



EU Single Window Environment for customs

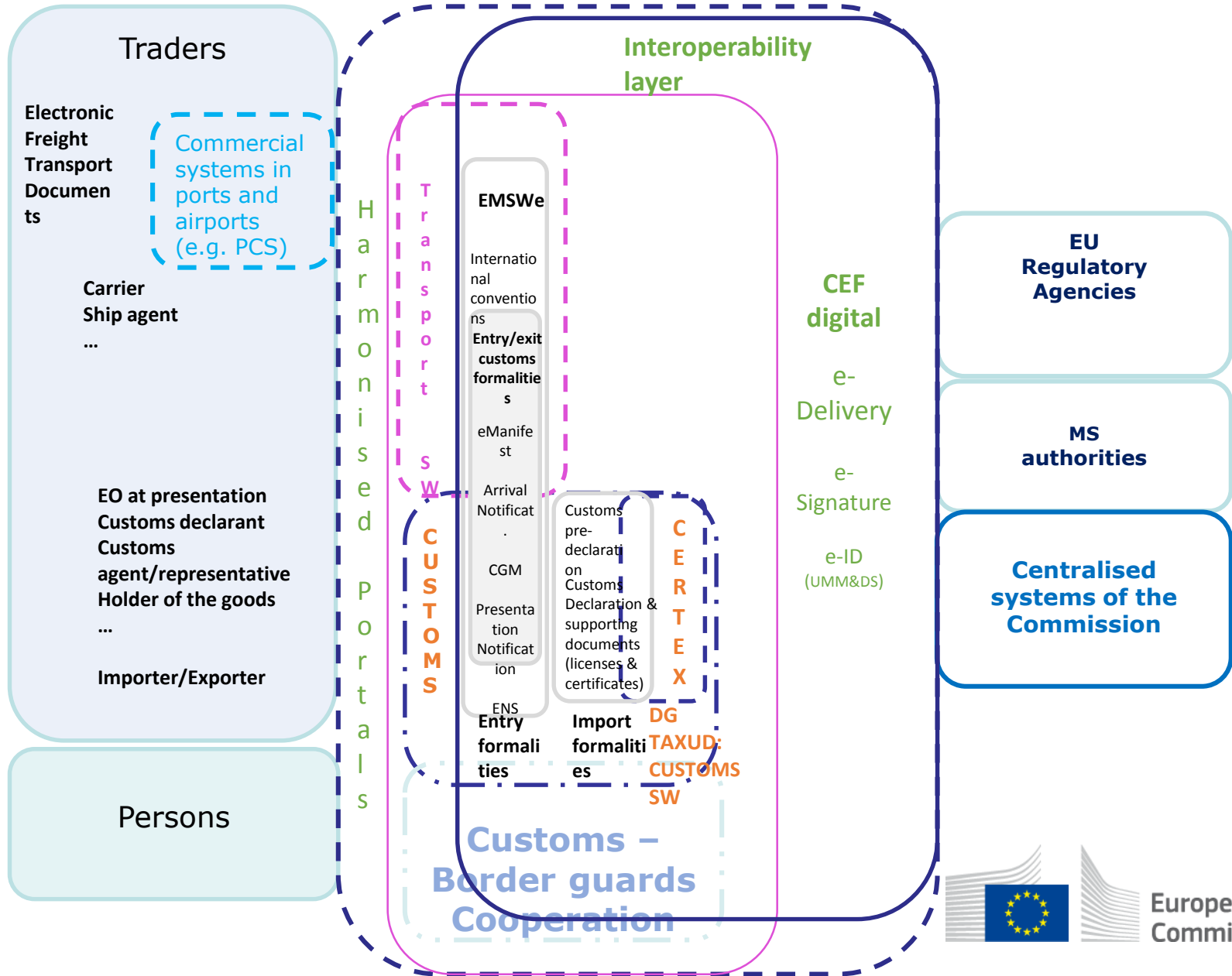
**Brussels, FEPORT conference
November 29th 2018**

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1. EU SW integrated environment for cross-border operations: the big picture
2. EU Single Window environment for customs: policy scope and agenda
3. Data platforms, digitalization, threats and opportunities for the supply chains: Blockchain @DG TAXUD experience and potential of Blockchain for SW services

