Track & Trace

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Sébastien Spanneut. MTS France, Internation Product & Projects, Track and Trace - © Worldline

Agenda

- Tobacco Products Directive.
- Article 15 – Traceability principles & figures.
- TPD implementation challenges.
- TPD implementation key success factors.
- Worldline in TPD.
- Our learnings
- Worldline with CIRPASS Digital Product Passport

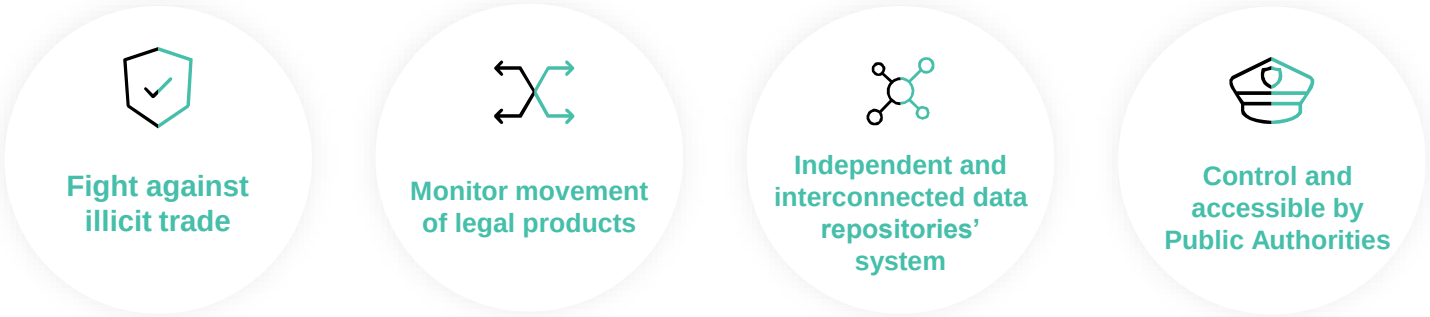
Tobacco Products Directive (TPD)

Summary

- April 3th, 2014 -> Tobacco Products Directive adoption by EU Parliament and Council.

Focus on the functioning of the EU internal market for tobacco related products and protecting human health, especially Young People.

