



# Blockchain @ IDSt

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# 1. Starting Point: Blockchain @ IDSt

## Pre-considerations

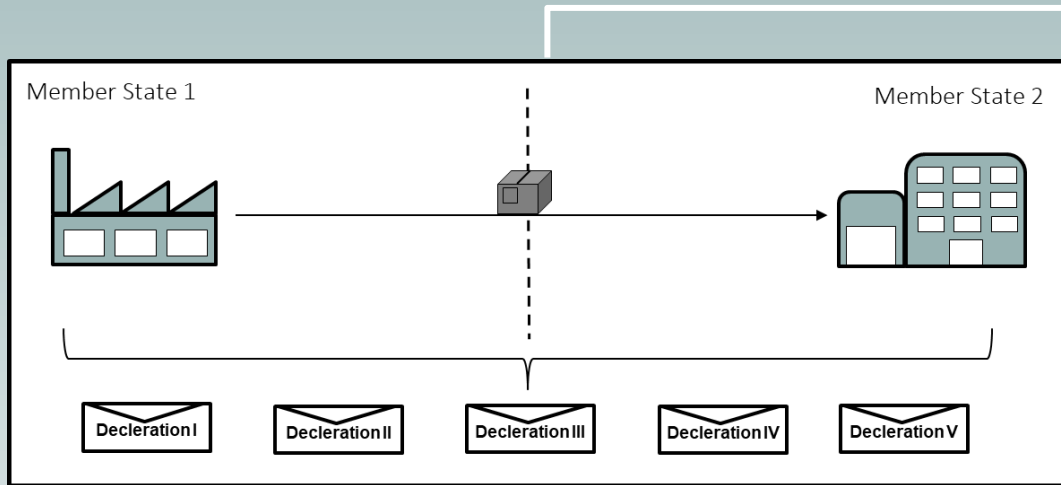
- The digital transformation in all central areas of life and business - including the tax sector - is the greatest challenge of our time
- Up to now, every single company works separately on “digitalization” in tax matters

## How does the IDSt wants to change that?

- Idea: Building a digital infrastructure in the tax area
  - exchange tax relevant data between companies and with the tax authorities
- Cooperation of all economic stakeholders for joint development of use cases in the tax and customs area
- Joint "best practice" transformation of tax law requirements into the digital world
- Imaginable for many technologies such as AI, blockchain, RPA ...

