



SIMPLIFIED TRADE SYSTEM (STS) CONSULTATION PAPER

January 2022

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KEY POINTS

- ANZ thanks Austrade for the opportunity to provide our views on its questions concerning the simplified trade system. Australia has a strong trading economy and we welcome the Government's initiatives in making the sector more efficient through innovation.
- We have three key suggestions for the strategic development of Australia's trade sector:
 1. Establish a domestic single window trade platform that is interoperable with other trade platforms, built on scalable distributed ledger technology (**DLT**) and underpinned by globally accepted filing and legal standards.
 2. Continue to support or increase domestic and international projects in standards-setting and data-sharing, including work on the multi-jurisdictional legal recognition and enforceability of digital documents and signatures.
 3. Continue to support research, testing, and adoption of emerging technologies in trade, including blockchain DLT, artificial intelligence and machine learning, internet-of-things sensors, and tokenisation of trade assets into non-fungible tokens on the blockchain.
- These suggestions could help alleviate the key pain points experienced by exporting and importing businesses:
 - International trade still relies heavily on slow and expensive paper-based processes and initiatives like a single window trade platform would provide an opportunity for trading businesses to move away from these.
 - Trade digitisation is slowed by information silos across a large number of cross-border participants, inconsistent global filing and legal standards, and the challenge of achieving a network effect on a global scale.
- Other reasons for our suggestions, particularly the establishment of a single window trade platform in Australia, are based on our observations of the industry:
 - Other jurisdictions, particularly Singapore and Hong Kong, have demonstrated good progress in establishing single window trade platforms.
 - Businesses trust the provenance and authenticity of information used in a government run or sponsored platform. With official support and guidance, this is likely to lead to wider adoption and faster digitisation in the private sector.
 - Australian businesses could build strong international trade linkages through a trusted platform acting as a doorway into the trade system.
- ANZ would welcome providing Austrade and the Australian Government with ongoing support in developing these initiatives.
- Our responses to certain of Austrade's consultative questions are set out below.

GENERAL

- **Tell us about your business, sector, product or service and location/s.**
 - Australia and New Zealand Banking Group Limited (ANZ) is a multinational bank headquartered in Melbourne. ANZ operates across 32 markets and in geographies that represent 75 percent of global trade flows. This covers our home markets of Australia and New Zealand, the Pacific, Asia, Europe, North America and the Middle East. ANZ also holds offices in all of Asia's major financial hubs, including Shanghai, Singapore, and Hong Kong.
- **What is your role in the end-to-end trade environment (importer, exporter, etc.)?**
 - ANZ provides trade finance, payment, and foreign exchange services to assist our exporting and importing clients. Trade finance services include documentary credits, documentary collections, trade finance loans, and supply chain finance and guarantees (financial and performance). Payment services enable our clients to receive and make payments from their overseas trading counterparties. Foreign currency exchange services enable our clients to trade with overseas counterparties.
- **What are the major pain points for your business to get your product to, from and across the border?**
 - Our experience with exporting and importing clients indicates that there are several major pain points in international trade.
 - **First**, international trade continues to rely on slow and heavily paper-based processes that have changed little over the last several decades. Key documents are still issued and exchanged in paper form, including the bills of lading, customs clearance, invoices, packing lists, inspection certificates, and government documentation.
 - **Second**, progress in trade digitisation has been hampered by the large number of participants (shippers, freight forwarders, banks, and government departments etc.) in trade transactions across multiple jurisdictions, each of whom may be using different systems and documentation standards. This creates information silos in cross-border trade as well as a lack of transparency and trust between the parties. For example, countries can have inconsistent laws on the legal recognition and enforceability of electronic trade documents and signatures. This means that businesses continue to rely on physical documents.
 - **Third**, even as trade becomes increasingly digitised, there remains the challenge of achieving a network effect – persuading enough participants and their counterparties to transition from long-established paper-based processes to new digital trade processes and platforms. If one party remains paper-based, for reasons such as onboarding cost or lack of integration with their internal systems, these platforms and the benefits of digitising are undermined, making it difficult for businesses to see sufficient value in transitioning away from paper.

