

## TRADE DIGITAL

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## ELECTRONIC TRANSACTIONS ACT AMENDMENTS

In 2021, the ETA was amended to adopt the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Transferable Records (MLETR) which enables the creation and use of transferable documents or instruments such as electronic bills of lading (eBLs) which are key documents for cross-border trade. The amended Act came into force on 19 March 2021. This marks a critical milestone for the legal harmonisation component in TradeTrust as this amendment will grant eBL the same legal status as the paper bill of lading. Learn more about the amendment of the ETA and discover how TradeTrust can support your digitalisation journey.

## Electronic Transactions Act Amendments

ENABLING DIGITALISATION OF TRADE DOCUMENTS:  
CONVENIENCE & SAVINGS FOR BUSINESSES

### WHAT IS THE ETA?

The Electronic Transactions Act (ETA) facilitates the use of e-commerce and e-transactions by giving e-contracts and e-signatures the same status as written contracts and signatures

ETA amendments enable the creation and use of Electronic Transferable Records (ETRs), such as electronic Bills of Lading (eBLs)

### WHAT IS A BILL OF LADING?

A BILL OF LADING IS A TRANSPORT DOCUMENT AND A DOCUMENT OF TITLE OVER GOODS IN TRANSIT

#### THE PROCESS

- 1 Seller engages Carrier to deliver cargo and will receive a Bill of Lading (BL)
- 2 Seller releases BL to Buyer upon payment
- 3 Buyer can only collect the goods when they produce the original BL

- Possession of the original BL is of crucial importance
- Previously, usage of electronic versions of BLs had been difficult due to technological and legal challenges in establishing what is the "original document" and "who possesses it"

### A BILL OF LADING IS A KEY DOCUMENT FOR INTERNATIONAL TRADE



### WHY DO WE NEED eBLs?

- 1 FASTER PROCESSING
- 2 LOWERED FRAUD RISKS
- 3 COST SAVINGS
- 4 INNOVATIVE BUSINESS MODELS

- No additional costs to hold cargo as goods are less likely to arrive at their port of destination before document processing is complete
- **US\$4 billion** estimated savings a year if 50% of the container shipping industry adopts eBLs, according to Digital Container Shipping Association
- Trade financing banks can obtain collateral security over the eBL, allowing them to obtain regulatory capital relief and pass on cost savings to clients

### THE ETA AMENDMENTS SUPPORT AND COMPLEMENT THE GOVERNMENT'S TRADE DIGITALISATION INITIATIVES



## Editor's Note

Looking back at 2020, the world has faced such radical change of processes like no generation before. The battle against COVID-19 remains uncertain in many countries, but with vaccines emerging, we approach the future with great hope.

On the topic of certainty, we have learned that digitalising our trade processes is a clear way forward in overcoming such disruptions to our environment. To this end, Singapore is the proud front runner in helping the certainty of electronic documents in trade as well.

In February, Singapore passed the bill to amend the Electronic Transactions Act (ETA). This was done to facilitate electronic transactions for businesses and citizens in Singapore and help businesses benefit from more convenient and secure electronic transactions. The ETA was amended to adopt the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Transferable Records (MLETR). This modification to Singapore law will enable among other things, the creation and use of transferable documents or instruments such as electronic Bills of Lading (eBLs) as legal equivalents to their paper-based versions. Trading partners looking to use these electronic trade instruments now do not have

to be on the same platform, nor signed up to the same agreement, as it now has the backing of statutory law.

Digitalisation also means instantaneous transmissions between parties and reduced times in verifying documents, making the process quicker and cheaper. The process can also help trade financing banks obtain collateral security of the eBL, allowing for yet again faster and lower costs.

With such certainties gaining ground because of the unfortunate circumstances thrust upon us, we have much to look forward to. Despite these dark times, there is light at the end of the tunnel in the form of the binary twinkle of digital processes. And because of this, I'm certain the industry will only grow stronger because of it.

In the meantime, stay safe and embrace the opportunities in change.