1. EU SW integrated environment for cross-border operations: the big picture

EU Single Window Integrated Environment for cross-border operations (air, maritime, rail, road)



The SW landscape at the border

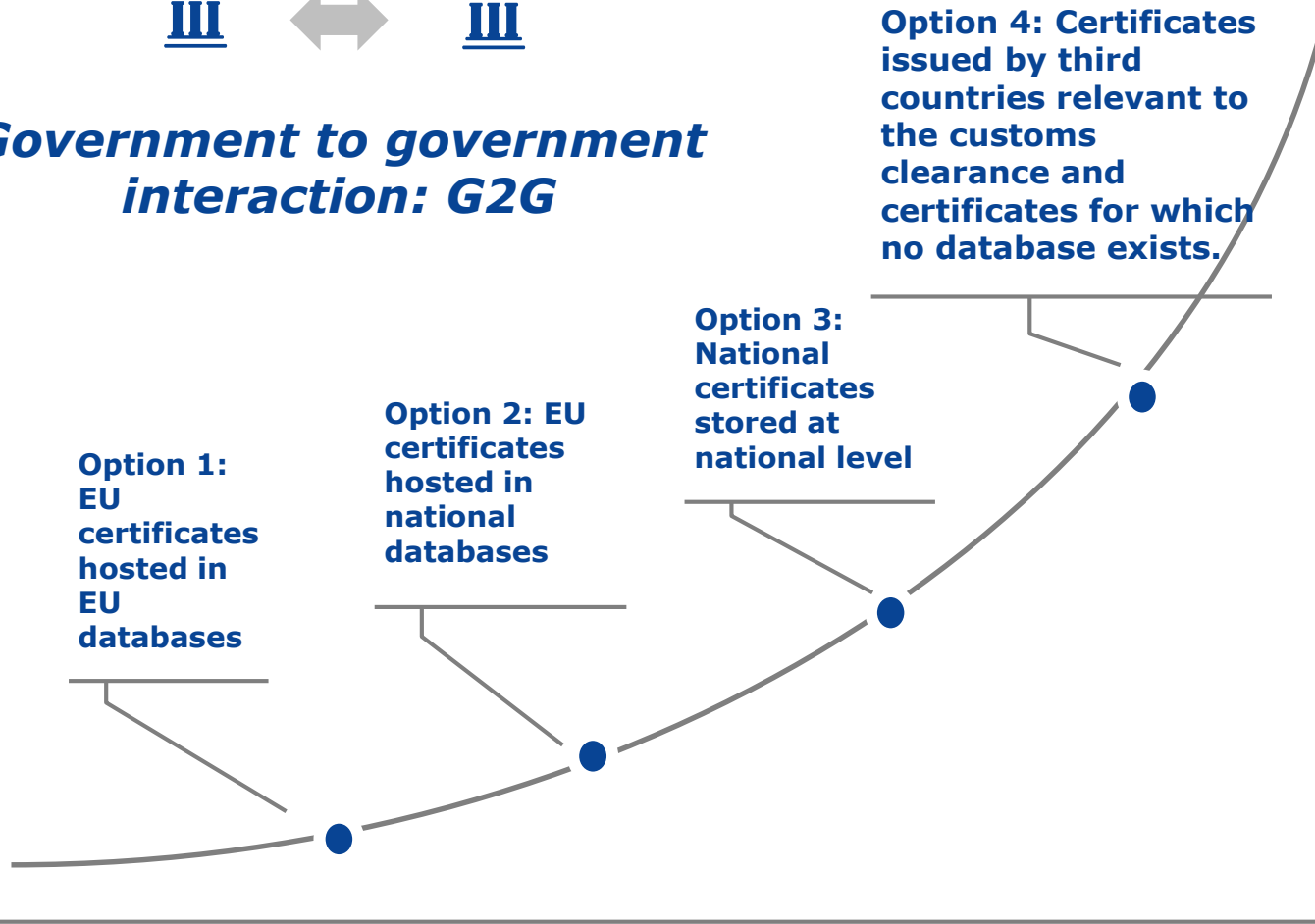
- Scope for several 'Single Windows'
- Customs side based on UNECE Rec. 33 focused on import, export and transit operations
- Transport side focused on entry formalities
- Synergies at interoperability layers (business, semantic, data, technical)

2. EU Single Window environment for customs: policy scope and agenda

EU Single Window environment for customs scope (1/2)



Government to government interaction: G2G



NB: G2G options 1 to 4 are not mutually exclusive and can be combined and can build on one another.

