Single Window and Blockchain
How they can fit together.

IX Meeting of the Inter-American Network of International Trade Single Windows
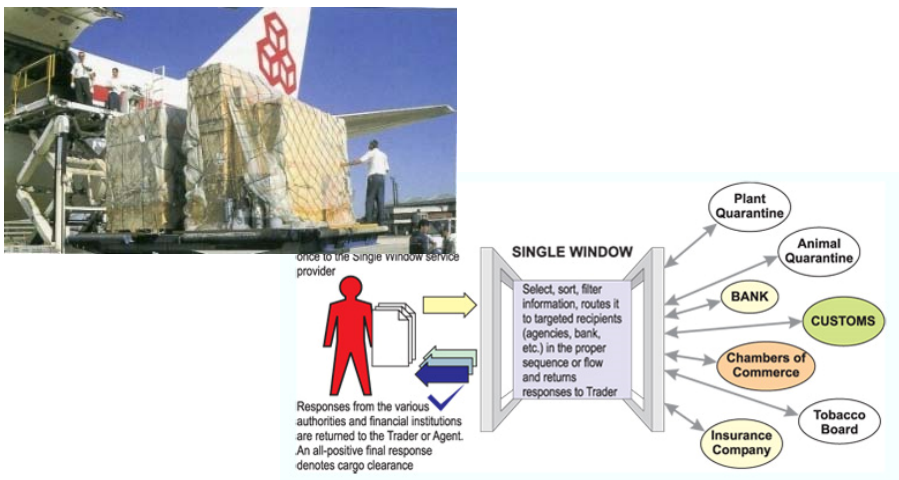
Montevideo – Uruguay, 7 September 2017