- Sin Yong Loh  
Director, Trade, IMDA



## UPCOMING TRADETRUST SOFTWARE RELEASE

One of the foundations of TradeTrust is the ability to trace provenance and verify authenticity of the issued documents. These documents are known as verifiable documents. In TradeTrust's current iteration, the Ethereum blockchain will incur a fee for each newly issued verifiable document as this involved creating a record of the fingerprint of the signed TradeTrust at the blockchain. Transactions that read from the blockchain, however, will not incur a fee, such as when performing document verification for its authenticity.

A new approach using a Decentralised Identifier (DID) is being tested. Using the DID approach, signed verifiable documents will no longer rely on the blockchain for tracking document provenance and verifying its authenticity. As a result, no fee will be incurred as the fingerprint of the signed TradeTrust file need not be recorded in to the blockchain.

This feature is still at the development stage. Do look out for it at the upcoming software release.

Find out more about the DID approach at:

<https://openattestation.com/docs/verifiable-document/did/create>



Guest Article

## HOW CAN BLOCKCHAIN AND OTHER EMERGING TECHNOLOGIES TRANSFORM SUPPLY CHAINS?

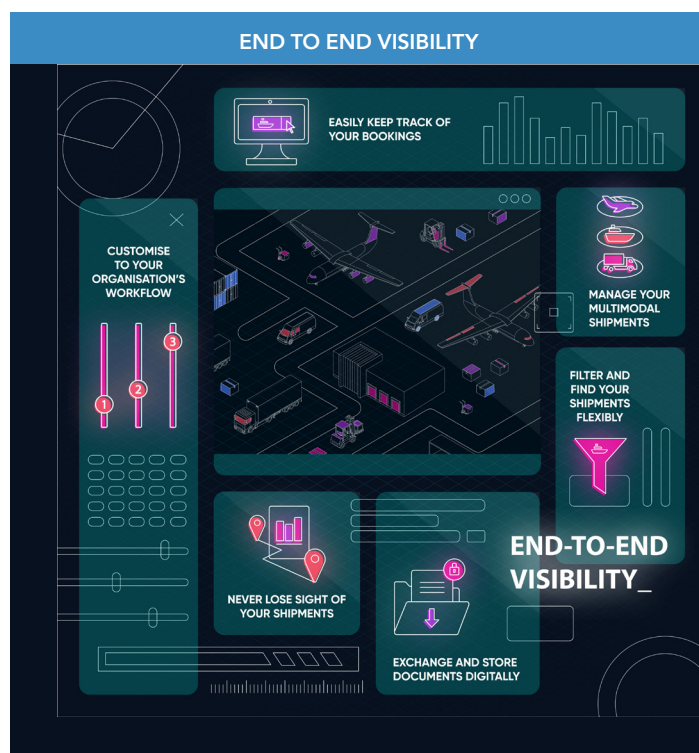
*By Alok Rajiv, Chief Technology Officer, Tramés*

### BLOCKCHAIN HOLDS PROMISE

Blockchain technology holds enormous potential to disrupt global supply chain operations positively. This is because blockchains can significantly optimise and provide solutions for existing problems that have largely arisen due to a lack of information, trust and manual time-consuming paper-based processes. We see blockchain technology providing value in 2 key areas:

1. Enabling other digital initiatives (for e.g. AI or machine learning) through thorough end-to-end data capture
2. Leveraging a single source of truth between multiple parties for fraud mitigation and greater accountability

This drive to digitalise is filling "data blackholes" and is rapidly enabling AI and machine learning solutions to become more viable. Some examples that we have been seeing include route and cost optimisations, and data-driven procurements or partnerships.



