

Response to the Law Commission of England and Wales Consultation on Digital Assets: Electronic Trade Documents (July 2021)

This response is provided by a working group of the Centre for Commercial Law at the University of Aberdeen. The working group consists of Dr Burcu Yüksel Ripley and Dr Alisdair MacPherson.

General Comments

We welcome this consultation and appreciate the opportunity provided to stakeholders to express views to assist with law reform proposals in this area. We note that the Centre for Commercial Law also responded to the Law Commission of England and Wales Call for Evidence on Digital Assets (see <https://www.abdn.ac.uk/law/research/public-policy-stakeholder-engagement-1109.php#panel1114>).

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.

In this respect, we emphasise the importance of law reform across the three jurisdictions of the UK and a level of uniformity to be achieved among them. As we also noted in our response to the Call for Evidence on Digital Assets, both consultations limit their scope to England and Wales. However, we consider that some of the law reform proposals in the consultations have a UK-wide impact and therefore would have a knock-on effect in the jurisdictions of the UK beyond England and Wales. Regarding Scotland, some of the acts being considered for reform in this consultation (eg the Bills of Exchange Act 1882 and the Carriage of Goods by Sea Act 1992) are applicable in Scotland. We therefore think that it would be very useful for the Law Commission for England and Wales to engage with the Scottish Law Commission and promote close cooperation in the scope of work under this consultation (as well as the consultation on digital assets).

Consultation Question 1. We invite consultees' views on the advantages and disadvantages associated with using private contractual frameworks to facilitate the use of electronic trade documents, compared with using electronic documents recognised in law as being equivalent to paper documents.

In terms of private contractual frameworks, we note that the need for contractual novation and attornment that the Consultation Paper points out is solved in the electronic/digital systems which expressly incorporate the Carriage of Goods by Sea Act 1992, eg eTitle. However, there are still some disadvantages in this kind of arrangement as private contractual frameworks are only binding on contractual parties. Legal risks still exist in relation to parties outside of the given system. There may also be a significant level of complexity involved in using contractual frameworks.

In addition, the contractual agreement between the parties regarding the use of electronic trade documents also needs to be explicit and free from doubt and ambiguities; otherwise, it may not be given effect by courts. We note *Glencore International v MSC Mediterranean Shipping*

Company [2017] EWCA Civ 365. In relation to an electronic release system (ERS) at Antwerp, whereby cargo delivery is against a PIN code issued upon the presentation of paper bills of lading (in this case subject to English law and jurisdiction), the English court required either appropriate contractual provision or statutory imposition for the ERS to be considered as the functional equivalent of delivery.

Furthermore, cross-border transactions raise further risks with the involvement of different legal systems and jurisdictions, and the limits of party autonomy and contractual freedom differ from one legal system to another. This would give rise to conflict of laws/private international law issues. Another issue that might arise in this context is legal (as well as technical) interoperability among the electronic/digital systems subject to different laws and standards. We therefore support the proposal of the Law Commission to take forward a separate project on private international law and emerging technologies as part of their 14th programme of law reform (see also our answer below to Question 38 on this matter).

We also see value in including a provision, similar to eg Article 4 of the MLETR, to the draft Bill which could clarify the relationship between private contractual frameworks and the draft Bill.

More generally, we believe that the law in this area should help to facilitate transactions as much as possible and meet the needs of business. If electronic documents are recognised in law as the equivalent of paper documents, parties will still have the opportunity to use private contractual frameworks if they prefer. Giving options to trading parties lets them decide what approach is more efficient and cost-effective. It is possible that some parties could utilise both.

Consultation Question 2. We provisionally propose that our reforms cover only the following categories of document: (1) bills of exchange; (2) promissory notes; (3) bills of lading; (4) ship's delivery orders; (5) warehouse receipts; (6) marine insurance policies; and (7) cargo insurance certificates. Do consultees agree? If not, we invite consultees to suggest categories of document that should be added to or removed from this list, and to explain why.

We would find it helpful to have more clarification on the rationale of the proposed approach of having an exhaustive list. For example, what is the value of an exhaustive list as opposed to an indicative list or a broader material scope of application with some defined exceptions? We also wonder to what extent the proposed approach would align with the least interventionist approach.

In addition, we note that facilitation of electronic trade documents, transferable or not, would be a very welcome development in international trade, particularly in trade finance for letter of credit transactions (on this point, see also our response below to Question 44).