- These pain points have four key implications for Australian exporters and importers:
 - 1) **Higher costs:** There is a cost to moving and processing paper documents for every participant in the supply chain. For example, a company which processes around 1,000 export shipments per year saved close to USD250,000 by moving to a digital trade solution.¹
 - 2) **Slower processing and cash flow:** Traditional processing requires physically checking documents, couriering the documents overseas and then the receiving company or bank inspecting the documents. A digital trade platform can send a bill of lading through an entire supply chain in three minutes.
 - 3) **Higher risk of fraud and financial crime:** Paper-based documentation is susceptible to forgery, or documents being altered to circumvent internal controls or sanctions and money laundering checks.
 - 4) **Reduced availability of financing:** The risk of fraud and lack of transparency associated with paper based open account processes reduces the availability of financing to industry. In open account trade, suppliers send the physical trade documents directly to an end buyer, rather than using the banking system. Banks, regulators and law enforcement authorities have less visibility of the transaction. Small and medium-sized businesses which lack quality trade data find it harder to access trade finance.²
- **What changes in the trade process have you incorporated or seen as result of the COVID-19 pandemic that would be beneficial to continue?**
 - The acceptance of documents, applications for finance, and indemnities in electronic format have been the most significant changes ANZ has made as a result of COVID-19. These changes were critical to supporting our clients throughout trade disruptions caused by the pandemic.
 - Prior to Covid-19, bank guarantees were issued and presented in paper at ANZ offices in the event of a claim, while letters of credit (**LC**) and documentary collections were physical documents sent to ANZ offices to be reviewed, then sent to clients so they could collect their shipments from the wharf.
 - In response to COVID-19, ANZ:
 - Worked with clients to quickly amend their LCs to account for courier delays and closures;
 - Accepted faxed/emailed documents, working with other banks to accept these in lieu of originals, which would follow when couriers resumed; and
 - Established e-signing protocols.

¹ essDOCS case study, https://www.essdocs.com/sites/default/files/imcefiles/CargoDocs_Refinery_One_Case_Study.pdf

² ICC, 2017 Rethinking Trade Finance, <https://iccwbo.org/publication/2017-rethinking-trade-finance/>

- **Where and how do you believe the cross-border trade system can be simplified?**
- **What have you seen in other countries' current trade processes that you think could be implemented in Australia?**
 - Trade systems need to be simplified, digitised, and made interoperable. This requires standardisation of the norms, rules, and standards used by parties to trade transactions. Set out below are some interrelated initiatives that the Australia government could either increase support for or implement:

1) Establish a domestic single window trade platform

What is a single window trade platform?

- A domestic single window trade platform would be one platform to service all government-related trade applications and documentation. It would also allow all parties in Australia to exchange their trade information digitally, such as import and export permits, certificates of origin, and bills of lading.
- A key feature in the platform's design would ideally be that it connects with other trade platforms, government agencies, business and community systems, both domestic and international. Through coordination between public service agencies, public and private sector cooperation, and intergovernmental partnerships, an Australian single window trade platform could be linked to key regulators as well as other enablers including:
 - Australian customs, law enforcement, biodiversity regulators, tax, and statistics bureaus.
 - The domestic NPP network and PEPPOL e-invoicing services.
 - Authorised financial institutions who provide additional trade-related services.
 - Overseas trade platforms, such as those developed by the Singapore and Hong Kong governments, or multinational databases developed by fintechs, logistics companies, and trade consortiums. For example, if the Australian government had a platform that is connected to systems used by other countries' regulatory or customs agencies, it could automatically extract and present the latest compliance requirements from those overseas agencies back to users of the Australian platform.

Potential benefits of a single window trade platform

- A government-sponsored single window trade platform that is well-integrated and provides easy sharing and reuse of information, would address three major inefficiencies in international trade – the reliance on paper, the siloed nature of trade information, and the challenge of achieving a network effect with cross-border stakeholders.
- Benefits could include:
 - Businesses would only need to submit information once, resulting in increased speed of trade and reduced costs for trade transactions.
 - Increased confidence, trust, and certainty about the platform's authenticity and the provenance of information, resulting in wider adoption.

