable, the force of this concern falls away.

8.47 That said, we think that it is easy to anticipate certain instances of interference with an electronic trade document which could give rise to an action for conversion. For example, hacking into a system, taking control of an electronic trade document, and transferring it to a third party would be an obvious way of converting such a document.

⁵⁷⁹ In general, Professor Bridge did not agree with the extension of possession to electronic trade documents.

⁵⁸⁰ We discuss this from para 6.17 above.

This would have the effect of usurping the rights of the party rightfully entitled to the document in exactly the same way as would the physical appropriation of a piece of paper. The material question remains identical to the one that needs to be asked in relation to tangibles: is the interference sufficient to deprive the dispossessed of their possessory rights? This question should not be much harder to answer in relation to electronic documents than it is in relation to paper.⁵⁸¹

Discussion and our recommended approach

- 8.48 It remains our view following the analysis of responses that insofar as these concepts apply to paper trade documents, they should also apply to trade documents in electronic form which satisfy the criteria in our Bill.
- 8.49 As we said in the consultation paper, 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 bailment, possessory securities and conversion.⁵⁸²
- 8.50 However, although it would be unfortunate, we noted that a court considering the question after the implementation of our reforms might possibly conclude that our reforms did 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 Ltd 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.
- 8.51 Given that the application of possessory and related concepts to electronic trade documents is central to the aims of our reforms, we continue to think that the matter should be put beyond doubt. That said, as we discuss below, we do not think it is necessary to make specific recommendations about precisely how possessory concepts should be applied to electronic trade documents, nor do we consider that such explanations are necessary in the Bill. Rather, our recommendations that electronic trade documents should be susceptible to possession and treated in law as equivalent to paper trade documents, together with the associated drafting in the Bill, are sufficient to ensure this outcome.

⁵⁸¹ An interference with the object of a property right, if deemed actionable, can be classified as either a trespass or a conversion: see from para 7.74. The former deals with lesser interferences, in the sense that it is an action that interferes with another's possessory right. Committing a conversion on the other hand, is to go one step further and act towards an object as if another's possessory rights over it were your own. A trespass affects someone else's asset: a conversion amounts to treating that asset as if it were your own.

⁵⁸² Consultation paper, para 6.106. We also included a provision in the consultation Bill which provided that "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". Although this is stated generally, we considered that it could apply to possessory concepts, as well as to other things which can be done with the document after it is issued, for example accepting it (in the case of a bill of exchange) or presenting it without transferring it (that is, demonstrating that one has control of it).

How possessory concepts will operate in the context of electronic trade documents

8.52 Some consultees suggested that the Bill should make clear the consequences of possessory concepts applying to electronic trade documents and, in particular, how those possessory concepts will apply to electronic trade documents in practice.

8.53 Dr Simone Lamont-Black indicated that:

it might be useful to clearly highlight the assumptions made on which the bill is developed; i.e. that the law as developed for these documents in their paper versions remains good law and applicable also to the electronic document.

8.54 Dr Rostill suggested that more may be needed to provide for the operation of concepts such as proprietary interests in personal property, the “wrongful interference” torts, and bailment, which are defined or limited by reference to tangibility. He said:

The Consultation Paper considers in great detail how possession might be extended to electronic trade documents. But enabling electronic trade documents to be possessed does not, by itself, explain how certain other concepts (eg “wrongful interference”), which hitherto have been applied only in respect of tangible things, are to be applied to electronic trade documents. A provision providing that “possession” of an electronic trade document has an effect that is “equivalent” to possession of an equivalent paper document raises, but does not address, this issue—for what needs to be determined is what the “equivalent” effect is. Consequently ... the proposals are silent on some significant issues, which would need to be resolved by the courts.

8.55 We recognise that the application of possessory concepts to certain intangible assets is a significant shift which will require the common law to adapt. However, we think that the common law is sufficiently flexible to provide for suitable adaptation. As we have discussed elsewhere in this report,⁵⁸³ although common law concepts such as factual control and possession themselves are often described using terms such as “physical” and “tangible”, on closer analysis it is possible to extrapolate principles which can apply equally to electronic trade documents. We think that trying to set out in the Bill the way in which common law concepts should apply to electronic trade documents is likely to cause more harm than good, as seen by our original provisions linking possession and control. We consider that adaptation of the common law is the appropriate vehicle for these developments.

ISSUES RELATING TO TRANSFER

8.56 It is important to consider how different actions that are to be performed with respect to paper trade documents could be performed in the context of electronic trade documents. In the consultation paper, we discussed a number of such actions.⁵⁸⁴ In particular, we considered the concepts of delivery and the point-in-time at which a transfer may be said to have taken place, as well as rejection and amendment of a trade document. Our view was that we did not need to include express provisions on these issues in the Bill. We said that it was likely that the courts would apply the

⁵⁸³ See the discussion in Chapter 5 from para 5.26 above.

⁵⁸⁴ Consultation paper, from para 6.63.

current law to determine issues in relation to transfer, or that systems/platforms would adopt explicit protocols on these matters, which would be applicable as a matter of contract. We asked whether consultees agreed.⁵⁸⁵

- 8.57 A clear majority of consultees agreed with our provisional proposal that these issues did not need to be dealt with in the Bill. However, some consultees raised a few points which prompt further discussion.

Time of transfer of possession

- 8.58 Although in the consultation paper we addressed this issue alongside delivery, in this report we have addressed the timing of transfer of possession separately.⁵⁸⁶ We have included there a summary of consultees' comments on timing received in response to this question.

Delivery and acceptance

- 8.59 As explained in Chapter 3, there is no single definition of what constitutes "delivery" of a paper trade document under the law of England and Wales, but all definitions involve a transfer of possession. For the purposes of the Carriage of Goods by Sea Act 1992 ("COGSA 1992"), this transfer must be met with an unconditional acceptance by the transferee.⁵⁸⁷

What constitutes delivery of an electronic trade document?

- 8.60 In Chapter 7 we have discussed what could constitute transfer of possession of an electronic trade document. However, delivery of a paper trade document can require more than transfer of possession. In the paper world, it can also require acceptance.⁵⁸⁸ The additional 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, such as where the transferee has not yet accepted the document, or has indicated that it is rejecting the document.

Our position in the consultation paper

- 8.61 In the consultation paper, we said we thought it was highly likely that a court would interpret "delivery" in the context of electronic trade documents as bearing the same meaning as it would have in respect of paper documents.⁵⁸⁹ All interpretations of

⁵⁸⁵ We asked consultees whether they agreed with our provisional proposal 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: consultation question 29, para 6.75. Twenty-nine consultees responded to this question. Twenty-three consultees answered "yes", one consultee answered "no" and five consultees answered "other".

⁵⁸⁶ From para 7.112 above.

⁵⁸⁷ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 at [28] by Moore-Bick LJ.

⁵⁸⁸ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1. See brief discussion from para 3.64 above.

⁵⁸⁹ Consultation paper, para 6.68.

“delivery” that we discuss in Chapter 3 involve a transfer of possession.⁵⁹⁰ In at least one interpretation, acceptance would also be required.

- 8.62 In the consultation paper, we suggested that a court would be able to determine when and how something was delivered based on an assessment of the factual characteristics of the system and the evidence available.⁵⁹¹ We suggested that developers of electronic trade platforms would construct their system in such a way that assessments of transfer and delivery may be conducted by easy analogy with paper documents.⁵⁹²
- 8.63 We provisionally proposed that there was no need to define delivery of an electronic trade document in the Bill.⁵⁹³ Under our recommendations and the Bill, electronic trade documents are capable of being possessed. If they can be possessed, then possession of them can be transferred, thereby satisfying the “transfer of possession” element of delivery. Even where delivery requires acceptance, we did not consider that there would be any difficulty in replicating this element in the electronic space, as acceptance is not linked to the document’s tangibility.

Consultees’ views

- 8.64 The majority of consultees agreed that there was no need to define delivery in the Bill. However, a few consultees argued that doing so would provide welcome certainty.
- 8.65 For example, Professor Djakhongir Saidov said that “there may be something to be said in favour of the meaning of ‘delivery’ to be specified (even if along the established lines of its being a voluntary transfer of possession)” and suggested that this would “introduce clarity”. He said that such an approach may require some choices to be made, including whether there should be an unconditional acceptance of a document for the delivery of the document to have occurred.
- 8.66 Norton Rose Fulbright emphasised the importance of acceptance and said that this should also be required for delivery of electronic trade documents:

It is important to understand that documents in the possession of the bank are held to the order of the presenter until they are accepted. That is, the bank must pay or return the documents if they are not complying. We believe that this will be maintained under the proposals, but it is critical.

- 8.67 The Centre for Commercial Law at the University of Aberdeen also suggested that “in the absence of a physical delivery for electronic trade documents” they thought that:

statutory provisions on the timings of delivery and transfer might be needed for legal certainty and predictability and would also be useful for the allocation of risk and liability in cases of delays in electronic/digital systems.

⁵⁹⁰ From para 3.59 above.

⁵⁹¹ Consultation paper, para 6.68.

⁵⁹² Consultation paper, para 6.68.

⁵⁹³ Consultation paper, para 6.75.

Discussion and our recommended approach

- 8.68 We agree with Norton Rose Fulbright that, as for paper bills of lading,⁵⁹⁴ in order for a transfer of a bill of lading in the form of an electronic trade document to be effective, it would have to be accepted. We do not think there is any reason why this rule should differ between electronic and paper trade documents, and there is nothing in our recommendations or the Bill that would have this effect. Section 5(2) of COGSA 1992, from where this definition of delivery is derived, can continue to be interpreted in the same way by the courts, as it will continue to apply to bills of lading in the form of electronic trade documents. In the paper world, acceptance does not depend on the document's tangibility. It does not even have to be express.⁵⁹⁵ We would expect the same to be the case in the context of electronic trade documents, although it may also be fairly straightforward for system designers to build in an option for "acceptance" by the transferee at the click of a button. Whether this is beneficial will be a matter for industry practice rather than the law to determine.
- 8.69 As to the comments from the Centre for Commercial Law on the need for certainty as to the allocation of risk and liability in cases of delays in electronic/digital systems, we do not consider that it is necessary or appropriate to make specific rules for electronic trade documents which do not apply to their paper counterparts. While delays may occur in the transfer of an electronic trade document, so too may delays occur in the delivery of paper documents. Although we expect that service agreements between the system operator and users will address issues such as liability for delay, we consider that common law rules can and should determine these questions where the answer is not to be found in the contract. Our position therefore remains that there is no need for specific provision for delivery of electronic trade documents. Subject to any necessary adaptations to cater for their digital nature, existing rules can and will apply to electronic trade documents by virtue of their being possessable, and the provision that they are to have the same effect as paper trade documents.

Rejection

Our position in the consultation paper

- 8.70 We were told that, in practice, banks rejecting paper trade documents for non-compliance simply transfer the documents back (with any necessary indorsement). In the consultation paper we provisionally proposed that no specific statutory provision needed to be made in order to facilitate rejection of an electronic trade document; the bank could similarly transfer it back over the system. We said that it had been 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 considered this to be a matter of design to be resolved by platform providers.

⁵⁹⁴ *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1.

⁵⁹⁵ See from para 3.65 above.

Consultees' views

8.71 In contrast with the majority of consultees who agreed with our provisional proposals, the International Group of Protection and Indemnity Clubs ("IGP&I"), answering "no", said that "it may be advisable to state ... how an e-bill may be rejected".

Discussion and our recommended approach

8.72 We remain of the view that legislation should not set out specific rules for rejection of electronic trade documents where none exists for paper trade documents, and we have not received any responses that explain why specific rules would be needed. Like acceptance, rejection does not depend on tangibility and can be effected merely by notice.⁵⁹⁶ In line with our general policy, we think that, unless there is a real need for special rules, electronic trade documents should slot into the existing rules and practices already in place for paper trade documents. Trying to legislate for certainty may in fact inhibit existing practices or frustrate the development of new technological solutions.

8.73 We consider that some issues associated with delivery and acceptance may be more efficient in the context of electronic trade documents compared with paper. For example, electronic systems can be designed to enable recipients to reject and divest themselves of possession of the documents simultaneously, which is harder to do with paper documents.⁵⁹⁷ In the paper context this can sometimes lead to delay.

Amendment and rectification

Our position in the consultation paper

8.74 Parties to a transaction may notice a discrepancy in the document and agree that it should be amended. In general, paper documents can be amended by inserting an amendment in writing on the document. What would be the equivalent of this process for an electronic trade document? In the consultation paper,⁵⁹⁸ we said that the situations in which parties could amend an electronic trade document, and the legal implications of doing so, would be analogous to those of a paper trade document. We did not think that the Bill needed to make explicit provision for amendment and rectification.

8.75 Depending on the technology used, the amendment of an electronic trade document might require a particular process to be followed. As we discuss in some detail in our work on smart legal contracts,⁵⁹⁹ one of the key features of DLT is its immutability. What if parties agree that a document on a DLT should be modified? In our work on smart legal contracts, we concluded that system providers must, if necessary for the

⁵⁹⁶ See ICC, Uniform Customs and Practices for Documentary Credits, art 16 and the discussion at para 3.66 above.

⁵⁹⁷ Eg, another issue in *Standard Chartered Bank v Dorchester LNG (2) Ltd (The Erin Schulte)* [2014] EWCA Civ 1382, [2016] QB 1 was that the presenter of the documents (Gunvor) left them with the bank after the bank's rejection and kept on insisting that the bank take them up. This meant that in the period between rejection and the bank eventually taking them up, Gunvor was the person entitled to the documents but was not in factual possession of them (although as a matter of law, the bank was holding them for Gunvor).

⁵⁹⁸ Consultation paper, para 6.74.

⁵⁹⁹ Smart legal contracts: Advice to Government (2021) Law Com No 401, paras 2.24 to 2.27.

usability of the relevant documents, provide means by which documents can be amended if required.

8.76 In the consultation paper, we said that the process of amending an electronic trade document is one that should be determined by platform providers. 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 said we did not think that there was a need to make explicit provision for amendment and rectification in the legislation, and asked if consultees agreed.⁶⁰⁰ We also asked consultees how amendment or rectification of an electronic trade document is achieved under existing systems and those in development.⁶⁰¹

Consultees' views

8.77 Robert Parson said that it is important to define amendment and rectification. He said that.

- (1) "Amendment indicates a consensual process which by its nature requires the issuer of the document and all persons liable on it to agree the prospective amendment".
- (2) "Rectification implies a contentious process (in the sense of rectification of a contract to reflect its true terms)".

8.78 Robert Parson said that, in either case, "the issuer has to be at the centre of the process". Sullivan & Worcester LLP similarly said that in most cases, it was the issuer, rather than the holder, who would be in a position to amend the trade document.

8.79 IGP&I said that the terms and conditions will provide for amendment or rectification of a document, and that "the issuer is required to rectify or requested to amend". They explained that the question of whether a bill of lading can be amended or whether it must be re-issued "will follow the usual rules applicable to paper bills".

8.80 IGP&I also suggested that the Bill should make express provision for how amendment can be achieved:

Amendment of a bill is a common enquiry amongst ship operators and counterparties, and it would be an opportunity to provide clarity on how amendment might be achieved.

8.81 In terms of how amendment or rectification is achieved in practice, DCSA said that there are a "variety of ways" that rectification or amendment can be achieved from a technical perspective. They said that it is more important to consider the governance conditions under which rectification or amendment should be allowed and ensure that

⁶⁰⁰ We asked for consultees' views as to how amendment or rectification of an electronic trade document is achieved under existing systems and those in development: consultation question 30, para 6.76. Twenty-two consultees responded to this question.

⁶⁰¹ Consultation question 30, para 6.76.

the mechanism is compliant. By way of example, they referred to article 9(1) of the EU eFTI [electronic freight transport information] regulation.⁶⁰²

- 8.82 Providers, including Bolero International Ltd, Minerva Global Ltd and China Systems, commented on how systems could accommodate amendment and rectification. Enigio Time AB emphasised the importance of amending or rectifying an electronic document without deleting information, so as to provide a “perfect audit trail”. WAVE BL explained that in their system, “the issuer of a document needs to obtain possession of a unique document having a ‘request amendment signature’ applied by the party then having the lawful right to apply such signature (the ultimate titleholder)”.