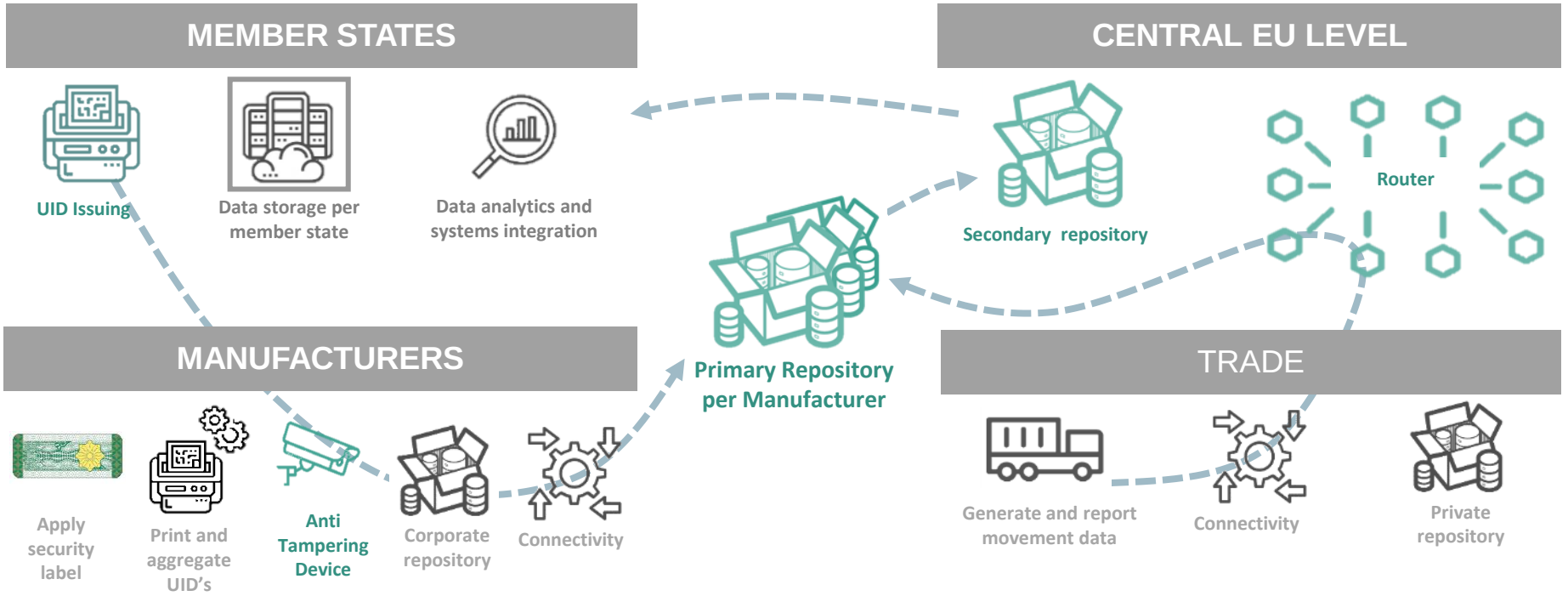
- Article 15 : Traceability system

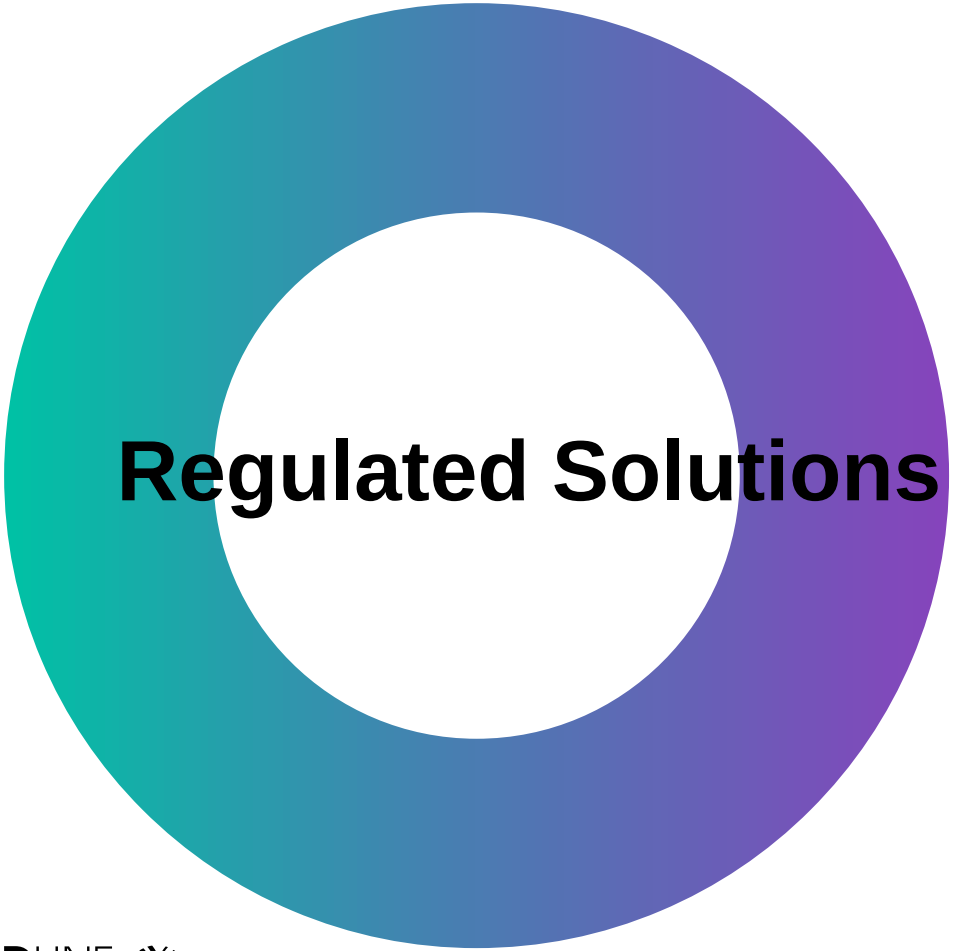


- May 20th, 2019 -> Go Live Date EU TPD traceability eco-system for cigarettes on Roll-your own tobacco (35 billions products/year)
- May 20th, 2024 -> Go Live date for other tobacco products (Cigars, RRP, Pipe tobacco…) (+15 billions products/year)

Tobacco Product Directive - Traceability

… a complex digital eco-system with different types of regulated and non-regulated systems.

