FIT ALLIANCE

**COMPLETE GUIDE TO
ELECTRONIC BILL OF LADING ADOPTION FOR CONTAINTER INDUSTRY**

BIMCO   dcsa   ICC   Swift   FIATA
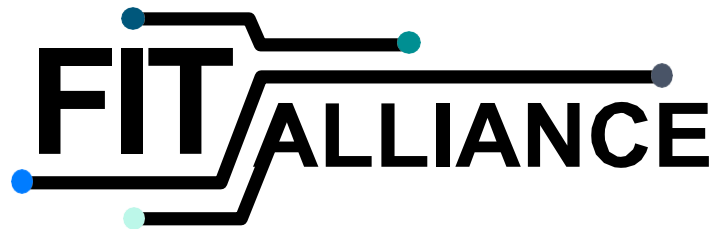
The FIT Alliance

This publication has been produced by the The Future International Trade (FIT) Alliance. Members of the FIT Alliance are the Digital Container Shipping Association (DCSA), BIMCO, FIATA, the International Chamber of Commerce (ICC), and Swift. The Alliance works together to generate awareness about the benefits of going digital and the importance of common and interoperable data standards and common legislative conditions across international jurisdictions and platforms. The aim is to facilitate acceptance and adoption of eBLs by shippers, carriers, regulators, banks and insurers and to unify communication between these organisations and all other stakeholders involved in an international trade transaction. By establishing open-source, interoperable, technology-agnostic standards, the FIT Alliance intends to make the digitalisation of international trade a reality, enabling smooth data exchange and streamlining the end-to-end shipping process for the entire industry.

CONTAINER SHIPPING AND THE BILL OF LADING

In 1956 Malcolm McLean's standardised shipping container made its maiden voyage. This started a revolution that not only dramatically lowered the cost of loading and unloading a ship, it made the modern globalized world possible. How? It provided a safer, more efficient and cost-effective way to transport goods from one side of the globe to the other.

The shipping industry now carries 90% of all globally traded goods. The container was standardised over 60 years ago, and the world has changed quite a bit since then.

In the 1990s, the world wide web ushered in a global technological revolution on par with the shipping container. Industries such as banking, telco, retail and the airlines adopted the standards necessary to fully leverage the power of the web. As a result, many of the companies in these industries were able to fully digitally transform, increasing efficiency and innovation, and creating a better customer experience.

Container shipping can realise similar benefits by embracing digital standards as it evolves to greater digital maturity. Central to this is accelerating adoption of a standards-based electronic bill of lading (eBL) across all sectors of the industry: a universal eBL.

The bill of lading (B/L) is the most important trade document in container shipping. It functions as a document of title, receipt for shipped goods and evidence of an underlying contract of carriage. Currently, stakeholders along complex supply chains must physically pass paper B/Ls from one place to another. The manual handover of paper documents is inefficient, expensive and error prone, which contributes to high costs and supply chain bottlenecks. These issues have never been more widespread or apparent than at the start of the COVID-19 pandemic. Paper-based B/L processes broke down as cargo in ports could not be gated out because original bills of lading (B/Ls) did not arrive or could not be manually processed in time.

Despite this, adoption of the electronic bill of lading is extremely limited. Currently, ocean carriers issue around 45 million bills of lading (B/L) per year, and in 2022, only 2 % of B/Ls was electronic.

For shipping customers, the frustration goes beyond cargo getting stuck when paper B/Ls are not in the right place at the right time. With all the required trade documents that are part of the B/L documentation process (e.g. carrier and authority certificates, import/export licenses, and certificates of origin), it is common to find 50 sheets of paper in a package of shipping documents that must be exchanged between, in some cases, 30 different parties. This creates inefficiencies that slow trade down and hamper growth and innovation.

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[1] DCSA internal member research

THE BENEFITS OF DIGITALISATION

Achieving a universal eBL would drive significant benefits not only for the industry and its stakeholders, but for the world at large. According to McKinsey[2] , universal eBL could:

- Save the industry $6.5 B in documentation costs vs. physical bills of lading (B/L)

- Unlock almost $7B in gains for all stakeholders by reducing inventory and financing costs and enabling new business models

- Unlock $30-40 B in global trade growth by reducing trade friction, especially for emerging markets.

- Save 28,000 trees per year and significantly reduce carbon emissions by eliminating paper

- Reduce illegal trade by 10-15%

A 2022 report by the Commonwealth association of 54 countries estimates that widespread adoption of digital trade documents could generate an additional US$1.2 trillion in trade for member countries by 2026. The report also suggests Commonwealth exporters could reduce costs by around 75 percent on average.

Research from the Economic and Social Commission for Asia and the Pacific (ESCAP) suggests that fully digitalising regulatory procedures around trade could save between 32 and 86 kg of CO_2 equivalents per end-to-end transaction.

Disruptions over the past few years have also awakened consumers to the importance of keeping global supply chains running smoothly. Establishing a universal eBL is one key to making international trade more seamless, agile, reliable, and secure, even in the face of disruption on the level of a global pandemic.

Digitalisation will also benefit the individual parties involved in an international trade transaction. A dramatically simplified and streamlined B/L process will enable carriers to become more efficient while providing a better experience for shippers. And every stakeholder will benefit from increased efficiency, accuracy and reduced administration costs.

