



# Welkom

# Gegevensdeling 2.0 in de haven van Rotterdam



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Ministerie van Economische Zaken  
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# Sprekers tijdens deze sessie



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# Supply chain coördinatie door gegevens deling



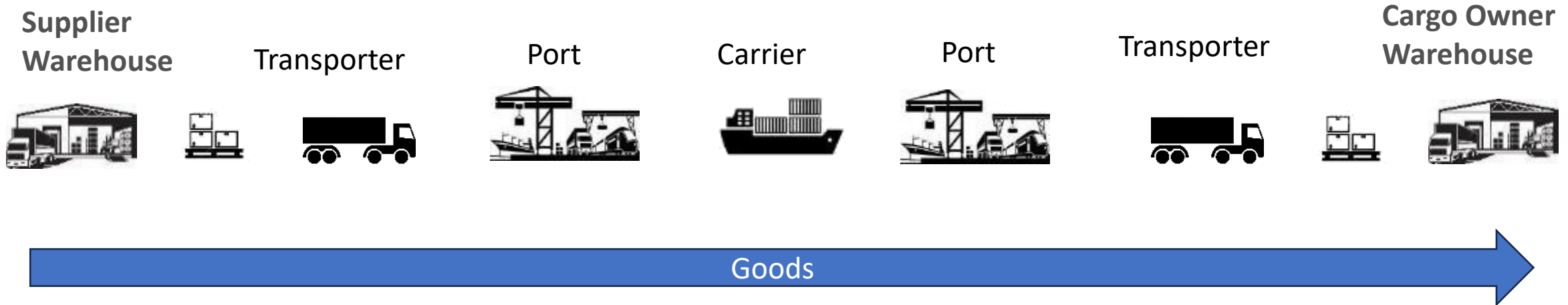
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# Basis Data Infrastructuur