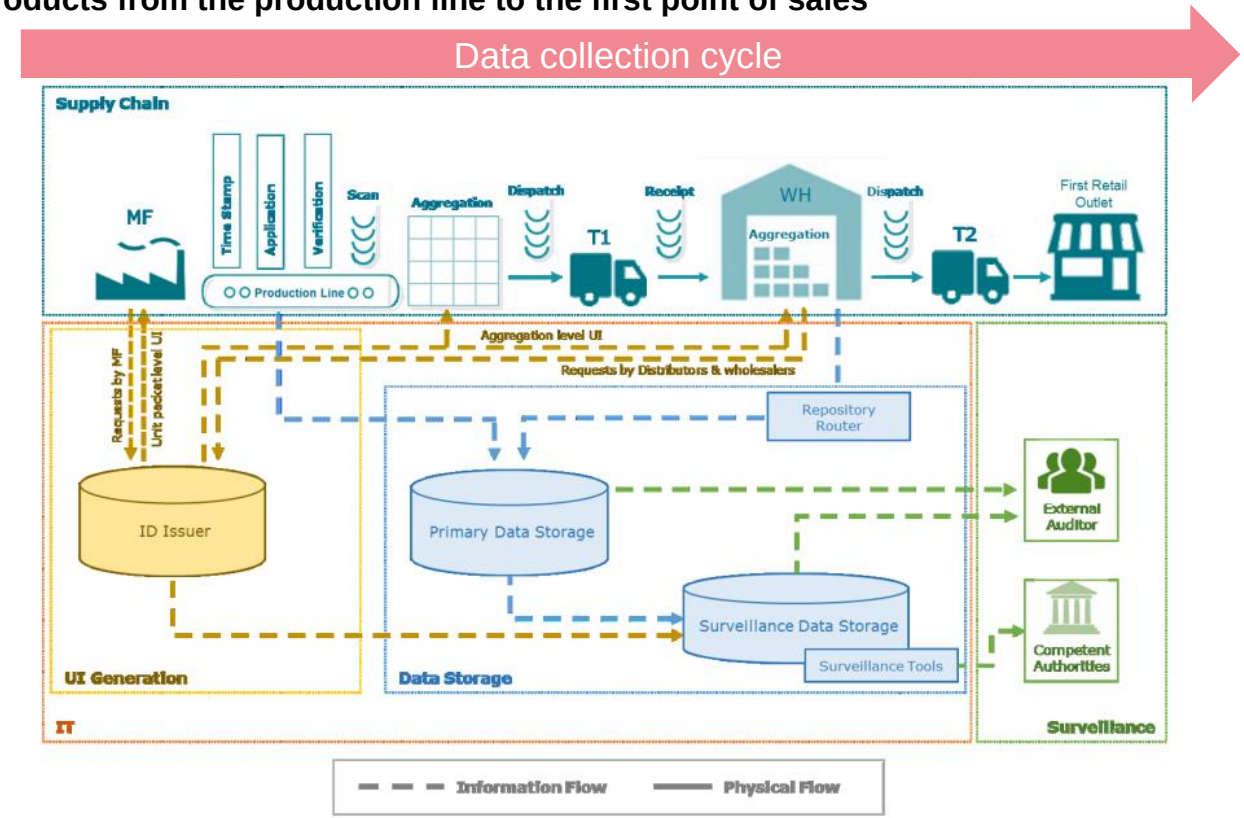




Regulated Solutions and Services

Tobacco Product Directive – for the Industry

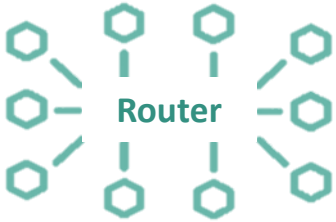
Tracing of tobacco products from the production line to the first point of sales