Discussion and our recommended approach

- 8.83 The responses confirmed that, as suggested in the consultation paper,⁶⁰³ the situations in which parties may wish to amend an electronic trade document, and the legal implications of doing so, will be analogous to those of a paper trade document. We think that the determination of the circumstances in which amendment or rectification would be appropriate, and how it would be achieved in practice, are matters for agreement rather than statute. Contracts can provide explicitly for the processes that need to be undertaken in order to amend a document, and the courts are well-equipped to fill in any remaining gaps. There are no statutory rules setting out when and how paper trade documents are to be amended or rectified (in some cases a document will be withdrawn and reissued, and in other cases it will be amended by manuscript). We have not heard any persuasive arguments that suggest special rules are required for electronic trade documents.⁶⁰⁴
- 8.84 As to how amendment or rectification of an electronic trade document should be achieved in practice, we consider that it is best to leave system designers to determine the relevant processes to be followed, in response to user demand. An important point arising out of consultee responses was the need to ensure flexibility for different solutions. We do not consider that the Bill should include any specific provisions prescribing how amendment or rectification should be achieved in practice.
- 8.85 Therefore, how an electronic trade document can be amended or rectified will depend on the system on which that electronic trade document is held, and the underlying technology that supports it. It is also a commercial decision based on the parties’ and the systems’ specific considerations and constraints. Clause 3(3) of the Bill, discussed above, ensures that any amendment or rectification of an electronic trade document, to the extent that it corresponds to an amendment or rectification of the equivalent

⁶⁰² eFTI Regulation (EU) 2020/1056, Official Journal L 249 of 31.7.2020 p 33. This provides that the eFTI platforms used for processing regulatory information shall provide functionalities that ensure that: ... (g) ... if an operation involves modifying or erasing an existing data element, the original data element shall be preserved; ... and (i) the operation logs referred to in point (g) of this paragraph are archived and remain accessible for competent authorities for auditing purposes for the period of time specified in the relevant Union legal acts and national law

⁶⁰³ Consultation paper, para 6.74.

⁶⁰⁴ This does not alter our conclusion that the system on which an electronic trade document is hosted must ensure that the document is protected from any unauthorised alteration. See clause 2(1)(b) of the Bill.

paper trade document, has the same effect in relation to that electronic trade document.

DISCHARGE, SURRENDER, ACCOMPLISHMENT

Our position in the consultation paper

- 8.86 In much the same way as a paper document continues to exist physically after it is spent but is devoid of legal significance,⁶⁰⁵ it is likely that an electronic trade document will remain on the system after it is spent as a record or archive copy. We were told by consultees that private systems providing for trade documents in electronic form mimic the processes associated with paper documents. 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 “accomplish”, terminating the effect of the bill and taking it out of circulation.
- 8.87 We provisionally proposed that it was unnecessary to say anything explicit in legislation to provide for the discharge, surrender, or accomplishment of electronic trade documents, and suggested that existing rules could accommodate them. We asked if consultees agreed.⁶⁰⁶

Consultees’ views

- 8.88 This question raised very little controversy, with numerous consultees simply skipping it or responding with “no comment”. A few consultees pointed to particular issues that they thought should be addressed.
- 8.89 Sullivan & Worcester LLP suggested that we should give some thought to practices surrounding the cancelling and re-issue of documents in the paper sphere, and the extent to which the Bill would apply to them.
- 8.90 DCSA noted that:
- the technical ways of achieving the discharge, surrender or accomplishment of electronic trade documents can differ from traditional ones in a paper environment and that these differing technological methods should not be excluded.
- 8.91 IGP&I thought that the Bill should address the issues of surrender, discharge and accomplishment directly. They recommended that “the process for the surrender and accomplishment of an e-bill of lading” be given “attention at a legislative level to encourage consistency and greater certainty for the commercial user”. The Law Society of Scotland noted that “[t]heir electronic nature is likely to require clarification in the application to electronic processes of current physical processes”.

⁶⁰⁵ See from para 3.69 above.

⁶⁰⁶ We asked consultees whether they agreed with our provisional proposal that existing rules and practices can accommodate the discharge, surrender or accomplishment of electronic trade documents and that no specific legislative provision is needed: consultation question 34, para 6.114. Twenty-six consultees responded to this question. Twenty-three consultees answered “yes” and three consultees answered “other”. No consultees answered “no”.

8.92 HSBC noted that “there may be a need for specific rules in respect to statutory instruments such as bills of exchange or promissory notes”.

Discussion and our recommended approach

8.93 Having considered these comments, we remain of the view that it is not necessary to address discharge, surrender or accomplishment explicitly in the Bill.

8.94 As discussed above, clause 3(3) of the Bill provides that anything done in relation to an electronic trade document that corresponds to something that could be done in relation to a paper trade document, has the same effect in relation to the electronic trade document. This is drafted broadly and would encompass any evolved practices in relation to these actions. There is nothing in the Bill which prevents these actions from being taken in the electronic context.

8.95 The Bills of Exchange Act 1882 covers various practical actions that can (and sometimes need to) be taken in respect of certain documents, for example acceptance and protest.⁶⁰⁷ In view of the legal effects that these actions may have, it is important for the holder to have certainty that actions taken on the system in respect of the electronic trade document correspond to the actions taken in respect of equivalent paper documents. We consider that clause 3(3) is sufficient to ensure this recognition.

8.96 Our view is that it might adversely impact the technological neutrality of the Bill if we were to include provisions on how discharge, surrender or accomplishment should be achieved for electronic trade documents. If, for example, the surrender of paper bills of lading involves transferring possession of the bill of lading back to the issuer (which we understand to be the case), the same should be the case in the electronic context. As for the application of physical processes to documents in electronic form, we consider that it would be preferable for the courts to examine these issues as they arise in relation to specific factual scenarios.

USING ELECTRONIC TRADE DOCUMENTS IN CROSS-BORDER TRADE

Private international law

Our position in the consultation paper

8.97 In the consultation paper,⁶⁰⁸ we noted that international trade involves the transfer of goods, money, and supporting documents across borders. We said that there is an existing set of complex private international law rules that determine which courts have jurisdiction over a dispute, and which country’s laws should be applied to resolve it. Questions such as which country’s laws apply to determine who is in possession of a particular electronic trade document, or the legal consequences of being in possession, will be answered with reference to the same rules that currently address those questions for paper documents. At the same time, we noted that these rules are complex and fact specific, and that there may be novel issues caused by electronic trade documents that require further consideration.

⁶⁰⁷ Bills of Exchange Act 1882, ss 17 and 51 respectively.

⁶⁰⁸ Consultation paper, para 6.137 to 6.147.

- 8.98 In particular, we observed that, in relation to electronic trade documents (as well as other digital assets including crypto assets) there are inherent difficulties in determining the geographical location of such documents, and of dealings in relation to those documents. In addition, questions may arise as to how an electronic trade document issued in England and Wales would be treated by a country that does not recognise the validity of electronic trade documents. We noted that conventional private international law rules might not work well in this context.
- 8.99 We provisionally proposed that the Law Commission should consider the private international law aspects of digital assets, including electronic trade documents, as part of a separate project. We asked consultees for their views.⁶⁰⁹

Consultees' views

- 8.100 The majority of consultees who answered this question agreed with our provisional proposal.⁶¹⁰ These included Professor Bridge, Linklaters LLP, and China Systems.
- 8.101 The Institute of International Shipping and Trade Law at Swansea University, agreeing, said that “the simpler the form of the Bill the better”. Bolero International Ltd similarly said the Bill should be kept “simple”.
- 8.102 Enigio Time AB pointed out that the breadth of “digital assets” could mean that legal reform was delayed, as it would need to be “investigated very thoroughly”. Central for Commercial Law at the University of Aberdeen similarly supported our provisional proposal, “so that it will not hold up this project for which there is a pressing need for law reform”. They added that in light of the UK’s membership of the Hague Conference on Private International Law, private international law was an area which was “important for law reform”.
- 8.103 Dr Lamont-Black said that:
- to provide a quick solution only for this subset of digital assets and considering that this ETD Bill is only one part of a larger project ... [it] seems most appropriate to cover private international law aspects for all at a later stage.
- 8.104 Professor Sir Bernard Rix was of the view that “for the moment our existing principles can operate successfully, and in due course some international rules will emerge”.
- 8.105 A few consultees disagreed with our provisional approach. The LMAA said that private international law issues surrounding electronic trade documents should be addressed and included in the Bill, “even if it means delaying the implementation of the legislation”. IGP&I similarly thought that it would be a “wasted opportunity” to not address private international law issues in this project.

⁶⁰⁹ Consultation question 38, para 6.148.

⁶¹⁰ Thirty-one consultees responded to this question. Eighteen consultees answered “yes, it should be part of a separate Law Commission project”, six consultees answered “no, it should be part of the electronic trade documents project,” one consultee answered “no, it should not be a Law Commission project” and six consultees answered “other”.

8.106 Minerva Global Ltd said that failing to consider these aspects “would severely limit the usefulness of the regulation”. The CLLS was of the view that the legislation will not work effectively “unless the conflict rules specific to electronic trade documents are addressed”.

Discussion and our recommended approach

8.107 Having analysed consultees’ responses, we remain of the view that we should consider the private international law aspects of digital assets, including electronic trade documents, in a separate project. The private international law difficulties associated with electronic trade documents (such as the problem of determining the location of an electronic trade document) also arise in relation to digital assets more broadly. Even though we acknowledge that the existing private international law rules in this context require revision, the question as to which rules would operate better is a significant one. We do not think we can satisfactorily answer this question within the context of this project, not least because it considers only one subset of digital assets. Therefore, a larger project addressing private international law rules applicable to digital assets as a whole is preferable.

8.108 On balance, we agree with the majority of consultees that considering private international law issues in this context in a separate project has the following advantages.

- (1) It would produce a “simple” yet effective Bill.
- (2) It would avoid any delay in implementing our recommendations. Considering private international law issues within the scope of the Bill would require extensive research and study. This would slow down the pace of implementing much needed and long-awaited reforms in this area.
- (3) It would be unprincipled to provide a legislative solution for only electronic trade documents, while disregarding other digital assets.

8.109 Some consultees expressed concern that the Bill’s effectiveness would be severely “limited” unless private international law provisions were included within it. We do not agree with this. The purpose of the Bill is to enable electronic trade documents that fall within the scope of the Bill to be possessable under the law of England and Wales. We think this purpose can be achieved without addressing private international law issues. In the meantime, however, we anticipate that courts will continue to deal with novel questions pertaining to electronic trade documents and private international law on a case-by-case basis, applying the existing rules.

8.110 We have agreed with Government to undertake a project looking at the rules relating to conflict of laws as they apply to emerging technology, including smart legal contracts and digital assets, and considering whether reform is required. We expect that this future project will consider some of the problems identified in this chapter. We hope to be in a position to begin this work in mid-2022.⁶¹¹

⁶¹¹ In our 2021 consultation on which areas of law should make up our next programme of law reform, we asked whether such a project would be welcomed: Generating ideas for the Law Commission’s 14th programme of law reform (March 2021) <https://www.lawcom.gov.uk/14th-programme/#introduction>.

Other considerations relating to private international law

8.111 Norton Rose Fulbright noted that “consideration therefore needs to be given to whether instruments issued under the English law meet the requirements of other laws – the more the better”. We think that this issue is unrelated to private international law, which specifically focuses on which country’s laws apply to determine a dispute, and which courts have jurisdiction to adjudicate that dispute. The treatment of documents issued under or governed by the law of England or Wales by other jurisdictions does not relate to that enquiry.

8.112 Mr Justice Foxton raised an issue regarding the treatment of foreign documents (that is documents issued in another country and/or documents governed by a foreign law) under the Bill. He said that:

at the moment, the Bill is otherwise silent on whether or not its provisions apply regardless of the choice of law of the instrument, or whether (as I understand the position) it is intended to apply whenever the status or effect of electronic trade documents falls to be determined as a matter of English law, whatever the governing law of the document.

8.113 The Bill is intended to apply whenever the status or effect of electronic trade documents falls to be determined as a matter of English law. However, this does not mean that where the dispute in question falls within the scope of a valid foreign choice of law clause, or within the scope of a foreign governing law, that an English court would disregard that choice or that governing law. On the contrary, the Bill is not intended to operate as a set of mandatory provisions that apply regardless of the parties’ choice of law.

8.114 The CLLS said that “it needs to be clarified whether trade documents governed by other systems of law are to be treated in the same way as those governed by English law”. In our view, the treatment of trade documents governed by a foreign law is a matter that falls to be determined by reference to the relevant foreign law. It would not be appropriate or possible to include something in the Bill to cater for this.

8.115 We have also considered the Singapore Electronic Transactions Act 2010, as amended in 2021 (the “Singapore Act”) and in particular section 16A(1). This section provides a definition of a bill of exchange and a bill of lading for the purposes of the Singapore Act.⁶¹² However, unlike the Singapore Act, we do not define terms such as “bill of exchange” or “bill of lading” in the Bill. We think these terms should instead be interpreted with reference to the underlying legislation and case law applicable to the particular trade document in question.⁶¹³ This is particularly so as the Bill contains an “umbrella” definition of trade documents. It would be practically unworkable to include specific definitions for all categories of documents potentially falling within the scope

⁶¹² Amended by the Electronic Transactions (Amendment) Act (No 5/2021), New Part IIA, s 16A(1). This section defines a “bill of exchange” as: “‘bill of exchange’ includes a bill of exchange within the meaning of the Bills of Exchange Act, or under any other rule of law, or the law of a country or territory outside Singapore”. It also defines a “bill of lading” as: “‘bill of lading’ includes a bill of lading within the meaning of the Carriage of Goods by Sea Act, the Bills of Lading Act, or under any other rule of law, or the law of a country or territory outside Singapore”.

⁶¹³ Eg, see the Bills of Exchange Act 1882, s 3.

of the Bill. We therefore do not think it is necessary or desirable to include a provision similar to that of section 16A(1) of the Singapore Act in our Bill.

8.116 We did not think it is necessary to include a provision in the Bill clarifying that foreign issued electronic trade documents are not to be denied effect solely on the grounds that they are issued outside England and Wales. We are aware that the MLETR⁶¹⁴ and the Singapore Act both contain a provision to similar effect.⁶¹⁵ However, we have not adopted a similar approach because there is no rule that we are aware of to suggest that the law of England and Wales would deny recognition of a document simply because it was issued abroad.⁶¹⁶

⁶¹⁴ MLETR, art19(1).

⁶¹⁵ Electronic Transactions Act 2010, as amended by the Electronic Transactions (Amendment) Act (No 5/2021), New Part IIA, s 16P. This section specifies that: “(1) An electronic transferable record is not to be denied legal effect, validity or enforceability solely on the ground that it was issued or used outside Singapore. (2) Nothing in this Part affects the application to an electronic transferable record of any rule of private international law governing a transferable document or instrument”.

⁶¹⁶ English statutes may have their own conflict rules which will be relevant when dealing with foreign documents (whether paper or electronic). Eg, s 72 of the Bills of Exchange Act 1882 sets out rules to determine the rights, duties, and liabilities of the parties where a bill drawn in one country is negotiated, accepted, or payable in another.

Chapter 9: Recommendations – other issues

- 9.1 In this chapter, we address some miscellaneous points relating to electronic trade documents, including formalities, indorsement and issuance in sets. We also discuss our recommendations to provide for change of medium of a trade document from electronic to paper and vice versa. We recommend that the legislation should not have retrospective effect, so that only trade documents issued after the coming into force of the relevant legislation should be affected by its terms. Finally, we discuss the repeal of sections 1(5) and 1(6) of the Carriage of Goods by Sea Act 1992 (“COGSA 1992”).

FORMALITIES

“in writing”

Our position in the consultation paper

- 9.2 All of the documents that fall within the scope of our provisional proposals have a requirement that they must be in writing. In some cases this is explicit, such as in the Bills of Exchange Act 1882 (“1882 Act”) which specifies that bills of exchange and promissory notes must be “in writing”.⁶¹⁷ For other documents, it 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.
- 9.3 “Writing” is defined in schedule 1 to the Interpretation Act 1978 (“1978 Act”) in broad terms:
- “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.
- 9.4 In the consultation paper, we considered the Law Commission’s 2001 Advice to Government on electronic commerce in relation to this requirement.⁶¹⁸ In that advice, a distinction was drawn between words displayed on a screen (such as an email), which we said would satisfy a statutory requirement for writing, and wording using electronic data interchange (“EDI”), which we said would not.⁶¹⁹ We still consider this to be correct.⁶²⁰

⁶¹⁷ Bills of Exchange Act 1882, ss 3(1) and 83(1). The Act, s 2, provides that “written” includes printed, and “writing” includes print. This appears to us to be permissive, rather than limiting. Given the context and purpose of the Act, we consider that this provision should be read as excluding any argument that bills of exchange have to be written out longhand or that manuscript is to be preferred.