## Volgen in de Toeleveringsketen

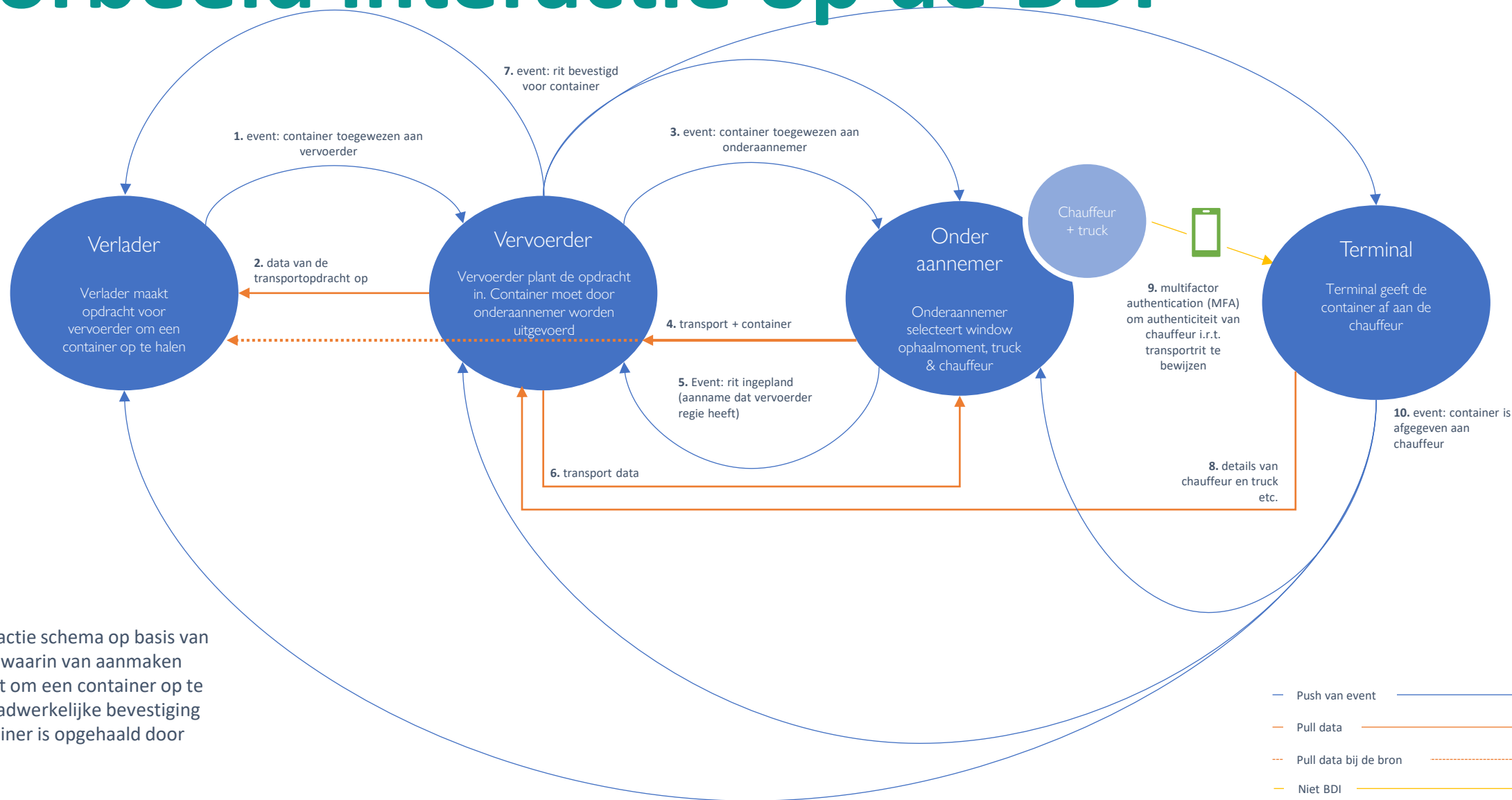


- Een pallet met goederen wordt vervoerd van de leverancier naar de koper, de ladingeigenaar.
- Tijdens het transporttraject vinden er verschillende gebeurtenissen plaats, die leiden tot gegevensuitwisselingen.
- Elke stap maakt doorgaans gebruik van eigen systemen, platforms en formaten.
- Het is voor de ladingeigenaar, aan het einde van de keten, nu erg moeilijk om alle stappen in de toeleveringsketen te volgen.



**Funded by  
the European Union**  
NextGenerationEU

# Voorbeeld interactie op de BDI



- Simpel interactie schema op basis van BDI concept waarin van aanmaken van opdracht om een container op te halen tot daadwerkelijke bevestiging dat de container is opgehaald door chauffeur

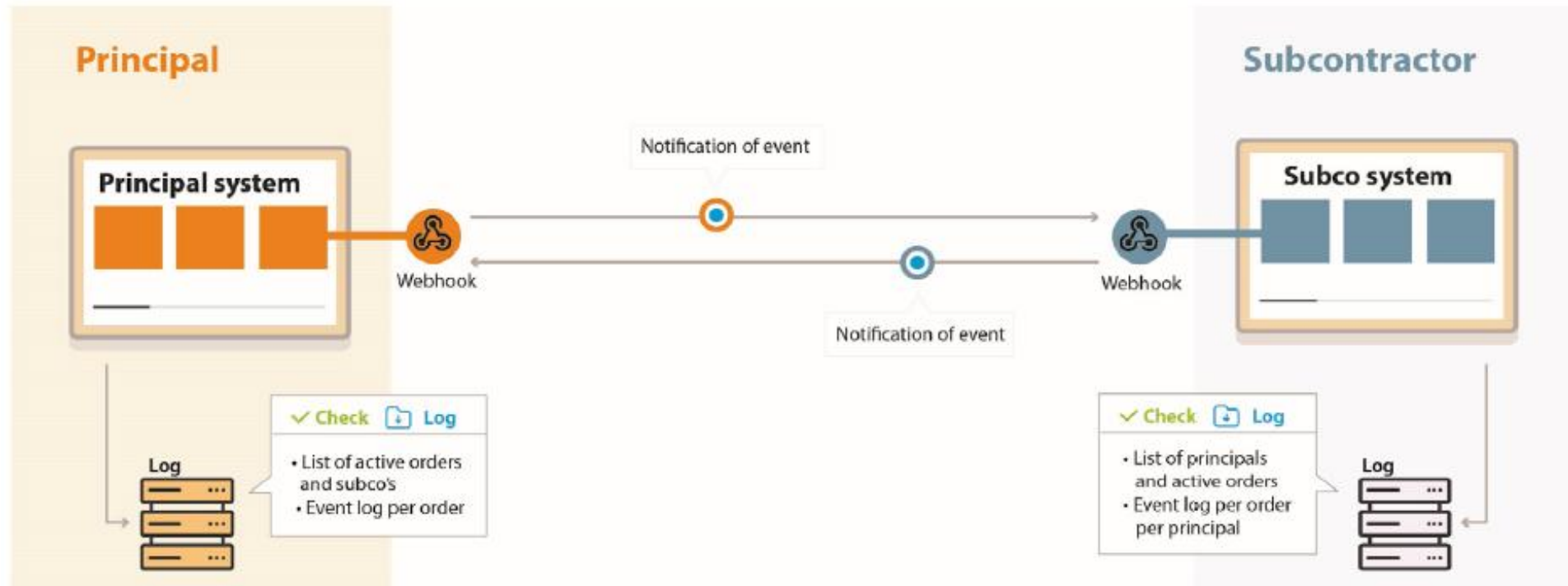
# De BDI in samenvatting

1. **Digitale coördinatie** via notificaties van relevante gebeurtenissen  
(Events en Notificaties)
2. Geautomatiseerde **beheersing van data toegang**  
(afspraken over rollen en rechten bij objecten en events)
3. Registratie van **digitale transacties**  
(onweerlegbare vastlegging tussen partijen van afhandeling en overdracht)
4. **Digitaal vertrouwen** in andere partijen  
(persoon/systeem namens een organisatie - vertrouwde identiteit)

# Digitale coördinatie

Notificaties van relevante gebeurtenissen van (logistieke) Events.

