

FACT SHEET**TRADETRUST: A TRUSTED GLOBAL NETWORK FOR DIGITALLY INTERCONNECTED TRADE DOCUMENTS****1.1. Background**

International trade forms the backbone of Singapore's open and trade-friendly economy. Singapore's institutions, infrastructure, policies and services are designed to encourage the free flow of goods to ensure its status as a major trading hub. With the opportunities provided by new digital technologies, Singapore aims to work with various countries to accelerate digital innovation in global trade.

Conventional digitalisation efforts thus far have given rise to increasingly fragmented digital ecosystems consisting of silo groups, preventing an efficient, automated process where electronic documents can be easily moved between various stakeholders, across the different digital systems in place.

Working with various agencies and industry partners both locally and overseas, Singapore seeks to develop TradeTrust, an interoperability framework to connect different platforms for the exchange of digital trade documentation. TradeTrust will enable various enterprise and platform systems to effectively inter-operate such that they will be synchronised. Coupled with enabling the legal validity of certain documents in digital form, this can enable the creation of completely new service offerings.

1.2. Future-Ready Digital Utility for Trade Documents

TradeTrust is a very ambitious endeavor to bring in and link international partners, from governments, international organisations like the ICC, industries, to technology and solution providers, to adopt and join the network.

TradeTrust comprises a set of globally accepted standards and frameworks that connects governments and businesses to a public blockchain to enable trusted interoperability and the exchanges of electronic trade documents across digital platforms. The four key components of TradeTrust are:

- **Legal harmonisation** to ensure legal validity of the digital trade documents across various countries and jurisdictions;
- **Standards development** - Define and use internationally accepted standards to facilitate the interoperability of digital documents exchanged across different solutions and ecosystems;
- An **accreditation structure** to provide a set of internationally accepted rules and policies to certify solutions that meet the requirements of the law; and
- A **digital infrastructure** which is a set of open source codes that can easily integrate backend solutions to the TradeTrust network

Through the use of distributed ledger technology (DLT), TradeTrust is able to provide participants with proof of authenticity and the source of origins for these documents which will enable a more seamless and efficient flow of goods between digitally interconnected trading partners. This framework aims to reduce inefficiencies and complexities of cross-border trade arising from the current usage of paper-based documentation, such as with bills of lading. This lowers operating costs for businesses and reduces the risk of fraud while accelerating the digitalisation of cross-border trade processes thereby facilitating more efficient trade.

1.3. Benefits of TradeTrust

TradeTrust can bring benefits to the trade, finance and logistics community:

(a) Increased efficiencies through certainty

- Reduce the risk of receiving fake documents/information as sources will be accredited. Removes the need for repetitive checks by the various trade ecosystem parties to ascertain whether the documents/information received are legitimate.

(b) Reduced costs of documentation

- Digitalising paper documents would eliminate costs associated with printing, including the handling and transportation of typically hundreds of pages amongst numerous parties. This will significantly reduce the costs of shipping¹.

(c) Support for new service offerings through digitalisation and interoperability

- Current digitalisation efforts are fragmented digital ecosystems consisting of silo groups of trade parties. TradeTrust will work with the current ecosystem to enable various enterprise and platform systems to be interoperable. Coupled with enabling legal validity of electronic trade documents, this can facilitate the creation of new service offerings.
- TradeTrust could allow the convergence of physical, financial and document chains hence making automation of key processes possible. E.g. automating payments or the release of funds with the use of smart contracts when conditions are met.
- Another possibility is to leverage the transparency and integrity of shipment events offered by TradeTrust to lower some of the risks for cargo insurance where underwriters can reinvent the way cargo insurance premiums are priced, i.e. instead of static pricing, they can dynamically price the premium as the cargo moves through its voyage.

¹ Trade document processing and administration is estimated to add 20% to the physical cost of shipping a single container.

<https://www.ibm.com/blogs/blockchain/2018/04/enterprise-ready-blockchain-brings-transparency-to-supply-chains/>

1.4. TradeTrust – Progress and Key Milestones

The different TradeTrust components work in concert to give participants of the network the trust and legal validity assurance of the digital documents that are exchanged. By 2022, a full functional TradeTrust digital utility will be developed and distributed as an open source. A first TradeTrust version prototype that provides proof of authenticity and provenance for electronic trade documents is already available and we are now conducting Proof of Concepts with partners.

Singapore has been active in efforts to drive and align TradeTrust with standards development at the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). Domestically, we intend to amend our Electronic Transactions Act (ETA) to implement the UNCITRAL Model Law on Electronic Transferable Records in order to provide legal certainty to such electronic transactions in Singapore. IMDA has also launched the TradeTrust Challenge in Nov 2019, which aimed to promote awareness and adoption of TradeTrust frameworks and standards among trade ecosystem companies and technology solution providers, and to encourage these companies to explore business models and/or transformation arising from the technology.

1.5 International Trading and Finance Community

Upon completion of successful prototyping and testing, Singapore brought together a diverse range of international and industry stakeholders to conduct a working TradeTrust trial.

1) First TradeTrust Transaction

In November 2019, the first TradeTrust transaction was conducted through DBS Bank, Trafigura, ICC, Perlin Network and IMDA, where the partners announced the completion of a pilot trade using the ICC Tradeflow powered by TradeTrust. The pilot trade was for the purchase of Iron Ore worth USD20M by Trafigura from South Africa, supported by DBS as Trafigura's trade finance issuing bank partner. It was cited that documentation time was reduced by more than half, from 45 to 20 days, demonstrating that parties in Singapore can digitally map out all trade instructions, track their execution, and more efficiently manage the trade finance transaction process and from the trial.

2) More partners coming on-board – Signing of MOI at ICC Trade Digitalisation Forum (held at Davos 2020)

IMDA has further engaged and brought in new partners to join our effort towards trade digitalisation. The collaboration between IMDA and ICC and other industry partners will be formalised through a Memorandum of Intent (MOI) that was signed/announced during Davos 2020. This will amplify the impact of our joint leadership in pushing for the digitalisation of trade.