EU Single Window environment for customs scope (2/2)



Business to government interaction: B2G

Harmonised measures to set up national customs single window solutions providing trade with harmonised access points to fulfil regulatory formalities for import, export and transit of goods (e.g. Submission of certificates application data through customs)

EU Single Window environment for customs policy agenda

Gradual implementation of the full initiative scope (2021-2027)

Today

(Dec. 2017-Q4 2019)

- Inception Impact Assessment published on 4/05/2018
- Open Public Consultation (Q2 - Q3 2018)

High-Level Seminar on SW (RO)

(May 2019)

Draft legal proposal for inter-service consultation

(Q4 2019)

Adoption by the College

(early 2020)

Co-legislation (Council and EP) with planned entry into force

(early 2021)

EU Single Window CERTEX implementation (in pilot mode until entry into force of new legislation)

UCC implementation (e.g. of relevance to SW: Centralised Clearance at Import, Generic Trader Portal, UMM&DS, EORI)

3. Data platforms, digitalization, threats and opportunities for the supply chains: Blockchain @DG TAXUD experience and potential of Blockchain for SW services at the border

What's in blockchain for TAXUD?

- A potentially foundational technology for the Digital Single Market
- Unique capabilities and benefits
- Enjoying growing momentum and interest

What blockchain is NOT:

- A solution to all problems!

TAXUD started exploration of blockchain technology in 2017

1. Study and PoC in the excise domain (EMCS)

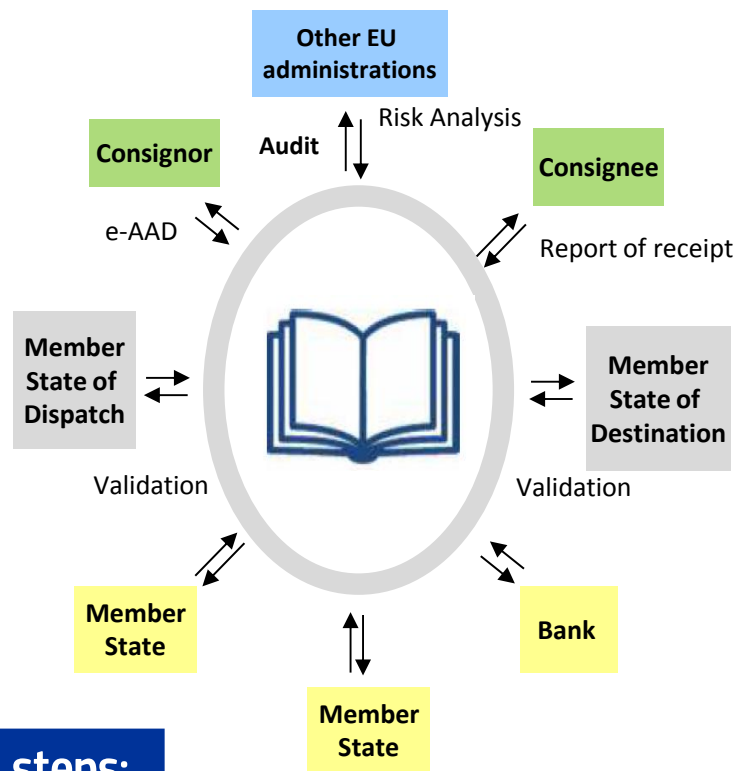
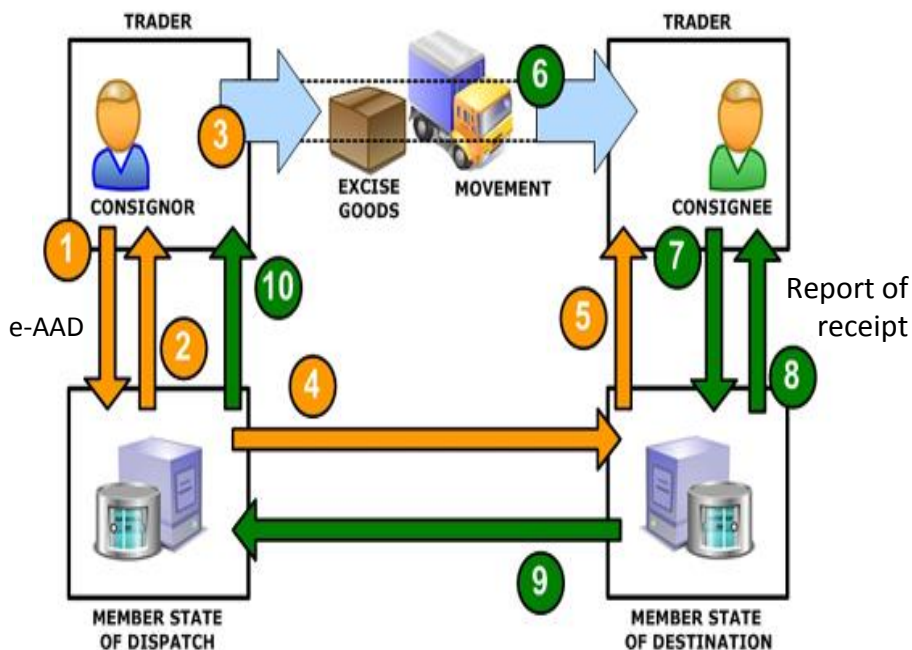
- Test the applicability of the technology as main component of an "illustrative" system
- End-to-end, transaction-oriented pattern
- Permissioned, private blockchain; Hyperledger Fabric (open source)
- No involvement of Member States or Traders
- Technology exploration outside of TAXUD's projects context

