



TOBACCO TRACEABILITY solution by PSQR

Read more about our traceability solution assisting companies in the tobacco industry to comply with the Tobacco Products Directive regulation



About PSQR

PSQR is a Danish software vendor providing **specialized industrial software** for Supply Chain Digitisation and Traceability related to compliance and business excellence.

The company partners with track and trace software integrators, solutions providers, consultancies and industry bodies to bring best-of-breed IT solutions to the world of traceability.

PSQR's mission is to empower manufacturers, corporations and governments across the globe with digital track and trace capabilities and the ability to tell the true story of the origin, journey, whereabouts, and consumption of products and resources across the supply chain.



Creating visibility of tobacco products to comply with EU Tobacco Directives

The European Commission drives a number of initiatives to regulate the tobacco industry. The Tobacco Products Directive (TPD) has a very comprehensive scheme affecting not only manufacturers and importers of tobacco products, but all economic operators within the tobacco supply chain. The developments relating to the Tobacco Taxation Directive (TTD) also present a significant impact on the industry.

For tobacco manufacturers, to comply with TPD, and other finished-goods-related regulations, track and trace was implemented from production/import to the retail level. It is projected that the scope may be increased to also cover the upstream supply chain - tracking and tracing bulks of raw materials.

The European Tobacco Products Directive (TPD) (2014/40/EU) is one of many regulations, which has made compliance with track and trace stipulations a reality, not just locally but also on a global scale.

**entered into force on 19 May 2014 and became applicable in the EU Member States on 20 May 2019*

The Tobacco Taxation Directive' or the 'Directive' (2011/64/EU) sets out the EU rules on the structure and minimum rates of excise duty applied to manufactured tobacco.