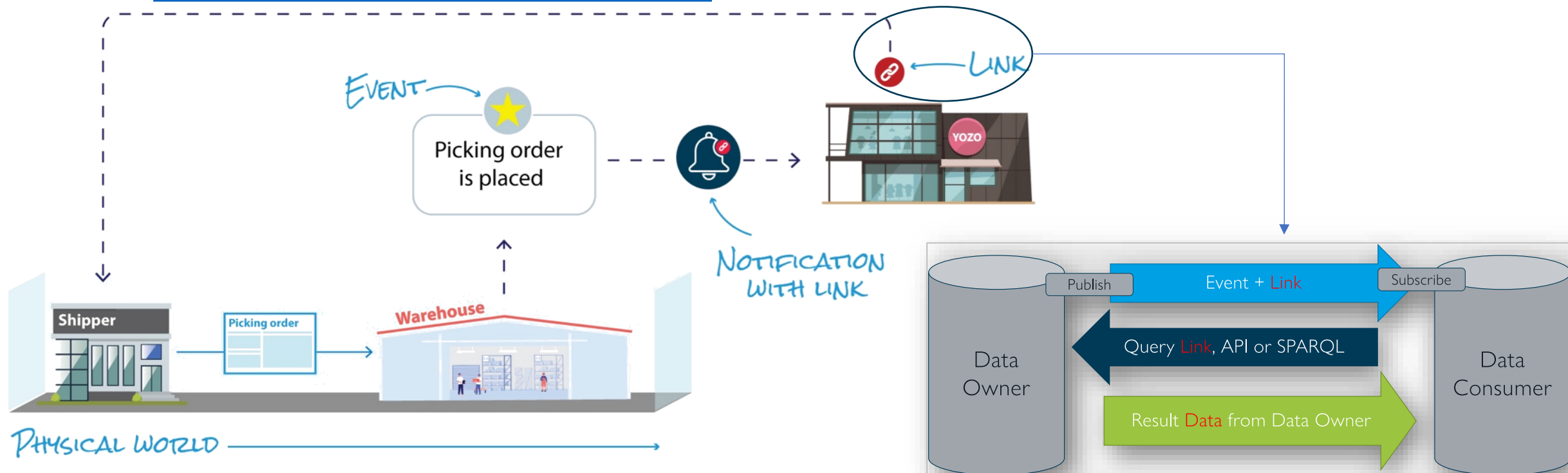
De BDI geeft dat vorm door: [BDI Dynamic event notification distribution](#)



# Beheersing van data toegang

Geautomatiseerde **beheersing van data policies** door benadering data bij de bron. De BDI geeft dat vorm door:

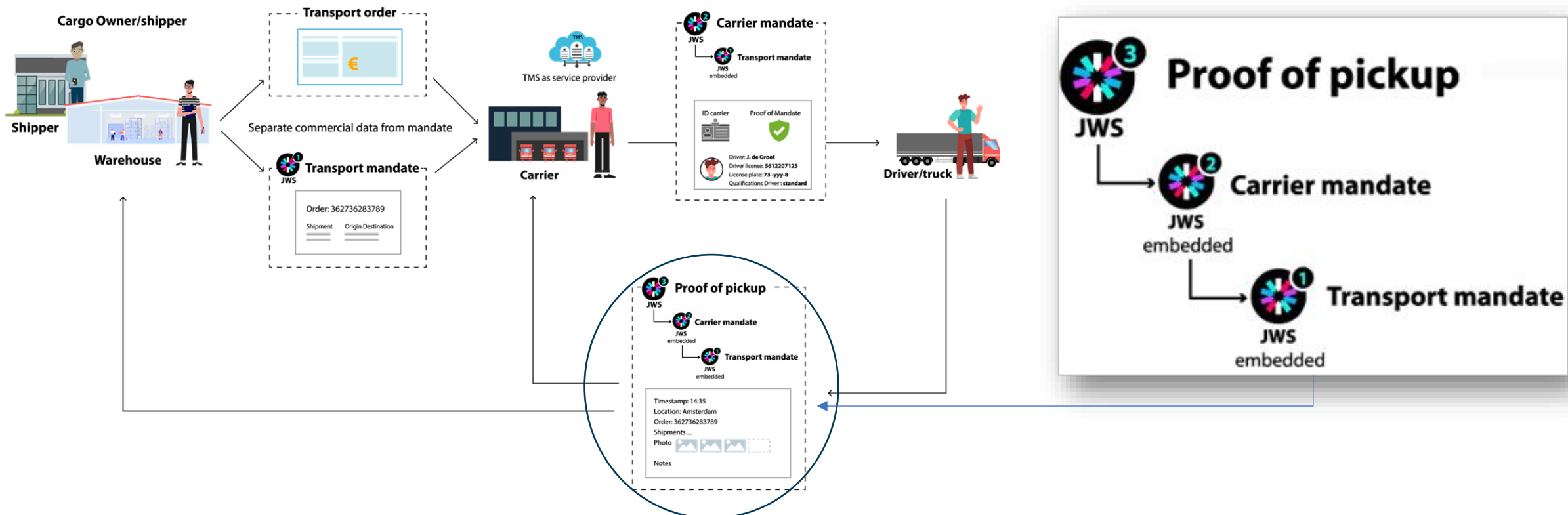
- Federatieve event distributie



# Digitale transacties

Digitale registratie van transacties voor onweerlegbare vastlegging tussen partijen van overdracht en afhandeling. De BDI geeft dat vorm door:

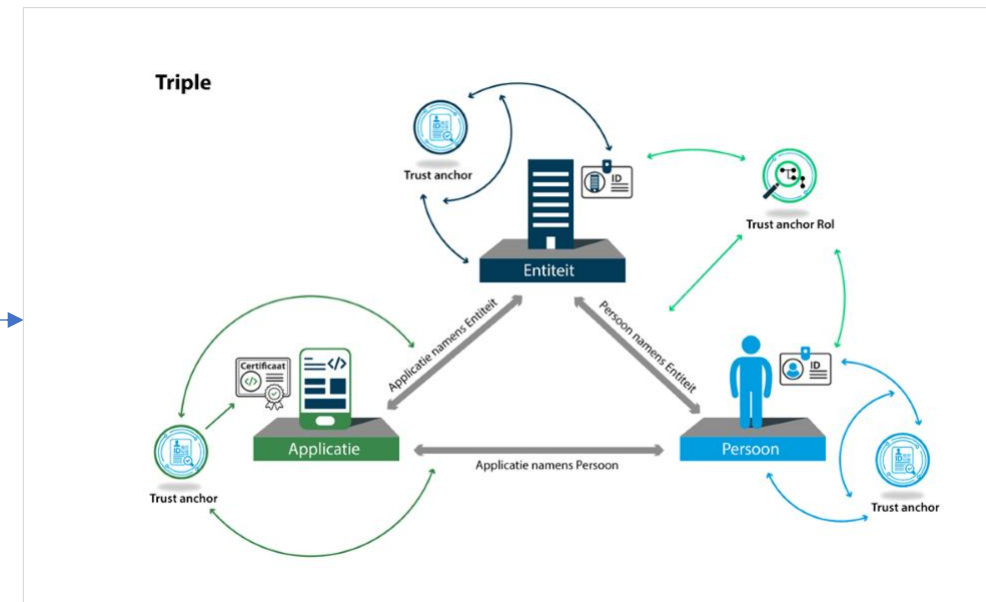
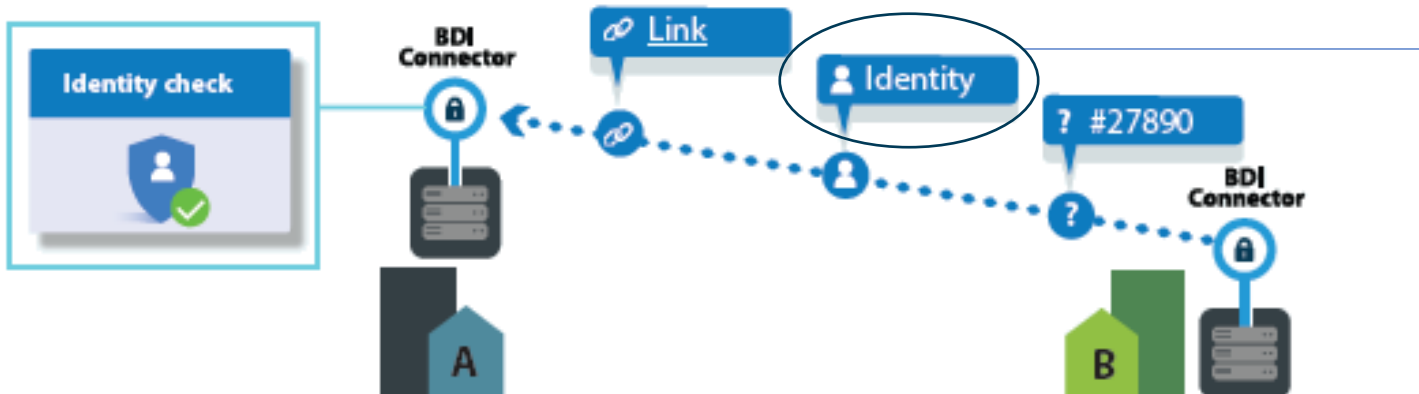
- Generiek digitaal bewijs tussen organisaties