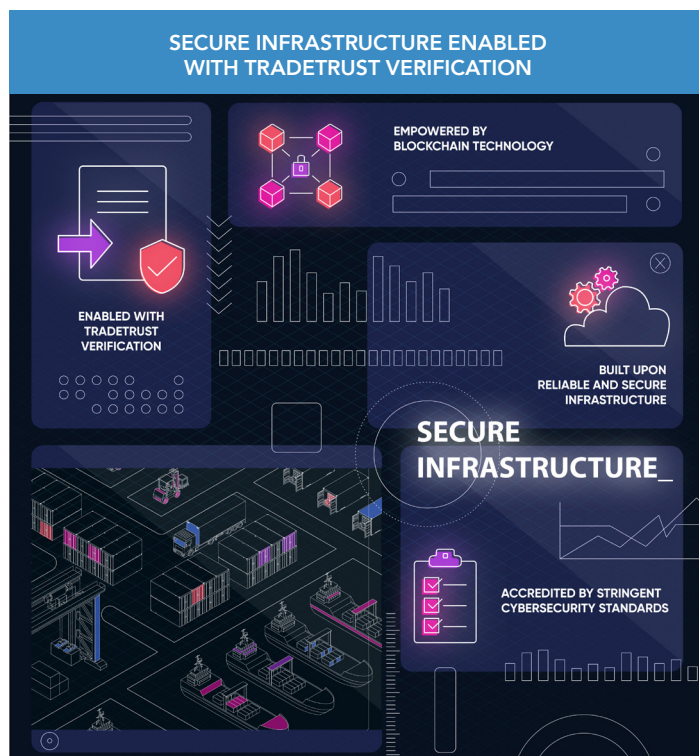


Blockchain technology will revolutionise fragmented and long supply chains - moving it away from inconsistent and bilateral peer-to-peer communications to a secure digital platform powered by a single source of truth. Previously unavailable through manual processes, a digitally empowered supply chain ecosystem allows for steady and comprehensive data capture that can be analysed to improve efficiencies across disparate supply chain stakeholders.

## GREATER SYNERGY IN THE ECOSYSTEM

National governments are also recognising the growing need to transform this sector - as an example, Singapore has been a frontrunner in the adoption of digital initiatives, especially with the recent announcement of the Singapore Blockchain Innovation Programme by various Singapore Government agencies at the Singapore Fintech Festival.

On the back of strong sentiment to advance blockchain initiatives, Tramés has been working with the Infocomm and Media Development Authority (IMDA) and R3, on TradeTrust. It comprises a set of globally-accepted trade process standards and frameworks, that connects governments and businesses to a public blockchain. In doing so, it enables interoperability across different platforms so that electronic trade documents can be exchanged in a trusted fashion across these digital platforms. R3, meanwhile, is an enterprise blockchain service



provider that envisions "eliminating friction and

The collaboration between these parties have yielded a corda blockchain implementation of a TradeTrust-enabled electronic document store facilitating the curation and exchange of trade documents across shippers, consignees, custom brokers, local transporter and cross border transportation partners.

## GOING FORWARD

Emerging technologies will continue to cast a positive impact on consumers and the supply chain sector. We are already seeing advances in communications technology enabling the collection of vast sets of data, which can provide insights that will enable supply chain companies to make data-driven decisions.

Digitalisation of cross-border trade activities have been talked about and trialled for many years now - the good news is that with the introduction of nascent technologies we are seeing this change. The discussions and progressive improvements in this exciting space will no doubt continue to drive interesting conversations in the upcoming years and beyond.



Guest Article

## DIGITALISING TRADE IN ASIA PACIFIC

By Ben El-Baz, Head of Ecosystems, Hashkey Group

The importance of the digital economy has been reinforced by COVID-19 and associated lockdowns. Across Asia Pacific, countries are accelerating the move from time-consuming paper-based processes to electronic and traceable trade procedures that can enhance competitiveness and address new challenges associated with e-commerce and digital economy.

HashKey Group, through its Mainland China strategic partner Wanxiang Blockchain, operates one of Mainland China's largest blockchain-based supply chain finance platforms within the automotive logistics supply chain. The key business value of this platform is allowing companies to better utilise the value of assets like inventory, accounts receivables or others where the secured digitalisation of these assets will be recorded into the blockchain giving lenders greater confidence in the authenticity of these assets, and hence lowering the cost of capital for companies. In mid-2020, this platform was awarded as one of the winners of the IMDA TradeTrust Challenge. The core of the project is integrating the TradeTrust document notarisation framework into the platform.

Countries in the Asia Pacific, including Singapore and China, are leading the way when it comes to the digitalisation of trade. Progress is being made on defining the standards and legal protocols needed for digital trade – an imperative if the region is to make its trade tech interoperable and see trade digitalisation reach a meaningful scale. HashKey Singapore, in strategic partnership with Wanxiang Blockchain, are working with various partners to promote the adoption of digital enabled trade.

