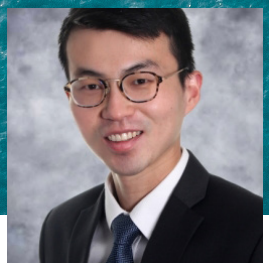

Electronic Bills of Lading: A (forgotten) way forward?

On 12 March 2021, Singapore passed the Electronic Transactions (Amendment) Act 2021 (the "ET(A)A") which recognised the legal validity of electronic transferable documents (including Bills of Lading). This made it only the second country in the world, the first being Bahrain, whereby such electronic transferable documents enjoyed legal recognition. However, instead of being enacted as a free-standing piece of legislation, or perhaps amending part the Singapore Bills of Lading Act (the equivalent of the UK's Carriage of Goods by Sea Act 1992 ("COGSA 1992"), the ET(A)A amended the more general Electronic Transactions Act (the "ETA") - which until now only recognised the legitimacy of 'electronic records' (such as electronic contracts) but not 'electronic transferable records' (such as transferable documents).

In this article, we examine the legal effects of the ET(A)A (Part I), we explain and evaluate how it fits into the ETA (the principal Act) (Part II) and suggest (if we may) a simpler and much forgotten way forward for the UK (Part III).

Part I: The Electronic Transaction (Amendment) Act 2021

The ET(A)A adopts with modifications the Model Law on Electronic Transferable Records (the **"Model Law"**) which recognises the legal validity of transferable documents in an electronic form (such as bills of exchange, promissory notes and bills of lading). However, much like the Model Law, the ET(A)A makes it crystal clear that the ET(A)A does not affect any rule of substantive law, including rules of private international law applicable to transferable documents and instruments (s. 16B(2) ETA and Art 1(2) Model Law). Instead, insofar as any rule of law would apply to a non-electronic transferable document, what the ET(A)A does is to allow for its functional equivalence of that rule when applied to transferable documents in an electronic form.

There are three main features of the ET(A)A:

First, the ET(A)A gives legal recognition to an electronic transferable record (which is defined as a transferable document in an electronic form that complies with the requirements set out in s. 16H ETA). Pursuant to s. 16E ETA, an electronic transferable record "is not to be denied legal effect, validity or enforceability solely on the ground that it" is in an electronic form. While not couched in positive terms, this is justified in the explanatory notes of Art 7(1) Model Law (which s. 16E ETA is based on) on the grounds that this section should not in itself be misinterpreted as establishing the legal validity of the electronic transferable record or the information it contains. Rather, the substantive rules of validity continue to apply – except that the form in which the electronic transferable record is presented or retained cannot be used as the sole reason for which that record might be denied legal effectiveness or validity.

Second, the ET(A)A sets out the necessary requirements for an electronic record to be considered an 'electronic transferable record' (i.e. a transferable document in an electronic form). Under s. 16H ETA, an electronic transferable record (a) must contain the information that would be required to be contained in that non-electronic transferable document or instrument and (b) a reliable method must be used: (i) to identify that electronic record as the authoritative electronic transferable record, (ii) to render that electronic record capable of being subject to control from its creation until it ceases to have any effect or validity and (iii) to retain the integrity of that electronic record.

The difficulty with electronic transferable records, as opposed to ordinary electronic records (e.g. an electronic contract), is ensuring that multiple copies of that electronic transferable record do not exist. As set out in the explanatory notes of Article 10 Model Law (which s. 16H ETA is based on), this is addressed by strictly enforcing the notions of 'singularity' and 'control' over that electronic transferable record to prevent any unauthorised replication of it. Therefore, and in line with these two notions above, s. 16H ETA necessitates that an electronic transferable record must include a reliable method whereby (i) that electronic record can be identified as the authoritative electronic transferable record and (ii) that electronic record can be subject to control for as long as it is legally effective.

Third, the non-discrimination of foreign electronic transferable records. s. 16P(1) ETA states *"[a]n electronic transferable record is not to be denied legal effect, validity or enforceability solely on the grounds that it is issued or used outside of Singapore".* However, the rules of private international law are unaffected (s. 16P(2) ETA).

While again not couched in positive terms, this in effect enshrines the principle of functional equivalence in the negative sense (as explained in the explanatory notes of Art 19(1) Model Law, on which s. 16P ETA is based) that the legal effect, validity or enforceability of foreign electronic transferable records cannot be discounted simply because of the electronic medium in which it exists. This means that so long as Singapore law is the applicable substantive law, an electronic Bill of Lading would not be denied legal effect, validity or enforceability solely on the grounds that it is issued or used outside of Singapore – and it matters not where an electronic Bill of Lading was issued, indorsed or transferred.