Tobacco Product Directive – for Public Authorities

UID Issuing

- System provided by each EU Member state
- Manage registration of all tobacco related economic operator (legal entities, facilities, machinery)
- Responsible to distribute unique identifiers to be applied on tobacco products or aggregates intended to be place in local market



- Delivered and managed by the EU Secondary repository provider
- Unique entry point of communication for data submitted by economic operators other than manufacturer and importer
- Unique entry point of communication for data transmitted by ID Issuers.

Secondary repository

- EU centralized data repository collecting all data process over the eco-systems Hosted on WL premises.
- Global and centralized monitoring system accessible to Public authorities and auditors
- The Secondary repository provider is the owner and responsible for the functional and technical list of specifications including data dictionary
- The Secondary repository is responsible for the proper interoperability of all TPD related system in the traceability digital eco-system.

Tobacco Product Directive – for Manufacturers

Primary Repository

- centralized data repository collecting all production and logistic events reported by Manufacturers or Importers
- One per Manufacturers or Importers
- Delivered and operated by independent third parties of the Industry
- Shall comply with List of Specifications and Data Dictionnary defined by the EU Secondary Repository service provider.

Anti Tampering Device

- Hardware sealed cabinet storing, onsite data captured on production lines to control application and tracking processes.
- Delivered and operated by independent third parties of the Industry
- One per production line where unique codes may be applicable.

Main Challenges and key success factors

Challenges we faced

- Global IT landscape specifications alignment between Independent service providers and public institutions
- Short Implementation Timeline after publication of the first set of List of Specifications and Data Dictionary
- Ensure business continuity between requirements for manufacturers and importers to set new equipment's on production lines and be integrated with the global IT Eco system
- Awareness of people (employees, operators, distributors, retailers…) on the what's in it for me and how shall I behave now?

What was missing ?

TRUST IN STANDARDS – TRY TO KEEP ROOM FOR FREEDOM

INITIAL REGULATION TIMELINE FAR AWAY FROM COMPLEX IT ECOSYSTEM IMPLEMENTATION (FROM BUILD TO RUN THROUGH ACCEPTANCE)

IMPACT ASSESSMENTS ON PRODUCTION PROCESSES AND NEW EQUIPMENT REQUIRED. THIS IS WAS NOT ONLY A DIGITAL TOPIC. YOU HAD TO ENABLE BEING DIGITAL

CHANGE MANAGEMENT, TRAINING, AWARENESS OF THE REGULATION REQUIREMENT

Example of communication for awareness and clarifications

EU SYSTEM OF TOBACCO TRACEABILITY

REPORTING OF PRODUCT MOVEMENTS WITHIN THE DISTRIBUTION CHAIN

AGGREGATION

Message 3.2 (EPA) relates an aUI to subordinate aUIs or upUIs at one level below.

REMEMBER

To send this message no later than max. 24 hours after the aggregation event took place;
To send separate messages for each aggregation;
Not to re-use aUIs for which the disaggregation message has not been sent to the system;
To report a new aggregation only once subordinate UIs are correctly reported to the system.

DISPATCH

Message 3.3 (EDP) is necessary for the consignment to lawfully leave the facility.

REMEMBER

To send this message no sooner than 24 hours before but no later than the moment that the dispatch takes place;
To report the dispatch at the highest available aggregation level;
To report dispatches separately for each destination even if the consignments are loaded together.

TRANS-LOADING

Message 3.5 (ETL) is necessary for the consignment to lawfully change the means of transport, e.g. from truck A to truck B, in between dispatch and arrival.

REMEMBER

To send this message no sooner than 24 hours before but no later than the moment that the trans-loading operation takes place;
To report the trans-loading at the highest available aggregation level (without altering the content of the initial consignment as indicated in the dispatch message);
Not to dismantle the existing aggregations.