# 1. Starting Point: Blockchain @ IDSt

## Analog infrastructure



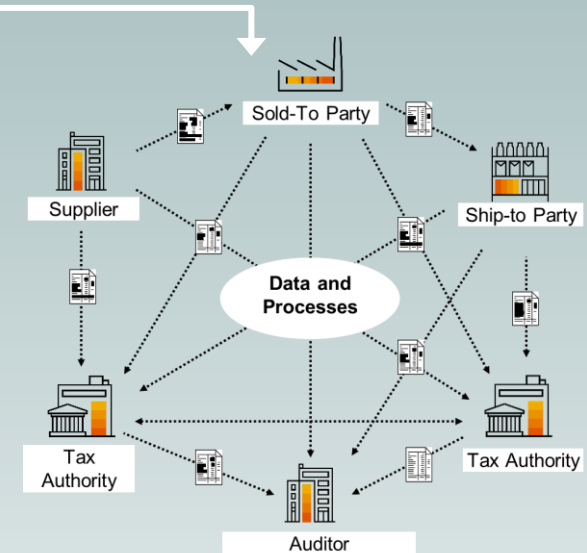
Manual and paper-based activities

Highly Fraud sensitivity

High administrative costs

Different solutions

## Digital infrastructure



Digital Transformation

Proof of originality

Automatization of legal requirements

Fraud Prevention

## 2. Realization: Blockchain @ IDSt - taXchain

### The platform

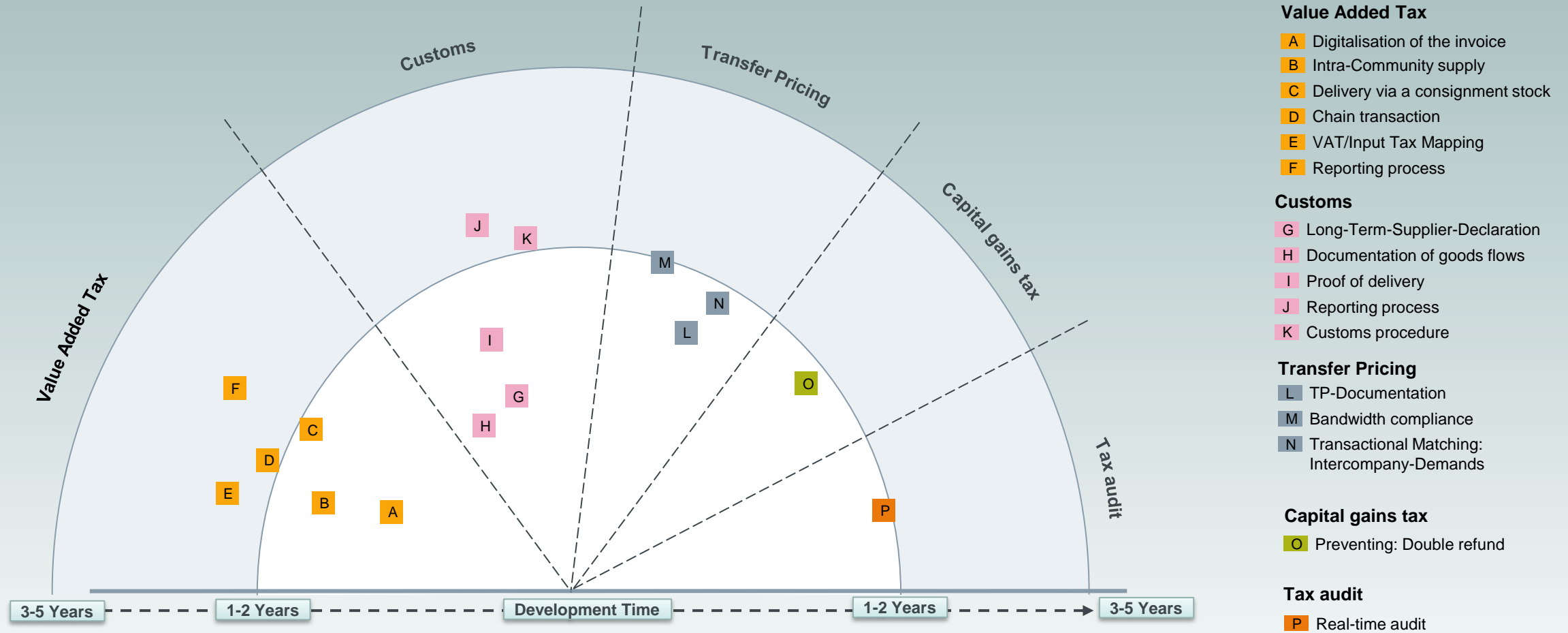
- taXchain as a Blockchain platform for tax and customs
- Goal: Digital Transformation of tax processes, stopping media disruptions with a digital tax data exchange, using technologies to automate tax processes

### The development

- Cooperation of all economic stakeholders for the joint development of use cases in the tax and customs (via IDSt)
  - Blockchain technology is only used, when it makes sense
- 1. Use Case: long-term-supplier-declaration according to articles 62 and 63 UCC-IA (*cooperation of Siemens & Henkel, completed*)
- 2. Use Case: tax exemption of intra-community supplies/chain transactions (“Document Evidence”) according to Art. 45a EU-VAT Regulation / § 17a-c german-VAT Regulation (*IDSt, development currently in planning*)