- Certainty about authenticity would reduce risk for finance providers, increasing opportunities for small and medium-size companies to access trade finance.
- The government could streamline revenue sources and more accurately tax participants.
- Businesses benefit from a single and trusted point of entry into the global trade system, helping them establish linkages to other financial hubs.
- Moving “off paper” increases the scope for using advanced systems to detect outliers in trade data and identify financial crime.
- Greater use of digital trade platforms will simplify monitoring for money laundering activity and improve compliance with international sanctions regulation.
- Some of these benefits have already been demonstrated in other countries.
 - For example, in Sweden, where there has been a long-established single window trade platform, more than 94% of customs declarations are submitted electronically each year. For users, compliance costs were estimated to have decreased between 20-50% depending on the prerequisites of the agency.
 - Electronically shared information also contained less errors and became higher quality, reducing the time Swedish Customs spent on documentary controls by 50%, and the processing times of the Swedish Board of Agriculture by 40%.³

Examples of single window trade platforms in other markets

- **Singapore**
 - Singapore is well advanced in developing a single window trade platform. Its Networked Trade Platform (**NTP**), which went live in 2018, acts as a one-stop trade and logistics ecosystem that supports document digitisation, information management, and access to other trade-related services.
 - ANZ was one of nine banks and the only Australian bank to participate in its early launch, helping to develop the NTP’s Trade Finance Application service – a multi-bank trade portal enabling digitisation of trade documents and the provision of trade financing. This works in conjunction with its Trade Finance Compliance service that allows businesses to consent to Singapore Customs sharing their permit data with financial institutions of their choice, speeding up trade finance applications.⁴

³ United Nations Economic Commission for Europe, Sweden Single Window Case, https://unece.org/fileadmin/DAM/cefact/single_window/sw_cases/sweden.htm

⁴ Singapore Customs, Transmission and Receipt of Electronic Preferential of Origin via Networked Trade Platform, December 2021, <https://www.customs.gov.sg/files/businesses/Transmission%20and%20Receipt%20of%20Electronic%20Preferential%20Certificate%20of%20Origin%20via%20Networked%20Trade%20Platform%20December%202021.pdf>, Singapore Customs, Introduction to Trade Finance Compliance E-Service, <https://www.ntp.gov.sg/-/media/ntp/documents/unified-trade-portal/pdf/public/more-information/introduction-to-trade-finance-compliance-e-service-for-publication-on-ntp.ashx>

- **South Korea**

- The government was upgrading its single window platform for paperless trade, known as u-Trade Hub, to enable companies to digitally manage their end-to-end trade process by 2021. This covers procurement, e-Bills of Lading / contract negotiation and signing, customs clearance, and distribution online. It aimed to reduce export reporting times from one hour to five minutes. The government has plans to export the platform to neighbouring countries via intergovernmental agreements. It is also exploring the application of big data and artificial intelligence to trade data in order to help SMEs look for new market opportunities and cut down 90% of administration time and costs.⁵

- **Hong Kong**

- The Hong Kong Monetary Authority, with a consortium of banks, established the eTradeConnect (eTC) Platform in 2018. This allows corporates to access trade financing, track transaction flows, reconcile transactions through invoice or purchase order matching, and reducing the risk of duplicate financing for participating banks. ANZ is an initiating bank on the eTradeConnect platform.

2) Use of Blockchain

Blockchain's utility in trade

- The Covid-19 pandemic has accelerated the adoption of blockchain distributed ledger technology (**DLT**) for the secure issuance and exchange of trade documents digitally. It has now become the technology of choice for single window trade platforms and other platforms that involve multiple enterprises and high volumes of data. The Australian government could expedite the adoption of blockchain in the trade sector as part of the National Blockchain Roadmap.
- The utility of blockchain rests on several unique features:
 - **Security, immutability, and transparency:** Blockchain uses advanced cryptography and other software protocols to encrypt and validate data recorded onto a blockchain network. Data is recorded in sequential blocks and becomes immutable. Attempts to non-consensually alter the data can be programmatically identified and prevented.

In trade, this provides the benefits of real-time record-keeping, traceability of transactions, document version control, verification of ownership, and certainty about the authenticity of documents.