ARRIVAL

Message 3.4 (ERP) is necessary for the consignment to lawfully enter its destination facility (except for the retail outlets).

REMEMBER

To send this message no later than max. 24 hours after the arrival took place;
To report the arrival at the highest available aggregation level (the same one as indicated in the dispatch message);
Not to dismantle the existing aggregations during the arrival operation.

DISAGGREGATION

Message 3.6 (EUD) is necessary whenever a self-generated aUI may be re-used for another aggregation.

REMEMBER

To send this message no later than max. 24 hours after the disaggregation event took place, unless there is no intention to reuse the aUI;
Removing one or more items from a given aggregated package fully dismantles it.

GENERAL RULES

1. Information on product movements must be transmitted in a chronological and sequential order. For example, an aggregation preceding a dispatch needs to be correctly transmitted ahead of the dispatch message.
2. Information concerning a given event is deemed to have been transmitted correctly upon its positive acknowledgement by the repositories system; without receipt of a positive acknowledgement a reporting obligation cannot be assumed to be discharged;
3. UIs must be captured at the highest level of available aggregation during dispatch, trans-loading or arrival;
4. Recording of aggregated packaging requires that the packaging is physically marked with an aUI, i.e. the regulatory framework does not permit "virtual" marking;
5. Each aggregation and disaggregation message requires an EOID and a FID, which means that these operations have to take place at a facility.

More information: https://ec.europa.eu/health/tobacco/tracking_tracing_system_en

GLOSSARY

upUI – unit packet level unique identifier, which must be issued by a competent ID issuer; **aUI** – aggregated level unique identifier, which is self-generated in line with the applicable ISO standards or issued by a competent ID issuer; **EPA, EDP, ETL, ERP, EUD** – message abbreviations as used in the technical specifications published by the operator of the secondary repository; **EOID** – economic operator identifier code; **FID** – facility identifier code.

European Commission | Health and Food Safety

Main Challenges and key success factors

Key Success factors

- Allow a growing/learning period to fine-tune to overall eco-system
- Create local industry champions who understand the overall challenges from business point of view as well as from an IT point of view
- Manage your data quality, monitor your performance, track any failures

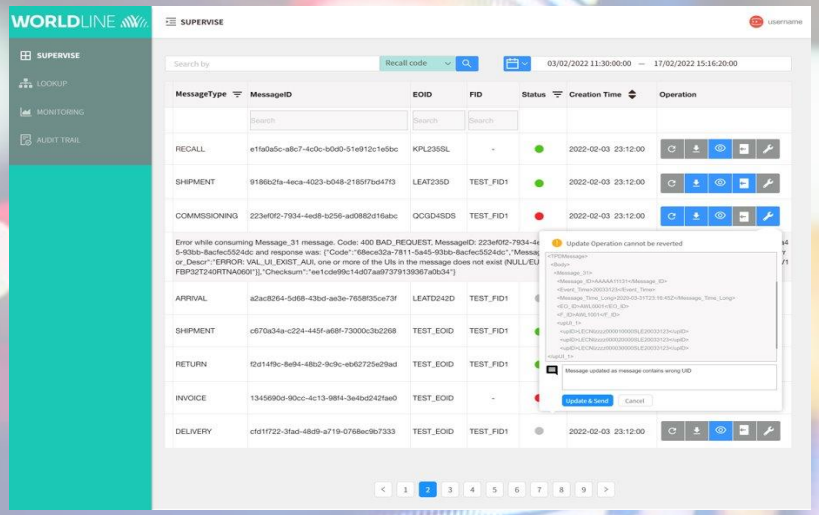
What was implemented

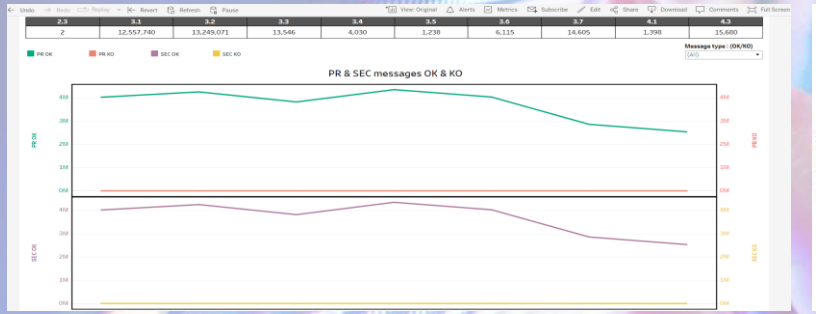
GRACE PERIOD TO ALLOW NON COMPLIANT PRODUCT TO CONTINUE CIRCULATING DURING 1 YEAR

