



## Bolero is leading the digital trade revolution

- Established from an EU initiative by Swift and TT Club
- Experts in Trade digitisation
- Ground breaking market leader and innovator
- Award winning solutions

Two Decades of Innovation and Driving Trade Digitisation













## Proven digital solutions – 3 Core Components

#### **Applications**



#### **Platform**



#### Network





## Bolero's Partner strategy

To develop and foster long term relationships with partner organisations to generate mutually beneficial business opportunities

#### Synergies

Belief in the partnership opportunity

Compatible business models

Common goals and revenue / profit expectations

Commitment to dedicated resources

#### **Common Success Criteria**

Strategic fit and shared timeline

Customer base synergy

Complementary solution sets that increase value proposition

Ability to access new markets

Expected channel investment and support



## Connectivity and Integration is key



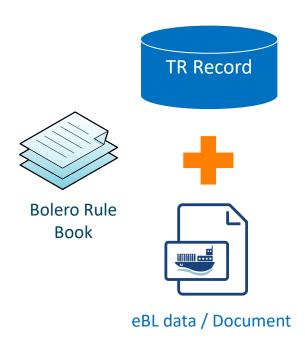
A connected digital eco-system, that is Secure, Trusted, and Fully Interoperable

Flexible integration and connectivity with back-office and third party systems





#### Elements of the Bolero eBL



- The Title Registry (TR) Record:
  - Involved (named) Parties
  - Type of eBL
  - eBL identifier
  - Current Holder of the eBL
  - Current State of the eBL
- Bill of Lading data:
  - Electronic equivalent of the 'paper' BoL
  - Can be an image (PDF) or Structured Data (Bolero<sub>XML</sub>)
- The Bolero Rulebook:
  - governs the process and its implementation
  - is signed by all the parties



#### Title Registry Service Summary

- The Title Registry record together with the eBL electronic document is referred to as a BBL (Bolero BL record).
- The BBL and the Bolero Rule Book provide the functional equivalent of a traditional paper bill of lading
- The eBL emulates the paper bill of lading and the Title Registry controls the title. With a paper bill of lading the title is controlled by possession of the bill of lading itself
- The Title Registry is a service for recording and transferring the rights and obligations contained in an electronic bill of lading (eBL)
- The Title Registry does not store or read the eBL document but records information about the eBL contained in the Title Registry instruction. Thus, the bill of lading document itself is an electronic version of the bill of lading



## Functions of the Title Registry

#### The Title Registry service:

- Allows the Creation of eBLs
- Controls all possible lifecycle events of the eBLs that are created
- Tracks the active state of the eBL until the eBL is ended, amended, or switched to paper
- Verifies and specifies the holdership of eBLs to prevent fraudulent transfer attempts or Surrender of goods to a fraudster
- Enforces the specific rules associated with each type of eBL
- Enforces the application of changes to the parties that are named in the eBL
- Sends automatic notifications to appropriate parties when changes occur to the eBL to provide notification of responsibility.
- Enforces inclusion of the eBL document with notifications
- Manages amendment flows
- Create and provide an electronic endorsement chain
- Create and include attornment notices when required in the Bolero PDU messages



## The eBL – Electronic Document format accepted

- The Originator or creator of the eBL can choose any format(mime type) for the eBL text document that they wish:
  - Image file incl: pdf, jpeg, bmp
  - Commonly used structured files incl: doc, docx, xlsx, rtf
  - Proprietary structured file those defined by the carrier themselves
  - International standards controlled structured file e.g. EDI interchange file
  - Bolero xml structure for the eBL Defined and published by Bolero



## Example Content of the Structured eBL Text (xml format)

#### The Bolero xml 705 eBL document:

- The Bolero xml structure is extensive to allow for many scenarios used in the industry from low granularity of detail or high granularity of detail
  - Parties
  - Party Type
  - Locations
  - Routes
  - Vessels
  - Dates (estimated and actual where applicable)
  - Goods
  - Goods Type
  - Goods conveyance method (Parcel granularity containerized, Bulk, Bulk/container, Unit)
  - Container Type





#### Bolero and Blockchain

Bolero can interoperate with Distributed Ledgers / Blockchain Technology



Bolero Can write to a private permissioned chain

Blockchain DLT

Business Rules

Multi-party Rulebook

Secure authentication of access and messages

Distribute information



Business Rules 'Smart Contract'

Multi-party Rulebook for sharing states and state changes

Secure authentication of access and updates

Replicated Shared State





## Working on blockchain, integrated dltledgers platform and pre-shipment finance

- dltledgers platform sends funding bank pre-shipment finance request
- Bank provides funding and dltledgers pays supplier
- Supplier then requests eBL from Carrier via dltledgers trough to Bolero
- Carrier provides eBL to dltledgers for supplier, with eBL copy to the bank
- Supplier issues transfer request of eBL via dltledgers to Buyer
- Buyer either surrenders eBL or requests switch to paper via dltledgers to Bolero and onto Carrier



# Bolero

Safer, Smarter and Faster Global Trade