⁶¹⁸ Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice Paper.

⁶¹⁹ Electronic Commerce: Formal Requirements in Commercial Transactions (2001) Law Commission Advice, paras 3.9 to 3.10.

⁶²⁰ We discuss writing requirements in more detail in Smart legal contracts: advice to Government (2021) Law Com No 401, from para 3.79.

- 9.5 We noted that, whatever “back-end” mechanisms a system may use, the “front-end” of any relevant system will be able to display the document as words displayed on a screen in such a way as to fulfil the definition of writing in the 1978 Act. We also said that statutes such as the 1978 Act are, unless otherwise stated, generally considered to be “always speaking”.⁶²¹ This means that such statutes are construed by the courts in such a way as to respond to societal developments, including changes in technologies.
- 9.6 We noted that the MLETR makes specific provision for an “in writing” requirement.⁶²² However, we did not consider there to be a need to introduce an express statutory provision on writing in electronic trade documents in the consultation Bill, because domestic law already considers electronic displays to be capable of constituting “writing”.

Consultees’ views

- 9.7 Most consultees, including Professor Michael Bridge QC, Linklaters LLP, and the City of London Law Society (“CLLS”), agreed with us.⁶²³ Professor Bridge said there is no need to “complicate matters” if the law is already clear on the issue. However, some consultees raised the following issues that require consideration.
- 9.8 Minerva Global Ltd gave the example of systems where sets of data can be “converted dynamically to a visual representation or a pdf file for humans to be able to read it”. We think it makes no difference to the “writing” requirement whether the “front end” interface is generated on the basis of static (fixed) or dynamic (continually updating) data sets. For example, consider a dynamic system which generates an electronic pdf file (“P”) in real time based on an updating dataset (“S”). Each time S updates, a new file P is generated to reflect the updated information. With regular updates, P continues to reflect the current “back-end” position of S. P is therefore an accurate method of “representing or reproducing words in a visible form”. The updated P fulfils the definition of “writing” in the same way as the previous version of the pdf file.
- 9.9 Minerva Global Ltd further noted that visual representations of sets of data stored in a database “can be made to look like a traditional paper document”, but are not “the electronic trade document”. This draws attention to issues surrounding what constitutes an electronic “document”. As discussed in Chapter 6,⁶²⁴ we now recommend that, where an electronic trade document comprises human readable

⁶²¹ Smart legal contracts: advice to Government (2021) Law Com No 401, para 3.83. Eg, the Court of Appeal adopted this approach when interpreting the reference to a “document” in *Victor Chandler International Ltd v Customs and Excise Commissioners* [2000] 1 WLR 1296. See also A Burrows, *Thinking about statutes: interpretation, interaction, improvement* (2018) p 21.

⁶²² MLETR, art 8.

⁶²³ We asked whether consultees agreed that there was no 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”: consultation question 24, para 6.43. Twenty-two consultees answered “yes”, four consultees answered “no” and five consultees answered “other”.

⁶²⁴ From para 6.23 above.

material and an underlying data structure, these elements together should be treated as the “document”.

- 9.10 Rio Tinto Commercial referred to the possibility that “parties may want a smart contract to be deemed by the Act to be an electronic ‘bill of lading’”. They said that the “idea that the document must be able to be read on the screen (including legal verbiage) does not sit well” with that possibility. We do not think that an electronic trade document in the form of a smart contract would fail to meet a requirement that the document be in “writing”, provided it can be regarded as “a mode of representing or reproducing words in a visible form”. A smart contract is usually drafted in a “high level” programming language known as source code, which is ultimately converted into a “low level” programming language known as machine code. As we discuss in more detail in our publication on smart legal contracts,⁶²⁵ we consider that source code can generally satisfy a requirement for writing because it is capable of being read by a person with knowledge of the relevant programming language, and translated into words.
- 9.11 A few consultees supported an express provision in the Bill to clarify that electronic trade documents can satisfy an “in writing” requirement. Professor Duncan Sheehan suggested that an express provision might avoid “messy litigation later”. HSBC suggested this would promote certainty in international trade. The Centre for Commercial Law at the University of Aberdeen said that “an express provision will also assist foreign courts” when applying the law of England and Wales.

Discussion and our recommended approach

- 9.12 Having considered consultees’ responses, we remain of the view that there is no need for an express legislative provision to the effect that electronic trade documents can satisfy an “in writing” requirement. As discussed in the consultation paper and confirmed by most consultees, we think that the position in domestic law is already clear: a trade document in electronic form can satisfy a requirement for writing. While some consultees suggested that an express statement would promote certainty, particularly for international parties and courts, we think that the issue is already sufficiently clear such that an “avoidance of doubt” provision would not be appropriate.

“signed”

Our position in the consultation paper

- 9.13 All of the documents that fall within our provisional proposals are required to be signed in order to be validly issued.⁶²⁶ In the consultation paper, we observed that the MLETR makes specific provision to provide for the signing of electronic documents.⁶²⁷ However, as we discuss in detail in our report on the Electronic Execution of Documents, the law of England and Wales is already sufficiently flexible to

⁶²⁵ Smart legal contracts: Advice to Government (2021) Law Com 401, from para 3.79. We did not consider that machine code or other lower level codes that are not human readable could satisfy a requirement for writing: see from para 3.92.

⁶²⁶ See eg Bills of Exchange Act 1882 ss 3(1) and 83(1), and the Marine Insurance Act 1906, s 24. Documents may also need to be signed for other purposes; eg, a bill of exchange must be signed to be accepted: see the Bills of Exchange Act 1882, s 17(2).

⁶²⁷ MLETR, art 9.

accommodate electronic signatures.⁶²⁸ This includes where there is a statutory requirement for a signature (unless the relevant statute provides otherwise). Accordingly, we provisionally proposed that there is no need to introduce an express statutory provision on signing electronic trade documents.

- 9.14 The provisions of the 1882 Act that require a signature do not refer to any particular method of signing; in particular, they do not require a manuscript signature. Section 3 of that Act 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.
- 9.15 In the consultation paper, we noted two points about the requirement for signature in section 91 of the 1882 Act. First, it is unnecessary for the person required to sign to do so “with his own hand”,⁶²⁹ as the law will consider the person to have signed if the signature is in their name and signed by an agent.⁶³⁰ Second, if a corporation is required to sign, the document or writing will be considered signed if “sealed with the corporate seal”.⁶³¹ Neither of these points affected our provisional view that electronic signatures can satisfy the requirements of the 1882 Act.
- 9.16 In our 2010 paper on marine insurance policies,⁶³² we noted that marine insurance policies must be signed.⁶³³ We suggested that this would not prevent a marine insurance policy from being an electronic document; however, we noted a “need for caution”.⁶³⁴ In light of our conclusions in the Electronic Execution Report, we said in the consultation paper that we consider electronic signatures will be recognised as valid signatures in this context.

Consultees’ views

- 9.17 Most consultees, including the CLLS, the Centre for Commercial Law at the University of Aberdeen and the Digital Container Shipping Association (“DCSA”), agreed with our provisional proposals.⁶³⁵ The Centre for Commercial Law at the University of Aberdeen observed:

⁶²⁸ 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.

⁶²⁹ Bills of Exchange Act 1882, s 91(1).

⁶³⁰ *London CC v Agricultural Food Products* [1955] 2 QB 218, 223 to 224, by Denning LJ; *Re Prince Blücher* [1931] 2 Ch 70.

⁶³¹ Bills of Exchange Act 1882, s 91(2).

⁶³² 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

⁶³³ Marine Insurance Act 1906, s 24(1).

⁶³⁴ 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, paras 4.10 to 4.11.

⁶³⁵ We asked whether consultees agreed that there was no need to introduce an express statutory provision on signing electronic trade documents: consultation question 25, para 6.49. Nineteen consultees answered “yes”, seven answered “no” and four answered “other”.

If there would be a statutory provision to ensure that electronic trade documents must contain the same information as would be required to be contained in a paper equivalent, this would already include signatures.

- 9.18 Some consultees emphasised that flexibility is necessary, particularly when dealing with cross-border trade. For example, Enigio Time AB said that it is “important not to have as strict signature requirements [as in the eIDAS regulation]”,⁶³⁶ and that “the contracting parties are responsible for ensuring the [identity] of their counterparty and that the signature is authorised”. China Systems noted that, insofar as the law already provides for digital signatures, there is no need to repeat it in the Bill, and Bolero International Ltd commented that “the legal position on this is already clear”. Similarly, Robert Parson noted that “there is no need to supplement existing electronic signature legislation”.
- 9.19 On the other hand, some consultees said that there should be an express statutory provision on signing electronic trade documents. The Institute of International Shipping and Trade Law at Swansea University (“IISTL”) suggested that the Bill should make clear what would constitute a signature on an electronic trade document, although they did not consider that such a provision is strictly necessary. Professor Sheehan was “in favour of explicitly stating that electronic documents and signatures meet the relevant requirements” to reduce the risk of litigation.
- 9.20 WAVE BL emphasised the importance of governmental authorities accepting as valid signatures made on the networks of electronic trade document service providers. In this regard, WAVE BL expressed concerns about some authorities requesting that signatures be compliant with the eIDAS regulation and that they be “qualified electronic signatures”. It should be noted that the type of electronic signature that will be accepted depends on the law applicable to the electronic trade document. The law of England and Wales (including case law, the Electronic Communications Act 2000 and the UK eIDAS regulation) recognises a range of electronic signatures.
- 9.21 The London Maritime Arbitrators Association (“LMAA”) argued that an express statutory provision is necessary, suggesting that there is a lot of uncertainty surrounding the efficacy and legal effect of documents that have been signed electronically in the absence of contractual agreement or legislation. They said that a bill of lading is “not valid and enforceable if it is unsigned in the signature box on the face of the document”. They subsequently added that signing a bill of lading in the signature box is a commercial practice that has evolved over time and that while these documents could be signed and stamped elsewhere on the face of the document, it would be “a little odd” not to use the signature box. The LMAA considered that there should therefore be a provision requiring that a system “enables participants to apply electronic signatures which will have the same effect as the wet inked signature applied to a paper bill of lading”.

⁶³⁶ 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. At the end of the UK EU transition period, eIDAS was incorporated into domestic law (with some amendments) by operation of the European Union (Withdrawal) Act 2018, s 3(1), and the amendments contained in the Electronic Identification and Trust Services for Electronic Transactions (Amendment etc.) (EU Exit) Regulations 2019, SI 2019 No 89.

- 9.22 The LMAA’s response seems to suggest that, with certain paper trade documents, there is an established commercial practice of signing in a particular place. It does not suggest, however, that if a signature is not in the customary place, that document will fail to satisfy the formality requirements for the relevant trade document. This is also our understanding based on our research. We think this can therefore be left to industry to develop a suitable practice. Parties may fashion the electronic document in such a way as to ensure it visually resembles its traditional counterpart if that is desired. For example, a pdf may be constructed so as to have two pages, including a front page with a box for a signature, but this would not be required in law.
- 9.23 Professor Bridge said that he was unsure as to whether there should be an express statutory provision on signing and commented that “there must surely be some means of determining whether a purported transfer was authorised”. We consider that this is simply a question of evidence. Regardless of whether a party uses a wet ink signature or an electronic signature, they may have to adduce evidence to demonstrate that the transfer was authorised and that the signature used was in fact applied by a party with authority. Minerva Global Ltd said that if there is no statutory provision on signing, “it becomes more important to regulate the requirements for identity verification of the parties using the system”. These comments relate to verification of identity, which we think is a matter for the system operator and individual parties to address. It has little bearing on whether electronic signatures can satisfy statutory requirements relating to signature in the context of electronic trade documents.
- 9.24 The British Insurance Law Association commented that they “understand that this [our approach] does not alter the requirement under the Marine Insurance Act 1906 that a marine policy must be signed, whether electronic or not”. This is correct. Our approach does not alter any requirements that trade documents, including a marine insurance policy, must be signed. In the consultation paper, we explained that the need for a marine insurance policy to be signed would not prevent such policies from being electronic documents. In light of our conclusions in the Electronic Execution Report, we concluded that electronic signatures will be recognised as valid signatures in this context. Furthermore, marine insurance policies are presently issued with electronic signatures, although we note that electronic marine insurance policies are currently not assignable by indorsement and delivery.

Discussion and our recommended approach

- 9.25 We remain of the view that electronic signatures can be used to sign electronic trade documents without the need for an express statutory provision. We consider that introducing an explicit provision on signing in the Bill is unnecessary and may have an adverse impact on the confidence of parties in relation to other legislation. This is because courts have continued to recognise electronic signatures for the purposes of legislation that is silent on the status of electronic signatures.⁶³⁷ There is also nothing

⁶³⁷ For instance, in the context of the Statute of Frauds 1677 s 4, in *Golden Ocean Group Ltd v Salgaocar Mining Industries PVT Ltd* [2012] EWCA Civ 265, [2012] 1 WLR 3674, the Court of Appeal held that the parties had “signed” a contract of guarantee by signing an email which referred to, but was not itself, the contract of guarantee. By signing the email, the parties had indicated their intention to authenticate the contract of guarantee. The Statute of Frauds 1677 does not explicitly provide for electronic signatures but courts have continued to recognise their validity regardless: *Golden Ocean Group Ltd v Salgaocar Mining Industries PVT Ltd* [2012] EWCA Civ 265, [2012] 1 WLR 3674 at [34] by Tomlinson LJ. For a discussion of these issues in detail see *Electronic Execution of Documents* (2019) Law Com No 386, ch 3.

in the Bill, or in the common law relating to trade documents, that would require the use of an eIDAS compliant signature. Individual parties may seek this in order to satisfy their own security checks, but this would not be required as a matter of domestic law. What is important is not the form of signature (unless this is prescribed by law), but whether it was applied in a manner which indicates the parties' intention to authenticate the document.⁶³⁸

INDORSEMENT

Our position in the consultation paper

9.26 Indorsement is an essential part of the transfer of many trade documents and any rights which attach to them.⁶³⁹ There is a business practice of indorsing paper documents on their reverse, which reflects the origins of the word "indorsement": the Latin "dorsus", meaning "back". Unlike a paper document, an electronic document may not have a "back" and, accordingly, we think it is important to ensure that an electronic indorsement will be valid regardless of where it is located on the document.

9.27 In the consultation paper, we provisionally proposed that there should be an express provision in the Bill covering indorsement of electronic trade documents to ensure that they would be regarded as capable of indorsement even if it is not possible to indorse them on their "back". We proposed the following provision:

Anything else 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.

Consultees' views

9.28 Most consultees, including the IISTL, China Systems, Phillips 66 Ltd, the International Group of Protection and Indemnity clubs ("IGP&I") and the CLLS, agreed that legislation should explicitly provide for indorsement of electronic documents, given its importance to the functioning of trade documents.⁶⁴⁰ Consultees said that providing clarity that electronic trade documents can be indorsed even where there is no "back" of an electronic document would provide comfort to users of electronic trade documents.

9.29 Professor Sheehan agreed that the Bill should cover indorsement, but queried whether the proposed provision was suitable. He thought it would be insufficient to say that "anything done ... that corresponds to indorsement has the same effect as

⁶³⁸ *Golden Ocean Group Ltd v Salgaocar Mining Industries PVT Ltd* [2012] EWCA Civ 265, [2012] 1 WLR 3674 at [32] by Tomlinson LJ; UKJT, *Legal Statement on cryptoassets and smart contracts* (November 2019) para 160, <https://technation.io/lawtechukpanel/>. See also *Electronic Execution of Documents* (2019) Law Com No 386, ch 3.

⁶³⁹ *The Bank of Bengal v James William Macleod* 18 ER 795, 800, by Chief Justice. See also *G&H Montage GMBH v Irvani* [1990] 1 WLR 667, and the discussion from para 3.4 above.