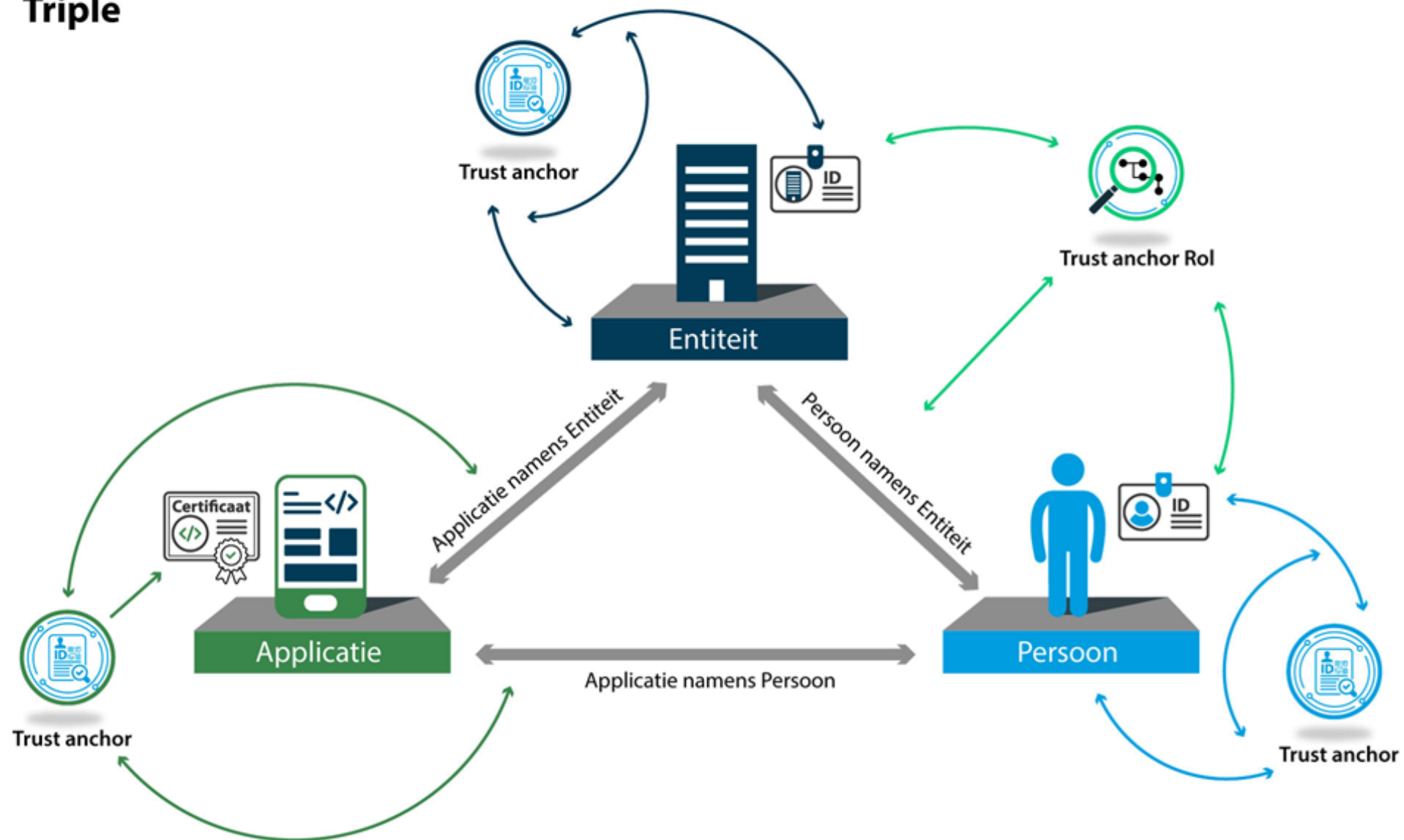
# Digitaal vertrouwen

Geautomatiseerde interacties tussen applicaties (inclusief mobile devices van personen) vragen om digitaal vertrouwen in de eigenaren en de applicaties. De BDI geeft dat vorm door:

- **Relatie tussen identiteiten** als basis
- (sub)sector specifieke vertrouwensregisters



## Triple



# WE BUILD: Logistics Use Cases for European Wallets

## 1. Trusted Contracting



Authorized  
Representative

Know with whom you  
do Business (KYB).  
Digital access into  
Chamber of Commerce,  
Certifications, Branche  
Memberships, etc.

Legally sign contracts in behalf  
for your company using your  
wallet.  
Share CoC, certificates, branche  
memberships via your wallet.

## 2: Trusted Planning & Login



Planner

Business Partners have  
secure access to status  
info and are able to  
propagate changes.

Use your wallet to login in behalf  
of your business at chain  
partners.

## 3. Trusted (physical) Access



Driver

Validate the identity of  
business visitors  
including the  
organisation and  
personal qualifications.

Request access in behalf of your  
organisation and share personal  
and organisational qualifications  
using your wallet.

## 4: Trusted Data Access



IT Server

Share data with trusted  
organisations via API's.

Issue and validate credentials  
from organisational wallet to  
safely exchange data between  
organisations.