Consultation Question 3. We provisionally propose that sea waybills and air waybills need not and should not be included. Do consultees agree?

We agree.

Consultation Question 4. We provisionally propose that bearer bonds and other documents of title including banker's drafts, certificates of deposit payable to bearer, bearer scrip certificates exchangeable for shares, mate's receipts, traveller's cheques, and dividend warrants need not and should not be included. Do consultees agree?

As we understand from the Consultation Paper, the justification for the exclusion of some of these documents, which have been or are likely to be recognised as documents of title, relates to the lack of demand for digitalisation. However, we wonder if their inclusion would help create demand and help facilitate paperless trade.

Consultation Question 5. We provisionally propose that the Secretary of State should have the power to add, remove, or amend an entry in the list of documents described in Consultation Question 1 by regulations made by statutory instrument. Do consultees agree?

We agree and also think that, in order to ensure legal certainty, it might be useful to specify the time from which that addition, removal or amendment will have an effect.

Consultation Question 6. We provisionally propose that the group of documents covered by our proposed reforms should be referred to as “trade documents” in the draft Bill. Do consultees agree? If not, what alternative label would consultees propose, and why?

We see value in using a broad term of “trade documents” in this context, but this term does not give much indication about the scope and purpose of the proposed reform and the draft Bill. The legal barrier that exists in this context and which is to be addressed by the proposed reform concerns transferability. We therefore think that it might be useful to include this element in the term and the title of the Bill in order to better identify the scope and purpose of the reform and the Bill, eg “transferable trade documents” and “Electronic Transferable Trade Documents Bill”.

Consultation Question 7. We provisionally propose that each individual trade document in the draft Bill need not and should not be defined. Do consultees agree? If not, please give reasons.

We agree.

Consultation Question 8. We provisionally propose to include ship’s delivery orders and warehouse receipts in our list of trade documents, without an express restriction to those that have been made out to order. Do consultees consider that this will cause problems? Please explain why.

We don’t think this will cause problems.

Consultation Question 9. We provisionally propose that bare legal rights should be excluded from the scope of our proposals for the possession of electronic trade documents. Do consultees agree?

Given the proposed exhaustive list in the draft Bill, we agree that this exclusion would be sensible. But, if an alternative approach would be adopted (see our answer above to Question 2), it might be useful to re-visit this exclusion.

Consultation Question 10. We provisionally propose that, in order for an electronic trade document to be capable of possession, the nature of the document must not support concurrent control by multiple parties at one time. Do consultees agree?

We agree and also think that access should be treated differently as multiple parties at one time may need to access a trade document.

Consultation Question 11. We provisionally propose that “control” should be defined as the ability (as a matter of fact) to: (1) use; and (2) transfer or otherwise dispose of an electronic trade document. Do consultees agree?

There are a few issues we would like to raise for consideration regarding the notion of control.

First, we are wary of giving a statutory definition of ‘control’ for the following reasons:

- 1) Is there a real need for ‘control’ to be defined in the Bill? (We note that the MLETR does not define ‘control’);
- 2) How would this align with technological neutrality?;
- 3) Do the proposed elements of ‘control’ align with the technical structure of the existing electronic/digital systems or those in development? For example, could one, from a technical point of view, ‘dispose’ of a document on blockchain given that one of the main advantages of blockchain is said to be immutability? What does ‘use’ of a document mean or entail in practical terms on electronic/digital systems?
- 4) The Consultation Paper, in defining the proposal, uses ‘exclusive control’ as one of the criteria to be met (eg paras 5.47, 5.71). However, the draft Bill uses the term ‘control’, not ‘exclusive control’. Therefore, there seems to be an inconsistency on this issue between the Consultation Paper and the draft Bill.

Second, the draft Bill, after defining in Section 1(4) when a person is deemed to have ‘control’ of a document, states in Section 2(1) that “the person who has control of an electronic trade document is the person who has possession of it for the purposes of any statutory provision or rule of law.”

- 1) 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?
- 2) What does ‘rule of law’ entail in practical terms within the scope of Section 2(1)?

Consultation Question 12. We provisionally propose that, in order for an electronic trade document to be capable of possession, “the system” on which the document is held must ensure that no more than one person can control the document at any one time. Do consultees agree?

We agree.

Consultation Question 13. We invite consultees’ views on whether there could be a situation in which multiple parties could have equal claim to “possession” of an electronic trade document in such a way that they would not be “one person” for the purposes of the law.