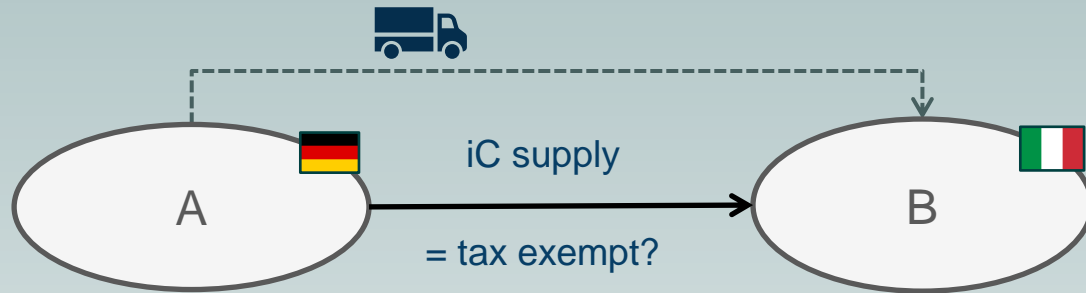


## 2. Realization: Blockchain @ IDSt - taXchain

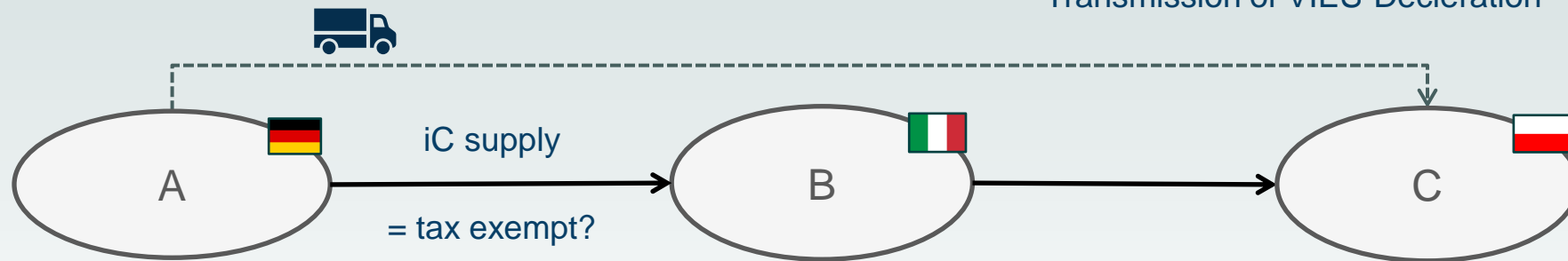


# 3. VAT Law: Document Evidence for tax exemption of intra-community supplies

## 1. Bilateral transaction:



## 2. Chain transaction:



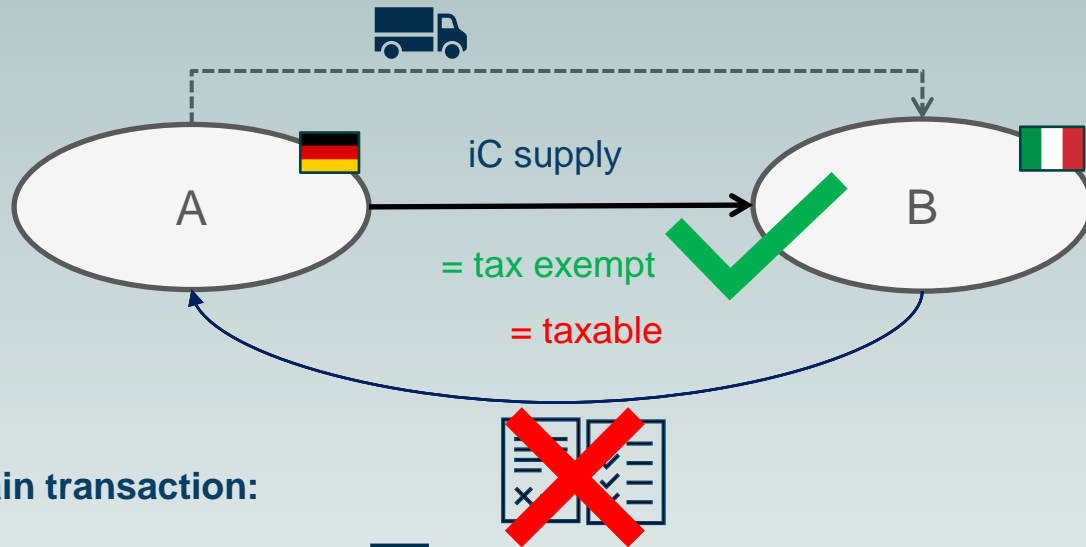
### Intra-community supply

(§§ 4 Nr. 1b, 6a German-VAT law/Art. 138, 139 EU-VAT Directive)