The remaining sections of the ET(A)A supplement the three main features listed above. For example, various provisions are made for the functional equivalence of writing (s. 16F ETA), signatures (s. 16G ETA), indorsements (s. 16K ETA) and amendments (s. 16L ETA) to any electronic transferable records. Similarly, provisions have also been included that allow a written transferable document to be changed to an electronic form and vice versa (s. 16M and 16N ETA). This is done by ensuring that all the information in the transferable written document is transferred to the electronic transferable record along with a statement (on the electronic transferable record) indicating the change of medium. Upon issuance of the electronic transferable record, the written transferable document then becomes inoperative. Should the bearer wish to convert it back to 'paper' form, the process above is then repeated mutatis mutandis. This degree of mutual interchangeability between the two different media makes the system particularly adaptable to the trade in commodities where different traders down a string may have their own and separate reasons why paper might be preferred to electronic records rather than paper or vice-versa. Finally, the ET(A)A makes it clear that it should be interpreted with regard to the international origin of the Model Law and the need to promote uniformity in its application (s. 16A(2) ETA).

Part II: The revised Electronic Transaction Act

Reverting to the vehicle adopted for this legislative change, the ET(A)A is not a free-standing piece of legislation but instead modifies the existing ETA (the principal Act). In this part, we explain and evaluate how the new sections inserted by the ET(A)A fit into the framework of the ETA more generally.

The ETA was first enacted in 2010 and implemented the UN Convention on the Use of Electronic Communications in International Contracts (the **"Convention"**) along with further included additional sections for matters connected therewith. In its unamended form, the ETA provided for the legal recognition of electronic records (such as a contract only existing electronically) and contracts formed through electronic communications. However (and consistent with the Convention), the unamended ETA expressly did not apply to negotiable instruments, documents of title, bills of lading, and any transferable documents or instruments that entitle the bearer to claim the delivery of the goods or the payment of a sum of money (s. 4 and First Schedule Part II ETA).

The ET(A)A inserted a new self-contained Part IIA (consisting of s. 16A-16S) into the ETA and expressly disapplied the ETA's previous inapplicability to transferable documents. Under the revised ETA, rules relating to electronic records and communications (e.g. electronic contracts) are contained in Part II while those relating to electronic transferable records (such as electronic documents of title and Bills of Lading) are in Part IIA. The elegance of such an approach is that all the relevant rules relating to electronic documents and communications are found in a single piece of legislation.

Nonetheless, the difficulty with this is that the sections inserted by the ET(A)A have to fit into and be consistent with its principal ETA. This is easier said than done as the rules/definitions that apply to electronic records might not similarly apply to electronic transferable records. The amended ETA achieves its objective neatly by enforcing a strict bifurcation between electronic records (Part II) and electronic transferable records (Part IIA), with the latter containing definitions only applicable to that Part. While no doubt an excellent strategy, this has led to some drawbacks such as identical terms being defined differently in different parts of the ETA.

By way of example, the definition of *"electronic records"* differs depending on whether it is applied to electronic records (Part II) or electronic transferable records (Part IIA).

- In Part II, it is defined as a *"record generated, communicated, received or stored by electronic means in an information system or for transmission from one information system to another".*
- However, in Part IIA, it is defined as *"a record 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".*

These differences in definition are explained by the fact that for an electronic transferable record, the electronic record that constitutes an electronic transferable record (a) may not be transmitted from one information system to another and (b) may include a set of composite information generated at different times (such as indorsements and amendments) – something which would not apply to ordinary non-transferable electronic records.

With that being said, something which the ETA does not explain and which will doubtless require further clarification as the new Act beds into practice, would be the practicalities of how electronic transferable documents are sufficiently 'singular' and 'controlled' so as to prevent any unauthorised replication of it (as is emphasised under s. 16H ETA). There were previous discussions as to how this might be resolved through the use of blockchain technology (such as the Singapore government backed TradeTrust digital network), although at the time of writing there have not been any further updates on this.

Part III: The COGSA 1992

Turning to the UK, in response to trade and transactions being already extensively digitised, the Law Commission has commissioned the 'Digital Assets' Project to make recommendations for reform to legislation that might be preventing businesses from adopting entirely paperless processes. The scope of that project is not merely limited to documents of title but more broadly aims to ensure that the law is capable of accommodating both cryptoassets and other digital assets in a way that allows the possibilities of this technology to flourish.

With the help of Professor Miriam Goldby, the Law Commission intends in the first instance to publish a consultation paper along with draft legislation on the digitisation of trade documents such as bills of lading and bills of exchange in Spring 2021. It will then begin wider work on cryptoassets with the final recommendations being due in 2022. It will then be for the government to decide whether and when to implement them.

Given that the scope of the Law Commission's endeavour is to include all documents of title and digital assets, it might be quite some time before electronic Bills of Lading finally enjoy legal recognition in the UK (notwithstanding that the relevant draft legislation is expected to be out by Spring 2021). In the meantime, we will no doubt, by looking East, very quickly see the benefits that electronic Bills of Lading bring and learn how Singapore circumvents any practical difficulties in its implementation.