We think that if these multiple parties are acting in the same capacity (eg more than one person operating a single account on the electronic/digital system), they should not have an equal

separate claim to possession of an electronic trade document as they would still use one account irrespective of who operates that account.

If these multiple parties are acting in different capacities, they in principle should still not have equal claim to possession of an electronic trade document (whereas they might need access to the document which is to be treated differently than control – see our answer above to Question 10). We however think that a view from banking and insurance industries would be useful as to whether there might be situations which enable multiple parties to claim possession, for example in cases of a joint pledge in relation to a trade document involving more than one bank, or a trade document involving more than one insurer.

Consultation Question 14. We provisionally propose that, in order for an electronic document to be capable of possession, transfer of the document must transfer control of the document to the transferee, and the transferor must lose control of it as a consequence. Do consultees agree?

We agree as we understand this is for an electronic document to be capable of being possessed by reference to the transferring of control to the transferee in the case of a transfer of the document.

Consultation Question 15. We invite consultees' views on how existing systems, or those in development, ensure that the transferor of an electronic document can no longer control the document after it is transferred.

We are not in a position to give a view on this question.

Consultation Question 16. We invite consultees' views on whether the ability to retain a copy of an electronic trade document after transfer or other disposal of the electronic trade document could lead to problems in practice.

We think that provided that electronic/digital system users can only view the copy (without being allowed to edit it) in such circumstances, this should not lead to problems in practice.

Consultation Question 17. We invite consultees' views on whether the possessibility of electronic trade documents should depend on any other factors or criteria. If so, please explain the reasons for your additional criteria.

We have no suggestion for any other factors or criteria.

Consultation Question 18. We provisionally propose that: (1) the person who is able to control an electronic trade document is the person in possession of it; and (2) possession of an electronic trade document is transferred from one person to another when the transferee gains control of that electronic trade document. Do consultees agree? If not, please explain why not.

Regarding (1), we refer to our answer above to Question 11. It would be helpful to further clarify the relationship between 'possession' and 'control'. Are they 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?

Regarding (2), we refer to our answer above to Question 14, and think that the following condition needs to be added here: “and the transferor loses control of it as a consequence”. Therefore, we suggest (2) should read as follows: “(2) possession of an electronic trade document is transferred from one person to another when the transferee gains control of that electronic trade document and the transferor loses control of it as a consequence”.

Consultation Question 19. We provisionally propose that there is no need to make explicit in legislation that the requirement of intention to possess applies to electronic trade documents. Do consultees agree?

We agree.

Consultation Question 20. We invite consultees’ views on what circumstances there could be a debate about which of one or more parties is in possession of an electronic trade document held on a system of the type envisaged by our proposals. Paragraph 5.130

We think that there should not in principle be a debate as such, but a view from the banking and insurance industries would be useful as to whether there might be situations which enable multiple banks or insurance companies to claim possession of an electronic trade document (see our answer above to Question 13).

Consultation Question 21. We provisionally propose that electronic trade documents should not be subject to an explicit statutory requirement for integrity. Do consultees agree?

We don’t agree with this proposal. We think that integrity is an important element, and it would be useful to have an explicit statutory requirement for integrity for electronic documents. Although this requirement is only implicit for paper documents, we think that a comparison between paper and electronic documents is not directly applicable to the integrity requirement. It is because for paper documents integrity can be preserved in physical paper whereas for electronic documents, which are mainly data, an equivalent record mechanism may not always be available unless expressly required by the law.

Consultation Question 22. We provisionally propose not to impose an express statutory reliability requirement. Do consultees agree? Please give reasons. If consultees disagree: (1) When should a party be required to prove that their electronic document is reliable? (2) Do consultees think our proposals should include an accreditation process? If so, in what form?

We agree and also think that if a reliability requirement would be imposed, then an accreditation process should be put in place.

Consultation Question 23. We provisionally propose that there should be a statutory requirement that electronic trade documents must contain the same information as would be required to be contained in a paper equivalent. Do consultees agree?

We agree and think that this is also justified by the fact that electronic/digital systems allow switches between paper and electronic documents, which would work only if they contain the

same information. It is sensible to align the law for electronic trade documents with the law applicable to their paper equivalent as far as possible.

Consultation Question 24. We do not consider there to be a need to introduce an express statutory provision on writing in electronic trade documents, because the law already considers electronic displays to be capable of constituting “writing”. Do consultees agree? Please give reasons.