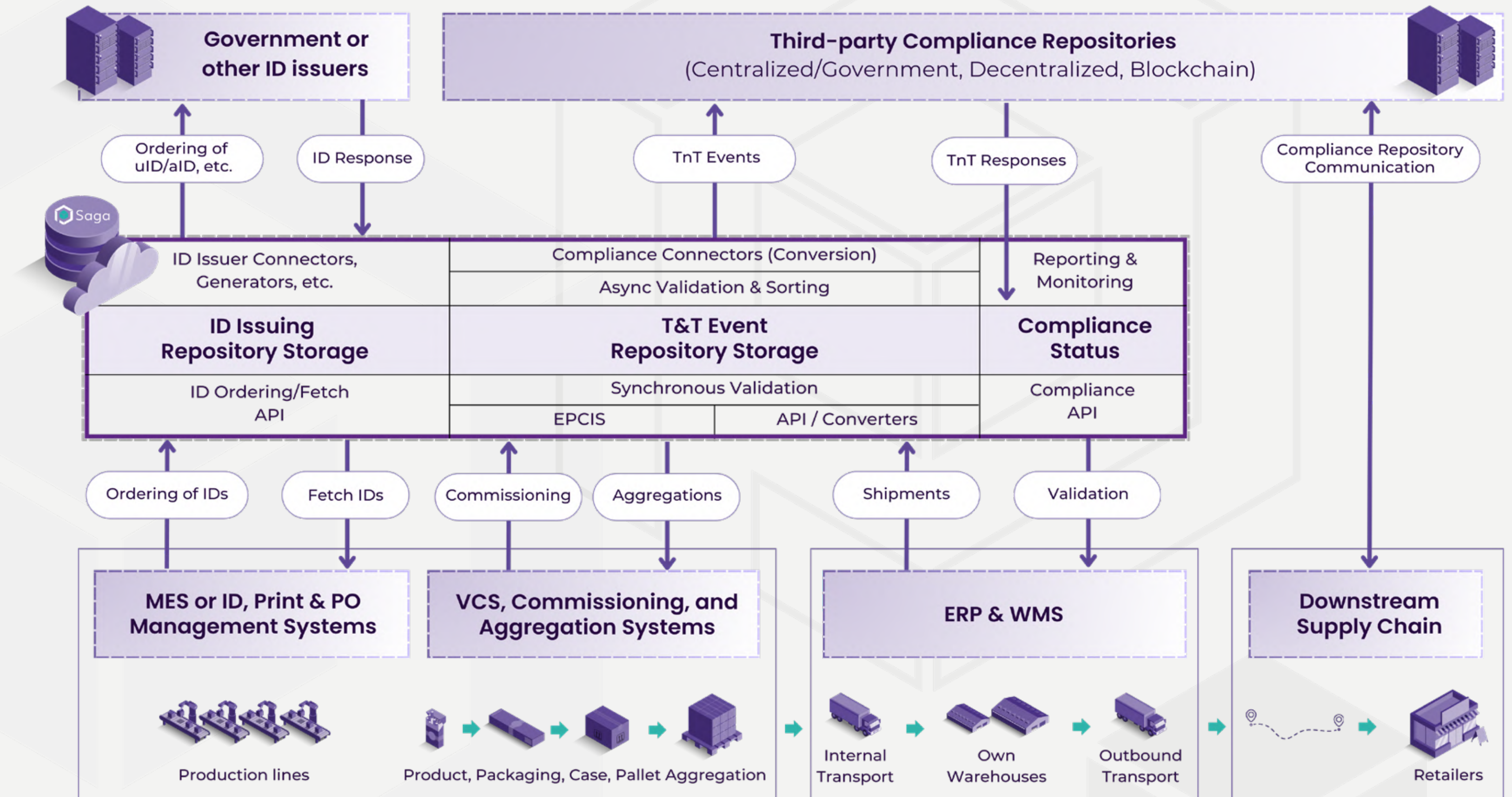
Saga Compliance Suite

Saga Compliance Suite - Tobacco Products Directive (TPD)

The **Saga Compliance Suite - Tobacco Products Directive (TPD)** consists of our Saga software and a set of specialized sub-modules specifically crafted to ensure optimal data exchange with TPD.

An instance of the Saga Compliance Suite consists of the following components:

- 📦 Saga
- 📦 ID Module
- 📦 ID Connector sub-modules
- 📦 Compliance Module
- 📦 Compliance Connector sub-modules
- 📦 Other relevant Saga modules
- 📦 Customer/Solution specific configuration





Saga TPD Product Suite

Saga Enterprise's highly scalable and modular architecture allows for unique adaptations and solutions for industry and customer needs.

Saga Compliance Suite is based on the GSI standard EPCIS.

It has been implemented in various industry solutions, providing functionalities needed for a complete compliance solution where codes are issued and used for collecting and sharing track and trace data.