## HOW WANXIANG BLOCKCHAIN AND HASHKEY ARE CONTINUING TO EXPAND ADOPTION OF TRADETRUST IN ASIA:

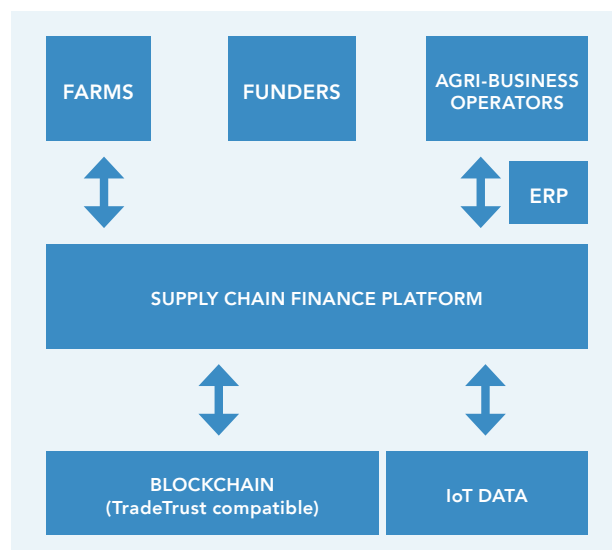
### 1. Expanding more pilots with supply chain financing partners in ASEAN –

By combining the benefits of both blockchain technology and IoT for SME supply chain financing in agricultural and livestock farming, we aim to reduce the cost of verification in real-time for SMEs, thus reducing overall credit risk for the supply chain. Within our technology solution, we use blockchain as a tamper-proof record of key document data, and we plan to expand the use of TradeTrust in the field through this use case. HashKey Singapore are collaborating with local partners to expand supply chain financing in ASEAN countries like Indonesia.

### 2. Recent winners of HKMA's Digitizing Trade Finance project –

In November 2020, HashKey Group and Wanxiang Blockchain worked on a project to create a toolkit that improves the usability of the TradeTrust open data standard framework through a combination of technical code, legislative recommendations, and industry outreach tasks. The toolkit will help grow awareness and usability of the TradeTrust framework through engagement in the Guangdong Greater Bay Area. This project was awarded as one of the winners of the Hong Kong Monetary Authority's Digitizing Trade Finance Tech Challenge.

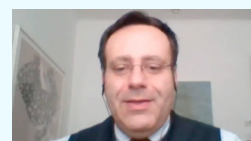
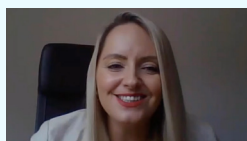
Fig 1: Multi-Party Platform View





## GLOBAL ENGAGEMENT AND OUTREACH

### SWIFT Community Update Digitising Trade: Now or Never 2 Feb 2021



With the Electronic Transactions Act passed in Parliament on 1 Feb 2021, Mr Loh Sin Yong, Director of Trade, IMDA joined a panel discussion together with Luca Castellani, Secretary of the United Nations Commission on International Trade Law, Working Group IV (Electronic Commerce), and with SWIFT's Head of Trade Strategy Louise Taylor-Digby as the moderator to discuss how the impact of recognising electronic negotiable instruments will be for cross-border trade.

Event link: [www.swift.com/news-events/events/watch-on-demand/digitising-trade](https://www.swift.com/news-events/events/watch-on-demand/digitising-trade)

### IBF Futureskills Connect with SCS Digitalisation of Trade finance in the age of 5G 23 Feb 2021

This programme organised by the Singapore Computer Society to invite experts to share and discuss on topics related to the digitalisation of Trade Finance in the age of 5G.

Event link: [www.ibf.org.sg/event/Pages/EventDetail.aspx?eventid=267](https://www.ibf.org.sg/event/Pages/EventDetail.aspx?eventid=267)

### Asia-Pacific Economic Cooperation Sub-Committee on Customs Procedures (SCCP) 27 Feb 2021

A sharing was conducted at the APEC Sub-Committee on Customs Procedures meeting on harmonised legislation on digital trade and how TradeTrust can benefit customs.