- **Programmability:** Blockchain-based processes can be programmed or composed with other pieces of software to automate any number and type of actions.

For example, smart contracts on blockchain platforms – contracts where the terms are written directly into software code – can be programmed to self-execute payments, alerts, document releases, and other predetermined events.

⁵ Pulse News, Korean Government to fully digitalise trade procedures by 2021, <https://pulsenews.co.kr/view.php?year=2019&no=828606>

- **Interoperability and scalability:** Business systems can be highly siloed, operating on their own set of software and standards. For example, even e-mailed PDF invoices and purchase orders require manual reconciliation by businesses prior to them entering the information into their respective enterprise resource planning (**ERP**) systems.

In contrast, blockchain platforms are often based on open source code and developed in ways that allow for quick updates, easy integration with other systems, and in turn, automated push and pull of data from multiple systems.

A trade platform's ease of integration with other systems is critical to attracting users on a global scale and achieving network effect. Therefore, the open-source culture among developers and companies using blockchain is a positive that governments could capitalise on to ensure their own platforms are optimised for interoperability and scalability in the future.

Examples of blockchain being used in trade

- **IBM**

- IBM platform TradeLens, established in 2018 with partners including Maersk and GTD Solutions Inc., is a single neutral platform for all supply chain participants to securely exchange data such as shipping milestones, cargo details, trade documents, customs filings, and sensor readings.⁶
- TradeLens is currently supported by five of the six largest ocean carriers globally, and in December 2021, Pakistan Customs (the Pakistan Single Window Company) signed an agreement to join TradeLens.⁷ In January 2022, EasyShipping, a well-known international logistics platform in China also powered by blockchain, partnered with TradeLens to share shipping data.⁸

- **Lygon**

- ANZ Bank has incorporated blockchain technology for trade through a joint venture with Scentre Group, Westpac Bank, Commonwealth Bank and IBM to establish 'Lygon', a blockchain-based platform that issues standardised, digital bank guarantees.
- By shifting paper-based guarantee issuance to Lygon, we can achieve a much more sustainable method of trade financing, where onboarding of clients can be completed in less than 15 minutes, and the time taken to issue the guarantee is reduced from 1 month to 1 day – a world-first for a fully digitised bank guarantee, and the first time blockchain has been used in the Australian banking sector in a live, real-world application. Lygon will also enable the digitisation of other guarantees including those that support building construction, leases, and environmental guarantees.⁹

⁶ TradeLens, <https://www.tradelens.com/>

⁷ TradeLens, December 2021, <https://www.tradelens.com/post/pakistan-customs-joins-tradelens>

⁸ TradeLens, January 2022, <https://www.tradelens.com/post/easyshipping-joins-forces-with-tradelens>

⁹ Australian Financial Review, February 9, 2021, <https://www.afr.com/companies/financial-services/scentre-anz-create-first-digital-bank-guarantee-with-lygon-blockchain-20210209-p570uu>

3) Develop and adopt international filing standards for digitised trade, including laws that provide legal recognition and enforceability of electronic documents and signatures

- The benefits of digital trade platforms rely on addressing two issues:
 - Inconsistent laws regarding the enforceability of digital documents and signatures across different jurisdictions; and
 - The lack of a standardised format for electronic trade documents.
- These issues mean some businesses are not confident relying on electronic documents and signatures for its trade operations, and may not participate in digitised trade.
- There could be benefit from increased engagement with, and/or learning from, bilateral and multilateral initiatives to address these issues and help lead the harmonisation of trade norms, rules, and standards.
- Domestically, the Australian Government has already adopted certain international financial standards, which will assist with trade digitisation. The international financial messaging standard, ISO20022, is being rolled out across the Australian payments system; and the international e-invoicing standard PEPPOL is being adopted to support the exchange of digital invoices. These payment and invoicing standards will play an inevitable part in international trade, though other key documents specific to trade still require standardisation.
- Some additional initiatives include:

- **The International Chamber of Commerce (ICC) Digital Standards Initiative (DSI)**

Launched in March 2020, this is a cross-industry collaboration aimed at creating global standards for Trade Documentation and to prevent unintentional fragmentation of the market. In general, the ICC focuses on standards and legal issues related to using digitised documentation.