Compliance Traceability

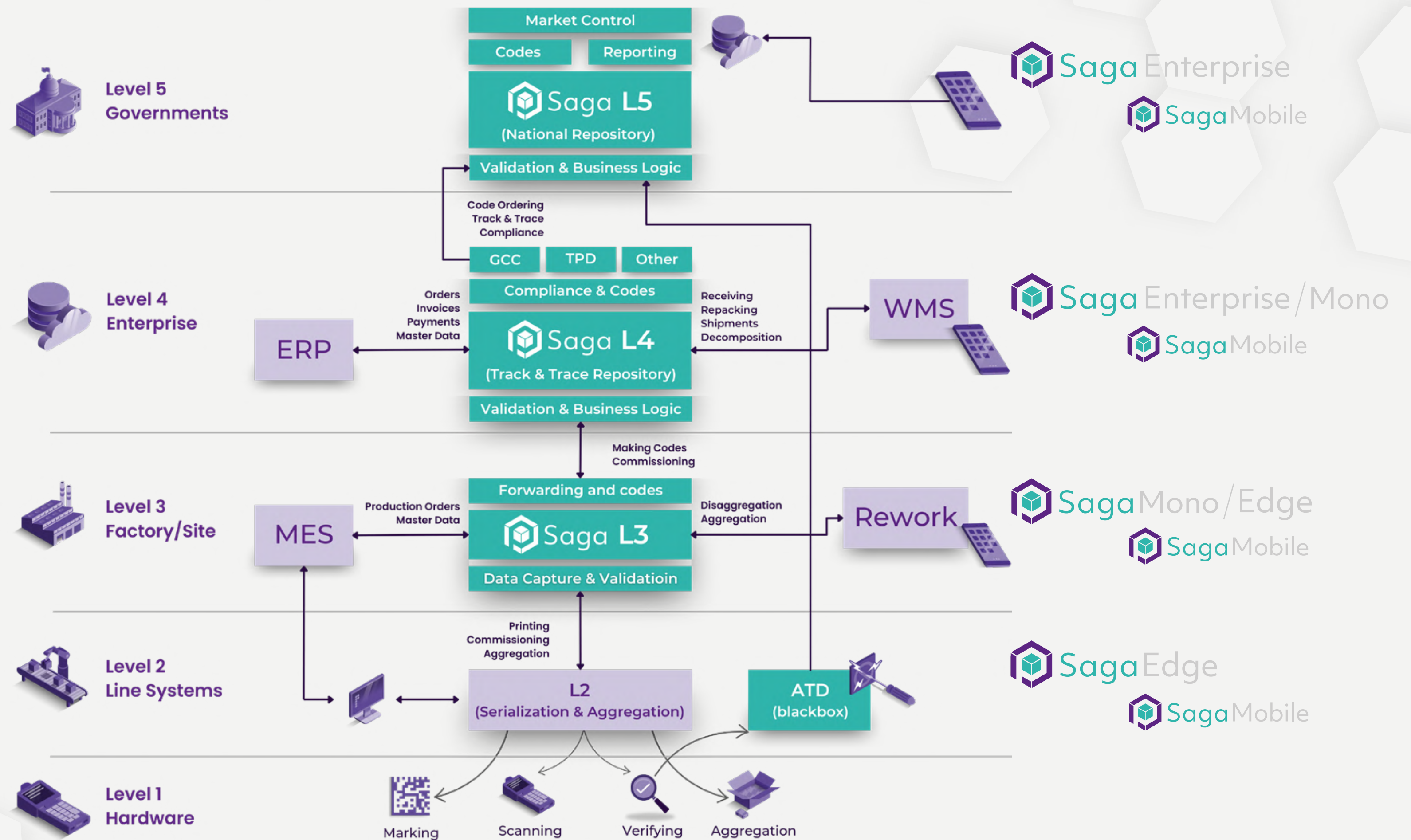
From Government to Production Line

Saga traceability solution bridges the gap between government regulations and production line operations with ease.

Our cloud-agnostic software integrates seamlessly with any platform or infrastructure, ensuring flexibility and adaptability.

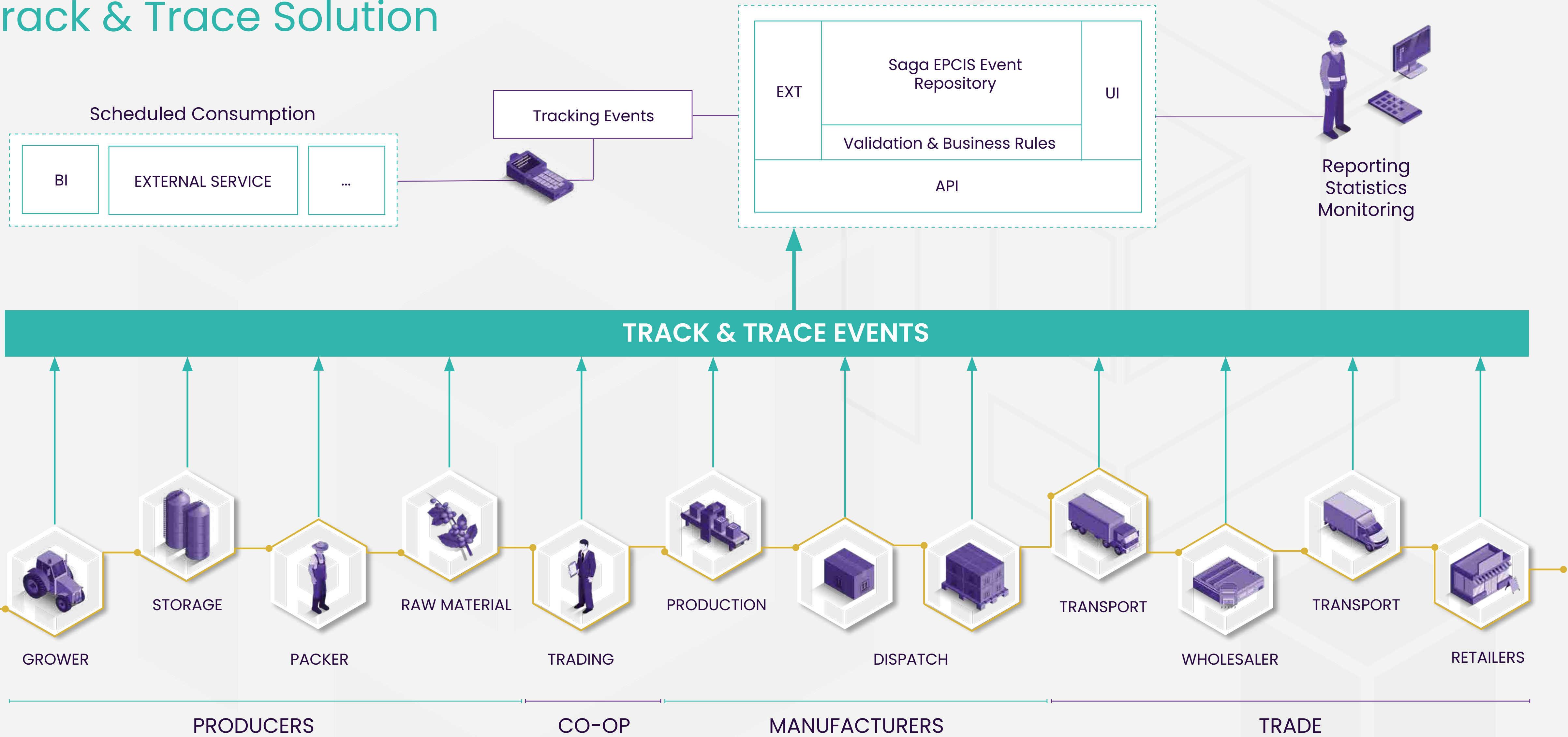
For proof of concept or scope projects, our incubation environment provides a cost-effective, non-intrusive solution, with support for a smooth transition to dedicated platforms as solutions mature.

