

Ecosystem of Trust and Trade Digitalisation



HM Revenue
& Customs

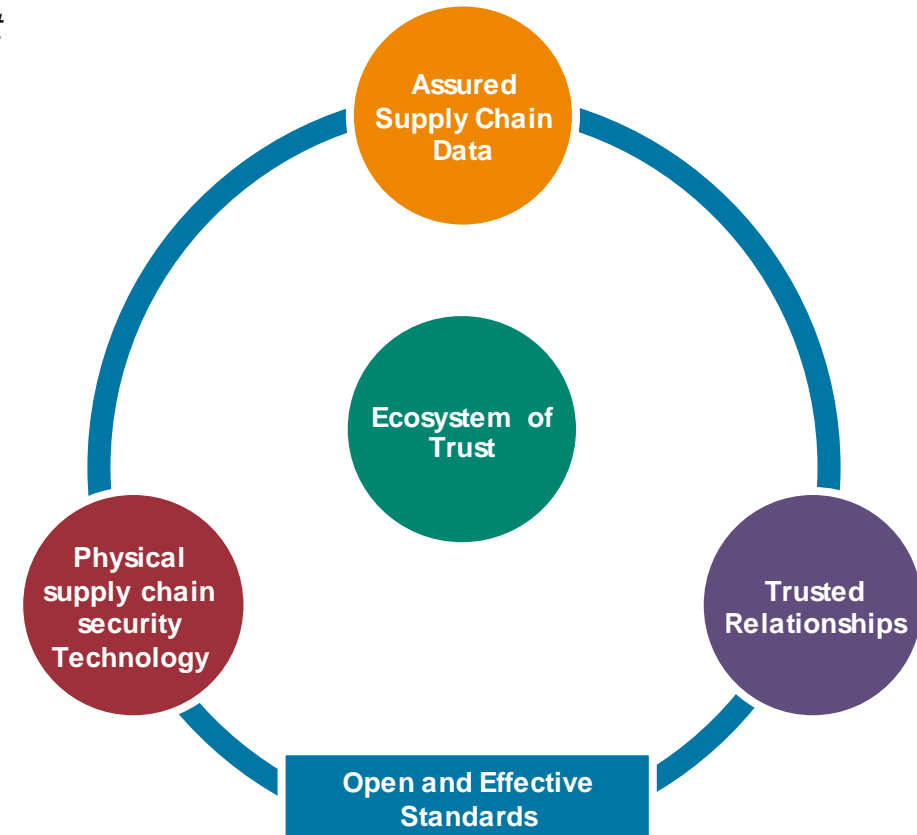


Ecosystem of Trust – technology, data insights & trusted relationships.

HMG's 2025 Border Strategy set out the goal of:

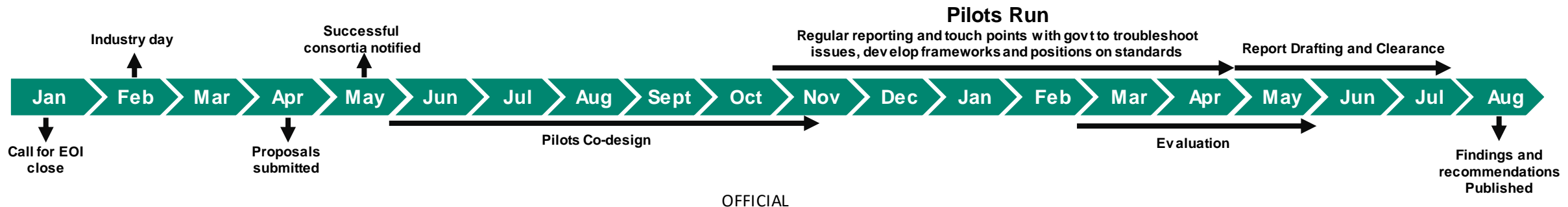
“creating an ecosystem of trust based on enhanced data around the border. We will deliver this by working with industry to share information and data effectively so that government understands the nature of goods or people moving across the frontier well in advance of arrival. Not only will this provide enforcement agencies with more information, but it will provide more opportunity to perform processes away from the border, minimising delays at ports and making the border more resilient.”