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51Biz-PPMB Luxembourg

EU-gate.eu,
UN/CEFACT, WCO, DG MOVE-DTLF

Fine Art and Luxembourg Freeport

e-CMR BeNeLux

Bulgaria, Czech Rep., Denmark, Estonia, France, Latvia, Lithuania, Netherlands, Slovakia, Slovenia, Spain and Switzerland
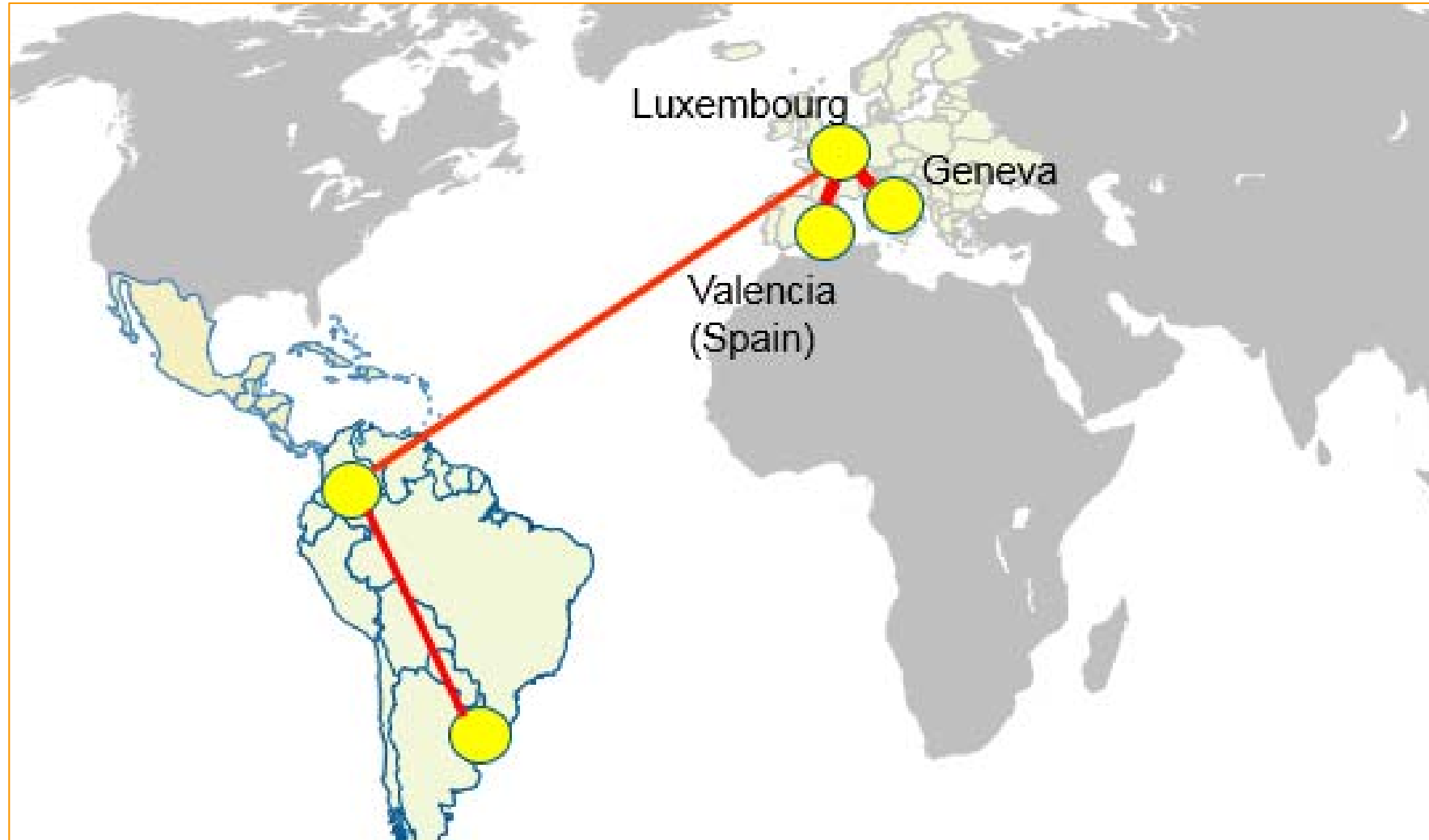
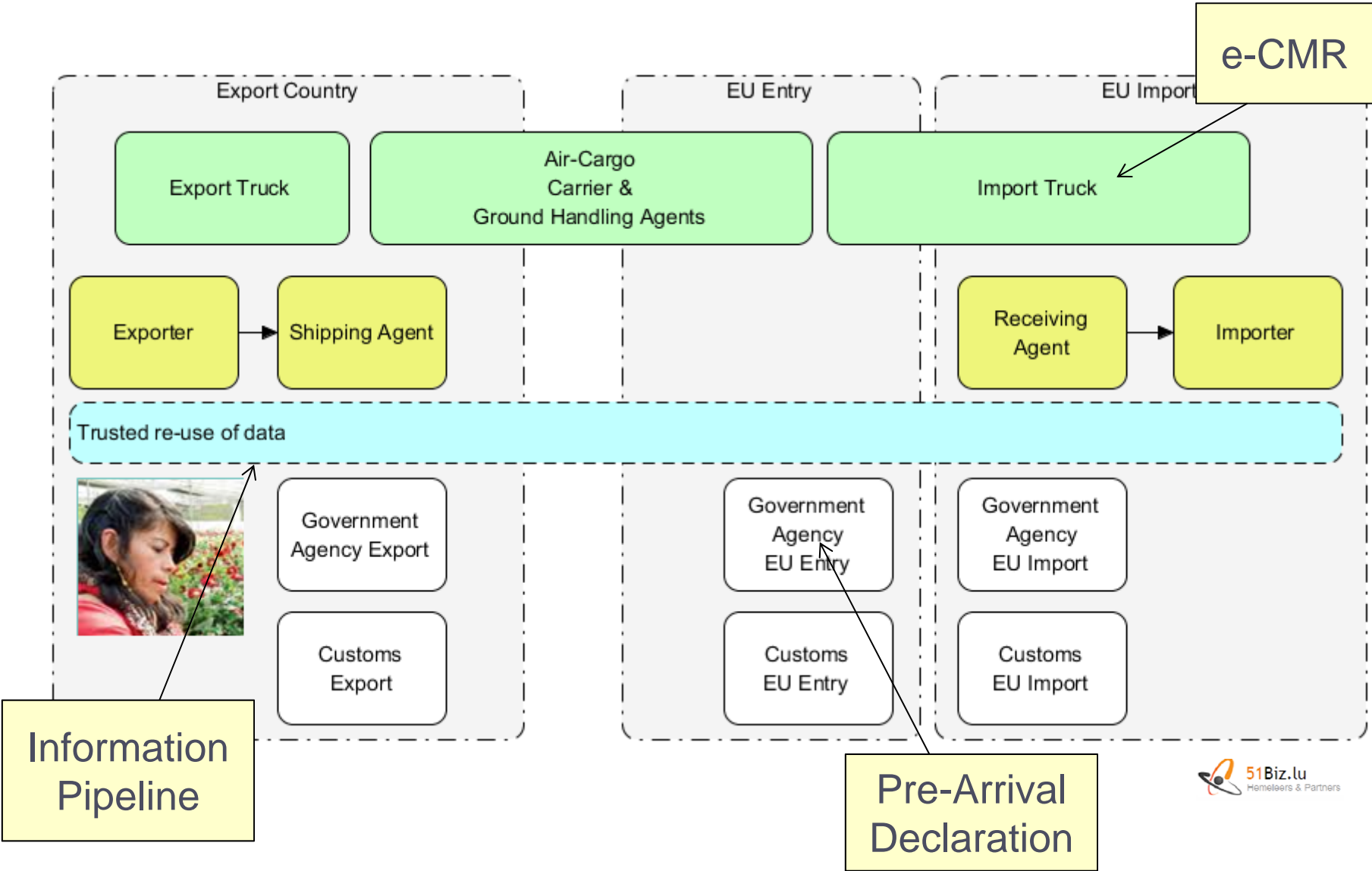## Digital Europe for Transport and Logistics

