Accelerating Trade Digitalization through Distributed Ledger Technology

2021 GLOBAL TRADE & BLOCKCHAIN FORUM

30 March 2021
10:00-18:00 CET
Accelerating Trade Digitalization through DLT
2021 Global Trade & Blockchain Forum – 30 March 2021, 10:00-18:00

Session 4 – 15:15-16:30 CET

Digital identities: why do they matter for 21st century trade and what does DLT mean for digital identities?

Chris Ballinger
MOBI

Nadia Hewett
WEF

Henrik Hvid Jensen
ATEA

Moderator:
Oswald Kuyler
ICC DSI
Common Digital Global Trade Identity and Signature

A foundational prerequisite for efficient digitalization of global trade

Henrik Hvid Jensen, Atea, hehj@atea.dk, +45 2299 8755
Why a common Global Trade Identity?

Efficient digitalization of all aspects of global trade can only happen if there is a simple and trustworthy digital methodology for any global trade actors to prove its own identity and check other parties' identity.
A digital identity – You know who you are interacting with

A digital identity is the digital equivalent of a person or entity’s real identity, used for identification in digital transactions and connections.

Primary focus is system-to-system interactions

Spans all types of actors – Legal entities, public authorities, Internet of Things

1) Verification of identity
2) Issuing a global recognisable identity
3) This is my identity
4) Please verify this identity
5) Verification

Global trade actor A

Trusted third party

Global trade actor B
How does a digital signature work?

Authority in exporting country:
- Trade-document
- Calculate unique code of the document
- Encrypt the unique code with signers private key

Authority in importing country:
- Trade-document has not been changed
- Compare the decrypted and the calculated unique key
- Decrypt the unique code with signers public key
A digital global trade signature

Significantly more secure than paper-based signature

- A digital signed trade document cannot be forged
  - You know the document hasn’t been tampered with

- Authorization is verified immediately by your IT-systems
  - Issued by an authorized agency in the exporting country
  - Can ensure that only authorized entities have access.

- Enables legally binding digital signature on business agreements and trade documents
Why common and global?

We must have **a single globally recognized** digital identity and signature to be used in global trade - One per digital service provider is not feasible.

Significantly **reduces time, cost and risk** in implementing trustworthy digital global trade solutions.
Global interoperability, while preserving political and competitive neutrality

- **Global trustworthiness** - Any government and business should be able to verify the trustworthiness of a particular identity and use internal rules for trust validation.

- **Self-managed** - Each government and business must control its own identity.

- **Independent of jurisdiction** - Each jurisdiction decides how much trust they will put into the digital identity.

- **Enables participation** - The required investment must be affordable for any country irrespective of their economic development and for any business irrespective of their budget and technological readiness.

- **Neutrality** - No single country/region/organization controls the infrastructure, and it offers no competitive advantage to any one organization.
Common Digital Global Trade Identity and Signature

A foundational prerequisite for efficient digitalization of global trade

Henrik Hvid Jensen, Atea, hehj@atea.dk, +45 2299 8755