Australia's previous achievements on the ASEAN-Australia Digital Trade Standards Initiative would offer useful insights to the ICC DSI, and any ongoing work could be presented to the DSI for international collaboration.

- **The Model Law on Electronic Transferable Records (MLETR)**

MLETR is a framework providing legal legitimacy to digital trade documents such as e-Bills of Lading. So far, it has been adopted by Singapore, Bahrain, Abu Dhabi Global Market, Belize, Kiribati and Paraguay.¹⁰

It recently gained approval from the G7, which announced a strong commitment to digital trade finance solutions.¹¹ The United Kingdom's Law Commission has released a proposal

¹⁰ Global Trade Review, 'Singapore and Abu Dhabi pilot first MLETR-enabled trade transaction', November 2021, <https://www.gtreview.com/news/fintech/singapore-and-abu-dhabi-pilot-first-mletr-enabled-trade-transaction/>

¹¹ Global Trade Review, 'Exporters have '12-18 months' to prepare as G7 paves way for trade digitisation', May 2021, <https://www.gtreview.com/news/fintech/exporters-have-12-18-months-to-prepare-as-g7-paves-way-for-trade-digitisation/>

to give legal recognition and enforceability to electronic versions of trade documents.¹² In December 2021, the UK G7 Presidency released a MLETR-aligned roadmap outlining practical steps different jurisdictions can take to identify domestic legal gaps and to reform their laws.¹³

- **Singapore TradeTrust**

Singapore's TradeTrust project is a digital utility that connects governments and businesses to a public blockchain network, using the MLETR standards. It enables interoperability and trusted exchanges of trade documents across different trade platforms and blockchain technologies.

- **Singapore Trade Data Exchange (SGTraDEX)**

Established through a public-private partnership, the SGTraDEX platform acts as a neutral 'data highway' to facilitate trusted, secure, and streamlined sharing of data between supply chain ecosystem partners that have signed up to the platform. It offers translation of data from a business' internal system into a standardised manner that the data highway can process efficiently for other connected systems. and aims to foster the emergence of a new service marketplace.

INNOVATION IN THE FUTURE TRADE SYSTEM

- **What innovations does your business use, or plan to use, to improve the way you trade?**
- **What innovations have you used or seen elsewhere – including those introduced in response to the COVID-19 pandemic - that would be valuable to continue?**

1) Increased use of blockchain-based innovations

- Globally, blockchain platforms for trade and supply chain management will continue to proliferate and attract more users.
 - For example, the Hong Kong-based Global Shipping Business Network (GSBN) is a technology consortium set up to simplify trade through blockchain, and was founded by eight global shipping lines and terminal operators, accounting for one in every three containers handled in the world.
 - In August 2021, GSBN released a product called Cargo Release that supposedly cuts the time needed to process physical documents at Shanghai port from as many as three days to less than two hours. GSBN signed a Memorandum of Understanding with eight major shipping port groups in China with the support of China's Ministry of Transport; and is

¹² UK Law Commission Takes Initiative on Changing Law on Electronic Trade Documents, June 2021, <https://www.clydeco.com/en/insights/2021/05/uk-law-commission-takes-initiative-on-changing-law>

¹³ UK G7 Presidency: Roadmap to reform for electronic transferable records, December 2021, <https://www.gov.uk/government/publications/uk-g7-presidency-roadmap-to-reform-for-electronic-transferable-records/uk-g7-presidency-roadmap-to-reform-for-electronic-transferable-records>

currently rolling out Cargo Release in Southeast Asia with port operators, Hutchison Ports and PSA International.¹⁴

- Blockchain-based innovations, particularly smart contracts for automated operations, will also see significant growth, presenting an influx of applications across trade and other industries. Currently, the potential of smart contracts remains untapped, and first movers are likely to gain an advantage among the market.