⁶⁴⁰ We asked consultees whether they agreed that the Bill should explicitly provide for indorsement of electronic documents: consultation question 27, para 6.60. Twenty-five consultees answered "yes", one consultee answered "no" and four consultees answered "other".

indorsement” since it might not be possible to distinguish between something corresponding to indorsement and “the electronic equivalent of doodling”.

Discussion and our recommended approach

- 9.30 We remain of the view that indorsement should be addressed explicitly in the Bill given its central importance to the functionality of electronic trade documents. We recommend that the Bill provides simply that an electronic trade document can be indorsed. Including such a provision removes any uncertainty that may arise about whether an electronic trade document can be indorsed given that it may not have a “back”; a feature which is, as a matter of business practice, essential to the indorsement of paper trade documents.
- 9.31 We do not think it is necessary to define indorsement in the Bill, or to include a more detailed provision on indorsement. Even though the law of England and Wales makes explicit reference to indorsement in a number of statutes, it seldom defines it. For example, section 11 of the Factors Act 1889 provides “for the purposes of this Act, the transfer of a document may be by indorsement ...”. Indorsement is also referred to in section 50(3) of the Marine Insurance Act 1906, which provides that a “marine policy may be assigned by indorsement thereon or in other customary manner”. However, neither statute defines “indorsement”. The term is defined in the 1882 Act as meaning “indorsement completed by delivery”, but perplexingly the definition includes the term itself, and we would not therefore wish to adopt it.
- 9.32 In our view, as long as legislation provides that an electronic trade document is capable of being indorsed, any uncertainty in this regard is removed. In keeping with the least interventionist approach, we do not think we need to include a more detailed provision in the Bill. The application of the usual written instruction and signature which are generally accepted to comprise an indorsement, albeit now in electronic form, should be sufficient.

Recommendation 22.

- 9.33 Legislation should provide that an electronic trade document is capable of being indorsed.

The Bill provisions

- 9.34 Clause 3(1) of the Bill provides that:

A person may possess, *indorse* and part with possession of an electronic trade document (emphasis added).

ACCESSIBILITY OF INFORMATION

Our position in the consultation paper

9.35 In the consultation paper,⁶⁴¹ we identified that the documents which fall under our proposals are all used to evidence certain rights or obligations. This means that these documents need to be accessible to the holder, and to any party to whom the holder is showing the document. If the information is not accessible, then these documents cannot function as evidence. For example, a bill of lading acts as a receipt for the goods and as evidence of the contract of carriage. The 1882 Act contains references to documents being presented or exhibited.⁶⁴² We said that if an electronic document is not accessible, parties will not be able to ascertain and exercise their rights under the document as easily as they could with a paper trade document. However, we did not consider there to be a need to introduce an express statutory provision on the accessibility of information contained in electronic documents. We asked consultees if they agreed.⁶⁴³

Consultees' views

9.36 The majority of consultees agreed that it was not necessary to introduce an express statutory provision on the accessibility of information contained in electronic trade documents. These included China Systems, Phillips 66 Ltd, Linklaters LLP, and the CLLS. The main arguments in favour of our provisional proposals can be summarised as follows.

- (1) There is no express statutory accessibility of information requirement for paper documents. It is implicit that the information in paper documents should be accessible in order to be used for evidential purposes. Similarly, it is implicit that information in electronic trade documents should be accessible.
- (2) Ensuring accessibility of information will differ on a case-by-case basis, and is likely to happen as a matter of course in practice.
- (3) Our proposals and the Bill purport to be technology neutral, and any proposal that sets a technological standard may be contrary to that approach.

9.37 HSBC and the CLLS noted that the issue of accessibility is likely to be addressed in regulated systems. The Centre for Commercial Law at the University of Aberdeen said that accessibility was “a matter for electronic/digital systems to deal with”. HSBC noted that “in reality any system issuing an electronic document, if it will be used in trade financing will need to ensure ongoing accessibility”.

9.38 A small number of consultees, including IGP&I, the Law Society of Scotland, WAVE BL, and Matthew Wright from the UK Chamber of Shipping, who responded in a personal capacity, reasoned that the Bill should not be silent on the issue of

⁶⁴¹ Consultation paper, para 6.50 to 6.52.

⁶⁴² Bills of Exchange Act 1882, ss 10(1)(a) and 52(4).

⁶⁴³ We asked whether consultees agreed that there was no need to introduce an express statutory provision on the accessibility of information contained in electronic trade documents: consultation question 26, para 6.53. Nineteen consultees answered “yes”, seven consultees answered “no” and four consultees answered “other”.

accessibility. In summary, the main arguments against our provisional proposals were as follows.

- (1) Accessibility is an important feature of possession and “effective” control. Any person purporting to control or possess a document should be able to access it. In this regard, WAVE BL used the phrase “accessibility to the Possessor”.
- (2) An accessibility requirement would “provide clarity” and an “explicit assurance” that parties with access to the document can obtain their rights without difficulty.

Discussion and our recommended approach

9.39 Having considered consultees’ responses, we remain of the view that there is no need for a provision in the Bill requiring that information contained in an electronic trade document be accessible. Such a provision would amount to a requirement that a document cannot be an electronic trade document unless the holder, or any other party, can access its contents. This appears to be a redundant requirement because, as a matter of practicality, unless parties are able to access and show that their document satisfies the other requirements of the Bill, they cannot prove that the document in question qualifies as an electronic trade document. It is also worth noting that neither the MLETR nor the Singapore Electronic Transactions Act 2010, as amended in 2021 (the “Singapore Act”) include a provision on accessibility of information. In addition, paper trade documents are not subject to an explicit accessibility of information requirement.

9.40 An explicit accessibility of information requirement would introduce additional and potentially undesirable hurdles to establishing that a trade document in electronic form is an electronic trade document. In our view, the terms “use,” “transfer” and “otherwise dispose” in clause 2(2)(a) imply that a person is able to access the document. This is because each of these terms requires a person in factual control to interact with an electronic document in some way. It is impossible to carry out these interactions unless a person has access to the electronic trade document. Thus, in our view, there is no need for an explicit provision mandating an “accessibility of information” requirement in the Bill.

Other considerations relating to accessibility

9.41 IGP&I observed that “access will be needed for legal reasons - litigation, auditing etc and sanctions screening other crime prevention”. In our view, accessibility of information for these purposes is a distinct consideration from accessibility of information to a person in factual control of the electronic trade document. Other existing laws and rules, such as the rules of evidence, anti-money laundering rules, and auditing rules, should be able to provide the courts and relevant parties access to the necessary information.

9.42 The Law Society of Scotland noted that “it may be that some parts of a document should be public so that they can function as evidence, whereas others might remain confidential”. We do not suggest that documents must be accessible generally; we intend accessible to mean accessible to the person in possession of the electronic trade document. The confidential nature of certain information during litigation depends on the court’s powers, and the classification of that information. It is an evidential issue rather than an accessibility issue.

SETS OF DOCUMENTS

- 9.43 It remains common practice for some trade documents, such as bills of lading and bills of exchange, to be drawn in sets of three.⁶⁴⁴ However, there is no requirement for these documents to be drawn in sets, and we therefore did not consider it necessary to include a requirement that the system on which an electronic trade document exists must make this possible. In the consultation paper, we noted that if the practice of issuing documents in sets continues in the context of electronic trade documents, technology providers are likely to develop platforms to enable this, and the law does not prohibit it.
- 9.44 The vast majority of consultees who commented on this point in the context of electronic trade documents,⁶⁴⁵ including DCSA, Vale International SA and WAVE BL, said there is no need for electronic trade documents to be issued in sets. Professor Bridge agreed with our position, observing that “if Lord Blackburn in the 19th century thought there was no need to continue issuing bills of lading in sets of three or more, the question pretty well answers itself”. IGP&I went further, saying that the practice of drawing documents in sets ought to be prohibited.
- 9.45 We agree with consultees that it is unlikely that electronic trade documents will need to be issued in sets. The justifications for this practice, such as mitigating against the risk of loss of a paper document, do not apply in the electronic context. However, we did not consult on prohibiting this practice; we consider that this is a matter for market practice.
- 9.46 Dr Jenny Jingbo Zhang and Dr Liang Zhao expressed a concern that the definition of “electronic trade document” in the consultation Bill had the effect of implicitly excluding sets. They noted that it excluded documents controlled by multiple parties concurrently, and that such a definition would exclude documents drawn in sets if each original were considered to be a separate document.
- 9.47 Following consultation and as discussed in detail in Chapter 6, we have modified our definition of “electronic trade document” to include documents that may be controlled by more than one person at the same time in certain circumstances. Therefore, regardless of whether each document within a set is considered a separate document or part of one document, we do not think that our Bill will prohibit the practice of issuing in sets in the context of electronic trade documents should this continue to be desirable.

CHANGE OF FORM OR MEDIUM

Our position in the consultation paper

- 9.48 Many of the documents that our recommended reforms will cover are used in cross-border transactions spanning multiple jurisdictions and involving contracts governed by different laws. It is inevitable that different jurisdictions will recognise electronic trade documents to varying extents, and that some port and border authorities will not

⁶⁴⁴ We discuss this practice at para 3.38 above.

⁶⁴⁵ We asked consultees’s views on whether there is any need for electronic trade documents to be capable of being issued in sets: consultation question 28, para 6.62.

be in a position to process them. It may be therefore be necessary in some situations to convert an electronic trade document into a paper trade document.

- 9.49 In our consultation paper, we provisionally proposed that the Bill should contain a provision allowing for change of medium.⁶⁴⁶ We noted that articles 17 and 18 of the MLETR, which cover change of medium, provide that a replaced document becomes inoperative and ceases to have legal effect upon the issuing of the replacement. They also require that the replacement document contains a statement that it is a replacement.⁶⁴⁷ The Singapore Act replicates the MLETR to that extent, and goes further, requiring that all the information contained in the original document or instrument must be accurately reproduced in the replacement document or instrument.⁶⁴⁸
- 9.50 The clause in our consultation Bill similarly provided that a replaced document ceases to have effect and that the replacement must contain a statement. We did not, however, propose a requirement of accurate reproduction of information as we considered that such a provision was not necessary to ensure the singularity of the operative document. We also wished to limit the potential for litigation arising out of minor inconsistencies between replaced and replacement documents.
- 9.51 Like the MLETR and the Singapore Act, our draft clause provided that the rights and liabilities relating to the replaced document shall continue to have effect in relation to the replacement document.⁶⁴⁹ In the event of a change of medium, the draft clause provided that the “original document” would cease to have effect and all rights and liabilities relating to the original document continue to have effect in relation to the “replacement document”. We asked consultees for their views.⁶⁵⁰

Consultees’ views

- 9.52 A significant majority of consultees agreed with our provisional proposal, and no consultees disagreed. Consultees’ questions related mainly to the effect of the particular drafting. Professor Djakhongir Saidov sought confirmation as to what the provision was intended to achieve:

Does it seek to: (1) make clear that a change in the medium is in principle permissible; or (2) provide for a legal right of a person in possession to replace the medium or request this change; or (3) provide for the legal consequences flowing [sic] the change of the medium? It is probably intended to do all these things but I think it is ambiguous as regards whether it is concerned with (1) and/or (2).

⁶⁴⁶ We asked if consultees agreed that provision should be made to provide for a change of medium for trade documents from electronic to paper, or from paper to electronic: consultation question 35, para 6.124. Twenty-five consultees answered “yes” and five consultees answered “other”. No consultees answered “no”.

⁶⁴⁷ MLETR, arts 17 and 18.

⁶⁴⁸ Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting ss 16M and 16N).

⁶⁴⁹ MLETR, arts 17 and 18; Electronic Transactions (Amendment) Act (No 5/2021), s 6 (inserting ss 16M and 16N).

⁶⁵⁰ Consultation question 35, para 6.125.

- 9.53 Besides the concern that the intended effect of our provisional proposal was ambiguous, consultees, including Dr Simone Lamont-Black, Rio Tinto Commercial and IGP&I, emphasised the need to ensure that only one document is valid and effective at any point in time.
- 9.54 Several consultees, including Vitol Services Ltd, IGP&I and the Centre for Commercial Law at the University of Aberdeen, expressed uncertainty about the use of the word “original”. Their responses highlighted a concern that defining “original document” in opposition to the “replacement document” could have the effect of creating a priority rule in favour of the replaced document because the “original” is implicitly the authoritative version.
- 9.55 Dr Zhang and Dr Zhao raised a concern about the use of the word “original” in the particular context of documents issued in sets. They considered that it would not be clear whether replacement of the “original document” meant replacement of only one part of the set or all of them. They said that if it was just one part replaced, “the other originals are still valid documents representing rights and liabilities”.
- 9.56 IGP&I queried what the place of issue of an electronic replacement document would be and said that this may have “a significant effect on liability regimes and jurisdiction”.

Discussion and our recommended approach

- 9.57 The overall policy behind our provisional proposal was well supported. We therefore recommend including a provision allowing for change of form or medium of a trade document from electronic to paper form, and vice versa. Our intention is to provide that a change of form or medium is permissible, to set out clearly the requirements that must be met for a valid change of medium, and to provide for the consequences thereof. We intend that the operative document remains singular following a change of medium. This means that the rights and liabilities relating to the document continue to have effect through the document in its new medium, and the document in its old medium ceases to have effect.
- 9.58 It is important that, upon a change of medium, it is only the medium or form of the document that changes. If there is any substantive change to the content of the document upon the purported change of medium, this would constitute a fresh issue, not a change of medium or form. Where it is just the medium of the document that is changing (rather than the document being re-issued), our view is that the date and place of issue of the document in its new medium would be the same as that of the document in its old medium.⁶⁵¹ This is in line with the case law on replacement of a paper bill of lading with an identical paper document in a different geographical location.⁶⁵²

⁶⁵¹ L Zhu and X Pan, “A conceptual analysis of the electronic bill of lading” (2021) *Journal of Business Law* 336, 353. See also UNCITRAL, *Explanatory Note to UNCITRAL Model Law on Electronic Transferable Records*, para 168, which draws a clear distinction between the concepts of reissuance and change of medium.

⁶⁵² In *Finmoon Ltd v Baltic Reefers Management Ltd* [2012] EWHC 920 (Comm) [2012] 2 Lloyd's Rep 388, bills of lading issued by the carrier in the loadport were replaced by bills issued by the carriers' agents in the port

Requirements for a valid change of form

9.59 In order to constitute a valid change of medium or form for the purposes of the Bill, we think it is important that certain requirements are complied with. We discuss these two requirements below.

Statement to be included on the document in its new form

9.60 The transferee of a trade document the medium of which has been changed or converted should be aware that the document was originally issued in a different form or medium. This puts the transferee on notice of a change of medium, helps maintain an audit trail of the document, and enables the transferee to ascertain the document's genuineness and compatibility with any specific requirements. We therefore recommend that the document in its new medium or form should contain a statement that it has been changed. For example, a document converted from paper into electronic form should contain, in that electronic form, a statement that it has been converted from paper.

9.61 We do not, however, recommend that a statement indicating that a change of medium has taken place be included on the document in its old form. IGP&I expressed the view that including such a requirement could be beneficial in that, if the change of medium were from paper to electronic, it would reduce the risk attendant upon failing to take the paper document out of circulation. They said that this risk could be reduced because any purported transferee of the document in its old (paper) form would be able to tell, by looking at the document, that it was no longer effective. We have considered the benefits of including this requirement but decided that it is not necessary or desirable to do so. First, as discussed below, we think that sufficient incentives exist to ensure that issuers of trade documents put in place mechanisms to take the old forms of documents that have been converted out of circulation. Second, introducing an additional formality requirement would increase the risk of invalid changes of medium for the purposes of the Bill, and be overly prescriptive. Such a requirement could also be meaningless, or difficult to prove compliance with, if the document in its old form is destroyed.