2. PoC in the field of temporary admission (eATA)

- Blockchain as an additional layer to ensure trust in a centralised solution
- Data anchoring & notarisation pattern
- Permission-less blockchain, on a private network but anchored to a public blockchain; Ethereum (open source)
- With the collaboration of the International Chamber of Commerce
- Inscribed in TAXUD's electronic customs MASP (project fiche 3.2)

From hub & spoke, message exchanges involving many silo'd databases


... to data sharing on a single ledger visible to all involved actors



From 10 to 6 workflow steps:
40% less complex!

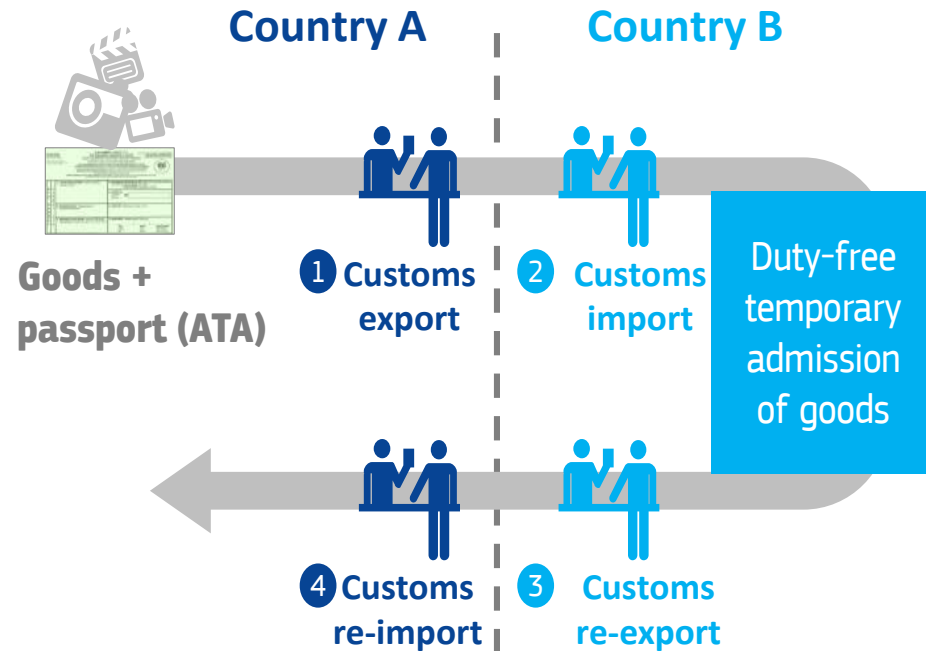
EMCS blockchain Proof of Concept

What is it?