Case study : from Latin America to Europe

An export forwarder consolidates meat exports with destinations in Geneva and Valencia
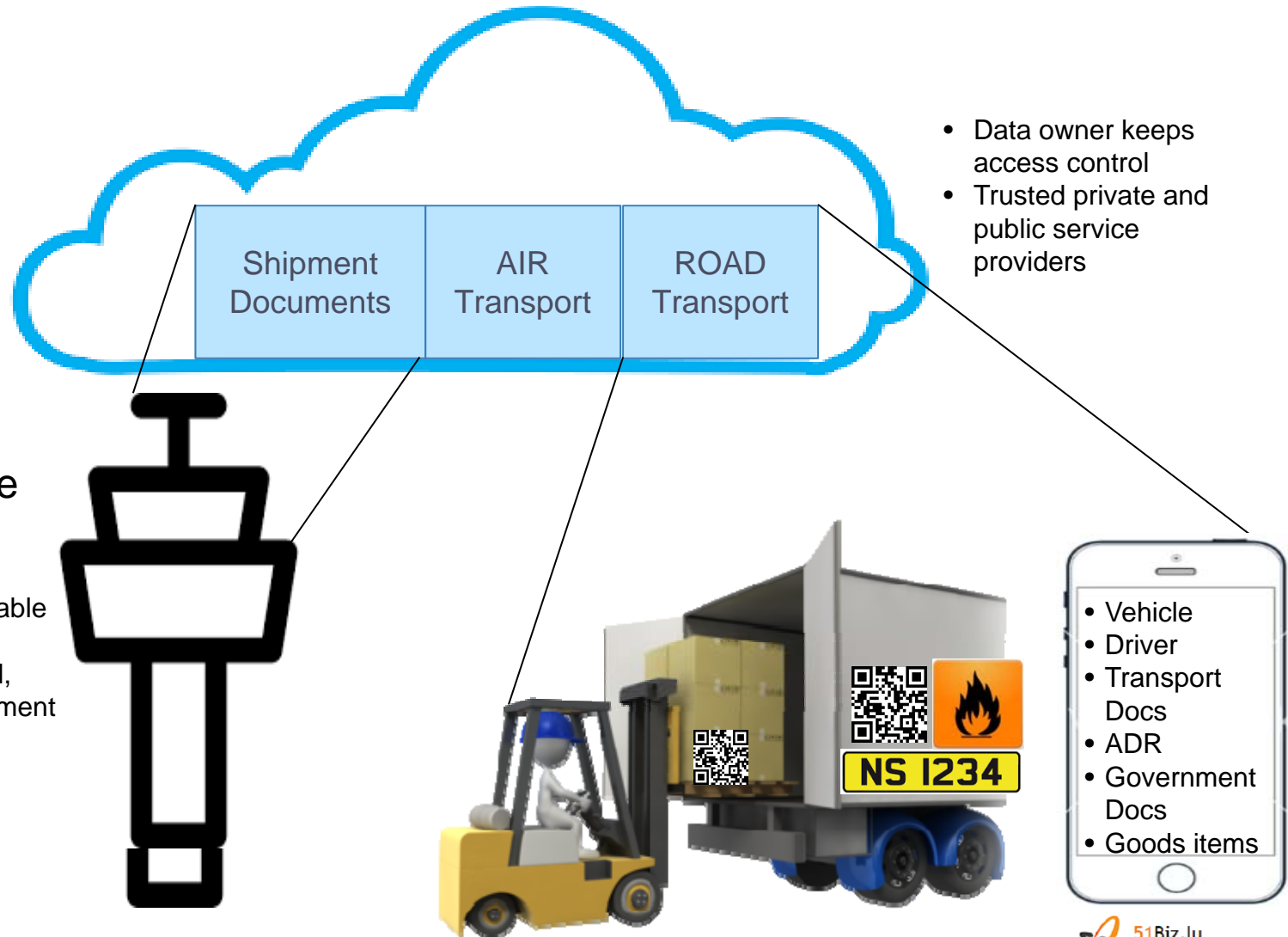
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Case study : from Latin America to Europe

