Governments around the world are introducing new regulations for the pharmaceutical industry, and while compliance is not an option, it creates an opportunity to digitize your supply chain and reap a positive return on your investment.

The first building block of a secure and transparent digital supply chain is serialization – and the first challenge is to choose the right serialization partner to meet your needs. OPTEL’s full-stack track-and-trace technologies can help your business comply with all worldwide regulations while guiding you along the next crucial steps toward a more intelligent supply chain.

SOME OF THE MANY BENEFITS OF HAVING A SINGLE SUPPLIER FOR COMPLIANCE AND EFFICIENCY:
- Cost-efficient turnkey solutions
- Trust: Long-term partnership
- Added value at every step of your supply chain, increasing operational efficiency
- Complete supply chain visibility and transparency
- Scalable solutions toward a more intelligent supply chain
- Data optimization of multiple manufacturing and distribution sites
- Data intelligence: Data with context
- Analytics reporting

WHY CHOOSE OPTEL?
- 30 years of track-and-trace expertise
- More than 3,500 solutions deployed worldwide
- Scalable solutions adapted to your need and budgets
- Configurable, customizable and flexible solutions
- Vendor-agnostic: integrates with any system
- Supports GS1 and all industry standards
- True end-to-end capabilities beyond compliance, from raw materials to the end user
- Full professional-services support before, during and after implementation
- Engagement tools for direct consumer communication: mobile application, chatbots, etc.
Track-and-Trace with Aggregation

In Brazil, the national agency ANVISA implemented the following Law No. 13.403 of December 29, 2016, together with RDC 319 of November 12, 2019, establishing that the pharmaceutical industry has until April 2022 to implement traceability for prescription drugs. To further detail the contents within this law, the Instrução Normativa is expected to be released in 2020.

Serialization Requirements

2D Data Matrix encoded with GTIN, ANVISA drug number, S/N, lot number and expiration date. By 2023, all manufacturers will be required to serialize all pharmaceutical products.

Serialization Requirements

2D GS1 barcode, S/N type: SGTIN (item level), SSCC base and pallet level.

EUROPEAN UNION

EU FMD - Verification and Decommissioning

As of February 2019, all manufacturers and distributors are required to comply with the European Union’s Falsified Medicines Directive (EU FMD), which requires all pharmaceuticals to have a unique product identifier and an anti-tampering feature, and to be verified and decommissioned before being dispensed to patients.

Serialization Requirements

2D Data Matrix encoded with GTIN, ANVISA drug number, S/N, lot number and expiration date. By 2023, all manufacturers will have to implement an interoperable, aggregation-ready Trace-and-Track system.

Serialization Requirements

2D Data Matrix encoded with GTIN or NTIN, S/N, lot number and expiration date.

SOUTH AFRICA

Track-and-Trace with Aggregation and Serialization

In 2018, the South African government replaced EAN-13 barcodes on tertiary packaging (e.g., shipping case) with GTIN-14 Data Matrix codes containing GTIN, batch/lot and expiration date. South Africa plans to phase in and then fully implement serialization of secondary and tertiary packaging by 2022 to mitigate the counterfeiting of medicines.

System Requirements

GTIN (14), Batch/Lot (10), Expiration Data (17), Serial Number (21)

Batch coding: September 1, 2020

Secondary to tertiary only; primary to secondary not required until further notice.

Aggregation Requirements

(contains only one primary pack)

Primary Pack Serialization

2D GS1 barcode, Serial Number (21), Expiration Date (17), Serial Number (21), Expiration Date on secondary and tertiary packages.

Secondary packs: 2D GS1 Data Matrix barcode.

Full Track-and-Trace system with a national database including pre-importation events. Aggregation from secondary to tertiary is mandatory.

Serialization Requirements

2D GS1 barcode

OUTH KOREA

Track-and-Trace and Serialization

As of January 1, 2021, serialization had to be implemented at 50%. In 2016, serialization regulations in South Korea covered 10% of pharmaceutical product manufacturers. On July 1, 2017, reporting enforcement was introduced for wholesale distributors.

Serialization Requirements

GS1 Data Matrix or GS1 – 128 linear barcodes encoded with GTIN, S/N, lot number and expiration date.