Issuing Association Association émettrice Organisatie van uitgifte Issuende des Carnets de Commerce et douane de la Région Fédérale de Belgique voor België en Nederland		A.T.A. CARNET / CARNET A.T.A. FOR TEMPORARY ADMISSION OF GOODS POUR L'ADMISSION TEMPORAIRE DES MARCHANDISES VOOR DE TIJDELIJKE INVOER VAN GOEDEREN CUSTOMS CONVENTION ON THE A.T.A. CARNET FOR THE TEMPORARY ADMISSION OF GOODS CONVENTION DOUANIÈRE SUR LE CARNET A.T.A. POUR L'ADMISSION TEMPORAIRE DES MARCHANDISES DOUANE-OVEREENKOMST BETREFFENDE HET CARNET A.T.A. VOOR TIJDELIJKE INVOER VAN GOEDEREN CONVENTION ON TEMPORARY ADMISSION / CONVENTION RELATIVE À L'ADMISSION TEMPORAIRE / OVEREENKOMST BETREFFENDE TIJDELIJKE INVOER		INTERNATIONALE AANSPRAKELIJKE ORGANISATIE INTERNATIONAL GUARANTEE CHAIN CHAÎNE DE GARANTIE INTERNATIONALE 
A T A C A R N E T A T A C A R N E T	A. HOLDER AND ADDRESS / Titulaire et adresse / Houder en adres	G. FOR ISSUING ASSOCIATION USE / Réservé à l'association émettrice Voorbehouden aan organisatie van uitgifte FRONT COVER / Couverture / Omslag		
	B. REPRESENTED BY* / Représenté par* / Verlegenwoordigd door*	a) CARNET No. Carnet N° Carnet nr. BE <input type="text"/>		
	C. INTENDED USE OF GOODS / Utilisation prévue des marchandises / Voorgenomen gebruik van de goederen	b) ISSUED BY / Délivré par / Afgegeven door		
		c) VALID UNTIL / Valable jusqu'au / Geldig tot year / année / jaar / month / mois / maand / day (inclusive) / jour (inclus) / dag (inclusief)		

- More than **70 countries**
- +200,000 paper carnets/ year
- ATA carnets digitisation as part of **EU digital customs**

How does it work?

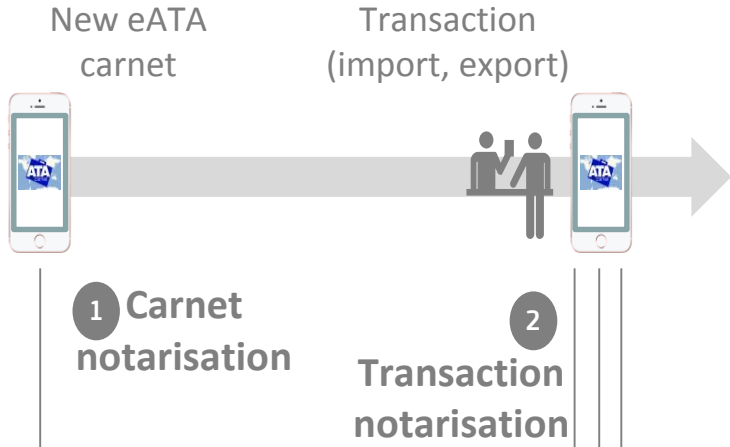


Issue: How can any of the participants be sure that the system is not altered behind the scene ?