- **The Ecosystem of Trust (EoT) pilots set out to test this high trade facilitation model** – how across all border regimes new technology and data insights - along with trusted relationships can work to improve trade facilitation and security.
- The UK government ran six pilots with self-organised and self-funded private sector consortia selected by government following a competitive process.
- The consortia were led by Fujitsu, IBM & Maersk, Palantir, the IoE, Azarc & Chainvine.
- The pilots – which are ‘dual running’ with existing border requirements – were temporary evidence gathering exercises to create a robust evidence base for future policy development, potentially beyond the EoT.
- The pilots ran from last quarter of 2022 to the first quarter of 2023. UK Government’s evaluation and recommendations stemming from this issued in late August 2023.
- The evaluation focused on testing the **feasibility, scalability** and **effectiveness** of proposals for both industry and government.

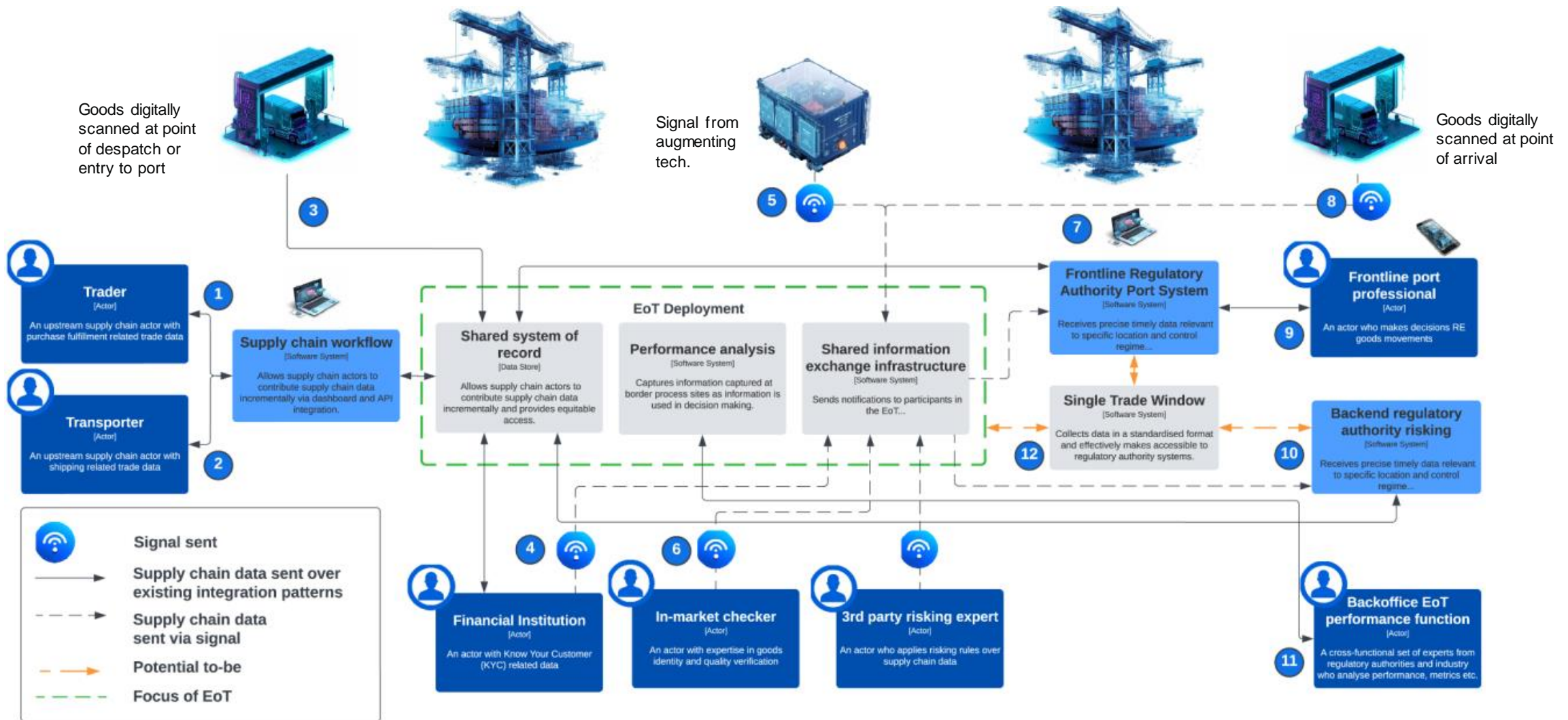


Timelines and Individual Pilot Details




Consortium	Trade Routes	Ports	Mode	Commodities	Consortia Capabilities
Azarc	EU-UK RoW-UK	1. Harwich 2. London Gateway	RoRo LoLo	(1) Fresh fruit and vegetables; and (2) Charcoal & wood.	(1) Data visibility; (2) Digital twinning, Smart seals and geo-tracking
Chainvine	Row-UK (Americas) UK-EU	1. Dover 2. Liverpool 3. Felixstowe	Break bulk, LoLo	(1) Melons; (2) Wine; and (3) Cut Flowers.	(1) Data visibility; (2) Smart GPS seals, smart labels and environmental sensors
Digital Business Marketplace / African Trade Corridor	EU-UK RoW-UK (Kenya)	1. Immingham 2. Felixstowe 3. Stansted airport	RoRo, LoLo,	(1) Frozen fish; (2) Coffee; (3) Tea; (4) Animal feed; and (5) Cut flowers.	(1) Data visibility; (2) Smart seals (3) In-market checks/audits
IBM & Maersk	RoW - UK (China, Thailand, Latin America)	1. Felixstowe 2. Southampton	LoLo	(1) Bananas (2) Electric scooters and parts (3) Poultry products	(1) Data visibility; (2) Smart Containers
Fujitsu	EU-UK	1. Eurotunnel 2. Dover	RoRo	(1). Pet food; (2). Computer, computer components & office equipment; (3) Paper for recycling; (4) Car parts & accessories (5) Books	(1) Data Visibility; (2) Smart GPS seals, (3) In-market checks/audits
Connected Borders (Palantir)	EU-UK	1. Dover 2. Felixstowe	RoRo, Maritime	(1) Meat & Meat Products; (3) Fish; (4) Egg Products; (5) Shelf stable food products	(1) Data Visibility