Data captured at at source to be re-used along the supply chain by trusted private and public partners
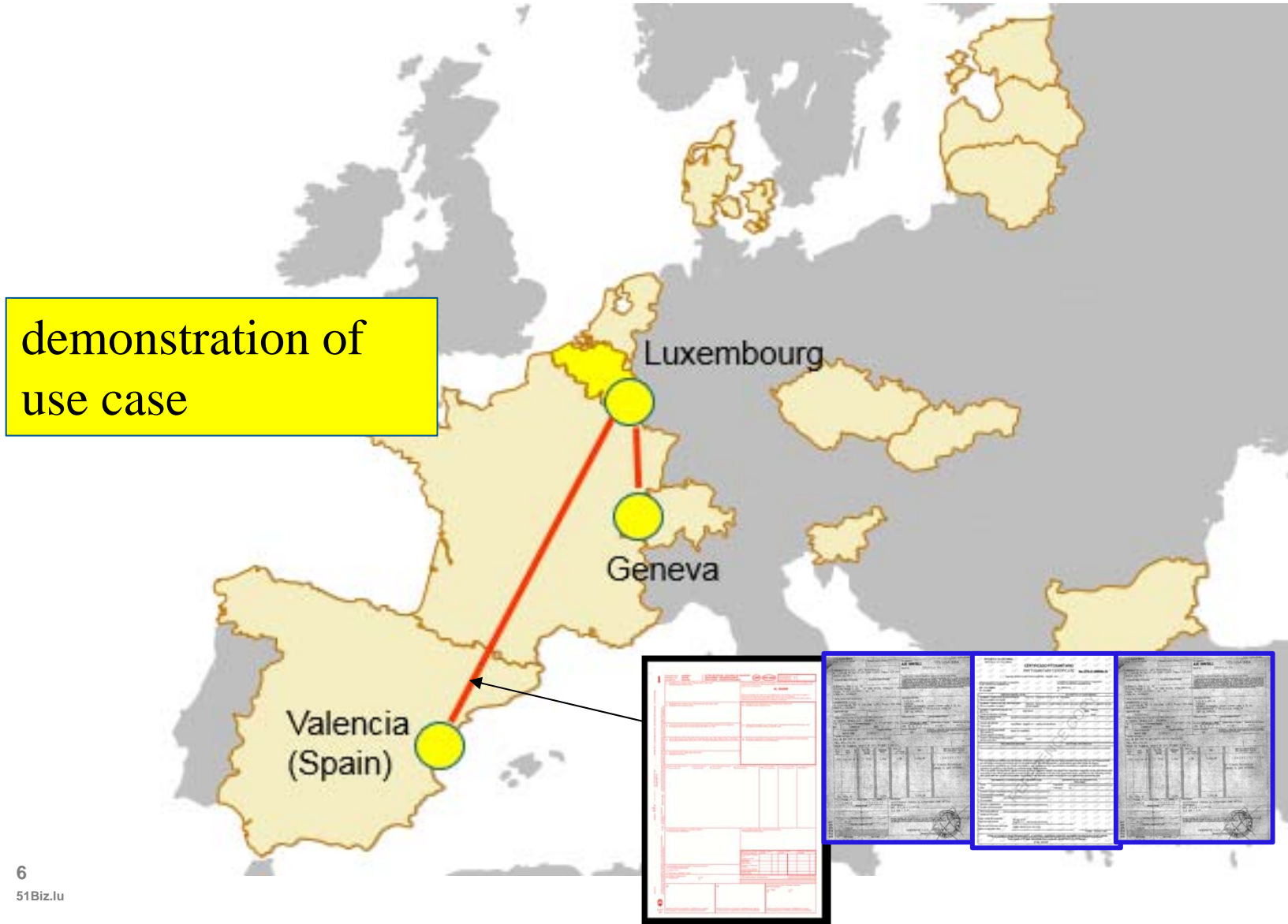
Truck: Luxembourg - Valencia