# Trust Framework for Data Rights



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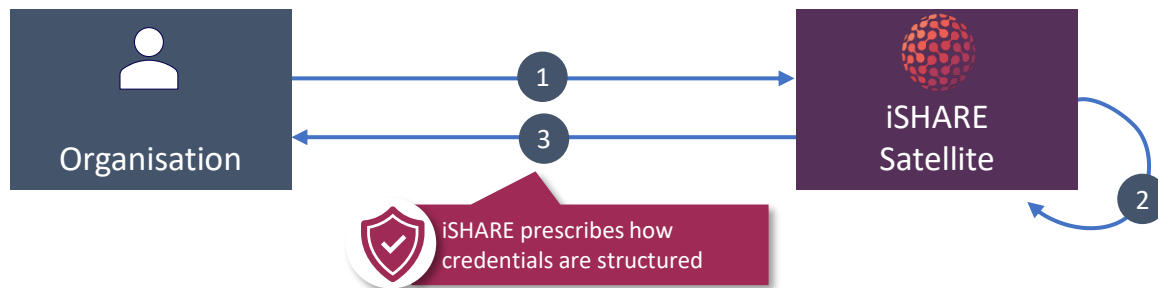
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# iSHARE realizes trust through IAA in both onboarding and data transactions

Simplified

## IAA processes in iSHARE to realise trust via onboarding and data transactions

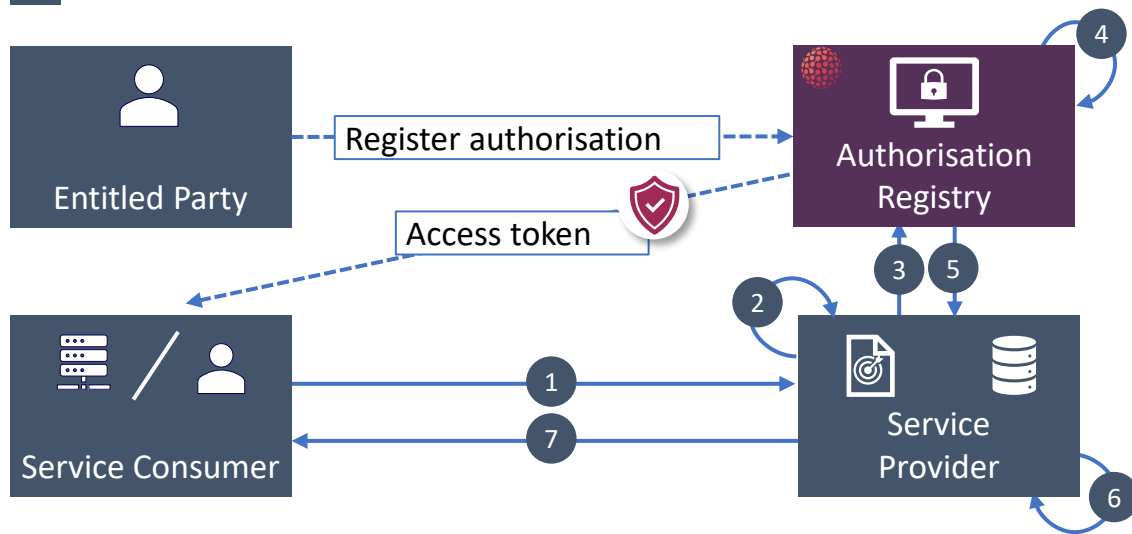
### 1 Onboarding process



### Onboarding process

1. An organisation registers itself to the Satellite via a certified Identity Provider (IDP) – through the IDP, the organisation's identity is authenticated and iSHARE's (and the Satellite's) terms and conditions are signed
2. Satellite checks whether the organisation has successfully registered and signed via the IDP
3. Satellite issues a verifiable credential to a party, proving that the party is trustworthy and has legal coverage