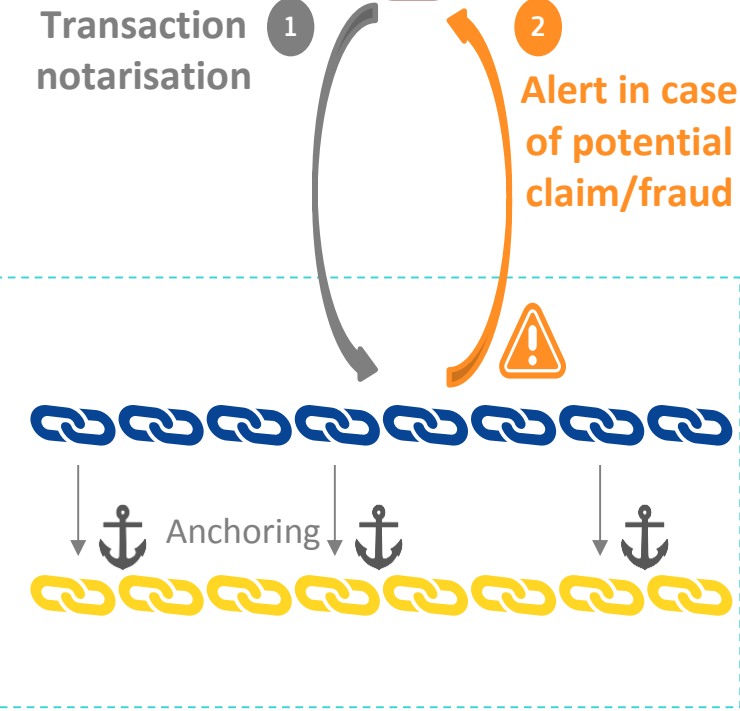
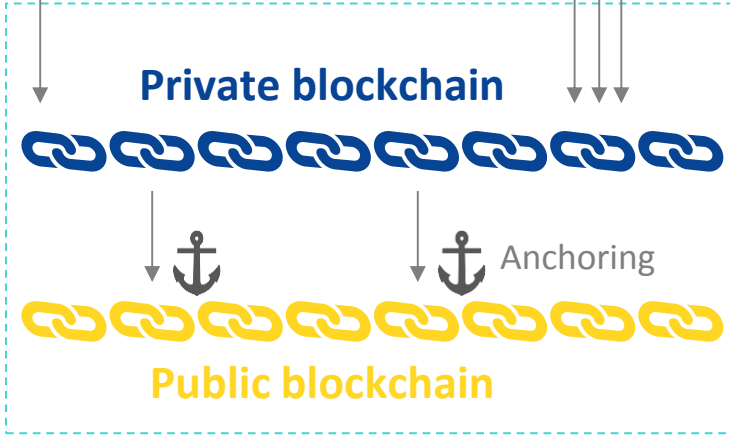
1 Notarisation of carnets & transaction