AUSTRALIA

Track-and-Trace and Serialization

A new barcode identification system or “first mile” for all medicines was set up in 2016. In September 2016, new regulations were issued for the Australian market, requiring labeling developed for all medicines, but these regulations do not require serialization, which will become mandatory for all supply chain items on September 1, 2020.

Serialization Requirements

ETIN (AI 10), Expiration Data (AI 17), Batch/Lot Number (A1 10)

No Aggregation requirements

TURKEY

Track-and-Trace with Aggregation

Turkey has one of the largest-standing Track-and-Trace systems in the world. All pharmaceutical products are subject to serialization and government reporting requirements, including aggregation at the unit level.

Serialization Requirements

2D GS1 barcode, S/N type: SGTIN (item level), SSCC base and pallet level.

KOREA

Primary Pack Serialization

Still exempted from labeling with a 2D barcode encoded with GTIN 14, batch number, expiration date and serial number; however, the primary level must have the information printed in human-readable format.

Primary Pack Serialization on Mono Carton contains only one primary pack

Optional until further notice.

Serialization Requirements

Secondary to tertiary only, primary to secondary not required until further notice.

Data Upload

As of October 1, 2015, manufacturers must maintain the data in the parent-child relationship for all three levels of packaging as well as their movements along their supply chain. Manufacturers must upload the data to the government’s central portal. All export shipments should have barcodes on secondary and tertiary packages and data must be uploaded to the portal.

AGREEMENTS RESOLUTIONS

Argentina

Certification

Identificador Único de Medicamentos (IUM) assigned by INVIMA

COLOMBIA

Track-and-Trace with Aggregation - TBC

Colombian authorities, in partnership with industry associations, initiated a national plan for medicine traceability at the end of 2017. A pilot project was initiated using RFID technology with mitigated results. Draft regulations have been discussed with local associations.

Serialization Requirements

Identification Code

Indonesia

U.S. Track-and-Trace with Aggregation

With traceability regulations already in place, the United States is now regulating serialization. As of November 24, 2017, the Drug Supply Chain Security Act (DSCSA) requires that manufacturers, mark packaged with a product identifier, serial number, lot number and expiration date. By 2023, all manufacturers will have to implement an interoperable, aggregation-ready Trace-and-Track system.

Serialization Requirements

2D Data Matrix encoded with GTIN, ANVISA drug number, S/N, lot number and expiration date. By 2023, all manufacturers will have to implement an interoperable, aggregation-ready Trace-and-Track system.

Serialization Requirements

2D Data Matrix encoded with GTIN or NTIN, S/N, lot number and expiration date.

SAUDI ARABIA

Track-and-Trace with Aggregation

New labeling practices became mandatory in 2015. Since March 12, 2017, all domestically produced and imported pharmaceutical products intended for human use are required to carry a 2D GS1 Data Matrix barcode. Effective 7 February 2019, all stakeholders (manufacturers, importers, distributors, dispensers) must register with the Saudi pharmaceutical Track-and-Trace system (TTS) and report all transactions involving drugs packs.

Serialization Requirements

GS1 Data Matrix encoded with GTIN, S/N, lot number and expiration date.

CHINA

Track-and-Trace

On October 10, 2020, the China National Drug Administration (NDA) made a public announcement confirming the deadline 31st December 2020, for the drug market authorization holders to complete the construction of the traceability system and collect traceability information throughout the entire process, for products such as the national drug centralized procurement, narcotic drugs, psychotropic drugs, and blood products.

System Requirements

N/A

Argentina

AGREEMENTS RESOLUTIONS

• January 1, 2018: GTIN Batch/Expiry Date

Track-and-Trace with Aggregation

Serialization regulations are being implemented in phases according to a detailed schedule set by the Taiwan Food and Drug Administration (TFDA)

• January 1, 2018: GTIN Batch/Expiry Date on secondary and tertiary packages

• January 1, 2019: Add S/N

• January 1, 2020: Add traceability platform login and aggregation

• January 1, 2021: Add API

Current Serialization Requirements

20 GS1 Data Matrix barcode.