We don't agree with this proposal. We think that there might be interpretation issues as to what constitutes writing in electronic documents. An express provision on this requirement would be useful to ensure legal certainty and predictability. In addition, given that legislation based on this Bill is likely to be applied by foreign courts as well, in cases where the applicable law is the law of England and Wales, an express provision would also assist foreign courts in those cases too.

Consultation Question 25. We do not consider there to be a need to introduce an express statutory provision on signing electronic trade documents. Do consultees agree? Please give reasons.

We agree and also think that 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. Therefore, there is no need to introduce an express provision on signatures.

Consultation Question 26. We do not consider there to be a need to introduce an express statutory provision on the accessibility of information contained in electronic documents. Do consultees agree? Please give reasons.

We agree as this seems to us as more of a matter for electronic/digital systems to deal with.

Consultation Question 27. We provisionally propose that legislation should explicitly allow for indorsement of electronic documents. Do consultees agree? Please give reasons.

We agree. Since indorsement is the one main element which electronic documents cannot mimic paper documents, an explicit provision allowing for indorsement of electronic documents would be needed to ensure legal certainty on this matter.

Consultation Question 28. We seek consultees' views on whether there is any need for electronic trade documents to be capable of being issued in sets.

We don't think that there is any need for electronic trade documents to be capable of being issued in sets. The need for a set of the same document arises in practice due to the heavy reliance on paper and we think that accessibility to electronic documents on electronic/digital systems would remove this need for electronic documents.

Consultation Question 29. We provisionally propose that no further provision is required in legislation to address the following in respect of electronic trade documents: (1) timing of delivery; (2) timing of transfer; (3) rejection; and (4) amendment. Do consultees agree?

Regarding (1) and (2), we don't agree with the proposal. 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.

Regarding (3) and (4), we agree with the proposal.

Consultation Question 30. We seek consultees' views on how amendment or rectification of an electronic trade document is achieved under existing systems and those in development.

We are not in a position to answer this question.

Consultation Question 31. We seek consultees' views on whether the phrase "so far as practicable" should be included in clause 2(2)(c). If yes, please give examples where such a qualification would be required.

This phrase might be perhaps useful for unforeseen circumstances, but we cannot think of any example as such. We are also concerned that the inclusion of this phrase to the provision might lead to further disputes and interpretation issues as to, for example, what is practicable or not in a given case.

Consultation Question 32. We seek consultees' views on what security interests are typically taken over trade documents at the moment.

We have no examples in response to this question other than the examples already given in the Consultation Paper.

We note, however, that Scots law differs from English law in this area. Depending on the type of asset(s) in question, pledge or assignation in security can be used under Scots law and floating charges can be used for all types of asset.

Consultation Question 33. We provisionally propose that an electronic trade document should be capable of being the subject of possessory concepts including bailment, conversion, pledges, and liens, and that this should be provided for in legislation. Do consultees agree?

We agree with the proposal and also think that it seems appropriate to specify this in section 2 of the draft Bill as it is not entirely clear in the reading of it.

We note, however, that there are differences between Scots law and English law in this area.

Consultation Question 34. We provisionally propose that existing rules and practices can accommodate the discharge, surrender or accomplishment of electronic trade documents, and that no specific legislative provision is needed. Do consultees agree?

We agree as this seems to us as more of a matter for electronic/digital systems to deal with.

Consultation Question 35. We provisionally propose that provision should be made to allow for a change of medium for trade documents from electronic to paper, or from paper to electronic. Do consultees agree?

We agree as this is inevitable particularly for cross-border transactions and technology is not at the same level everywhere.

However, we wonder whether the terms ‘original document’, ‘replacement document’, and ‘replaced’ are the correct terms to use in this context since, in the case of a change of medium, only the format of the document is changed not the document itself. In other words, there is still one document, but in different formats. Instead of those terms, perhaps the following terms could be used respectively: ‘document in the old format’, ‘document in the new format’, and ‘converted’ or ‘transformed’.

Consultation Question 36. We seek consultees’ views on whether the draft Bill should contain a requirement that the issuer of a trade document must allow the person in possession to change the document’s medium.

We think that this is more of a matter for electronic/digital systems to deal with and users can choose the system that they think would work best for them based on system peculiarities.

