TradeLens - Using Digital Blockchain to Reduce Paperwork

Submitted by: TradeLens
TRADELENS—Using Digital Blockchain to reduce paperwork
Connect the ecosystem
Bring together all parties in the supply chain - including shippers, freight forwarders, intermodal operators, ports and terminals, ocean carriers, customs and other government authorities, and others - onto a blockchain-based platform with a secure permission and identity framework.

Driving true information sharing
TradeLens provides seamless, secure sharing of real-time, actionable supply chain information across all parties — encompassing shipping milestones, cargo details, trade documents, sensor readings and more — thereby empowering the consumers to mitigate problems through predictability and exception handling.

Foster collaboration and trust
Enable the digitization and automation of the cross-organization business processes integral to global trade, including import and export clearance, with blockchain ensuring secure, auditable, and non-repudiable transactions.

Spur innovation
Lay the foundation for ongoing improvement and innovation through an open, publicly-available API, the use of standards and promotion of interoperability, and the launch of an Application Marketplace that parties can use to build and deploy TradeLens-powered applications for themselves, their partners, and their customers.
The foundation of TradeLens is its business network — shippers, freight forwarders, ports and terminals, ocean carriers, intermodal operators, government authorities, customs brokers and more. Each entity shares information that can be tracked, stored and actioned across the platform throughout a shipment’s journey.

**ECOSYSTEM**

The TradeLens Platform is accessible via an open API and brings together the ecosystem through a set of open standards. Powered by Hyperledger Fabric blockchain technology and IBM Cloud, the platform enables the industry to share information and collaborate securely.

**MARKETPLACE**

An open applications and services marketplace allows both TradeLens and third parties to publish fit-for-purpose services atop the TradeLens platform, fostering supply chain innovation and value creation.

**PLATFORM**

The TradeLens Platform is accessible via an open API and brings together the ecosystem through a set of open standards. Powered by Hyperledger Fabric blockchain technology and IBM Cloud, the platform enables the industry to share information and collaborate securely.
The TradeLens Ecosystem Today

AUTHORITIES

Working with authorities from 10+ economies to deliver better information sharing, less manual paperwork, and easier connections to national single window platforms.

CARRIERS

Partnerships with >15 global ocean carriers representing data on 60% of global container shipping volume.

INTERMODAL + RAIL

Maximizing the value of logistics firms (3PL and Intermodal) by improving collaboration via open global standards around commercial, documentary, and operational elements.

PORTS AND TERMINALS

- Coverage across 6 continents
- Data from up to 600 ports and terminals captured by existing TradeLens members
- 150+ ports and terminals directly integrated in to TradeLens

10 June, 2021
The TradeLens Marketplace accelerates supply chain innovation and value creation by offering apps and services developed by TradeLens and third parties that work on top of the platform and leverage the power of ecosystem data. TradeLens also provides the technical foundation to enable parties to build and deploy applications. Service offerings will also be made available in the marketplace to support ecosystem members.

**TradeLens Applications**
Foundational offerings and other value-added products developed and managed by the TradeLens collaboration team.

- **TradeLens Core**
  The essential TradeLens application enables a simple, standard, digital exchange of information across parties to a shipment.

- **TradeLens eBL**
  Addresses a longstanding pain point in the ocean shipping industry: the creation, transfer, and surrender of bills of lading. Intended to simplify and streamline the existing paper-based process and offer a digital alternative.

- **Future applications**

**Partner Applications**
Applications that can be developed, sold and distributed by authorized third-parties.*

*Partner applications may be deployed at a later date.*
SI-BL Automation is in early release. Ocean carrier participation varies.
The TradeLens eBL is a fully digital instrument, replicating all the functionalities of original paper bills of lading. It is requested via your existing shipping instruction process with the ocean carrier.

Exchanging the TradeLens eBL is a standardized process for all TradeLens participants and adheres to legal and regulatory frameworks.

1. Issue
Carriers issue an eBL for a shipper as a structured document. The issuance is recorded, and a hash of the document is saved to the TradeLens Blockchain.

2. Transfer
Now, the shipper can view the issued eBL in the TradeLens platform, and when ready, instantly and securely transfer it to a counterparty with the click of a button. Can transfer to any onboarded partner (visually changes the below diagram)

3. Surrender
When the container shipment is ready to be received, the consignee can click “surrender” and the eBL returns to the carrier for cargo release.
SAVE TIME AND COST USING THE ONLY TRUE MULTI-CARRIER BACKED EBL SOLUTION

The TradeLens eBL, in combination with TradeLens Core, reduces the cost and time of printing and couriering documents by enabling you to share the full shipping document sets across permissioned parties.

<table>
<thead>
<tr>
<th>CURRENT BILL ACTIVITY</th>
<th>TIME FOR AS IS</th>
<th>TIME WITH TRADELENS</th>
<th>DAY SAVINGS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct/Single Transfers of original BL</td>
<td>Etd+11</td>
<td>Etd+3</td>
<td>8</td>
</tr>
<tr>
<td>Direct/Single Transfer BL with escrow</td>
<td>Etd+11</td>
<td>Etd+3</td>
<td>8</td>
</tr>
<tr>
<td>Documentary collection shipments</td>
<td>Etd+25</td>
<td>Etd+16</td>
<td>9</td>
</tr>
<tr>
<td>LC shipments</td>
<td>Etd+25</td>
<td>Etd+16</td>
<td>9</td>
</tr>
<tr>
<td>Tri-trade shipments with LC</td>
<td>Etd+39</td>
<td>Etd+16</td>
<td>23</td>
</tr>
</tbody>
</table>

* Figures are estimates only and are generated across the entire ecosystem. Estimates cited here may not include additional benefits in using the TradeLens eBL process.

<table>
<thead>
<tr>
<th>CURRENT BILL ACTIVITY</th>
<th>ESTIMATED COST*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courier Cost: BL from carrier to shipper’s office</td>
<td>$10.00 – $15.00</td>
</tr>
<tr>
<td>Courier Cost: Presentation of BL to Bank</td>
<td>$10.00 – $15.00</td>
</tr>
<tr>
<td>Advising Bank Costs: Managing BL process</td>
<td>$50.00</td>
</tr>
<tr>
<td>Courier Cost: Transfer between Advising and Issuing Bank</td>
<td>$75.00</td>
</tr>
<tr>
<td>Issuing Bank Costs: Managing BL process</td>
<td>$50.00</td>
</tr>
<tr>
<td>Courier Cost: Retrieval of BL from bank</td>
<td>$10.00 – $15.00</td>
</tr>
<tr>
<td>Courier Cost: Final surrender of BL to Carrier</td>
<td>$10.00 – $15.00</td>
</tr>
<tr>
<td>Total other Indirect Costs (reworking errors / courier pack admin / lost BL)</td>
<td>~$50.00</td>
</tr>
<tr>
<td>TOTAL PER ORIGINAL BL</td>
<td>$265.00 - $285.00</td>
</tr>
</tbody>
</table>
THANKYOU