The compliance suite streamlines reporting to meet diverse regulatory requirements, while features like mobile support and data uploads via Excel accommodate both large-scale automated systems and smaller, manual setups.



Saga

Track & Trace Solution



The solution

A reliable, customizable, on-prem solution with three active use cases:

Government Solutions

PSQR delivers software into multiple government (L5) and compliance track and trace solutions around the world.

- 📦 **Number of Countries:** 33
- 📦 **Period:** Live since December 2018
- 📦 **Total Volume:** ~10bn/year
- 📦 **Marking Types:** Direct marking and physical Tax Stamps
- 📦 **Product Categories:** Cigarettes, Other Tobacco Goods, Alcohol
- 📦 **Track & Trace Scope:** End-to-end, ID generation, ID activation, product commissioning and decommissioning, hierarchy aggregation, shipments, receipt, and financial transactions.

Commercial/Industry Solution

PSQR delivers software into a number of both international and local manufacturers (L4) producing under track and trace schemes/regulations.

- 📦 **Number of Countries:** 8
- 📦 **Period:** Live since May 2019
- 📦 **Total Volume:** ~15bn/year
- 📦 **Marking Types:** Direct marking
- 📦 **Product Categories:** Cigarettes, Other Tobacco Products
- 📦 **Track & Trace Scope:** End-to-end, ID ordering, ID download, serialization, product commissioning and decommissioning, hierarchy aggregation, shipments, receipt, eASN and financial transactions. Anti-tampering devices.

Line System Compatibility

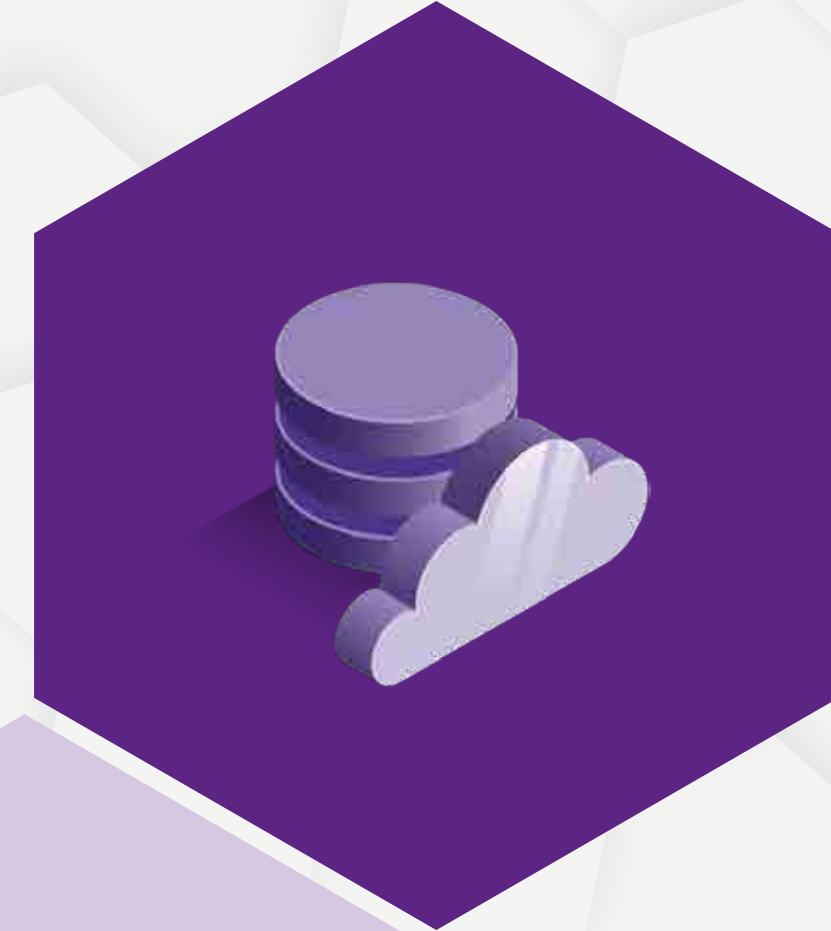
The PSQR systems are compatible with all the existing serialization and aggregation systems in the market. These, track and trace systems, are connecting to the PSQR systems to obtain the barcodes, and report back the successful marking/affixing, the aggregations/hierarchies, and product movements.