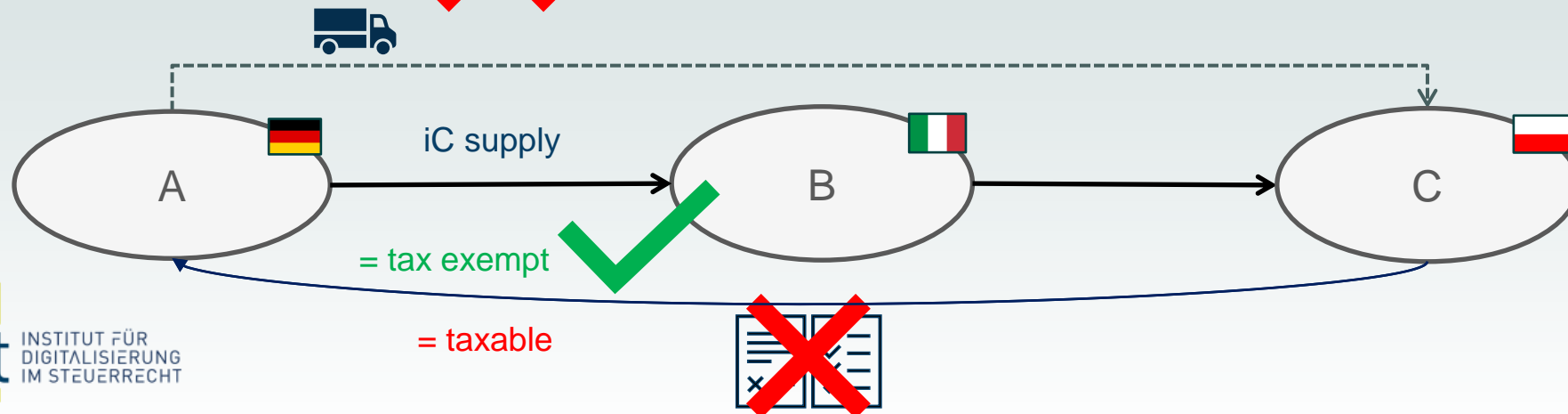
- Supply
- The goods must have been transported or dispatched from the domestic territory to another EU Member State by the supplying company or customer
- The customer must be an entrepreneur and use a valid VAT-ID from another EU Member State
- Taxable intra-community acquisition in the Member State of destination
- Tax exemption can only be claimed if accounting and **document evidence** are properly kept
- Transmission of VIES-Declaration

# 3. VAT Law: Document Evidence for tax exemption of intra-community supplies

## 1. Bilateral transaction:



## 2. Chain transaction:



## Document evidence management

(§§ 6a Abs. 3 german-VAT law, 17a-17c german-VAT regulation/Art. 131 EU-VAT Directive, Art. 45a EU-VAT Regulation)

### (1) Invoice duplicate( § § 14, 14a german-VAT law)

- Reference to tax exemption of iC supply

### (2) Proof of transport

- At least two non-contradictory proofs from two independent parties
- or special case in GER: confirmation of arrival
- Important: monitoring the receipt of documents in the company