An illustrative Ecosystem of Trust



In principle benefits framework for the Ecosystem of Trust

	Before the border	At the border	Beyond the border
Traders 	<ul style="list-style-type: none"> Indirectly submit information to HMG through an integrated supply chain data platform which replaces the standard declaration process. The administrative burden associated with submitting declarations is reduced. 	<ul style="list-style-type: none"> Encounter fewer or faster checks as trusted traders. HMG risks more effectively pre-arrival. Reduction in time and demurrage costs. Experience fewer rejections and product spoil with faster clearance and HMG advanced view of richer pre-arrival data. 	<ul style="list-style-type: none"> Experience higher supply chain resilience and certainty reducing disruption to business activity.
HMG & Industry 	<ul style="list-style-type: none"> Receive advance view of richer pre-arrival data resulting in better ability to target the highest risk consignments and more efficient resourcing for both HMG and Ports. 	<ul style="list-style-type: none"> Act on more timely, more rich pre-arrival data. Time taken to validate documents at the border reduced. 	<ul style="list-style-type: none"> Improved policy making from improved transmission of data across government/agencies.
Economy & society 	<ul style="list-style-type: none"> Access verifiable data showing the provenance of goods. Meaning a better ability to establish authenticity, enforce compliance, and raise ethical or ecological practices in production. 	<ul style="list-style-type: none"> Produce better security, fiscal and biosecurity outcomes as a result of improved targeting at the border. 	<ul style="list-style-type: none"> Experience a smoother flow resulting in less GHG emissions. Experience a better border experience resulting in macroeconomic benefits.

Findings and recommendations from EoT pilots

Assured Supply Chain Data

- Most data required for customs declaration was available in commercial supply chain management systems.
- Industry possess richer, timelier supply chain data not requested in customs declarations which could be used to enhance risking.
- Industry data was largely not available in structured, digital formats necessary to enable a scalable model.

Promote trade digitisation and the use of Electronic Trade Document Act (ETDA) 2023 compliant digital trade documents by industry.