### 2 Data exchange



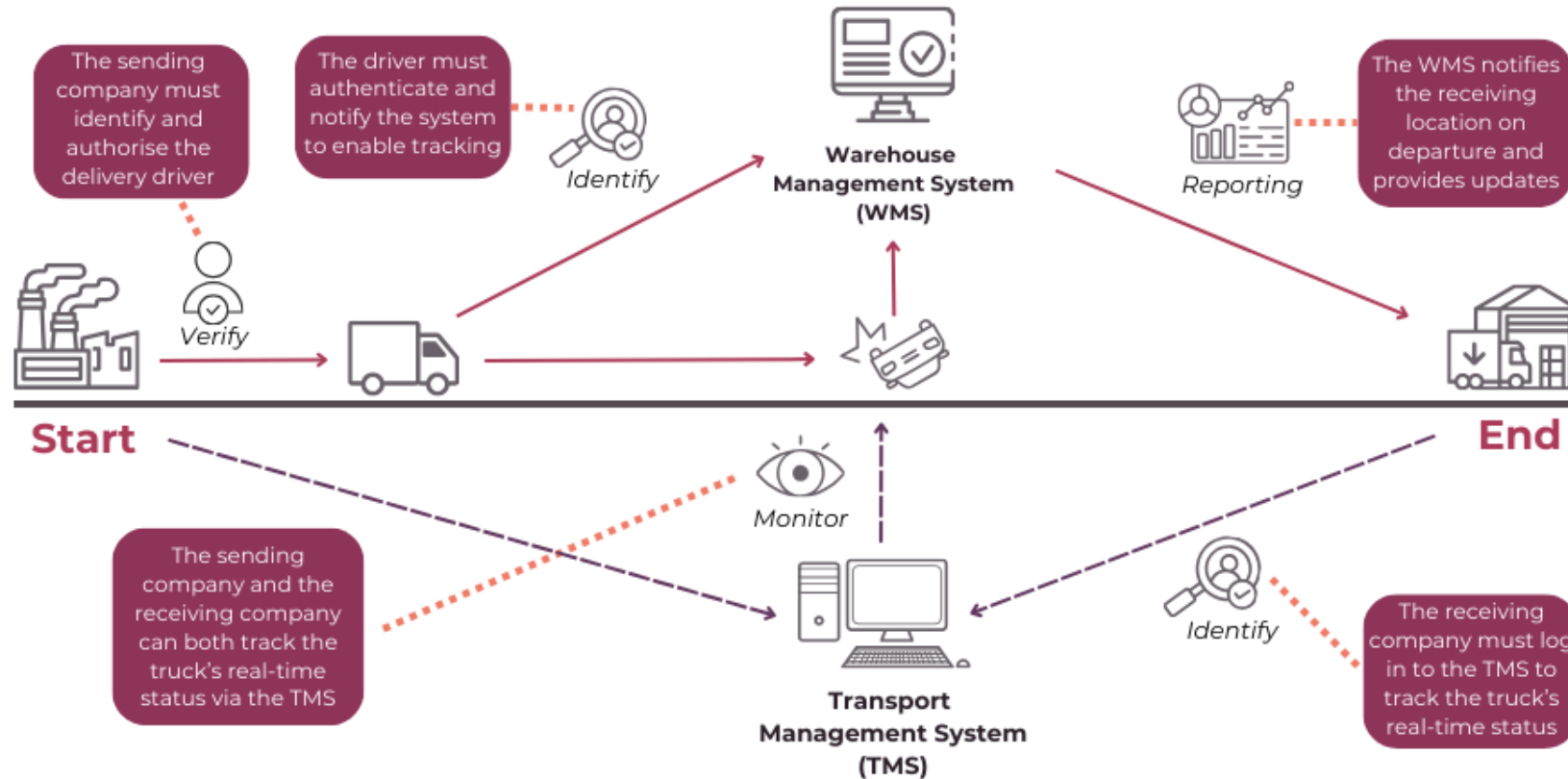
### Data exchange

For a data exchange a party still needs consent to receive certain data. This is given by the entitled party via an access token issued by an iSHARE Certified Authorisation Registry (AR).

1. Service Consumer (SC) sends data request with access token to Service Provider (SP)
2. SP authenticates SC and validates its iSHARE adherence
3. SP requests authorisation rights of the access token with AR
4. AR checks authorisation rights of SC's access token
5. AR provides evidence of authorisation rights to SP
6. SP checks SC's data request against its authorisation rights
7. SP provides the data service response

# Workflow for Trusted Goods Deliver

## From Verification to Handover



### Real-Time Tracking

Track goods in real time



### Automated Access

Efficient, secure data access

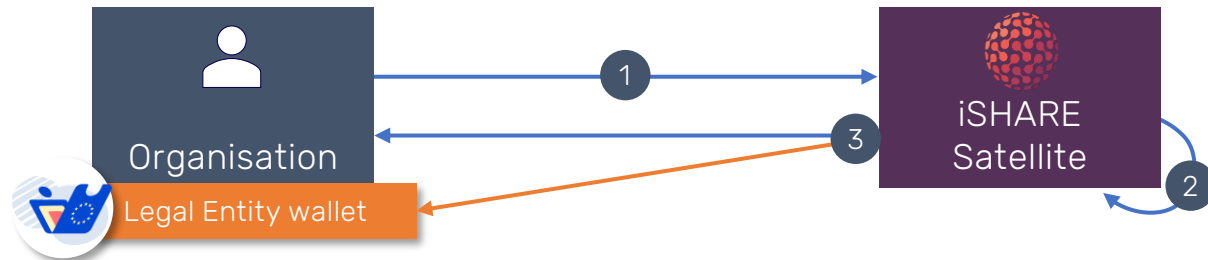


### Digital Identity Verification

Ensures trusted interactions

# The EUDI wallet can be used to store iSHARE verifiable credential, facilitating functionality

## Possible EUDI Wallet implementation for iSHARE



### EUDI wallet can be used to store iSHARE credential

- As a last step in the onboarding process, the Satellite issues an iSHARE credential to a party, proving that the party is trustworthy and has legal coverage
- The organisation can use this again for another iSHARE dataspace, so it doesn't have to go through the onboarding process again.