In light of the importance and commercial significance of Bills of Lading in international trade, there might be a strong impetus (economic or otherwise) to implement the Law Commission's draft legislation on the digitisation of trade documents, at least in relation to Bills of Lading, a lot sooner. Should this be the case, may we suggest a simpler, much forgotten, way forward – s. 1(5) COGSA 1992.

Under s. 1(5) COGSA 1992, the Secretary of State may by regulation make provision for transactions involving Bills of Lading (such as issue, transfers and amendments) to be effected electronically. This can be through the modification of the present COGSA 1992 or by inserting supplementary or transitional provisions (s. 1(6) COGSA 1992). As the UK does not have an equivalent of the ETA, any implementation of the draft legislation (on the digitisation of trade documents) to Bills of Lading would be significantly less cumbersome and might be as simple as inserting the relevant draft legislation preceded by the opening words "insofar as it applies to bills of lading". While there is of course much work to be done and the devil is almost certainly going to be in the detail, such an approach might provide a quick and expedient way to implement any relevant legislation should there be the impetus for it.

**Charles Debattista has had an advisory, advocacy and arbitral practice for twenty years in the areas of dry shipping, commodities and international arbitration. Charles is Head of 36 Stone, a set specialising in these areas of practice. The fourth edition of his book Debattista on Bills of Lading in Commodity Trades, with Francis Hornyold-Strickland, is due out in April 2021.*

**Andrew Ng is developing a broad commercial and international arbitration practice with a particular focus on shipping, commodities and international trade law. A fluent Mandarin Chinese speaker, he was born and raised in Singapore and is familiar with the East Asian and Southeast Asian region.*

Charles and Andrew can be contacted at cdebattista@36stone.co.uk, ang@36stone.co.uk or at clerks@36stone.co.uk

With comment from Jim Leighton, Consultant (FD&D) at North P&I Club:

"Paper bills of lading have been part of international trade and shipping since at least the 14th century and, despite the advent of more modern and faster technology, they continue to retain their dominant role in industry. Whilst paper bills of lading used to arrive at ports of discharge in advance of vessels that time has long since passed, yet even though modern technology has the ability to ensure electronic bills of lading arrive timely, before delivery of cargoes is to take place, they are only now gaining a more substantial foothold in industry, as adoption of Bolero, ESS CargoDocs, etc show.

The reality is that many jurisdictions from which goods are shipped and those within which goods are received are still heavily dependent on what, by modern technological standards, is an old-fashioned (although still highly dependable) system of using paper documents to facilitate the sale, finance, shipment transfer and receipt of goods. Such jurisdictions present potential bottlenecks in being able to globalise electronic equivalency standards, in the same way that the "Ever Given" has recently alerted the wider world to the risks inherent in the physical bottlenecks that vessels face.

The practical stop-gap measure often adopted is for charterers to provide shipowners with letters of indemnity, in return for delivering the cargo to the parties nominated by charterers pending presentation of the original paper bills of lading to accomplish delivery of the cargo to the lawful holders of the bills of lading. Whilst this method has provided a satisfactory solution to avoid delay when vessels would be substantially delayed if the cargo cannot be discharged and held safely ashore, pending the arrival and presentation of the original paper bills of lading, it comes with risks.

First, letters of indemnity are only as good to shipowners as the financial strength of the parties who issue them. Second, the act of accepting letters of indemnity has the effect of undermining P&I insurance coverage in the event of cargo misdelivery. Combined, the adverse impact on other parties could be devastating if those issuing letters of indemnity lack the means to make good on their obligations. Accordingly, there is much to admire about Singapore taking forward-looking steps to establish a statutory framework within which modern technology can close the gap.

The benefits of using electronic bills of lading has been embraced by the International Group of P&I Clubs, who have recently approved CargoX – the sixth system approved to date (the others being ESS CargoDocs, Bolero, E-Title, Wave and edoxOnline, respectively). Consequently, the P&I third-party liability insurance needed to facilitate the use of electronic bills of lading is available and, if there is a real desire to use the new technology, industry participants need only familiarise themselves with the practicalities and the terms and conditions of the approved systems.

Charles and Andrew's article helpfully adds to the growing body of work on this important subject being erudite in its guidance to those who will have to grapple with the application of this legislation before the Singapore courts and astute in its suggestion on how the UK can fast-track its own legislation. For the time being, as reflected in a recent article by Feng Wang (see footnote below), self-regulatory instruments are the basis for filling the regulatory gap between the fast evolution of electronic bills of lading in industry and the inherent conservatism of maritime law." **Jim Leighton - Consultant (FD&D) at North P&I Club.**

Footnote: Wang, Feng, *Blockchain Bills of Lading and Their Future Regulation* (April 1, 2021), NUS Law Working Paper No. 2021/008: see https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3817112