Further test and refine how government could optimally integrate supply chain data, key use cases and the benefits provided and thus incentives for industry

Physical supply chain security Tech.

- Augmenting technologies can provide a level of additional security and thus assurance.
- Government can use the intelligence provided (e.g., tampering detection or location tracking) to make better inform decisions.
- Industry developed standards are embryonic in many areas and may not yet be significantly robust to meet government needs despite quick progress in some areas.

Work collaboratively with industry to understand scope for different forms of augmenting technology to provide necessary security, assurance and potential for commercial scaling.

Test key government use cases for augmenting technology and the benefits that could be provided and thus incentives for industry.

Open & Effective Standards

- Efficient transfer of data between, businesses, government and other stakeholders is necessary for a viable and scalable model.
- UK government cannot currently take full advantage of new data because industry has yet to be incentivised to develop the technical infrastructure to make it available in the right format.
- It is important to ensure standards and models adopted in any UK EoT model can be aligned with wider international standards.

Promote trade digitisation and the use of digital trade documents by industry.

Work collaboratively with industry and internationally, to fully understand and identify how to make data interoperable between government and industry systems

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The Electronic Trade Documents Act (ETDA)

The UK's Electronic Trade Documents Act (ETDA) provides legal recognition to commercial trade documents in digital form, including bills of lading and exchange and promissory notes.

The Act gives business the freedom to decide how and when to use electronic trade documents.

English law plays a significant role in the commercial agreements which underpin global trade. The ETDA will help support greater digitisation of global commerce – the ICC estimate 80% of all bills of lading operate under English law.



Our estimates are that the Act could:

- ✓ Reduce the administrative costs to UK businesses from commercial trade processes by £1.1 billion over a decade.
- ✓ Reduce processing times of trade documents by some estimates from days to seconds.
- ✓ Enable improved visibility of supply chain cash flows, which will provide greater security against fraud.
- ✓ Improve access to trade finance.

Facilitating Trade Digitalisation

The UK's goal is to make the use of electronic trade documents the norm, rather than the exception.