Any contractual or other requirements are complied with

9.62 Consultees indicated that systems currently in use which provide electronic alternatives to paper trade documents operate in accordance with underlying contractual provisions governing a change of medium. In particular, they noted that the issuer as well as the person in possession would generally have to agree to the change of medium. Our recommended reforms are not intended to make these arrangements redundant or to override them. The intention is to ensure that a change of medium is permissible at law, but not to establish how or by whom it may be done. As such, we recommend that in order to constitute a valid change of medium, any contractual or other requirements relating to the conversion of the document are

of discharge to avoid the trouble of sending the original documents to the consignee. The High Court found that the loadport bills had been replaced by the bills issued at the discharge port (called the "disport bills") (at [41] by Eder J) which were duly issued and became valid bills binding on the parties and containing or evidencing the contract of carriage. Eder J said that "this was a matter of mechanics and convenience only and did not affect the existence of the underlying contract of carriage" (at [46]). We consider that changing the document's medium is similarly a matter of mechanics, and does not have any effect on the liability regimes and jurisdiction applicable to the document.

complied with. In particular, there may be existing rules of law which are relevant to a change of medium. For example, case law on “switching” bills of lading (in the sense of cancelling a paper bill of lading and replacing it with a substitute), suggest that a substitution of this kind would require authorisation by the obligor.⁶⁵³ We consider that changing the medium of a document could trigger the application of similar requirements, in that it is a process which could result in more than one document covering the same performance obligation being in circulation at the same time. We think it is important to reflect these considerations in our recommended reforms.

Consequences of compliance with the requirements for a change of form

9.63 Complying with both requirements for a valid change of medium should have certain consequences. First, it should entail that the document in its old form or medium ceases to have effect and, second, that the rights and liabilities relating to the document continue to have effect in relation to the document in its new form. This ensures that there is no duplication of the performance obligation as a result of the change of medium, because the old form of the document ceases to have effect. In addition, the continuation of the rights and liabilities ensures that a change of medium is precisely that – a change of the form of the document, rather than any substantive change to the rights or liabilities pertaining to the document.

Consequences of non-compliance with the requirements for a change of form

9.64 Since the requirement to include a statement on the trade document in its new medium imposes a mandatory formality requirement, failure to include such a statement will result in an invalid change of medium for the purposes of the Bill. While this may seem like a drastic result, we think this formality requirement serves an important function, and is not unduly onerous to comply with. The statement need only specify that the document has been converted or changed from paper to electronic form, or vice versa. It need not contain additional details. Similarly, failure to comply with any contractual or other requirements necessary for a change of medium will result in an invalid change of medium for the purposes of the Bill.

9.65 While failure to comply with either of the requirements set out above would result in an invalid change of medium for the purposes of the Bill, the document created as a result of the purported conversion may nonetheless constitute a newly issued trade document in its own right, with its own date and place of issue. For example, if the purported change is from paper to electronic, but the parties forget to include a statement that the document has been converted, the electronic document could still qualify as an electronic trade document if it satisfies the requirements of the Bill. However, since the document is not validly converted under the Bill, this could lead to a duplication of the promisor’s obligation. This is because, in the absence of a valid change of medium, the document in its old (paper) form will not automatically cease to have effect. It would need to be separately cancelled and taken out of circulation in order to no longer bind the obligor.

9.66 Even though we acknowledge the possibility of this duplication where the requirements for a change of medium are not satisfied, we do not think it is something

⁶⁵³ See *Noble Resources v Cavalier Shipping Company (The Atlas)* [1996] 1 Lloyd’s Rep 642, 649, by Longmore J, where, in the context of switching bills of lading, the need for the original issuer of the bill (or someone acting as their agent) to authorise the switch was emphasised.

that the Bill should expressly address or provide for. Rather, we think these are concerns that will be addressed by the parties using electronic trade documents. As we noted above, consultees emphasised that a change of medium would ordinarily require the consent of the issuer. On giving their consent, the issuer will be incentivised to remove the document in its old (pre-converted) form from circulation to avoid disputes arising from a duplication of documents. In addition, we anticipate that electronic trade document systems will be set up in such a way so as to ensure that upon a change of medium, the document in old form will be removed from circulation.

9.67 In requiring the inclusion of a statement that the document has been converted, our approach is also consistent with international standards insofar as the MLETR contains a similar formality requirement in articles 17(2) and 18(2).⁶⁵⁴ However, the Explanatory Note to the MLETR indicates that the legal consequence of non-compliance with this requirement is two-fold. It results in both “the invalidity of the change of medium *and, consequently, of the electronic transferable record*”.⁶⁵⁵ Unlike our approach, therefore, the Explanatory Note indicates that the MLETR should be understood to mean that a failure to include a statement on the document in its new medium results in both an invalid change of medium, and invalidity of the document in its new form. While we acknowledge the benefit of this approach (that is, of reducing the risk of having the old and new forms of the document both valid and in circulation simultaneously should the statement not be included) we think our approach is preferable for two reasons.

9.68 First, it avoids the consequence that if the old form of the document were removed from circulation but no statement were included on the document in its new form, there would be no valid trade document at all. Second, it is consistent with the least interventionist principle and stays true to the primary purpose of the Bill, which is to remove the legal blocker to the possessability of electronic trade documents.

Change of form and sets of documents

9.69 As to the point made by Dr Zhang and Dr Zhao about the use of the word “original” in the context of documents issued in sets, we acknowledge that use of this word in clause 3 of the consultation Bill gave rise to confusion. In particular, it was not apparent whether “original document” referred to any one of the parts of a set of trade documents, or all of them collectively. This is because technically each part of the set is an “original document”. However, we no longer recommend the use of this terminology in the Bill. For the purposes of changing the medium of a trade document, our policy is that a set should be treated as a single unit, such that the singularity of the obligation is preserved when the medium of the document is changed. Our recommendations do not envisage the possibility of changing the medium of just one part of a set, leaving the remainder of the set as “live” trade documents. Therefore, in a change of medium from paper to electronic, the entirety of the paper set would

⁶⁵⁴ Art 17(2) of the MLETR provides that “For the change of medium to take effect, a statement indicating a change of medium shall be inserted in the electronic transferable record”. Art 18(2) provides that “For the change of medium to take effect, a statement indicating a change of medium shall be inserted in the transferable document or instrument”.

⁶⁵⁵ UNCITRAL, *Explanatory Note to the UNCITRAL Model Law on Electronic Transferable Records*, para 169 (emphasis added). The same consequence arises if the conversion is from electronic to paper: see para 178.

cease to have effect even if only part of the set were converted. This is because when a trade document is issued in a set, the set represents a single obligation, not an obligation that is divisible into as many parts as there are documents in the set.⁶⁵⁶

Recommendation 23.

9.70 Legislation should provide expressly that:

- (1) A trade document may be converted from electronic to paper form and from paper to electronic form, provided that a statement is included in the document in its new form to the effect that it has been converted, and any contractual or other requirements relating to conversion of the document are complied with.
- (2) Where a document is converted, the document in its old form should cease to have effect, and all rights and liabilities relating to the document should continue to have effect in relation to the document in its new form.

The Bill provisions

9.71 Clause 4 of the Bill contains the provision on change of form. It provides that:

- (1) A paper trade document may be converted into an electronic trade document, and an electronic trade document may be converted into a paper trade document, if (and only if) —
 - (a) a statement that the document has been converted is included in the document in its new form, and
 - (b) any contractual or other requirements relating to the conversion of the document are complied with.
- (2) Where a document is converted in accordance with subsection (1) —
 - (a) the document in its old form ceases to have effect, and
 - (b) all rights and liabilities relating to the document continue to have effect in relation to the document in its new form.

9.72 The Bill uses the word “converted” to describe the act of changing the medium of a document. It does not refer to the tort of conversion. The word “converted” is intended to prevent arguments premised on the (incorrect) idea that two documents are involved in a change of medium. We were concerned that such arguments might be enabled by the language of “replaced” and “replacement” documents, or “original” and “replacement” documents. Instead, “converted” makes clear that there is only one document. When a document is “converted”, everything about it remains the same

⁶⁵⁶ *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.

except for its form. Since in practice the two forms of the document might continue to exist concurrently, the provision needs to refer to them separately so as to indicate which form is the effective or operative one from a legal perspective. We consider that the terms “old” and “new” provide a simple, direct and effective way of referring to the document’s separate forms without creating any risk of confusion.

Requirement that the issuer must allow a change of medium

Our position in the consultation paper

- 9.73 In the consultation paper, we noted that, in certain circumstances, it may be crucial for the holder to be able to have the medium of the document changed. This could be the case where, for example, the document is in electronic form and performance of the obligation needs to occur in a jurisdiction where that type of document in electronic form is not legally recognised.
- 9.74 Our provisional view was 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 said it was highly likely that the issuer would permit the holder to replace their document where requested. For this reason, we suggested that it was not necessary to include a provision in the Bill requiring the issuer to allow the person in possession to change the document’s medium. We asked whether consultees agreed.⁶⁵⁷

Consultees’ views

- 9.75 Consultees’ views on this question were mixed. HSBC said that having this ability to change the form of the document was important “in the absence of universal acceptance of electronic documents”. Professor Saidov observed that “if the right to replace is deemed paramount, it may be worth making clear that if ... a request [to change the form of the document] is made the issuer must comply with it”.
- 9.76 Dr Lamont-Black observed that if an issuer or group of issuers has a large enough market share, they may be able to impose terms on users which are favourable to themselves but detrimental to users. On that basis, she considered that it may be desirable to require issuers to allow a change of medium if requested.
- 9.77 On the other hand, some consultees, including Enigio Time AB, the CLLS and DCSA, considered that while having the ability to change the medium of a trade document was important, this should remain a matter for commercial practice and contract. The DCSA observed that statutory regulation “would result in an unnecessary burden”. Similarly, Robert Parson noted that a statutory provision was not necessary, as “[p]articipants will gravitate towards carriers who prove cooperative in promoting digital trade and who prove flexible in terms of a change in medium”.
- 9.78 IGP&I and Vitol Services Ltd expressed concerns at the prospect of the holder of a document being able to request a change of medium from paper to electronic form. Vitol Services Ltd suggested that any requirement on the issuer to allow a change of

⁶⁵⁷ We sought consultees’ views on whether the Bill should contain a requirement that the issuer of a trade document must allow the person in possession to change the document’s medium: consultation question 36, para 6.128. Ten consultees answered “yes”, eight consultees answered “no” and nine consultees answered “other”.

medium should be a requirement to allow a change from electronic to paper only, as there are not yet generally accepted platforms on which electronic documents can exist electronically. Similarly, IGP&I considered that requiring the issuer to allow the holder to change the medium of a document from paper to electronic could give rise to disputes between the parties as to the platform that should be used.

Discussion and our recommended approach

- 9.79 On balance, we consider that it is not necessary to include a provision requiring an issuer to accede to a request for a change of medium from the person in possession of the trade document. We think that systems are likely to continue to provide for this for as long as there is commercial demand. A system that does not is unlikely to attract users who may have to present a paper document somewhere down the sale string. We also consider that including a provision of this nature risks eliding the fact of being in control with the rights of the holder, which is something that we wish to avoid.
- 9.80 While Dr Lamont-Black's point is an important one, and it is true that certain relevant sectors (such as liner shipping) are characterised by a small number of large players, we note that users such as financing banks may also have considerable influence. System designers and issuers are unlikely to be in a position to ignore their needs.
- 9.81 We consider it unlikely that a party would force an unwelcome change of medium from paper to electronic on a party with whom they are contracting and with whom they share a common interest of frictionless performance of their agreement.

APPLICATION OF THE BILL TO EXISTING TRADE DOCUMENTS

Applicability: documents issued before the Act's coming into force

Our position in the consultation paper

- 9.82 In the consultation paper,⁶⁵⁸ we provisionally proposed that our reforms should have prospective effect only; that is, that they should apply only to documents issued after the coming into force of the legislation. Our reasoning was that 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 did not consider that parties who have entered into these contractual arrangements should have to determine whether their existing documents are electronic trade documents within the meaning of the Act.
- 9.83 We asked consultees whether they agreed that the word "issue" describes the process by which a trade document (where relevant) becomes a document of title.⁶⁵⁹

Consultees' views

- 9.84 The majority of the consultees who responded to this question answered "yes", agreeing with our provisional proposal. These included the IISTL, Professor Bridge, and the LMAA. Consultees said that "issue" is appropriate to describe the point at

⁶⁵⁸ Consultation paper, paras 6.157 to 6.161.

⁶⁵⁹ Consultation question 39, para 6.162. Twenty consultees answered "yes", two consultees answered "no" and three consultees answered "other".

which a document becomes legally effective, and was in line with language used in the industry.

9.85 A small number of consultees disagreed. These included China Systems, Legal Innovation Ltd, and Sullivan & Worcester LLP. The main reasons given by consultees who did not think “issue” was the correct word were as follows.

- (1) The meaning of “issue” may be wider than a document becoming a document of title as it must mean that the document is capable of performing all its functions, including that of being a document of title.
- (2) The concept of “issue” does not work for all the documents listed in clause 1 of the consultation Bill as not all the documents listed there are documents of title.
- (3) If by “issue” we mean “create”, then this word does not work because a trade document can be created and then signed thereafter, at which point it becomes a document of title.

9.86 Sullivan & Worcester LLP suggested that there could be a different relevant date for when a document “enters the system”. Professor Saidov, answering “other,” said that it may be helpful to have regard to how, in certain contexts, a certificate must be “put into circulation” in order to be issued. DCSA made a similar point about how the process of “issue” should retain its other customary functions/roles, besides becoming a document of title.

9.87 Sullivan & Worcester LLP also added that “issue” could be used to capture the scenario when the document comes into being, or when it is executed by the issuer and delivered to the first holder, which could be in paper or electronically.

Discussion and our recommended approach

9.88 We agree with Sullivan & Worcester LLP that our use of the term “document of title” was imprecise in this context. In Chapter 3, we explain the terms “document of title”, “negotiable instrument” and “assignable document”.⁶⁶⁰ This does not, however, change the fact that all the documents with which we are concerned need to be issued before they can be used in the ordinary course of business to achieve certain effects at law.

9.89 We also agree that when a particular trade document can be said to be issued will depend on the facts, and the type of document in question. However, on further consideration and research, we continue to think that “issue” is the correct term to use in this context. It can accommodate the various documents that may fall within the scope of the Bill, provided it is used in a general sense (rather than with a single defined meaning).

9.90 We do not consider that the reference to issue in our Bill will displace the meaning of “issue” as that term is understood in the industry. Furthermore, while it may be the case that a certain trade document needs to be circulated before it is deemed to be “issued”, we do not think the Bill should make explicit reference to these requirements.

⁶⁶⁰ See paras 3.19 to 3.21 above.

We consider that it is immaterial whether different categories of documents have different steps that need to be followed in order to become a document of title, or to be legally effective. What matters is the eventual result.

Recommendation 24.

- 9.91 Documents issued before the day on which the Electronic Trade Documents Act comes into force should not be capable of being electronic trade documents within the meaning of that legislation.

The Bill provisions

- 9.92 Clause 7(3) of the Bill provides that:

This Act does not apply to a document issued before the day on which this Act comes into force.

Application of change of medium provisions

Our position in the consultation paper

- 9.93 In the consultation paper,⁶⁶¹ we discussed whether the change of medium provision should apply to paper documents issued prior to the coming into force of the Act. That is, whether, after the coming into force of the Act, it should be possible to effect a change of medium under the Bill from paper to electronic, when the relevant paper trade document was issued *prior* to the Act coming into force.

- 9.94 Our provisional view was 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 period during which paper trade documents exist which cannot be made electronic will be relatively short. We suggested that the trade-off for certainty and clarity was therefore warranted. This would also mitigate 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. We asked whether consultees agreed.⁶⁶²

Consultees' views

- 9.95 The majority of consultees who answered this question, including Phillips 66 Ltd, IGP&I and China Systems, agreed with our provisional proposal. In summary, the main reasons given by consultees were as follows.

- (1) The provisional approach provides practical and legal certainty.

⁶⁶¹ Consultation paper, para 6.165.

⁶⁶² Consultation question 40, para 6.165. Twenty-seven consultees responded to this question. Sixteen consultees answered "yes", two consultees answered "no" and nine consultees answered "other".

- (2) The Act should not have retrospective effect and any existing legal relationships should not be disturbed.
- (3) It is unlikely, given the short-term nature of trade documents, that there is a need for a change in medium in relation to paper trade documents issued before the Act comes into force.

9.96 A smaller number of consultees thought that parties should be able to take advantage of the reforms with respect to paper trade documents issued before the Act comes into force.