Consultation Question 37. We seek consultees’ views on whether the electronic trade documents that satisfy the requirements of our draft Bill will also satisfy the requirements of the MLETR. To the extent that consultees consider our provisional proposals to be incompatible with the MLETR or other international approaches, please explain this and the consequences to which it could give rise.

Broadly speaking, the proposal and the MLETR seem to be compatible to a considerable extent. We don’t think that differences between the two instruments would cause any great difficulty as the MLETR, as a model law (not convention), serves mainly as guidance for national legislators. However, we have noted above some of the differences between the two instruments for consideration (see our responses to Questions 1, 11 and 18).

Consultation Question 38. We provisionally propose that the Law Commission should consider the private international law aspects of digital assets, including electronic trade documents, as part of a separate project. Do consultees agree?

We agree that it would be better for the Law Commission to consider private international law aspects as a separate project, so that it will not hold up this project for which there is a pressing need for law reform and it will also allow the Law Commission to be able to consider properly the challenging private international law questions that digital assets (including electronic trade documents) give rise to.

As we also noted in our response to the Law Commission of England and Wales Call for Evidence on Digital Assets, the Hague Conference on Private International Law (HCCH) is

working on private international law implications of the digital economy, including DLT and its applications including digital assets. The mandate for the work is to monitor developments with a view towards identifying topics for further study (see <https://assets.hcch.net/docs/f787749d-9512-4a9e-ad4a-cbc585bddd2e.pdf> and <https://assets.hcch.net/docs/8bdc7071-c324-4660-96bc-86efba6214f2.pdf>). As a HCCH member, the UK's cooperation and coordination with the HCCH regarding conflict of laws/private international law issues in this area is important for law reform particularly given the proposal of the Law Commission to take forward a separate project on private international law and emerging technologies as part of their 14th programme of law reform (see also our answer above to Question 1 on this matter).

Consultation Question 39. We provisionally propose that the word “issue” describes the process by which a trade document (where relevant) becomes a document of title. Do consultees agree?

We agree as this seems to be in line with the jargon in use in the area.

Consultation Question 40. We provisionally propose that the change of medium of a trade document issued before the Act comes into force should not be permitted. Do consultees agree?

Although we see the value in the argument of promoting certainty and clarity in this kind of case, we think that this reform is an improvement to the current law and should be facilitated if the parties agree.

Consultation Question 41. We provisionally propose that our proposals do not create any additional risk that documents which are not intended to be documentary intangibles will become so by virtue of the draft Bill. Do consultees agree?

We agree as we think that the proposals do not attempt to change the nature of a document, but rather they introduce the possibility of having an electronic format of it functionally equivalent to its paper format.

Consultation Question 42. We seek consultees' views on what, in their experience, is the average number of paper documents required in a single trade transaction, compared to our current assumption of 40.

We are not in a position to give a view on this question.

Consultation Question 43. We seek consultees' views on whether our estimate of the global total number of paper trade documents used in container shipping is accurate.

We are not in a position to give a view on the accuracy of this estimate.

Consultation Question 44. We seek consultees' views on whether the average number of documents required in a trade transaction varies between sectors. If so, please give details.

We think that the average number of documents required in a trade transaction probably varies between sectors and also within the sectors.

For example, if one considers trade finance and in particular letter of credit transactions, they include a lot of paperwork as various documents relating to the different phases of trade transactions are usually required for letters of credit (such as certificate of origin; export licence and any documents associated with the export licence: certificates of quality, analysis and inspection; invoices, bill of lading or other transport documents depending on the mode of transport, and insurance documents, marine insurance policy or other type insurance policy depending on the mode of transport). Examination of these documents may take days depending on the complexities of the letter of credit and the number of documents to be examined. For example, in the case of *Bankers Trust Co v State Bank of India* [1991] 2 Lloyd's Law Report 443, there were 967 pages of documentation to examine, and it took 3 days for the first examination of documents from their submission. Under Article 14(b) of the Uniform Customs and Practice for Documentary Credits (UCP) 600, adopted by the International Chamber of Commerce (ICC), banks have a maximum of 5 banking days for examination of documents following the day of presentation of documents.

Consultation Question 45. We seek consultees' views, if they are able to give an estimate, on the percentage of trade and shipping documentation which is under the law of England and Wales.

We are not in a position to give an estimate on this question; however, maritime trade in particular is an area which is predominantly governed by the law of England and Wales via choice of English law clauses.