1

Multilateral Engagement

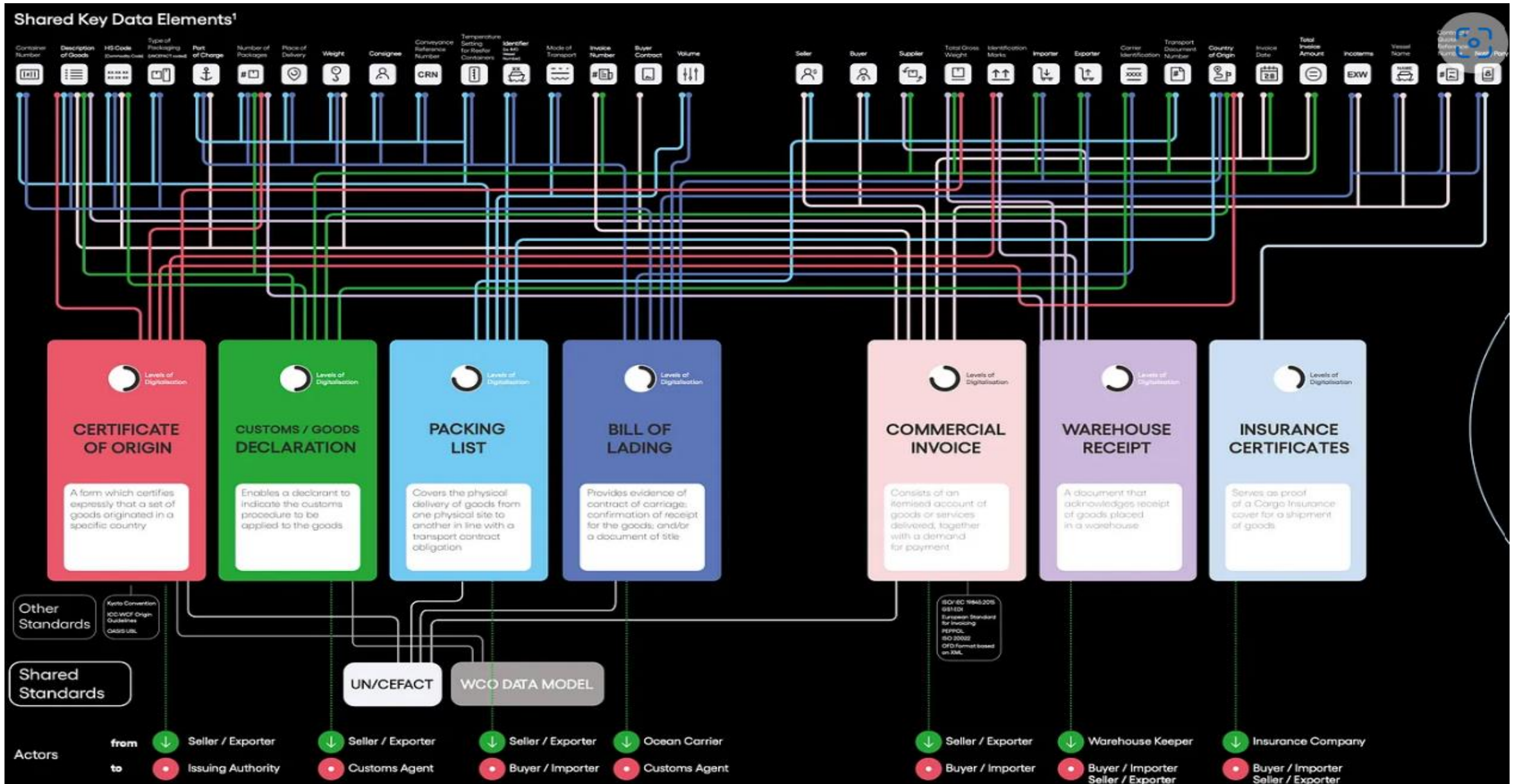
2

Bilateral Agreements

3

Partnership and Engagement
with Industry

Digitisation can enable efficiency and assurance gains for commercial and official processes



1. Note: these data elements are not the only ones appearing on a particular document, rather they are those that one or more documents have in common

Our vision

The UK's work, and ongoing partnership with business on trade digitalisation will address key challenges identified by the Ecosystem of Trust evaluation and support our ambition of integrating digital data from supply chains into the UK border model

- Digital trade is an important part of the UK's trade policy and provides the UK with the opportunity to expand its trading capacity by assisting business to trade with the world.
- Our vision is for the UK to be a global leader in digital trade with high adoption supporting digital transformation of the UK goods border – as well as more widely facilitating trade and driving growth across the UK, and elsewhere.

If we...

1. Create a legislative framework enabling trade digitisation domestically and internationally

2. Promote the use of interoperable standards

3. Work with industry to pilot new technology and drive adoption

We can...

Strengthen commercial supply chain systems and processes

Increase adoption of digital, interoperable, machine-readable commercial documents

Which will enable...

Reduced costs and administrative burdens for businesses

Enhanced integration between government and commercial systems, and greater security and compliance

Further Reading on the EoT and Trade Digitisation

- EoT Evaluation Report:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1180988/Ecosystem_of_Trust_Evaluation_Report_August_2023.pdf
- Feb 2024 WCO New Article: <https://mag.wcoomd.org/magazine/wco-news-103/developing-an-ecosystem-of-trust-at-the-uk-border/>
- Press release on first fully digitised cross-border goods movement under ETDA and UK-Singapore DEA:
<https://www.britcham.org.sg/news/britcham-supports-worlds-first-digitalised-cross-border-movement-of-goods>
- UK Electronic Trade Documents Act Impact Assessment:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1122880/DMA_self-certification_template_-_DCMS_Electronic_Trade_Documents_DMA_2022_accessible.pdf
- ICC Case Studies on businesses benefiting from trade digitisation, post ETDA.
https://cdn.shopify.com/s/files/1/2992/1976/files/Seizing_the_moment_Unleashing_the_power_of_trade_digitalisation_report.pdf?v=1701936547
- UN/CEFACT White Paper on Verifiable Credentials for Cross Border Trade: [WhitePaper_VerifiableCredentials-CrossBorderTrade_September2022.pdf](#) (unece.org)

QUESTIONS

ANSWERS

OFFICIAL