Discussion and our recommended approach

9.97 We remain of the view that allowing for change of medium of paper trade documents issued before the Act comes into force could cause parties confusion and uncertainty about how their rights and obligations differ before and after the change. On the basis of the analysis above, we recommend that the change of medium of a paper trade document issued before the Act comes into force should not be permitted. In addition, since most trade documents have a relatively short existence, we think it is imperative to reduce any uncertainty about the parties' rights and obligations by ensuring that the Act as a whole does not apply to a paper trade document issued before the Act comes into force. The drafting of the Bill makes this clear.

9.98 Bolero International Ltd said that "care needs to be taken to ensure that electronic documents issued before enactment under existing contractual arrangements are not accidentally prohibited from being changed into paper ones". There is nothing in the Bill that leads to such a result. However, the framing of question 40 referred to changes of medium generally, so we have some sympathy with the point.

9.99 We also acknowledge that the way in which the provision was drafted was likely to cause some confusion. The effect of the drafting was that a document issued before the coming into force of the Act could fall within the definition of electronic trade document in clause 1 of the consultation Bill, but outside the application of clauses 2 and 3. The drafting of the Bill now provides that the Act in its entirety does not apply to documents issued before it comes into force. This means that such a document would not be an "electronic trade document" for the purposes of the Act.

Recommendation 25.

9.100 We recommend that the change of medium provisions in the Bill should not apply to a paper trade document issued before the Act comes into force.

The Bill provisions

9.101 This point is addressed by clause 7(3) referred to above.

ELECTRONIC PRESENTMENT UNDER THE BILLS OF EXCHANGE ACT 1882

9.102 Sections 89A and 89B of the 1882 Act provide for presentment of instruments by “electronic means”. They were inserted into the 1882 Act in 2015⁶⁶³ primarily to accommodate the electronic paying in of cheques. The provisions are based on the assumption that there will still be a physical instrument, which by virtue of these provisions can be presented by providing an electronic image of the front and back of the instrument instead of presentment of the physical document.⁶⁶⁴ Section 89B sets out the instruments to which the provisions apply, including cheques and other bills of exchange or promissory notes meeting certain conditions.

9.103 These provisions envisage a different type of electronic presentment from that provided for by our recommendations and Bill, which do not involve a physical document. It is appropriate therefore that electronic trade documents within the meaning of the Bill are excluded from the scope of these provisions.

Recommendation 26.

9.104 The existing provisions on electronic presentment of instruments in the Bills of Exchange Act 1882 should not apply to electronic trade documents within the meaning of the Bill.

The Bill provisions

9.105 The Bill amends section 89B(2) of the 1882 Act which provides that “section 89A does not apply to any banknote (within the meaning given in section 208 of the Banking Act 2009)”.

9.106 Clause 6(1) of the Bill adds words excluding bills or notes that constitute “electronic trade documents” at the end of this provision:

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 2022 (see section 2 of that Act).”

REPEAL OF SECTIONS 1(5) AND 1(6) OF THE CARRIAGE OF GOODS BY SEA ACT 1992

9.107 Sections 1(5) and 1(6) of COGSA 1992 give a power to make regulations to enable bills of lading, sea waybills and ship’s delivery orders to be issued, indorsed, delivered or otherwise transferred by electronic means, and to enable anything else that may be done in relation to them to be done electronically. Given that bills of lading and ship’s delivery orders fall within the scope of the Bill, the powers provided for in these provisions become redundant with respect to those documents. In addition, even

⁶⁶³ By the Small Business, Enterprise and Employment Act 2015, ss 13(2) and 164(4).

⁶⁶⁴ Bills of Exchange Act 1882, s 89A(1).

though our Bill does not apply to sea waybills, we are not convinced that the COGSA 1992 provisions need to be retained to cover them. Sea waybills are not transferable, and possession of them is not (either as a matter of law or, as we understand it, a matter of commercial practice) relevant to the determination of rights and entitlements. If it were, they would in any case fall within the scope of our Bill by application of the umbrella provision in clause 1. As such, the inability to possess sea waybills is not an obstacle to their use in electronic form.

9.108 In addition, we understand that sea waybills are already in widespread use in electronic form, without the need for regulations under sections 1(5) and 1(6). There is an argument that if we left these provisions in place in respect of sea waybills, it may give the mistaken impression that regulation under COGSA 1992 is necessary for them to be used in electronic form.

9.109 For these reasons, we recommend that sections 1(5) and 1(6) of COGSA 1992 be repealed.

Recommendation 27.

9.110 Sections 1(5) and 1(6) of the Carriage of Goods by Sea Act 1992 should be repealed.

The Bill provisions

9.111 This point is addressed in clause 6(2) of the Bill, which provides that:

In section 1 of the Carriage of Goods by Sea Act 1992 (shipping documents etc), omit subsections (5) and (6).

Chapter 10: The potential impact of reform

INTRODUCTION

- 10.1 The principal rationale for our recommendations in this area is efficiency: the current position of the law has forced industry to rely on paper documents where electronic forms of these documents 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.
- 10.2 Our policy objective is to remove the legal blocker to the electronic conduct of trade. The intended effects are to: (1) make England and Wales the jurisdiction of choice for electronic commerce; (2) reduce transaction costs for parties; and (3) encourage business growth by facilitating the development of digital products and services.
- 10.3 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.
- 10.4 In the consultation paper, we summarised the evidence of the main benefits and costs of our provisional proposals. We asked consultees whether they agreed with our summary. We also asked them for evidence of the possible impact of our provisional proposals, including costs and benefits (both monetary and non-monetary) and transitional costs.⁶⁶⁵
- 10.5 In this chapter, we summarise the responses we received from consultees. We do not draw conclusions as to the costs and benefits associated with the recommended reforms, but the information in this chapter may influence any economic impact assessment prepared to support the Bill.

⁶⁶⁵ Consultation paper, chapter 7.

GENERAL QUESTIONS

How many documents are involved?

- 10.6 Our starting point was the United National Conference on Trade and Development's ("UNCTAD") 2013 estimate of 40 documents per customs transaction.⁶⁶⁶ In the consultation paper, we noted that the International Chamber of Commerce ("ICC") has estimated that the international trade industry generates four billion paper documents per year.⁶⁶⁷ We said that, on the information available to us, as many as 28.5 billion documents may be generated each year by contained shipping alone.⁶⁶⁸ Some of these may already be in electronic form, as not all documents are required to be possessed. This was for containers alone – it did not include the documentation requirements for bulk carriers.
- 10.7 We asked consultees what they thought the average number of paper documents required in a single trade transaction was.⁶⁶⁹ We also asked consultees whether our estimate of the global, total number of paper trade documents used in container shipping was accurate.⁶⁷⁰ Finally, we asked whether the average number of documents required in a trade transaction varied between sectors.⁶⁷¹
- 10.8 Some consultees said that the average number of documents required in a single trade transaction was difficult to estimate as it depended on several variables.⁶⁷² Professor Djakhongir Saidov said that it was "difficult, if not impossible, to make generalisations". Vale International SA and the Digital Container Shipping Association ("DCSA") considered that 40 was a realistic estimate but noted that the answer depended on how one defined "trade transaction", "document" and "required". Other consultees, including China Systems and Minerva Global Ltd, considered that the estimate of 40 was too high. The London Maritime Arbitrators Association ("LMAA") listed 11 types of documents they typically see for a single trade transaction, while Rio Tinto Commercial said that they see between 10 and 12 documents in each shipment or transaction, not including contractual documents. Robert Parson observed that "some efficiencies" in reducing the volume of paper would have become effective since the UNCTAD's estimate in 2013.
- 10.9 Professor Saidov said that our estimate of 28.5 billion documents generated by contained shipping alone every year was "more or less" accurate. Other consultees

⁶⁶⁶ 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.

⁶⁶⁷ International Chamber of Commerce ("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>.

⁶⁶⁸ Consultation paper, para 7.16.

⁶⁶⁹ Consultation question 42, para 7.19.

⁶⁷⁰ Consultation question 43, para 7.20.

⁶⁷¹ Consultation question 44, para 7.21.

⁶⁷² The Institute of International Shipping and Trade Law at Swansea University ("IISTL"), Professor Djakhongir Saidov and Enigio Time AB.

considered that this estimate was too high. DCSA said that, based on their members' input, the average number of paper trade documents used per year is 20 billion. They noted, however, that "it has to be taken into account that varieties exist in straight, master and house bills of lading, where house bills of lading are not issued by the carriers".

10.10 Consultees, including Minerva Global Ltd, Phillips 66 Ltd and Rio Tinto Commercial, said that the number of documents did vary by sector. Other consultees, including the Institute of International Shipping and Trade Law at Swansea University ("IISTL"), China Systems and the LMAA, agreed but placed greater emphasis on other factors that affect variation, such as the mode of transport used and the geographical region in question.

What proportion of these documents are governed by the law of England and Wales?

Our position in the consultation paper

10.11 We have been told that a "significant" percentage of global trade and shipping documentation is conducted under the law of England and Wales. In the consultation paper, we said we had heard anecdotally that this proportion could be as much as between 50 and 80% for shipping documents.⁶⁷³

10.12 We asked consultees for their estimates of the percentage of trade and shipping documents that are governed by the law of England and Wales.⁶⁷⁴

Consultees' views

10.13 Vale International SA said that more than 80% of trade and shipping documentation is governed by the law of England and Wales. The Centre for Commercial Law at the University of Aberdeen said that maritime trade is "predominantly" governed by the law of England and Wales, while DCSA gave a lower estimate of 20% to 40%. The Mining and Metals Digitalization Forum emphasised the importance of our reforms "as English law is the governing law of many of the documents used in international trade", describing the Bill as:

a particularly critical building block for the digitisation of international trade flows – although of course law reform in other jurisdictions is also required to fully enable this.

The potential pace of transition

Our position in the consultation paper

10.14 We also asked consultees how quickly the industry would move to electronic trade documents if our provisional proposals for reform were implemented in 2022.⁶⁷⁵

⁶⁷³ Consultation paper, para 7.22.

⁶⁷⁴ Consultation question 45, para 7.23.

⁶⁷⁵ Consultation question 46, para 7.28.

Consultees' views

10.15 Enigio Time AB estimated that 80% of documentation might be issued and used in electronic form by 2030, while Phillips 66 Ltd gave an estimate of 10%.

Enigio Time AB said that this figure would rise to 99% by 2050, and Phillips 66 Ltd considered that it would rise to between 50% and 60% by that time. More general comments included HSBC's view that "there will only be significant movement when laws are aligned globally" and the view expressed by China Systems and Phillips 66 Ltd that uptake would depend on the approach taken by other key jurisdictions.

POTENTIAL BENEFITS

Cost savings

Our position in the consultation paper

10.16 In the consultation paper, we identified cost savings as one of the potential benefits of our provisional proposals.⁶⁷⁶ ICC has estimated that digitalising certain trade documents will free up £224 billion in efficiency savings, enabling banks to focus resources on tackling the trade finance gap.⁶⁷⁷ We said that, broadly speaking, savings will materialise in at least two ways:

- (1) in the form of resourcing and operational cost savings (for example paper, costs associated with paper, printing/photocopying, postage/courier services, filing, storage and staffing); and
- (2) in the form of increased productivity (for example, not having to re-enter information, saving time searching for lost documents and eliminating the risk of mistakes).

Consultees' views

10.17 DCSA said that "the potential annual savings for the industry at 50% eBL adoption level would be 4 Billion US dollars". Rio Tinto Commercial said that between 5% and 10% could be saved on each transaction. The IISTL referred to a finding by the UN Electronic Trade Documents Project that "paper-shuffling expenses" in international trade have been estimated at various figures ranging between 5% and 15% of transaction values. They said they considered it "likely that at the very least over half of this might be saved". At the other end of the spectrum, Enigio Time AB estimated that "going from a paper based process to a digital STP process could save as much as 90% of the total processing cost (including all types of paper, handling, storage and courier costs)".

Efficiency gains

Our position in the consultation paper

10.18 In the consultation paper, we said that another potential benefit of our provisional proposals was the increased efficiency in trade processes and labour. We observed that the movement of documents and payments could be accelerated, ancillary

⁶⁷⁶ Consultation paper, para 7.30.

⁶⁷⁷ ICC, *Aligning national laws to the UNCITRAL Model Law on Transferable Records*, UK Business Case (2021).

administrative processes could be simplified, and trading parties could allocate their resources more effectively.⁶⁷⁸

Consultees' views

10.19 The main efficiency gains identified by consultees were the reduced loss of time and, relatedly, the reduction of shipments arriving before the necessary documentation.

10.20 Enigio Time AB estimated that lead times could be reduced by up to 90% as there would be no need for any physical transport or handling. They added that this estimate was made on the basis that electronic trade documents are fully interoperable between all parties and platforms. Minerva Global Ltd said that electronic bills of lading are "much more efficient" than paper bills. They noted that, in buying from their supplier in California and then selling to a customer in Europe, there are at least four courier services involved, each of which takes two to four days. If there were to be an amendment it would take even longer than that. However, they noted that all of this could happen in a matter of minutes with electronic bills.

10.21 The Centre for Commercial Law at the University of Aberdeen observed that:

it is not uncommon for the goods to arrive at the port of discharge before the paper bill of lading. This is particularly the case in the commodities trade where there is a long chain of sub-sales of the goods while the goods are in transit. Such a delay may result in storage or demurrage costs.

They said that there would be significant efficiency gains from a transition to electronic documentation in relation to bills of lading.

Increased security and transparency

Our position in the consultation paper

10.22 In the consultation paper, we observed that electronic trade documents are more secure than paper documents, and offer the prospect of a greater level of transparency.⁶⁷⁹ We asked consultees whether they agreed that electronic trade documents will enhance the transparency of supply chains,⁶⁸⁰ and reduce the risk of fraud compared to paper trade documents.⁶⁸¹

⁶⁷⁸ 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.

⁶⁷⁹ 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.

⁶⁸⁰ Consultation question 50, para 7.57.

⁶⁸¹ Consultation question 49, para 7.53.

Impact on fraud

- 10.23 A significant number of consultees considered that the shift to electronic trade documents would reduce fraud.⁶⁸² In support of this, they observed that electronic documents are stored in digital systems that are encrypted and that it is much more difficult to forge an electronic document than a paper one. WAVE BL noted that “the issue of the integrity of the document and the validity of the chain of endorsements will become practicably undisputable”. Dr David Gibbs-Kneller and Phillips 66 Ltd suggested that the transition to electronic trade documents would reduce the risk of fraud only in the short-term.
- 10.24 Other consultees, including the ICC International Maritime Bureau (“IMB”) and the International Group of Protection and Indemnity Clubs (“IGP&I”), were sceptical of the claim that the transition to electronic trade documents would reduce fraud significantly. Professor Michael Bridge QC said that “fraud will always find a way. Computers can be hacked. Imaginary shipments can be concocted out of thin air”. Relatedly, HSBC noted that “fraudsters are very good at innovation”. The IMB, whose main role is to “protect the integrity of international trade by seeking out fraud and malpractice”, said that fraud would not decrease. They emphasised that, in many instances of fraud, the medium of the document would not make a difference, such as in situations where seemingly bona fide transacting parties collude to defraud financiers. The IMB urged against complacency and too much trust being put in electronic alternatives to paper documents.

Transparency

- 10.25 Most consultees said that the shift to electronic trade documents would increase supply chain transparency. Robert Parson described such enhanced transparency as “an inevitable progression”, and China Systems said that electronic trade documents will “facilitate data inheritance from the start of a trade transaction throughout the entire lifecycle”.⁶⁸³ However, others considered that the shift to electronic trade documents would not increase transparency. WAVE BL said that parties across the supply chain do not wish to expose their data to third parties. The IISTL said that increased transparency would happen only if document systems were open to public or governmental scrutiny.
- 10.26 In light of these responses, it is important to clarify that we did not envisage absolute transparency of the supply chain. We had in mind the potential of electronic trade document systems to enhance supply chain transparency amongst specific and intended parties.

⁶⁸² WAVE BL, the Centre for Commercial Law at the University of Aberdeen, Vale International, British Insurance Law Association, China Systems, Enigio Time AB, Professor Djakhongir Saidov, Minerva Global, the London Maritime Arbitrators Association, Legal Innovation Ltd, Rio Tinto Commercial and the IISTL.