2 Automation of consistency checks

eATA

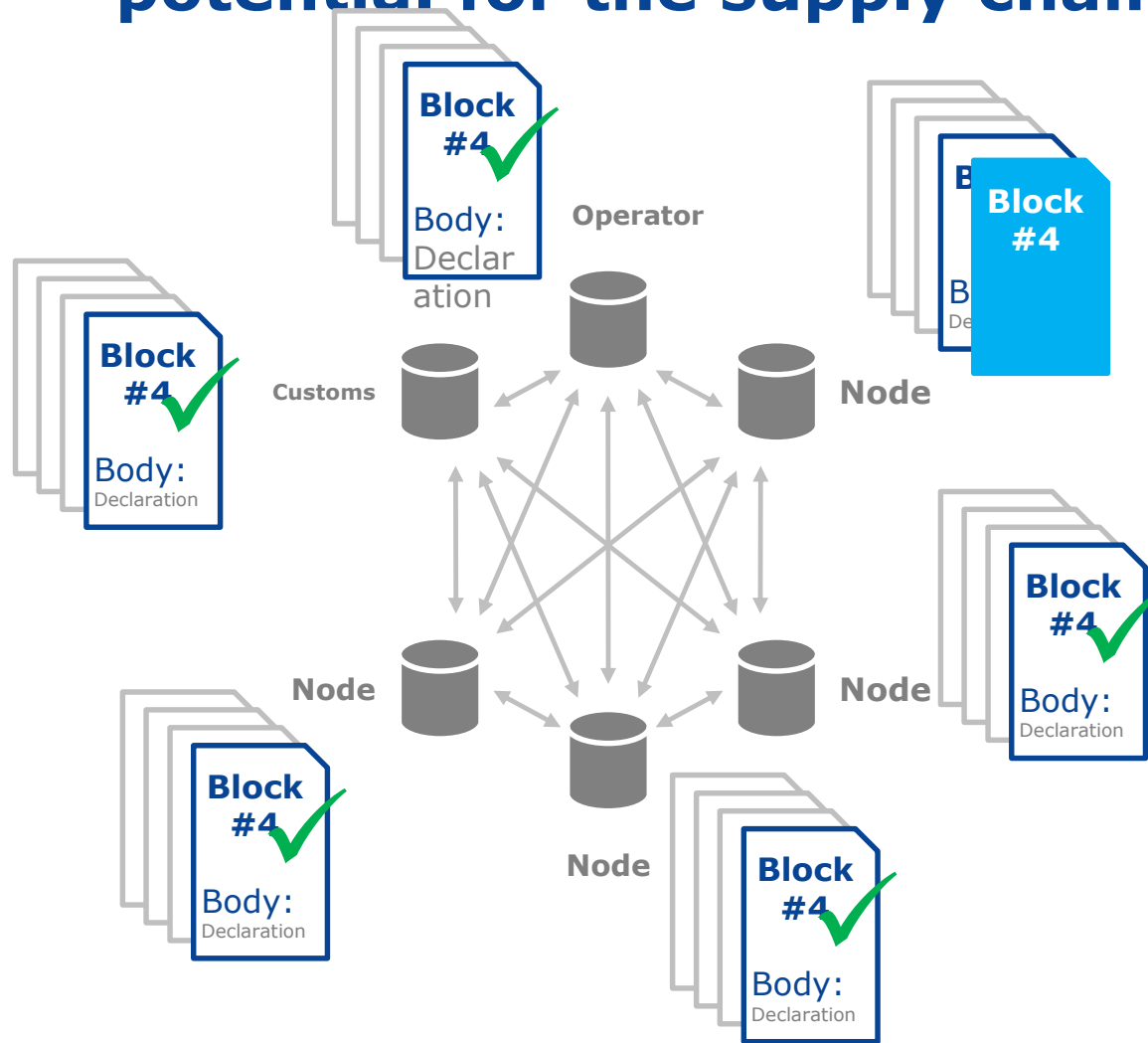


Blockchain add-on



ATA blockchain

From messages exchanges to data sharing: potential for the supply chain



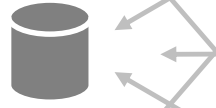


Electronic Freight Transport document
(and other transport eDocs verified by customs authorities)



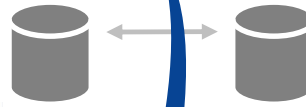
EU regulatory agencies

Economic Operators' Systems



MS authorities

Entry into declarant records (EIDR)
UCC art. 182



Centralized systems of the commission



Blockchain for notarisation to bring trust in the integrity of declarations stored at the Economic Operator's systems

Transaction-less B2G declarations facilitated by blockchain notarisation

Key takeaways

- Blockchain has characteristics that are interesting for public authorities and economic operators such as notarisation to ensure traceability across the supply chain
- Blockchain is no panacea, no general solution. Additional work required before adopting Blockchain/DLT in our technology portfolio.
- Joined discovery and implementation approach between EU Commission and Member States.

EMCS PoC: cf. video (6 min)

<https://youtu.be/qsmo7VOqATl>

eATA Blockchain PoC: cf. article in WCO News

<https://mag.wcoomd.org/magazine/wco-news-87/digitization-ata-carnets/>

European Blockchain Partnership

<https://ec.europa.eu/digital-single-market/en/news/european-countries-join-blockchain-partnership>

Report from Scientific Foresight Unit (STOA), DG EPRS, European Parliament

[http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/581948/EPRS_IDA\(2017\)581948_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/581948/EPRS_IDA(2017)581948_EN.pdf)

Additional information

Open Public Consultation (OPC) on the EU SW environment for customs

- ✓ https://ec.europa.eu/info/consultations/initiative-eu-single-window-environment-customs_en
- ✓ Launched on 9th October 2018 and open until 16th January 2019.