Consultation Question 46. We seek consultees' views on how quickly the industry would move to electronic trade documents if these provisional proposals came into force in 2022. If possible, we request that consultees say what percentage of documentation might be issued and used in electronic form: (1) by 2030; and (2) by 2050.

We are not in a position to give an estimate on this question; however, we think that COVID-19 disruptions to international trade will speed up this transition.

Consultation Question 47. We seek consultees' views on how much money, or what percentage of the cost of a transaction, do consultees estimate could be saved per transaction by transitioning to electronic documents.

We are not in a position to give an estimate on this question.

Consultation Question 48. We seek consultees' views on the efficiency gains of a transition to electronic trade documents. Please provide evidence or data if possible.

In the context of bills of lading, the efficiency gains to a transition to electronic bills of lading could be significant. Some of the disadvantages of the paper bill of lading, which requires physical delivery, are low speed, delay and as a result cost. 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. If the goods in question

are perishable, the delay may lead to loss of goods. The most common solution for this problem is letter of indemnity, but this adds extra costs and administration, and it does not remove the carrier's liability under the bill of lading for claims for mis-delivery of cargo. In some sectors, such as the oil trade, this practice is common.

Consultation Question 49. We provisionally propose that electronic trade documents will reduce the risk of fraud compared to paper trade documents. Do consultees agree?

We in principle agree, but there are also other factors to be considered in this context. For example, there is no doubt that paper bills of lading are very vulnerable to fraud (eg they can be forged by adjusting details, or by switching). This is less an issue with electronic bills of lading, because they are not in a physical form and therefore not being transferred from hand to hand. They can remain securely in electronic/digital systems due to strong security and encryption mechanisms in place in these systems. From this perspective, electronic trade documents will reduce the risk of fraud compared to paper trade documents depending on the level of security and encryption mechanisms in place in a given electronic/digital system.

On the other hand, electronic/digital systems inherit a risk of cybersecurity attacks or hacking which can be considered as a new form of fraud for electronic trade documents. Arguably, this fraud risk for electronic documents could be higher than the fraud risk for paper documents given the size and number of transactions that could be accessed in electronic/digital systems. For example, essDOCS provides insurance that covers all electronic bill of lading users against electronic risks up to US\$20 million per electronic bill of lading, which might give an indication about the potential risk and liability that one might be exposed to in electronic/digital systems.

Consultation Question 50. We provisionally propose that electronic trade documents will enhance the transparency of supply chains. Do consultees agree? Please provide examples or evidence if possible.

We agree and can give an example in the context of illegal wildlife trade, which by analogy could be applied more broadly.

Illegal wildlife trade is a pressing issue at the global level with proceeds estimated to be worth up to \$23 billion a year, making it the world's fourth most lucrative trafficking industry (after drug, human and weapon trafficking) with high demand driving high prices (see <https://www.zsl.org/conservation/how-we-work/illegal-wildlife-trade-crisis/illegal-wildlife-trade-impacts>). It is also often linked with adverse business practices such as corruption (<https://www.oecd-ilibrary.org/sites/9bac2383-en/index.html?itemId=/content/component/9bac2383-en>). There are international legal frameworks (notably the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and other legal means to enhance the effectiveness of the CITES such as free trade agreements) and domestic legal frameworks in place to regulate wildlife trade. However, they are not as effective as they should be. There are practical challenges due to the low level of detection of illegal wildlife trade, the involvement of transnational organised crime groups and corruption in supply chains and the increased use of cyberspace for trade. The UK Government has been working on pioneering digital technologies to tackle this global challenge (<https://www.gov.uk/government/news/digital-revolution-to-use-the-power-of-data-to-combat-illegal-wildlife-trade-and-reduce-food-waste>). In this context, risk profiling through interrogation of shipping documentation is one of the possible scientific and technological interventions (along with smart shipping container technologies) identified by

the Royal Society in their report on Science: tackling the illegal wildlife trade (<https://royalsociety.org/-/media/policy/projects/illegal-wildlife-trade/illegal-wildlife-trade-technology-update.pdf>). This would help to provide the necessary tools to detect and combat illegal wildlife trade and to reduce human error and adverse business practices via increased intelligence, automation and transparency. For more details on this issue, see Burcu Yüksel Ripley, “Covid-19 and Illegal Wildlife Trade: Where does the Law Fail and How Digital Technologies can help?”, NERC Constructing a Digital Environment Programme Blog, August 2020, <https://digitalenvironment.org/covid-19-and-illegal-wildlife-trade-where-does-the-law-fail-and-how-digital-technologies-can-help/>.