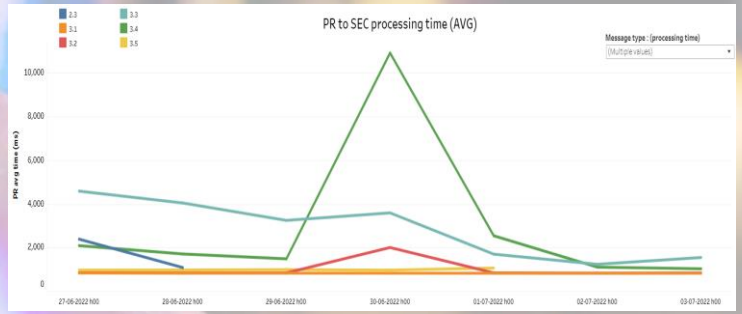
NEW SKILLS REQUIRED WHITIN YOUR ORGANIZATION – HEAD OF TRACEABILITY

MAKE USE OF BUSINESS INTELLIGENCE TECHNOLOGIES TO ANALYSE AND VALUE THE DATA YOU'RE COLLECTING ALONG THE PRODUCTION AND SUPPLY CHAIN.

Example of data quality management system







Tobacco Product Directive - Traceability

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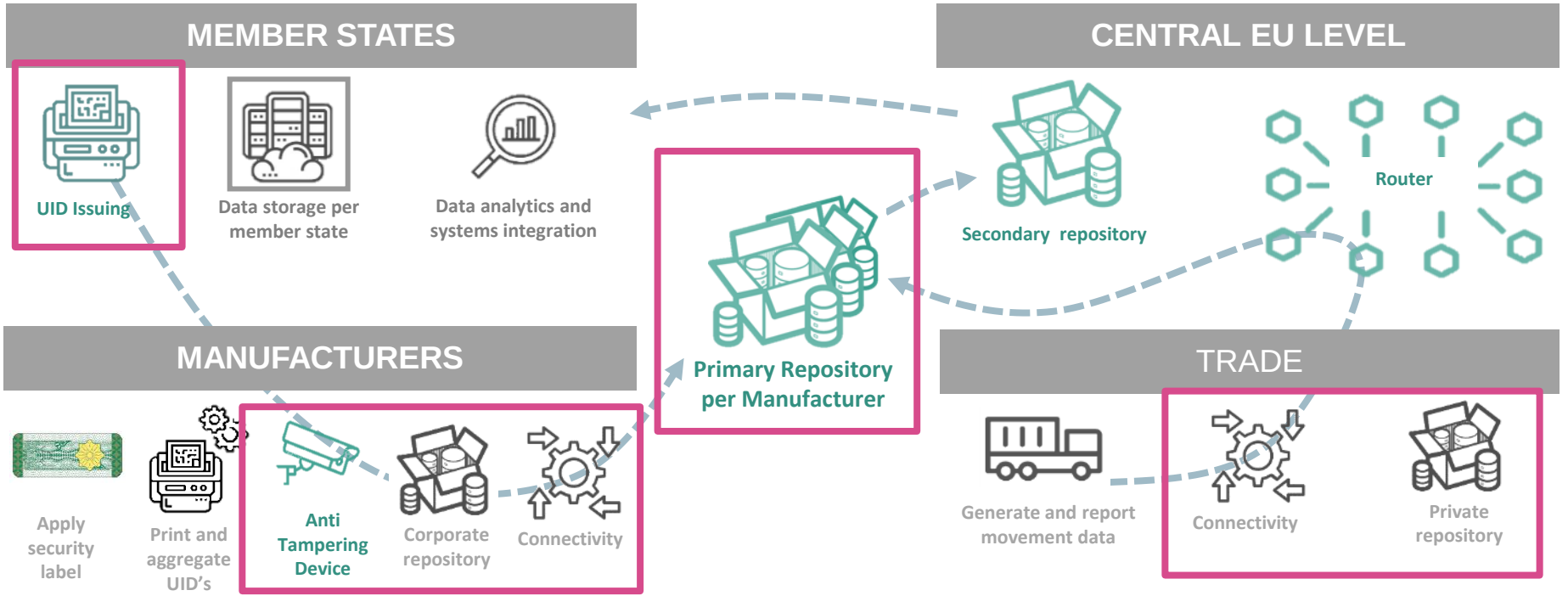
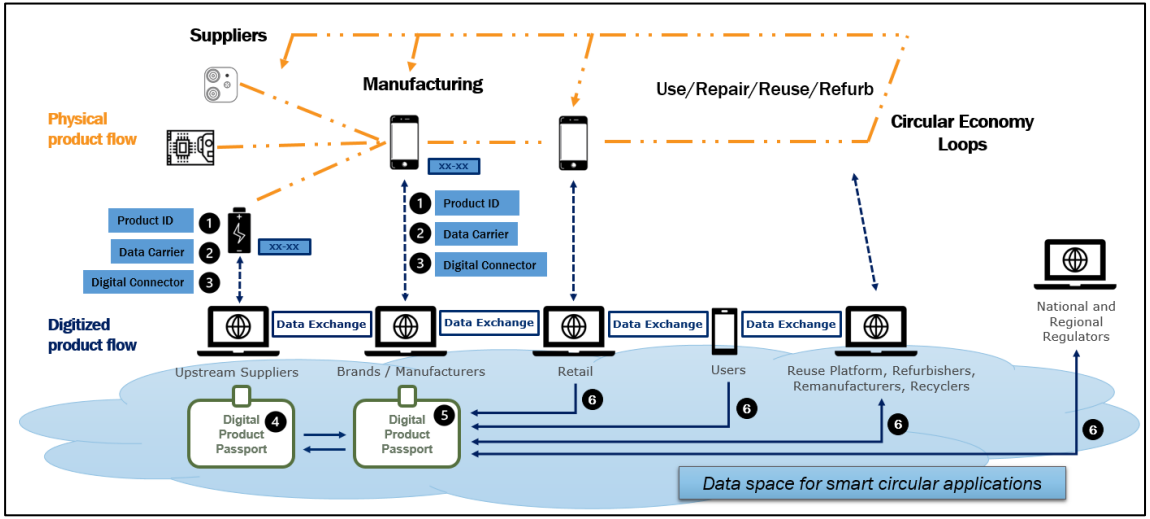
Worldline's positioning



Let’s talk about “EU Digital Product Passport”



- Unique Product ID (including batch and/or serialization as necessary)
- Data carrier (RFID, QR Code, digital watermark, Bluetooth tag, etc.)
- IT architecture
  - Standardized vocabulary, data exchange protocols and formats
  - Standardized stakeholder-dependent access mechanisms (read/edit rights)
  - Distributed management of stored information (in connection with EU dataspaces)
  - A stakeholder-dependent interaction layer

Funded by the European Union
CIRPASS

Why ?
Fosters and enables Circular Economy

What ?
Information on the origin, composition, repair and dismantling options, movement of a product, hazardous substances, recyclable content, carbon footprint…

For whom?
Economic Operator, Consumers, Authorities

How ?
Centralized or Decentralized data system ? with central registry ?

WORLDLINE As partner providing advices and guidance on DPP system and framework Architecture stream

Our learnings

Along the TPD journey and more…

Ensure system interoperability by allowing different communication protocols or international standards

Ensure Data Harmonization by using/defining standards

Value collected data by reusing it for other means to promote return on Investment for industry. From regulation as a constraint to regulation as an opportunity

Make use of the most efficiency technology to ensure performances, cost efficiency, security and sustainability

Thank you for your attention