The reference trade lane illustrates the opportunity to trust digital data, documents and events that are shared with multiple single window environments

| Shipment Documents | AIR Transport | ROAD Transport |

- Data owner keeps access control
- Trusted private and public service providers

Logistics Service Coordinator

- 50+ information available at source
- Generate commercial, transport and government documents

NS 1234

- Vehicle
- Driver
- Transport Docs
- ADR
- Government Docs
- Goods items

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Case study : from Latin America to Europe
An export forwarder consolidates meat exports with destinations in Geneva and Valencia

demonstration of use case

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Single Window and Blockchain

Trust across borders

- Trade Finance
- Border controls access data that can no longer be shared
- Blockchain technology enables to verify authenticity and uniqueness of logistics documents
- Single Windows can protect commercial data that were used to create e-Certificates

Traceability of goods

- IOT technology enables to generate events
- Smart contracts to automate supply chain processes
- Blockchain enables to access goods movement history records that can no longer be changed

Execute logistics contracts
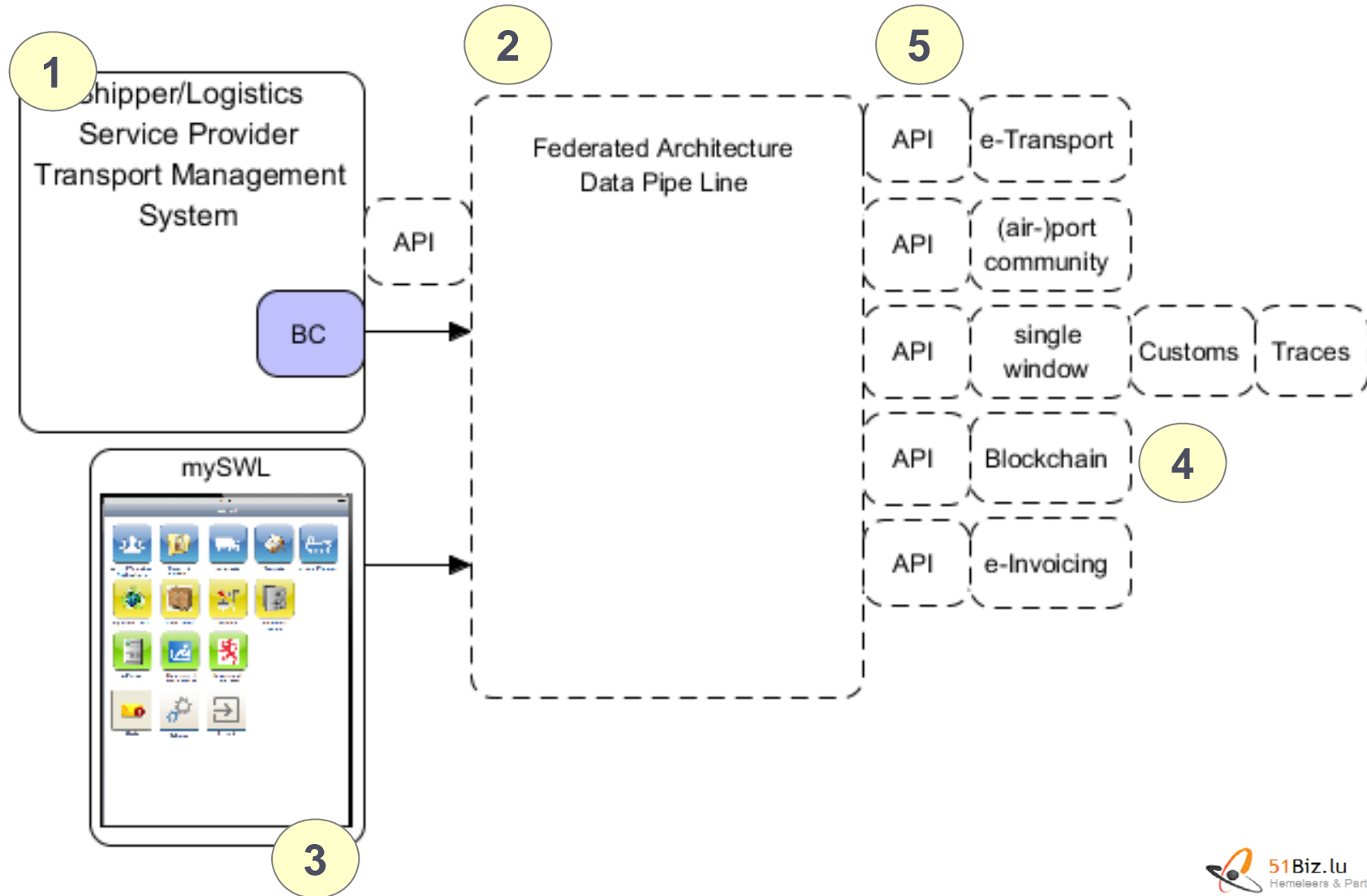
- Authenticity, Unique, Latest version
- Events, signed by multiple signatures (e.g. goods receipt, proof of delivery
- Use as a reference for government declarations
- Protect commercial data by reducing the use of paper shipment pouches

Sharing data between private and public

- Private economic operators and government agencies share trusted information
- Blockchain can authenticate e-certificates and the information that was used to obtain the certificate
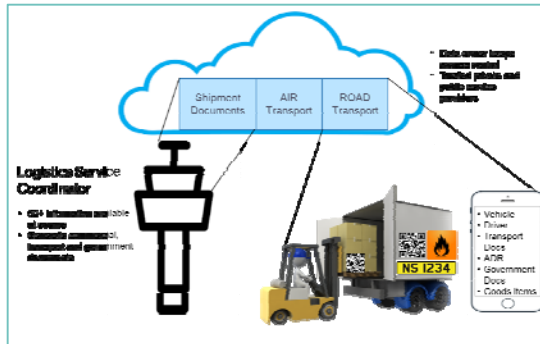
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Federated Architecture

A federated architecture will provide single authentication, authorization and data interoperability where data owners keep control who can access their data

Conclusions

1. 50-60% of information is available at the source of the multi-modal trade lanes

2. It's all about sharing trusted data with business partners and government control agencies.

3. Single window and blockchain

   ❑ Trust across borders

   ❑ Traceability

   ❑ Contracts and events

   ❑ Sharing data between private and public

4. Blockchain: learn today, use tomorrow

   ❑ Understand potential of IOT, Blockchain, Data Integration

   ❑ Proof of concept driven by business, not technology hype