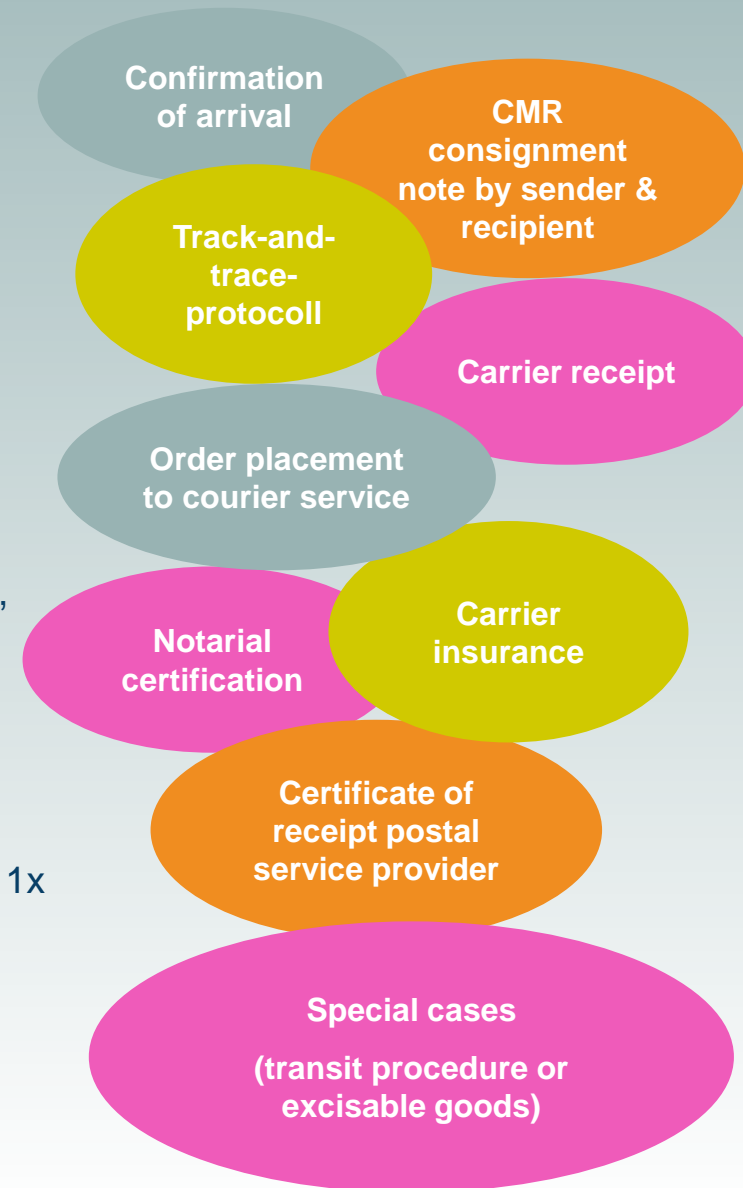
**If the documents are missing or incomplete, the tax authorities can deny the tax exemption**



# 3. VAT Law: Document Evidence for tax exemption of intra-community supplies

## Problems with the current document evidence management:

- Complex, manual and paper-based process
- Documents must be kept for ten years in the possession of the company required to provide proof (paper-based)
- Complexity: Each member state has a "slightly different" procedure regarding the record keeping
  - Some countries require e.g. personal names for goods recipients
  - The position of the tax authorities is unclear in most member states
  - In the member states often manual & paper-based procedures, partly with signature or stamped, only a few member states accept electronic signature, but still PDF (no automated further processing, as not machine-readable = again media disruption)
  - Not only the customer company has to confirm the receipt of the goods, but also exactly the person receiving the goods
  - Match between invoice and proof document difficult in practice (3 documents must be mapped - 1x invoice/2x documents invoice)
- In chain transaction: intermediary is at risk of disclosing confidential information about his customer





### 3. VAT Law: Document Evidence for tax exemption of intra-community supplies

#### **Possible consequences:**

- VAT
- Interest
- Penalties
- Possible deregistration
- Loss of "special status" (CTP) in member states
- Supplier/customer relationship jeopardized in the event of discrepancies in supporting documents
- ...