- 📦 **Production lines:** +1,500 production lines globally are equipped with T&T for cigarettes, OTP, RRP
- 📦 **Period:** Most manufacturers have been live with their T&T systems since 2008
- 📦 **Printers in use:** +6,000 printers in operation from providers such as Videojet, Markem-Imaje, Domino, Koenig & Bauer, Linx, Zebra.
- 📦 **Barcode Readers in use:** +10,000 barcode readers from providers such as Cognex, Omron, Sick, Keyence and Datalogic.

Compliance Suite for Tobacco Products (L4 & L5)

Scope of work

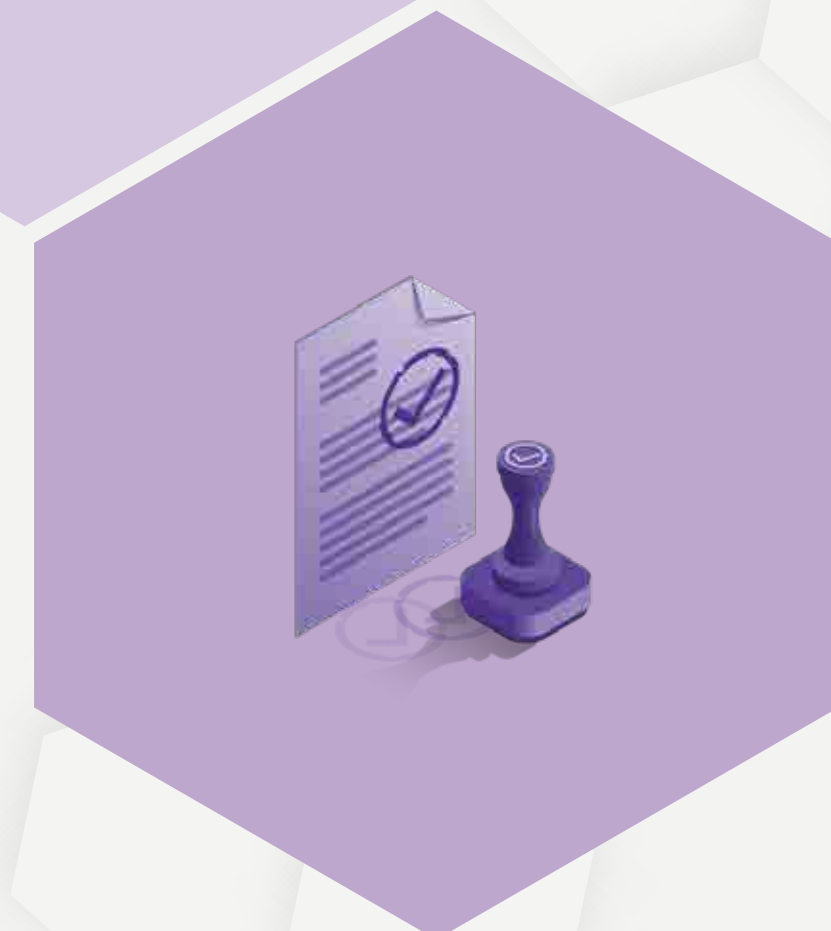
Delivering the event repository, processing and validation system (Saga) within the scope of the tobacco production from/to regulated markets (EU, UK, CIS, GCC).



Including the development of event and master data validation frameworks, synchronous/asynchronous establishment of consistency, and forwarding into relevant regulatory repositories.