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[2] "The multi-billion-dollar paper jam: Unlocking trade by digitalizing documentation October 4, 2022" McKinsey

THE CURRENT STATE OF eBL ADOPTION IN CONTAINER INDUSTRY

The shipping industry is incredibly complex, involving numerous industries and governed by a raft of country- and region-specific legislation. Because of this, the adoption of electronic bill of lading requires collaboration and alignment among a large and diverse set of stakeholders including shippers, consignees, freight forwarders, regulators, banks and insurers. Aligning the industry around eBL standards is the first step towards fully digitalising shipping processes and ensuring seamless data integration across all systems involved in shipping.

To help achieve these aims, the FIT Alliance commissioned an independent study that revealed three key factors hindering eBL adoption by industry stakeholders:

1. Concerns about technology, platform and lack of interoperability

2. Insufficient adoption by other stakeholders

3. Legal acceptance of eBL

Today's" eBLs are mainly PDFs passed electronically. To reap the benefits of digitalisation, DCSA has created opensource eBL standards and is working to achieve legal and technical interoperability in collaboration with the other FIT Alliance members and eBL platform providers. There are currently eight IGP&I-approved eBL platforms of which some are used by carriers to issue eBLs.

DCSA collaborates with its carrier members to drive necessary changes that enable end-to-end digitalisation of the container trade documentation process. In February of 2023, DCSA carrier members committed to 100% adoption of a DCSA standards-based eBL by 2030. Member CEOs have publicly expressed their support for the commitment. This is a meaningful step towards removing trade friction, improving the customer experience and increasing the sustainability of container shipping.

ESTABLISHING A TECHNICAL FOUNDATION FOR eBL INTEROPERABILITY

DCSA, in conjunction with our member carriers, has published data and process standards for the submission of shipping instructions and issuance of the bill of lading (B/L). Through this initiative, DCSA aims to facilitate acceptance and adoption of an electronic bill of lading (eBL) by regulators, banks and insurers and to unify communication between these organisations and customers, carriers and all other stakeholders involved in a transaction. The standards-based eBL is a framework for the collection, processing and transfer of shipping instruction &B/L data digitally (for original, straight and to-order B/Ls) between carriers and customers, using eBL platforms where relevant. The lack of interoperability is a blocker for wide-scale adoption, as stated above. DCSA is working to achieve legal and technical interoperability in collaboration with the eBL platform providers, carriers and other stakeholders.

DCSA has successfully completed two standards-based eBL interoperability proofs of concept (PoC) with participation from carrier members, Exxon Mobil and 5 eBL solution providers. As part of the PoCs, Bolero, CargoX, edoxOnline, iQAX and WAVE BL implemented DCSA eBL interoperability standards to test eBL interoperability through the full bill of lading lifecycle using data that mirrors a live shipment.

As a result of the PoCs, the technological feasibility of transferring a DCSA eBL from one eBL platform to another was verified. All the necessary records and lines of trust needed for a successful business transaction were preserved and maintained throughout the transactions, and the eBLs were transferred according to the desired workflow. Achieving this technical milestone has unlocked the full potential of global electronic trade documentation processing. Collaboration between DCSA and eBL solution providers to ensure eBL legal interoperability is ongoing. The current focus is to add a control mechanism to also better strengthen the requirements as expressed in MLETR regarding the ability to determine who is in control of the document.

 eBl Solution providers are enthusiastic about the success of the PoCs and the impact interoperability will have on the future of container shipping.

Alejandro Pernias, CEO of edoxOnline: "A significant milestone was reached … when we achieved interoperability between two leading eBL solutions, underpinned with blockchain technology. This was an unparalleled event for global trade when the complete process, from data input to drafting and transferring the eBL from one platform to the other, took only five minutes. Considering this would normally take more than a day, that is very significant."

Noam Rosenfeld, CEO of WaveBL: "The PoC … showed all trade partners along the supply chain that digitalisation is the future and that operability between eBL platforms is definitely achievable."

Peter Kern, Chief Commercial Officer of CargoX: "Once interoperability is achieved, electronic trade records will be moving through various systems for true efficiency and transparency in cross border trading….This will remove a lot of friction in trade document processing, as well as boost productivity and lower cost."

WHERE DO YOU START?

With standards as a framework for digitisation, stakeholders have a clear path forward to eBL adoption and a future of growth empowered by paperless trade for more efficient and sustainable shipping.

Stakeholders can take action to support the development and usage of eBLs based on what makes sense for their organization. Such actions could include the following:

1) Sign the [FIT Alliance eBL Declaration](#) to publicly signal your organisation's readiness for change and commitment to collaborate to drive digitalisation, starting with eBLs, within your industry
2) Adopt eBL process and data standards from FIT Alliance members (DCSA, BIMCO and FIATA), use them in relevant product applications and encourage trade partners to do the same
3) Adopt existing eBL solutions and encourage trade partners to do the same
4) Support eBL standards development
    a. Provide feedback on standards
    b. Provide stakeholder requirements to developers
    c. Participate in workshops, surveys, POCs and pilots executed by members of the FIT Alliance
5) Participate in promotional activities
    a. Collaborate with FIT Alliance members to promote eBL standards (through marketing programs)
    b. Share eBL success stories
6) Utilise eBL standards from FIT Alliance members in establishing new digital partnerships

Achieving universal eBL requires diverse stakeholders working together to develop, adopt and promote eBL and eBL standards. Now is the time to demonstrate your commitment to universal eBL and help move the industry closer to its promising digital future.