## World Customs Organisation Asia Pacific Regional Workshop on Disruptive Technologies

### 23 Mar 2021

A joint presentation with the Australian Border Forces was conducted to share our experience on the blockchain trial between Singapore and Australia. This was followed by moderating a breakout session to discuss on the benefits, potential use and initiation of projects using blockchain technology.

## 2021 Global Trade and Blockchain Forum

### Accelerating Trade Digitalisation through DLT

### 30 Mar 2021

This event explores how trade resilience can be strengthened through digitalisation and the use of Distributed Ledger Technology (DLT) to help address the disruptions caused by COVID-19 in global supply chains. Mr. Lew Chuen Hong, CE of IMDA delivered the 2nd keynote speech at this forum.

#### Accelerating Trade Digitalization through DLT

2021 Global Trade & Blockchain Forum – 30 March 2021

10:00-10:30 CET

#### Introductory remarks



**Xiaozhun Yi**  
Deputy Director-General,  
WTO



**John W.H. Denton AO**  
Secretary General,  
International Chamber  
of Commerce



**Lew Chuen Hong**  
CEO of Infocomm Media  
Development Authority  
(IMDA), Singapore



**Moderator:**  
**Emmanuelle Ganne**  
Senior Analyst,  
WTO



Global Trade & Blockchain  
Commerce Mondial & Blockchain  
Comercio Mundial & Blockchain

#### Event link:

[https://www.wto.org/english/res\\_e/reser\\_e/blockchainforum2021\\_e.htm](https://www.wto.org/english/res_e/reser_e/blockchainforum2021_e.htm)

#### MARITIME TRADE DIGITALISATION - ELECTRONIC BILLS OF LADING

31 MARCH 2021, 10.30AM TO 12PM (SGT)

##### SPEAKERS



**Kenny Yap**  
Partner and Co-  
Head of Maritime  
& Aviation Practice  
Allen & Gledhill



**Alexander Goulondris**  
Co-CEO & CRO  
esDOCS



**Luiz Almanca**  
Digital Business  
Senior Manager  
Ocean Network  
Express (ONE)



**Loh Sin Yong**  
Director of Trade  
Infocomm Media  
Development  
Authority (IMDA)



**Kenneth Lim**  
Assistant Chief  
Executive (Industry)  
Maritime and Port  
Authority of  
Singapore (MPA)



**Thomas Ting**  
Chief Technology  
Officer  
Maritime and Port  
Authority of  
Singapore (MPA)

##### HOST

##### MODERATOR

Organised By:



## Maritime Trade Digitalisation – Electronic Bills of Lading, 31 Mar 2021

This forum organised by the Maritime Port Authority of Singapore (MPA) brings together four leading practitioners or adopters of eBLs to share about available solutions, learning points and plans for more to start or scale-up usage of eBLs in cross-border trade.



## About TradeTrust

TradeTrust comprises a set of globally-accepted trade process standards and frameworks, that connects governments and businesses to a public blockchain. In doing so, it enables interoperability across different platforms so that electronic trade documents can be exchanged in a trusted fashion across these digital platforms.

### 4 Key Components of TradeTrust



#### 1. Legal Harmonisation

Provide legal validity for electronic negotiable documents



#### 2. Standards Development

Develop international standards that TradeTrust complies to



#### 3. Accreditation Structure

Certify technical solutions that meet the requirements of the law



#### 4. Open Source Software

Develop a set of open-source codes that can easily integrate backend solutions to TradeTrust network



TradeTrust documentation:  
[docs.tradetrust.io](https://docs.tradetrust.io)

TradeTrust Software:  
[github.com/TradeTrust](https://github.com/TradeTrust)

TradeTrust tech webinar videos:  
[tradetrust.io/resources](https://tradetrust.io/resources)



Find out more at  
[TradeTrust.io](https://Tradetrust.io)



For more enquiries, email us at  
[tradetrust@imda.gov.sg](mailto:tradetrust@imda.gov.sg)