Possible use of Legal Entity wallet

- The iSHARE credential could be issued to the company's legal entity wallet, and from here be issued to a natural persons wallet to be presented for functionality in other iSHARE dataspace

## Rationale for EUDI wallet implementation

The EUDI wallet makes decision making easier, as the information in credentials is more fine-grained

- Currently, iSHARE Satellites hold all participants credentials and one single credential holds all information
- With the EUDI wallet, organisations receive separate credentials for each data space/ecosystem they onboard onto in their wallet
- The generic iSHARE credential then gives legal assurance and other Data Space credentials can be stacked on top of that
- The separate credentials can be easily presented from the wallet to other Data Spaces for additional assurances

The EUDI wallet is more self-sovereign and can replace the hyperledger's functionality

- Hyperledger becomes obsolete, as participants can store their own participant data, and consciously decide what data to share
- However, the added value is limited, as the Hyperledger is only an optional tool for discovery - a participant can decide not to be registered

# Digitalisering zeevarenden documenten



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our **12.000 experts**  
in **35 countries.**



***Testing***



***Inspection***



***Certification***



# Enkele voorbeelden van ons werk in de haven





# Digitalisering zeevarenden documenten Nederland

The holder can **lose** it or **forget** to bring it with them.

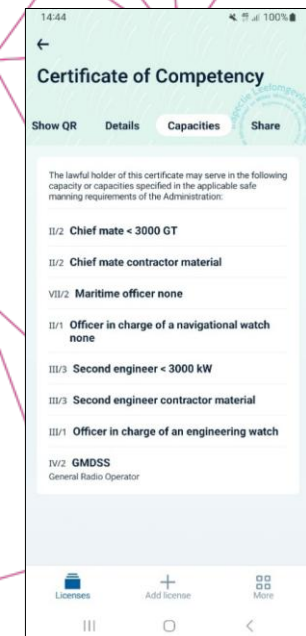
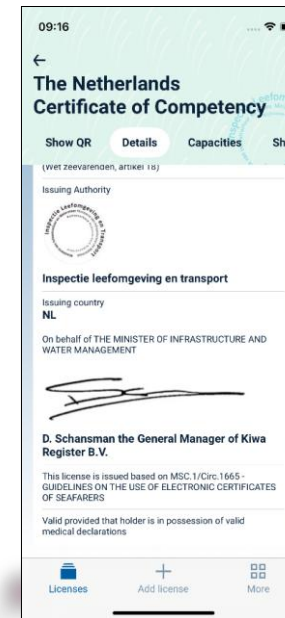
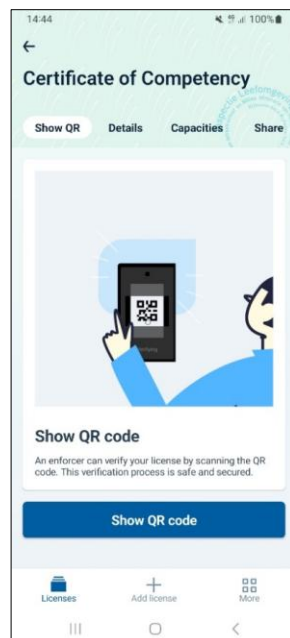
The **status of the license** is not always clear. When a license is suspended or revoked.

It can be easily **forged**.  
This is even more easy in digital transactions.

It holds **personal data** which is not always relevant for every enforcement scenario.

# Opzet pilot

1. 8 rederijen uit verschillende onderdelen van de scheepvaart nemen deel > 450 documenten
2. Pilot bestaat uit 2 delen
  1. Deel 1: testen applicatie
  2. Deel 2: beter integreren in bestaande processen en uitbreiden documenten



# Techniek

- **Uitgifte:** Kiwa digital certification platform (ISO18013-5 CBOR)
- **Wallet:** Kiwa eWallet
- **Verificatie:** Kiwa eWallet, ISO18013-5 reader, ISO18013-7 (annex A) reader





# Leerpunten uit pilots

- Actieve rol van de markt, belangenpartijen en I&W/ILT is belangrijk
- Veel aandacht voor samenwerking met andere landen
- Wetgeving op (inter)nationaal niveau
  - IMO > wereldwijd
  - EMSA > Europees
  - I&W > herziening wet zeevarenden
- eIDAS 2.0 brengt geen complete oplossing
  - Veel zeevarenden komen van buiten de EU
  - Trust framework is niet ontworpen voor oplossingen binnen én buiten de EU
- Een gefaseerde aanpak in livegang
  - Nieuwe ontwikkelingen toepassen op bestaande processen
  - Rederijen en overheden krijgen veel digitaliseringsprojecten tegelijkertijd op zich af

# Digitalisering scheepvaart





# Vragen?

## Contact

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