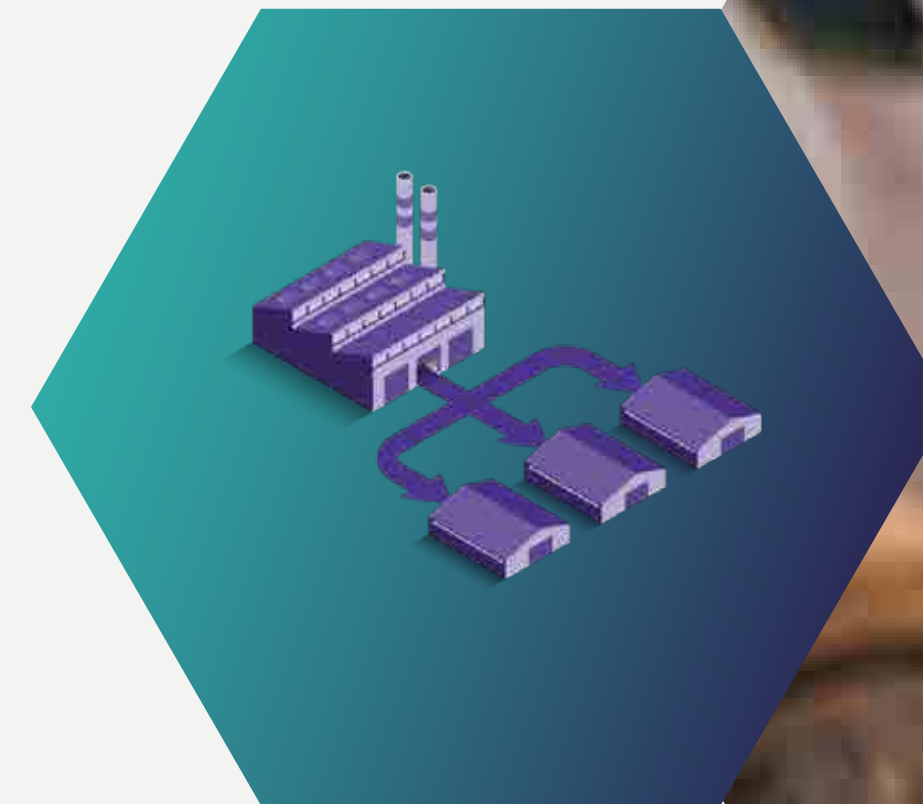
Delivering the event storage and validation system (Inveni) within the scope of the European Tobacco Products Directive.



Corporate Repository (Saga L4)

Visibility and data collection through traceability

- Ensuring data collection, staging, validation, and homogenisation of relevant traceability data for serializing and tracking all products throughout the supply chain.
- Supplying the core technology - the Saga L4 event repository - capable of handling the billions of data points collected, including synchronized validations, and forwarding to relevant compliance repositories.
- Delivering Saga Compliance Module which is extensible to add new markets as their regulations go live as part of global adoption of FCTC.



Primary Repository (Inveni L5)

Road to transparency and compliance

- ❖ Ensuring transparency for the EU and auditability for the tobacco producers by serializing and tracking all products throughout the supply chain (manufacturing to retail).
- ❖ Supplying the core technology - the INVENI event repository - capable of handling the billions of data points collected, including synchronized validations, and forwarding on to the TPD Secondary Repository.





From its first implementation in 2019 to a number of successful implementations to date, we have found the PSQR Saga Level 5 repository for track and trace to be secure and reliable, handling considerable volumes of data in an efficient manner.

Responses to infrequent incident calls have been responsive and PSQR and its associates a collaborative and effective partner.

Commercial Director, Authentication

De La Rue International Limited



We needed a traceability solution to successfully ensure regulatory compliance with the Tobacco Products Directive (TPD). Simultaneously, we needed to ensure that our day-to-day operations were not negatively affected by integrating an external system into our internal processes.

Therefore, we engaged with PSQR to deliver a central Level 4 repository, supporting tight integration with our Level 3 system, while at the same time ensuring integrated and seamless support for manual warehouse processes, including pallet packaging and shipment using a mobile device, and supporting uploading relevant data via spreadsheets.

PSQR's traceability solution, Saga, proved to be the ideal solution to integrate without disrupting our daily operations, and that helped us stay compliant and tackle compliance issues properly when needed.

From implementation to day-to-day operations and daily support, the PSQR team has been dedicated to providing a solution that consistently meets our needs, staying on top of regulatory and operational updates and requirements.

Manufacturing General Manager

TABSA





Track and Trace Software Experts

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