# 4. IDSt Use Case for Digital Documentation evidence management

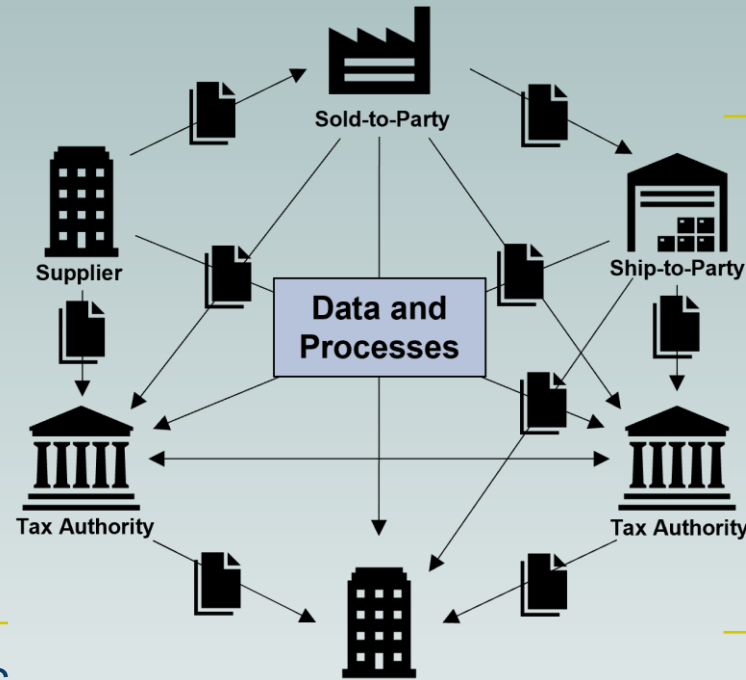
## Goal: Digital document evidence management

Digitalize and automate the cross-company data exchange process in the context of document tracking

## Unambiguous evidence via GPS tracking

Unique proof of transport through use of GPS tracking upon arrival of goods

Authentication of tax data to ensure the identity of the information through blockchain technology



## Data restriction

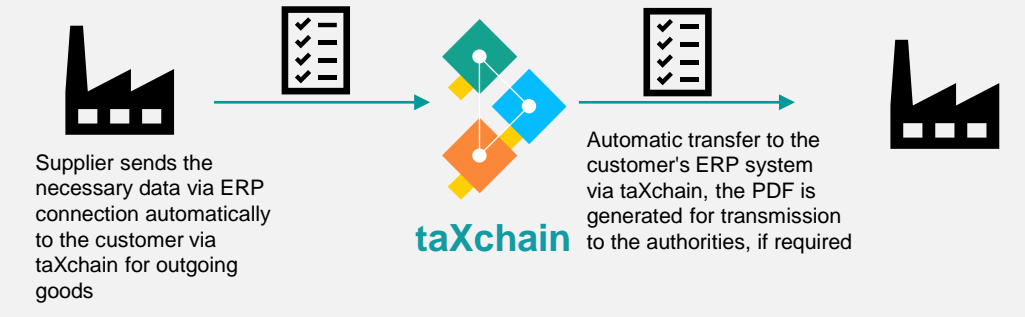
Sharing data on a need-to-know basis to control attribute-level visibility