⁶⁸³ See also: Digital Container Shipping Association (“DCSA”), *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 5, https://go.dcsa.org/ebook-ebi/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-ebi. According to DCSA, currently only 2% of containers are physically inspected by customs. They suggest that if customs officials had the relevant data in digital format from end to end, they could better spot inconsistencies in shipping documentation from origin to destination, and target their checks for potential crimes involving the trafficking of guns, narcotics, illegal wildlife and timber.

10.27 Some consultees said that the extent to which electronic trade documents would increase supply chain transparency depends on the systems used and the nature of the transaction.⁶⁸⁴

Environmental benefits

Our position in the consultation paper

10.28 In the consultation paper, we identified significant direct and indirect environmental benefits arising out of the shift to electronic trade documents. We said that a direct benefit was the reduction of the estimated 28.5 billion paper trade documents currently used each year. An indirect benefit was the potential to eliminate food wastage, which in 2020 was estimated to be in the region of 30% a year, due to logistical failures that could be addressed using information technology.⁶⁸⁵ We asked consultees whether there would be environmental benefits from a transition to electronic trade documents.⁶⁸⁶

Consultees' views

10.29 Some consultees, such as DCSA, China Systems, Vale International SA and Enigio Time AB, said that the transition would mean reduced reliance on paper and couriers which would benefit the environment.⁶⁸⁷ The LMAA and HSBC agreed that reduced reliance on paper and couriers would benefit the environment, but considered that it is not clear that the transition to electronic trade documents would create environmental benefits overall. Some consultees, including Phillips 66 Ltd, Bolero International Ltd, WAVE BL and Matthew Wright from the UK Chamber of Shipping (who responded in a personal capacity), considered that the environmental benefits of reduced paper and couriers could be cancelled out by the power consumption of technology systems.

Benefits for small and medium-sized enterprises and consumers

Our position in the consultation paper

10.30 In the consultation paper, we observed that the efficiency and decreased costs associated with the transition to electronic trade documents were likely to lead to some particular benefits to small and medium-sized enterprises ("SMEs") as well as to consumers. We also said that it was possible that port operators, shippers, and exporter/importers would retain those benefits in the form of increased profits.⁶⁸⁸ We

⁶⁸⁴ Minerva Global Ltd, Matthew Wright from the UK Chamber of Shipping (who responded in a personal capacity), the City of London Law Society and HSBC.

⁶⁸⁵ A Koh and H Lee, "Stop Food Rotting on Ships and You'll Cut Carbon Pollution Too" (27 October 2020), <https://www.bloomberg.com/news/articles/2020-10-27/stop-food-rotting-on-ships-and-you-ll-cut-carbon-pollution-too>.

⁶⁸⁶ Consultation question 51, para 7.61.

⁶⁸⁷ See also: Digital Container Shipping Association ("DCSA"), *Streamlining international trade by digitalising end-to-end documentation* (February 2022) p 3, https://go.dcsa.org/ebook-ebi/?utm_source=dcsa&utm_medium=display&utm_campaign=ebook-ebi. DCSA has noted that the emissions savings from fully digitalising regulatory procedures around trade could save between 32 and 86 kg of carbon-dioxide equivalents per end-to-end transaction.

⁶⁸⁸ Consultation paper, para 7.62.

asked consultees what impact they foresaw the transition to electronic trade documents having on end-users.⁶⁸⁹

Consultees' views

10.31 Consultees, including Enigio Time AB, WAVE BL and HSBC, foresaw reduced delay in goods being released to the buyer as a result of late or lost documentation. Some consultees, including Legal Innovation Ltd and the Centre for Commercial Law at the University of Aberdeen said that there would be reduced costs of trade financing for SMEs and smaller financial institutions, and associated price improvements for consumers. Robert Parson identified “the most obvious benefit” as “the cost of financing and end price relationship”. He said that “if speed of document flow improves the shipment to payment delay by just one day, then there should be a consumer benefit”. However, some consultees, including the LMAA, observed that this potential positive impact on end-users would depend on whether supply chain parties passed on the benefits.

Other potential benefits

10.32 Minerva Global Ltd and Legal Innovation Ltd both considered that our provisional proposals had the potential to increase the UK’s competitiveness. Minerva Global Ltd said that “proper regulation can give UK an incentive to adopt them, which can somewhat contribute to a more competitive UK trading sector”.

10.33 D2 Legal Technology and the Centre for Commercial Law at the University of Aberdeen suggested that our provisional proposals could build trust in international trade. They also thought they could increase resilience through the use of DLT, increase the accuracy of information contained in trade documents, and make the storage and retrieval of documents easier.

POTENTIAL COSTS

Transition costs

Our position in the consultation paper

10.34 In the consultation paper, we observed that perhaps the most immediate detrimental effect of the adoption of our provisional proposals would be the costs of transition in global networks of commerce from paper-based documentation to electronic documentation. These costs could result from the need to train staff on new systems, develop and refine new internal processes for dealing with documentation, and spend time negotiating with trading partners.⁶⁹⁰ We asked consultees whether they anticipated that transition costs would be a brake on the uptake of electronic trade documents.⁶⁹¹

Consultees' views

10.35 Consultees, including the IISTL, Matthew Wright from the UK Chamber of Shipping (who responded in a personal capacity) and DCSA, said that costs could be a brake

⁶⁸⁹ Consultation question 52, para 7.65.

⁶⁹⁰ Consultation paper, para 7.68.

⁶⁹¹ Consultation question 54, para 7.72.

on the adoption of electronic trade documents. Bolero International Ltd noted that often transition will be partial, and this could lead to dual operational systems for users. Phillips 66 Ltd said that, in their experience, there is a short-term increase in costs and/or decrease in efficiency when two systems run in parallel.

10.36 Some consultees said that transition costs would be outweighed by the savings and commercial advantages of electronic documents. Enigio Time AB said that “transition cost will be minimal and greatly outweighed by the quickly obtainable cost savings for all parties”. Similarly, China Systems said that costs would go down and initial investment would be recovered quite quickly. Other consultees, including the LMAA, Legal Innovation Ltd and Alan Cooper Cabinetmaker Ltd, did not think that transition costs were a significant factor affecting the uptake of electronic trade documents. Vale International SA observed that electronic documents were already in significant demand, and that this demand was on the rise. Robert Parson said the legal blocker was the biggest brake on the uptake of electronic trade documents.

Technological and market risks

Our position in the consultation paper

10.37 In the consultation paper, we observed that one source of friction associated with the adoption of paperless trade might be a lack of interoperability between different platforms, and that this will ultimately be a matter for alignment in the private sector.⁶⁹² We asked consultees for their views as to the factors that may affect the willingness of financiers of trade transactions to adopt electronic trade documents.⁶⁹³

Consultees’ views

10.38 Consultees, including the IISTL, the City of London Law Society, the LMAA and Rio Tinto Commercial, said that a lack of recognition of rights and obligations arising from the use of electronic documents could deter financiers. Other consultees placed emphasis on the importance of standardisation as a factor that could affect the willingness of financiers to adopt electronic trade documents. HSBC said that financiers would only adopt electronic trade documents if there were a “global legal consistency” that would enable them to “rely and enforce” such documents in the relevant jurisdictions.

10.39 Other consultees noted that trade financiers are cautious and risk averse. Minerva Global Ltd said that banks are currently assessing the risks of using electronic trade document solutions and the uptake will be slow. Vale International SA noted that trade financiers are currently resistant to embracing electronic trade documents because adapting involves investment in a process that is still not widely adopted.

10.40 Robert Parson identified cost, security and environmental efficiencies as factors that could influence the willingness of financiers of trade transactions to adopt electronic trade documents.

⁶⁹² Consultation paper, paras 7.73 and 7.76.

⁶⁹³ Consultation question 55, para 7.78.

Environmental and climate change impact

Our position in the consultation paper

10.41 In the consultation paper, we said that the energy consumption of some DLT platforms continues to be a source of concern. The power required by network users employing computational capacity to verify the transactions added to the blockchain is the main source of the problem. At a time of increasing global efforts to combat climate change, the scaling up of a highly energy intensive technology must be carefully evaluated.⁶⁹⁴

10.42 We asked consultees to estimate the average energy consumption for each transaction for proposed electronic trade document platforms. We also asked them how the energy consumption of DLT can be minimised.⁶⁹⁵

Consultees' views

10.43 Consultees gave no specific estimate of the average energy consumption for each transaction. Enigio Time AB noted that autonomous DLT solutions storing large amounts of data are using large amounts of energy. However, Minerva Global Ltd said that the energy consumption was “orders of magnitude smaller than the paper equivalent”. The Centre for Commercial Law at the University of Aberdeen pointed out that not all DLT systems involve the same energy consumption. They said that “Bitcoin’s energy consumption is not the appropriate variable for an analysis for the energy consumption of electronic/digital systems for electronic trade documents”.

10.44 IGP&I and Legal Innovation Ltd said that energy consumption of DLT could be minimised by industry participants opting for systems that do not use DLT technology. Other consultees said that DLT systems could be configured to use less energy. For example, Rio Tinto Commercial said that:

one can adopt a consensus algorithm that doesn’t rely on a party wishing to validate transactions being the first to provide the answer to a calculation designed merely to take up the processing time.

WAVE BL suggested that energy consumption of DLT could be minimised “by using a blockchain based on proof of Stake mining”.

⁶⁹⁴ Consultation paper, para 7.79.

⁶⁹⁵ Consultation questions 56 and 57, paras 7.84 and 7.85.

Chapter 11: Recommendations

Recommendation 1.

- 11.1 Trade documents in electronic form should be capable of being possessed as a matter of law, provided that they meet certain criteria which ensures that they can replicate the salient features of paper trade documents.

Paragraph 2.78

Recommendation 2.

- 11.2 There should be legislative reform to allow for trade documents in electronic form that satisfy certain criteria to be possessed and therefore to have the same legal effects as their paper equivalents.

Paragraph 2.89

Recommendation 3.

- 11.3 Subject to certain explicit exclusions, legislation should make provision to allow for electronic forms of trade documents, possession of which is required as a matter of law or commercial practice for a person to claim performance of the relevant obligation, to be treated in law as equivalent to their paper counterparts.

Paragraph 4.46

Recommendation 4.

11.4 Legislation should specifically allow for the following documents to be used in electronic form, provided that possession is required as a matter of law or commercial practice for a person to claim performance of an obligation:

- (1) bills of exchange;
- (2) promissory notes;
- (3) bills of lading;
- (4) ship's delivery orders;
- (5) warehouse receipts;
- (6) mate's receipts;
- (7) marine insurance policies; and
- (8) cargo insurance certificates.

Paragraph 4.47

Recommendation 5.

11.5 Instruments entered in a "relevant system" under the Uncertificated Securities Regulations 2001 should be excluded from the scope of legislation allowing for trade documents in electronic form.

Paragraph 4.60

Recommendation 6.

11.6 Bearer bonds should be excluded from the scope of legislation allowing for trade documents in electronic form.

Paragraph 4.69

Recommendation 7.

11.7 Legislation should contain a power to make secondary legislation, subject to the affirmative procedure, to add to, remove from, or otherwise amend the list of documents which are excluded from the scope of the Bill.

Paragraph 4.74

Recommendation 8.

11.8 In order to qualify as an electronic trade document, a document in electronic form must contain the same information as would be required to be contained in the paper equivalent.

Paragraph 6.16

Recommendation 9.

11.9 Where a trade document in electronic form comprises separate, but linked elements – a data structure consisting of functional code, and a human readable part of the document which contains or specifies certain rights – these elements together should comprise “the document”.

Paragraph 6.23

Recommendation 10.

11.10 In order to qualify as an electronic trade document, a reliable system must be used to ensure that the document contains certain functionality designed to replicate the salient features of a paper trade document.

Legislation should include a non-exhaustive list of factors which may be taken into account when considering whether a system is reliable, being:

- (1) any rules of the system that apply to its operation;
- (2) any measures taken to secure the integrity of information held on the system;
- (3) any measures taken to prevent unauthorised access to and use of the system;
- (4) the security of the hardware and software used by the system;
- (5) the regularity of and extent of any audit of the system by an independent body;
- (6) any assessment of the reliability of the system made by a body with supervisory or regulatory functions;
- (7) the provisions of any voluntary scheme or industry standard that apply in relation to the system.

Paragraph 6.50

Recommendation 11.

11.11 In order to qualify as an electronic trade document, a document in electronic form must be protected against unauthorised interference or alteration.

Paragraph 6.61

Recommendation 12.

11.12 For the purposes of the gateway criteria, a person should be taken to exercise control of a trade document in electronic form when the person uses, transfers or otherwise disposes of the document (regardless of whether they have the legal right to do so).

Paragraph 6.90

Recommendation 13.

11.13 “Use” of a trade document in electronic form should comprise utilising or retaining the document to achieve a particular purpose. It should include causing something to happen (or preventing something from happening) to the document, but exclude merely reading or viewing the document.

Paragraph 6.91

Recommendation 14.

11.14 In order to qualify as an electronic trade document, a trade document in electronic form must be susceptible to exclusive control; that is, only one person (or persons acting jointly) must be able to exercise control of a document in electronic form at any one time.

Paragraph 6.107

Recommendation 15.

11.15 In order to qualify as an electronic trade document, a trade document in electronic form must be divestible; that is, after the document is transferred, any person who before the transfer was able to exercise control of the document is no longer able to do so (except to the extent that a person is able to exercise control by virtue of being a transferee).

Paragraph 6.125

Recommendation 16.

11.16 In order to qualify as an electronic trade document, a document in electronic form must be identifiable as “the document” so that it can be distinguished from any copies.

Paragraph 6.152

Recommendation 17.

11.17 In order to qualify as an electronic trade document, the trade document in electronic form must be capable of being uniquely associated with the person or persons able to exercise control of it.

Paragraph 6.157

Recommendation 18.

11.18 Intention should be an element of possession in the context of electronic trade documents in the same way that it is for paper trade documents, but it need not be referenced expressly in legislation.

Paragraph 7.38

Recommendation 19.

11.19 Once electronic trade documents are regarded by the law as possessable as a matter of fact, all other possessory interests, such as constructive possession, should also apply to them.

Paragraph 7.43

Recommendation 20.

11.20 Legislation should provide expressly that an electronic document is capable of being possessed.

Paragraph 7.46

Recommendation 21.

11.21 An electronic trade document should be treated in law as equivalent to a paper trade document, and anything that can be done to a paper trade document should have the same effect if done to an electronic trade document.

Paragraph 8.7

Recommendation 22.

11.22 Legislation should provide that an electronic trade document is capable of being indorsed.

Paragraph 9.33

Recommendation 23.

11.23 Legislation should provide expressly that:

(1) A trade document may be converted from electronic to paper form and from paper to electronic form, provided that a statement is included in the document in its new form to the effect that it has been converted, and any contractual or other requirements relating to conversion of the document are complied with.

(2) Where a document is converted, the document in its old form should cease to have effect, and all rights and liabilities relating to the document should continue to have effect in relation to the document in its new form.

Paragraph 9.70

Recommendation 24.

11.24 Documents issued before the day on which the Electronic Trade Documents Act comes into force should not be capable of being electronic trade documents within the meaning of that legislation.

Paragraph 9.91

Recommendation 25.

11.25 We recommend that the change of medium provisions in the Bill should not apply to a paper trade document issued before the Act comes into force.

Paragraph 9.100

Recommendation 26.

11.26 The existing provisions on electronic presentment of instruments in the Bills of Exchange Act 1882 should not apply to electronic trade documents within the meaning of the Bill.

Paragraph 9.104

Recommendation 27.

11.27 Sections 1(5) and 1(6) of the Carriage of Goods by Sea Act 1992 should be repealed.

Paragraph 9.110

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.⁶⁹⁶
 - (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.⁶⁹⁷ 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?

⁶⁹⁶ 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.

⁶⁹⁷ 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

The following bodies and individuals responded to our consultation, which ran from 30 April to 30 July 2021.