2) Use of artificial intelligence (AI) and machine learning (ML) to generate advanced analytics:

- AI and ML are being used to automate the processing of real-time data across the supply chain, generating advanced analytics. Some prominent examples of this include:
 - Providing demand forecasting across multiple products and geographies;
 - Predicting risks and disruptions to the supply chain beyond tier one and two suppliers.
 - Stress-testing complex supply chains via AI simulations and then advise how to address vulnerabilities and protect against trade credit risk/trade credit contagion;
 - Facilitating 'smart logistics' by automating and optimising transportation, warehousing, distribution, and B2B2C/B2C delivery, in response to real-time developments; and
 - Analysing customer behaviour or identify suspicious and anomalous behaviour.
- According to a McKinsey report, successfully implementing AI-enabled supply chain management has enabled early adopters to improve logistics costs by 15 percent, inventory levels by 35 percent and service levels by 65 percent, compared with slower-moving counterparts.¹⁵ Examples of companies currently using AI and ML for supply chains include Amazon, Renault, and FedEx and DHL, who are now building their own supply chain simulation software.¹⁶

3) Use of internet-of-things (IoT) sensors to track goods in real-time:

- IoT sensors are being installed at various points along the physical supply chain to provide real-time tracking of the status of raw materials, goods in transit, and inventories. This data could then be fed into a blockchain platform, trigger certain actions via smart contracts, and be used by AI and ML processes to generate advanced analytics, creating an even higher level of end-to-end supply chain visibility, connectivity, and efficiency.
- Leading trade service companies and start-ups have now moved beyond initial trials and proof-of-concepts and are actively rolling out IoT sensors at the farm, factory, cargo and/or warehouse, to gather data for customers. In combination with blockchain and AI, this data

¹⁴ Port Technology, August 21, 2021, <https://www.porttechnology.org/news/gsbn-rolls-out-cargo-release-in-southeast-asia/>

¹⁵ McKinsey, April 30, 2021, <https://www.mckinsey.com/industries/metals-and-mining/our-insights/succeeding-in-the-ai-supply-chain-revolution>

¹⁶ MIT Technology Review, October 26, 2021, <https://www.technologyreview.com/2021/10/26/1038643/ai-reinforcement-learning-digital-twins-can-solve-supply-chain-shortages-and-save-christmas/>

can be used to enhance trust and visibility across the product life cycle, as well as create real-time 'digital twin' simulations to generate additional insights and forecasts.

- Banks are actively looking to support and invest in this technology, which could open up more opportunities for trade financing and lead to greater customisation of trade financing services across different industries.

4) Tokenisation of Trade Assets onto the Blockchain as Non-Fungible Tokens (NFTs)

- The tokenisation of trade assets as NFTs is occurring in trade and supply chain finance. As blockchain-based data-sharing platforms become popular, NFTs are being used as digital receipts to show proof of ownership or "possession" of important documents such as bills of lading and certificates of origin, making the processing of LC much faster and easier.
- It would also be possible to tokenise invoices, the trade assets, or shipments themselves into NFTs so that they can be used as a form of collateral, while data on their provenance, originality and ownership are all recorded on the blockchain, enhancing trade transparency.¹⁷ It would be valuable to further study the risks and benefits of NFTs as applied to trade finance.

• What barriers prevent you from incorporating innovation or emerging technology?

- In general, the key challenges that prevent the incorporation of new technologies in the trade sector include:
 - Uncertainty about the legal status of electronic documents and signatures.
 - Lack of cross-border standardisation in the formatting of electronic documents.
 - Lack of easy ERP system integration.
 - Lack of trust and cybersecurity concerns from businesses regarding new trade technologies and platforms, especially platforms that are "domiciled" in a foreign country.
 - Outsized energy consumption with regards to blockchain-based transactions. Improvements to the design of blockchain networks and increased use of renewable energies are intending to change this in the future.
 - Network effect challenge: insufficient counterparties onboarded to a new platform.
- ANZ believes that the establishment of a domestic single window trade platform will be the best solution to the above challenges. By providing a trusted platform for government-related trade documentation, and integrating with systems where trade data can be easily shared and reused for different purposes, businesses will see sufficient incentive and commercial benefit to sign-up as a user of the platform, even despite the initial costs or effort of onboarding.

ENDS

¹⁷ Global Trade Review, July 2021, <https://www.gtreview.com/news/fintech/nfts-in-trade-finance-the-next-frontier-or-bad-idea/>