Consultation Question 51. We provisionally propose that there will be environmental benefits from a transition to electronic trade documents. Do consultees agree? Please provide examples or data if possible.

We in principle agree, but this needs to be compared against the level of energy consumption of electronic/digital systems.

Consultation Question 52. We seek consultees’ views on what impact is foreseen for ultimate end-users of goods. Please provide quantitative evidence if possible.

We are not in a position to provide quantitative evidence on this question.

We think that there will be an increased resilience in trade transactions which would also benefit end-users of goods. For example, in the context of the COVID-19 pandemic, some essential products have become inaccessible for periods of time as physical exchange of paper documents concerning those goods have been disrupted by lockdowns, social distancing and the consequent reduced availability of courier and postal services and/or the non-availability of staff in business branches and offices. Electronic trade documents would help to alleviate this kind of problem.

In addition, transactions will speed up and they will be conducted at a lower cost, which would lead to price drops on products as another benefit for end-users of goods.

Similarly, SMEs could benefit from being able to borrow more readily and at better rates if there is a lower likelihood of fraud and more transparency, reliability and efficiency in transactions, which should support the availability of finance.

Consultation Question 53. We seek consultees’ views on if there are any potential positive impacts of our proposals that have not been identified above.

There are some points we think worth mentioning specifically, although they can fall into the categories already identified in the Consultation Paper:

- Building trust in international trade: Building trust among system participants is one of the main advantages of DLT-based systems (due to data monitoring, traceability, transparency, and data integrity). This is particularly important for international trade as the counter-party risk is usually very high in trade transactions.
- Increased resilience: In DLT-based systems, since the ledger is distributed, there is no single point of failure for the system, which makes these systems more resilient.

- Reducing adverse business practices: Transition to electronic trade documents will also help reduce adverse business practices with increased transparency and automation (on this point, see also our response above to Question 50).

Consultation Question 54. We seek consultees' views on whether it is anticipated that transition costs will be a brake on the uptake of electronic trade documents.

We don't think that this would be the case after witnessing, during the COVID-19 pandemic, the extent of the paper-reliance problem in international trade and how fragile paper-based trade practices are.

While there may be an initial stage in which parties familiarise themselves with the new law and adapt their practices and procedures, commercial advantages of electronic trade documents and technological advances are likely to lead them to transition over time.

Consultation Question 55. We seek consultees' views on factors that may affect the willingness of financiers of trade transactions to adopt electronic trade documents.

We think that standardisation is an important factor and the work of international organisations (such as the ICC) on developing global standards is a very welcome step.

Support from the main industry actors, such as the ICC and P&I Clubs, for the adoption of electronic trade documents is another important factor, as this would give industry some reassurance.

Understanding and raising awareness of electronic/digital systems is also important as potential users need to build faith in these systems, understand how these systems work and how they can be used in a valuable way.

We also think that positive experience of users will help others to adopt electronic trade documents.

Consultation Question 56. We seek consultees' views on the average energy consumption per transaction for proposed electronic trade document platforms.

We are not in a position to give a view on this average, but we think 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. Bitcoin's blockchain is a public and permissionless blockchain/DLT and open to anyone, and because of that it requires an intensive use of energy to due to the need of having strong consensus algorithms in this type of blockchain. In the application of DLT in international trade for electronic trade documents, the system models would be more likely to be permissioned and private DLT, which needs lighter consensus algorithms and therefore is less energy intensive.

Bitcoin's blockchain has also scalability issues arising from the predetermined size of blocks. This would be less of an issue for permissioned DLT systems.

Consultation Question 57. We seek consultees' views on how the energy consumption of DLT can be minimised.

As we have indicated in our response above to Question 56, the energy consumption of DLT could be minimised by the use of permissioned DLT systems which are open to a limited and

pre-defined number of participants with permission, and which therefore need lighter consensus algorithms.

Consultation Question 58. We seek consultees' views on whether there are any other potential negative impacts of our proposals that have not been identified above.

We think that there could be some psychological resilience to diverting from the traditional trading model to a new model. We don't see this as a potential negative impact of this law reform but rather a potential difficulty in a transition to electronic trade documents. Some of this resilience would be due to the lack of technological understanding and seeing DLT as something rather novel and untested.

As covered in the Consultation Paper to some extent, there would also be a need for sufficient infrastructure to make this transition work.