ACADEMICS

Professor Michael Bridge QC, London School of Economics and National University of Singapore

Dr Simone Lamont-Black, University of Edinburgh

Dr Michael Crawford, University of New South Wales

Associate Professor Tatiana Cutts, University of Melbourne

Professor David Fox, University of Edinburgh

Dr David Gibbs-Kneller, University of East Anglia

Professor Sir Roy Goode QC FBA, University of Oxford

Professor Louise Gullifer, University of Cambridge

Professor Peter Mirfield, University of Oxford

Professor Sir Bernard Rix, Queen Mary University of London

Associate Professor Luke Rostill, University of Oxford

Professor Djakhongir Saidov, King's College London

Professor Duncan Sheehan, University of Leeds

Professor Andrew Steven, University of Edinburgh

Professor John Taylor, Queen Mary University of London

Professor Christian Twigg-Flesner, University of Warwick

Dr Jenny Jingbo Zhang, University of Southampton

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BUSINESSES AND FINANCIAL INSTITUTIONS

Alan Cooper Cabinetmaker Ltd

Bolero International Ltd

China Systems

D2 Legal Technology

DocuSign

Enigio Time AB

HSBC

Legal Innovation Ltd

Minerva Global Ltd

Phillips 66 Ltd

Rio Tinto Commercial

Vale International SA

Vitol Services Ltd

WAVE BL

LAW FIRMS

Linklaters LLP

Norton Rose Fulbright

Sullivan & Worcester LLP

GROUPS AND ASSOCIATIONS

British Insurance Law Association

The Centre for Commercial Law, University of Aberdeen

The City of London Law Society

The Digital Container Shipping Association

The Grain and Feed Trade Association

International Capital Market Association

International Capital Market Services Association

International Group of Protection & Indemnity Clubs

International Maritime Bureau, International Chamber of Commerce

Institute of International Shipping and Trade Law, Swansea University

The Law Society of England and Wales

The Law Society of Scotland

London Maritime Arbitrators Association

London Metal Exchange

Mining and Metals Digitalization Forum

INDIVIDUALS

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Kate⁶⁹⁸

Nicholas Bohm

Richard Gwynne, Stephenson Harwood LLP

Robert Parson, Squire Patton Boggs

Matthew Wright, UK Chamber of Shipping

The Law Commission met or otherwise corresponded with the following people and organisations in relation to this project.

JUDICIARY

Lady Justice Carr

Lord Justice Males

Mrs Justice Cockerill

Mr Justice Foxton

Mr Justice Fraser

GOVERNMENTAL BODIES

Bank of England

DCMS

HMRC National Trade Facilitation Committee

HMRC

⁶⁹⁸ This individual did not give a surname in their consultation response.

ACADEMICS

Professor Roger Brownsword, King's College London

Dr Sean Thomas, University of York

Dr Johannes Ungerer, University of Oxford

BUSINESSES AND FINANCIAL INSTITUTIONS

American International Group, Inc.

Barclays

Bolero International Ltd

Casterman Advisory

Enigio Time AB

essDOCS

eTEU Technologies Ltd

Glencore

Global Share SA

HSBC

IBM

Levantor

Lloyds of London

Natwest

Shell

SMBC

Standard Chartered Bank

TradeIX

WAVE BL

LAW FIRMS

Ashurst

Clyde & Co LLP

Gowling WLG

HFW

Morgan Lewis

GROUPS AND ASSOCIATIONS

Bankers Association for Finance and Trade

International Chamber of Commerce

International Trade Forfaiting Association / Casterman Advisory / SMBC

Global Shippers Forum

International Chamber of Commerce, International Maritime Bureau

International Capital Market Services Association

International Group of Protection and Indemnity Clubs

London Metal Exchange

Mining and Metals Digitalization Forum

Society for Computers and Law

SWIFT

The Commonwealth Secretariat

UCC Working Group

UK Chamber of Shipping

UNCITRAL

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Michael Howard QC, Quadrant Chambers

Sarra Kay, London Maritime Arbitrators Association

Andrew Ng, 36 Stone

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Appendix 3: A summary of distributed ledger technology

OVERVIEW

What is DLT?

- 1.14 A distributed ledger is a digital store of information or data. It is shared (that is, “distributed”) amongst a network of computers (known as “nodes”) and may be available to other participants. DLT is technology that enables the operation and use of a distributed ledger. The distinguishing feature of DLT compared to traditional, centralised databases is that the ledger is not maintained or controlled by a central administrator or entity.
- 1.15 Instead, in DLT systems, participants approve and eventually synchronise additions to the ledger through an agreed “consensus mechanism”. The consensus mechanism is set by the software underlying a DLT system.⁶⁹⁹ In general, it requires some or all of the nodes to determine the validity of a proposed data entry.⁷⁰⁰ If the participants determine that the proposed entry is valid, it is eventually added to the ledger. The consensus mechanism is typically designed so that, once data is added to the ledger, the data is very difficult to amend.⁷⁰¹ The data is said to be “immutable”.
- 1.16 For example, the Bitcoin network uses a consensus mechanism based on “proof of work”.⁷⁰² In this DLT system, a “block” of bitcoin transactions can only be added to the distributed ledger when a participant finds a solution to a mathematical problem. Broadly, this problem requires the participants to generate a number that falls within set parameters for the proposed block based on the preceding block of data (via a process called “hashing”). The process of finding a solution is known as “mining” and

⁶⁹⁹ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 6, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷⁰⁰ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 6, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷⁰¹ The consensus mechanism may differ depending on whether the DLT system is “permissionless” or “permissioned”: see from para 1.19 of this appendix.

⁷⁰² Blockchain is 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. The Bitcoin blockchain is a blockchain which records transactions in the bitcoin cryptocurrency: see S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://www.usssc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf.

requires significant computational resources.⁷⁰³ When a solution is found and verified by the nodes, the block is added to the ledger.⁷⁰⁴

- 1.17 The consensus mechanism operates to, among other things, verify that all the data on the Bitcoin blockchain is and remains mathematically linked.⁷⁰⁵ Any alteration to the data of a given block would break the mathematical link between that block and all subsequent blocks on the ledger. Essentially, two competing versions of the ledger would arise: one chain containing the altered block and one containing the unaltered block.⁷⁰⁶ Importantly, the Bitcoin network protocol rules include a rule that the longest chain of mathematically linked blocks is the only “valid” record of transactions. As such, if a participant wanted to alter the data on the ledger and have this recognised by the network, they would have to resolve the mathematical problem for all subsequent blocks on the ledger. This would involve adding new blocks to the ledger faster than the rest of the participants could do (so that its chain of blocks was the longest). The computing power required to do this would be enormous, and beyond the capabilities of any single node.⁷⁰⁷
- 1.18 Once a bitcoin transaction is recorded on the ledger, it cannot, for practical purposes, be amended. 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.⁷⁰⁸

⁷⁰³ Participants are incentivised to engage in mining because they are rewarded with bitcoins upon generating a valid hash for a proposed block: S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 4, https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) pp 25 to 26.

⁷⁰⁴ The participants also check that the transacting participants have sufficient bitcoin in their accounts to engage in the proposed transactions: S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf.

⁷⁰⁵ S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) pp 1 to 3, https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf.

⁷⁰⁶ This is known as a “fork”.

⁷⁰⁷ S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 3, https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf; World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 18, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 25.

⁷⁰⁸ S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) pp 1 to 2 https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) p 26.

PERMISSIONED AND PERMISSIONLESS DLT SYSTEMS

- 1.19 DLT systems can be permissioned or permissionless, and private or public.⁷⁰⁹ We understand that the permissioned/permissionless distinction typically relates to the role of participants within the DLT system, whereas the private/public distinction typically refers to access to the system.⁷¹⁰ A permissioned DLT system is generally one in which authorisation to perform a particular activity on the DLT system is required.⁷¹¹ Not all participants may have the same rights within the system. Some participants may be granted permission to propose transactions, others to both propose and validate transactions, and some might only be allowed to view transactions on the ledger.⁷¹² In a permissioned structure, participation in the consensus mechanism may be limited to a subset of participants. The ledger can be updated upon the agreement of a specified majority of validator nodes.⁷¹³
- 1.20 Permissioned systems tend to be private,⁷¹⁴ meaning that the DLT system is only accessible for use by a limited group of participants.⁷¹⁵ Generally, there is a central administrator who admits participants to the network based on specific onboarding criteria, and who enforces the rules of the system.⁷¹⁶ However, in contrast to a centralised entity in a traditional ledger, the role of an administrator in a DLT system is somewhat more circumscribed.⁷¹⁷ As participants in a permissioned DLT system are

⁷⁰⁹ Some sources use the terms “private and permissioned” and “public and permissionless” interchangeably. See eg, P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) pp 31 to 32.

⁷¹⁰ World Bank, *Distributed Ledger Technology and Blockchain* (2017) pp 12 to 13, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>. See also T Schrepel, European Commission, *Smart Contracts and the Digital Single Market Through the Lens of a “Law + Technology” Approach* (September 2021) p 12 where a distinction is made between public and private, and permissionless and permissioned blockchains. Public blockchains are described as those where “anyone can see the information and use the system”; private blockchains are described as those where “only chosen users may see the information and use the blockchain”. In addition, permissioned blockchains are described as those where “only certain users may become validators”, whereas permissionless blockchains are said to be those where “anyone may become a validator”.

⁷¹¹ International Organisation for Standardisation, *Blockchain and distributed ledger technologies – vocabularies* (ISO 22739:2020), <https://www.iso.org/obp/ui/#iso:std:iso:22739:ed-1:v1:en>.

⁷¹² World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 13, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷¹³ Bank for International Settlements, *BIS Working Papers No 924, Permissioned distributed ledgers and the governance of money* (January 2021) p 2, <https://www.bis.org/publ/work924.pdf>.

⁷¹⁴ Although permissioned DLT systems tend to be private, they need not be. Ripple is said to be an example of a public DLT system with certain permissioning aspects. See World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 13, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷¹⁵ International Organisation for Standardisation, *Blockchain and distributed ledger technologies – vocabularies* (ISO 22739:2020), <https://www.iso.org/obp/ui/#iso:std:iso:22739:ed-1:v1:en>.

⁷¹⁶ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 16, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷¹⁷ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 16, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

typically pre-selected, known to one another, and trusted, these systems tend to employ a less rigorous consensus mechanism.⁷¹⁸ 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.⁷¹⁹

- 1.21 In a permissionless system, no such authorisation to perform activities on the DLT system is required. The ledger is maintained collectively by the network participants. Permissionless DLT systems tend to be public,⁷²⁰ meaning that the DLT system is accessible for use by the public. 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.⁷²¹

BENEFITS OF DLT COMPARED TO TRADITIONAL, CENTRALISED LEDGERS

- 1.22 DLT offers three potential advantages over a centralised ledger.⁷²²

- (1) *Security*: in a centralised ledger or database, 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.⁷²³ In contrast, in a decentralised ledger maintained by consensus, there is generally 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.
- (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

⁷¹⁸ Eg, 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.

⁷¹⁹ World Bank, *Distributed Ledger Technology and Blockchain* (2017) p 19 (referring to “Know-Your Customer” laws in Anti-Money Laundering/Combating the Financing of Terrorism regulations), <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

⁷²⁰ An example of a permissionless, public DLT system is the Bitcoin blockchain and Ethereum.

⁷²¹ Eg, the “proof of work” consensus mechanism described at para 1.16 of this appendix.

⁷²² See World Bank, *Distributed Ledger Technology and Blockchain* (2017) ch 5, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>; P de Filippi and A Wright, *Blockchain and the Law: The Rule of Code* (2018) ch 2.

⁷²³ S Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008) p 2 https://www.ussc.gov/sites/default/files/pdf/training/annual-national-training-seminar/2018/Emerging_Tech_Bitcoin_Crypto.pdf; World Bank, *Distributed Ledger Technology and Blockchain* (2017) pp 5 and 6, <https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=5>.

intended to update as data is verified and 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.

Appendix 4: Bill

Electronic Trade Documents Bill

CONTENTS

- 1 Definitions of “paper trade document” and “qualifying electronic document”
- 2 Definition of “electronic trade document”
- 3 Possession, indorsement and effect of electronic trade documents
- 4 Change of form
- 5 Documents and instruments to which sections 1 to 4 do not apply
- 6 Consequential provision
- 7 Extent, commencement and short title

A

B I L L

TO

Make provision about electronic trade documents; and for connected purposes

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 “paper trade document” and “qualifying electronic document”

- (1) A document is a “paper trade document” for the purposes of this Act if—
 - (a) it is in paper form, and
 - (b) possession of the document is required as a matter of law or commercial custom, usage or practice for a person to claim performance of an obligation. 5
- (2) The following are examples of documents that, if they fall within subsection (1), will be paper trade documents—
 - (a) a bill of exchange;
 - (b) a promissory note; 10
 - (c) a bill of lading;
 - (d) a ship’s delivery order;
 - (e) a warehouse receipt;
 - (f) a mate’s receipt;
 - (g) a marine insurance policy; 15
 - (h) a cargo insurance certificate.
- (3) Where information in electronic form is information that, if contained in a document in paper form, would lead to the document being a paper trade document, that information, together with any other information with which it is logically associated that is also in electronic form, constitutes a “qualifying electronic document” for the purposes of this Act. 20

2 Definition of “electronic trade document”

- (1) A qualifying electronic document is an “electronic trade document” for the purposes of this Act if a reliable system is used to—
 - (a) identify the document so that it can be distinguished from any copies,
 - (b) protect the document against unauthorised alteration, 5
 - (c) secure that it is not possible for more than one person to exercise control of the document at any one time,
 - (d) allow any person who is able to exercise control of the document to demonstrate that the person is able to do so, and
 - (e) secure that a transfer of the document has effect to deprive any person who was able to exercise control of the document immediately before the transfer of the ability to do so (except to the extent that the person is able to exercise control by virtue of being a transferee). 10
- (2) For the purposes of subsection (1)—
 - (a) a person exercises control of a document when the person uses, transfers or otherwise disposes of the document (whether or not the person has the legal right to do so), and 15
 - (b) persons acting jointly are to be treated as one person.
- (3) Reading or viewing a document is not, of itself, sufficient to amount to use of the document for the purposes of subsection (2)(a). 20
- (4) When determining whether a system is reliable for the purposes of subsection (1), the matters that may be taken into account include—
 - (a) any rules of the system that apply to its operation;
 - (b) any measures taken to secure the integrity of information held on the system; 25
 - (c) any measures taken to prevent unauthorised access to and use of the system;
 - (d) the security of the hardware and software used by the system;
 - (e) the regularity of and extent of any audit of the system by an independent body; 30
 - (f) any assessment of the reliability of the system made by a body with supervisory or regulatory functions;
 - (g) the provisions of any voluntary scheme or industry standard that apply in relation to the system.

3 Possession, indorsement and effect of electronic trade documents 35

- (1) A person may possess, indorse and part with possession of an electronic trade document.
- (2) An electronic trade document has the same effect as the equivalent paper trade document.
- (3) Anything done in relation to an electronic trade document that corresponds to anything that could be done in relation to the equivalent paper trade document has the same effect in relation to the electronic trade document as it would have in relation to the paper trade document. 40

4 Change of form

- (1) A paper trade document may be converted into an electronic trade document, and an electronic trade document may be converted into a paper trade document, if (and only if) –
 - (a) a statement that the document has been converted is included in the document in its new form, and 5
 - (b) any contractual or other requirements relating to the conversion of the document are complied with.
- (2) Where a document is converted in accordance with subsection (1) –
 - (a) the document in its old form ceases to have effect, and 10
 - (b) all rights and liabilities relating to the document continue to have effect in relation to the document in its new form.

5 Documents and instruments to which sections 1 to 4 do not apply

- (1) Sections 1 to 4 of this Act do not apply in relation to a document or instrument listed in subsection (2). 15
- (2) The list is as follows –
 - (a) a bearer bond;
 - (b) an uncertificated unit of a security that is transferable by means of a relevant system in accordance with the Uncertificated Securities Regulations 2001 (S.I. 2001/3755). 20
- (3) The Secretary of State may by regulations made by statutory instrument add, remove or amend an entry in the list in subsection (2).
- (4) Regulations under this section may make incidental, consequential, transitional or saving provision.
- (5) 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. 25

6 Consequential provision

- (1) 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 2022 (see section 2 of that Act).” 30
- (2) In section 1 of the Carriage of Goods by Sea Act 1992 (shipping documents etc), omit subsections (5) and (6).

7 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) This Act does not apply to a document issued before the day on which this Act comes into force. 40

- (4) This Act may be cited as the Electronic Trade Documents Act 2022.