## Read authorization of the tax authorities / European extension

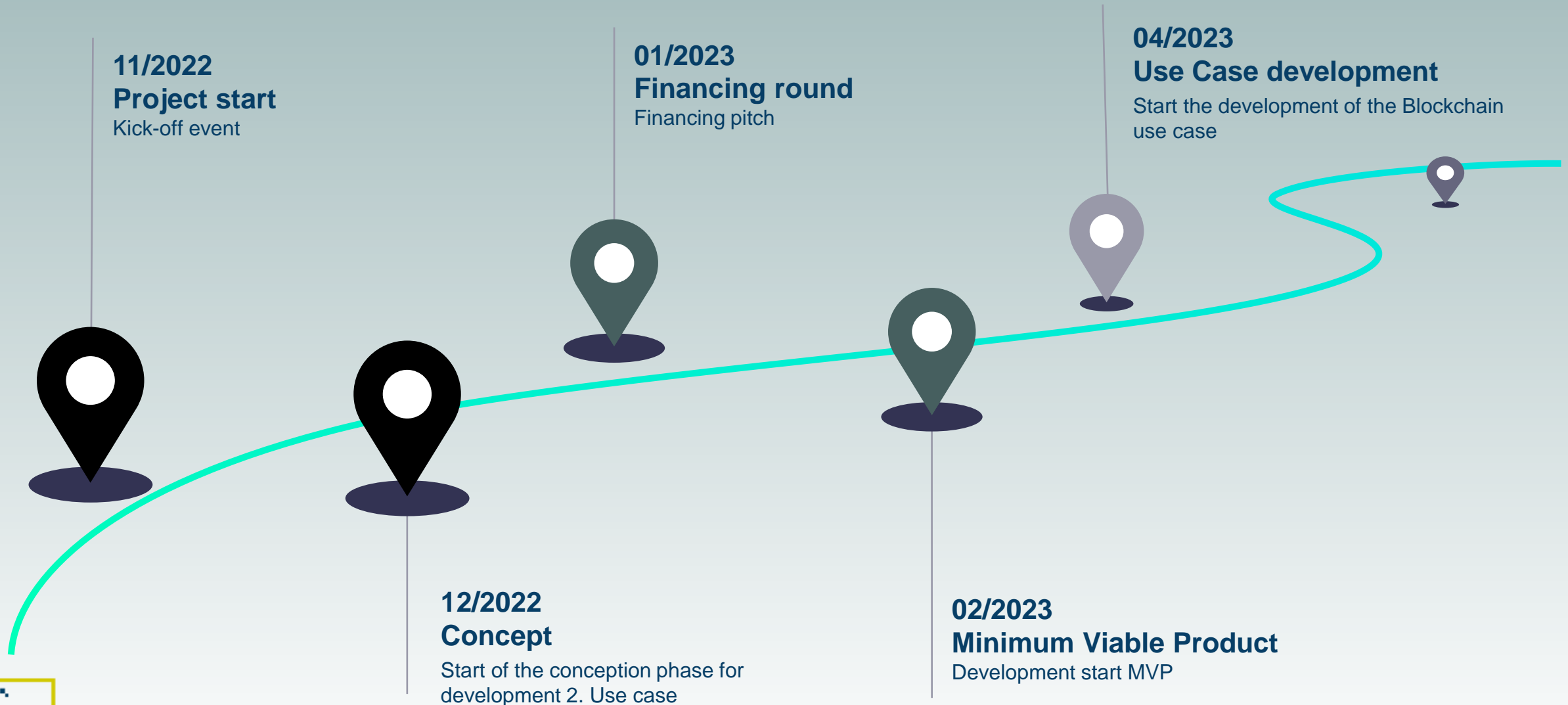
Avoidance of denial of tax exemption by tax audit years after movement of goods. Extension starting from GER to the other member states



## 6. Possible implementation scenarios for the use case

Option 1	<p>Confirmation of arrival      CMR-consignment note      +      Use of GPS data from logistics/carriers</p> <ul style="list-style-type: none"><li>• Classic common proof documents established in template form for the digital world</li></ul>
Option 2	<p>e-CMR      <b>Still under development in Germany, other countries already use it</b>      +      Use of GPS data from logistics/carriers</p> <ul style="list-style-type: none"><li>• Use of the e-CMR → The challenge and at the same time the greatest benefit lie in creating a platform across companies and also across borders for the exchange of freight information data, which also includes the E-CMR. After all, an e-CMR is only as good as the amount of access that companies grant to all stakeholders to this data – domestic and foreign.</li></ul>
Option 3	<p>Data model      +      Use of GPS data from logistics/carriers</p> <ul style="list-style-type: none"><li>• Identification of the data actually required by the tax authorities</li><li>• Tax data model</li><li>• Access to the GPS data of the carriers</li></ul> <div data-bbox="1274 899 2293 1213"><p>The diagram illustrates the taXchain process flow. It starts with a supplier factory icon on the left. An arrow points to a document icon with a checklist, representing data being sent via ERP. This leads to the taXchain logo, which consists of four colored diamonds (green, blue, orange, yellow) arranged in a square pattern. From the taXchain logo, another arrow points to a second document icon with a checklist, representing automatic transfer to the customer's ERP system. Finally, an arrow points to a customer factory icon on the right. Below the diagram, text explains: 'Supplier sends the necessary data via ERP connection automatically to the customer via taXchain for outgoing goods' and 'Automatic transfer to the customer's ERP system via taXchain, the PDF is generated for transmission to the authorities, if required'.</p></div>

# 7. Project plan (2022/2023)



# | Contact



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