TRACEABILITY : Highly Interoperable powered by GS1 EPCIS v.2.0 Standards and BlockChain Technology

IDENTIFY : GS1 Standards for Identification

CAPTURE : GS1 Data Carrier

SHARE : GS1 Data Exchange

GS1 Digital Links : Powered by Vector Embeddings (Semantic Search)

BLOCKCHAIN TECHNOLOGY

GS1 EPCIS STANDARDS v.2.0 (Knowing What? When? Where? Why? How? Who?)

GLN
Brand Owner/
Local Importer

GLN
Manufacturer
Vendor/Supplier

GLN
Raw Materials
SGLN

GIAI
Transport
SGLN

GTIN
Item
SGTIN

SSCC
Pallet

GIAI
Transport

GLN
Customs

GLN
Distributor

GIAI
Transport

SSCC
Pallet

GLN
Distribution Center

GIAI
Transport

SSCC
Pallet

GLN
Retailer Center

SSCC
Case

GTIN
Item

GSRN
Consumer

BlockChain Smart Contract

BlockChain Smart Contract

Ⓐ GS1 Registration

BlockChain
Smart Contract

Ⓑ Send Invite
Manufacturer
Vendor/Supplier

① Send Order
P.O Information

BlockChain
Smart Contract

EPCIS
ObjectEvent
Bizstep:"PO"

② PICKING
EPCIS
Association
Bizstep:"picking"

③ RM TO WIP
EPCIS
Association
Bizstep:"receiving"

④ WIP TO FG
Printing/Encoding
EPCIS
Association
Bizstep:"packing"

⑤ QA/QC
EPCIS
Association
Bizstep:"commissioning"

GTIN Tracker v. 2.0
GTRACK
IDENTIFY
CAPTURE
SHARE

Powered by GTRACK Mobile v.2.0

SALES ORDER
EPCIS
Association
Event
Bizstep: "dispatch"

PICKING
EPCIS
Association
Event
Bizstep: "assembling"

LOADING
EPCIS
Association
Event
Bizstep: "shipping"

ASSOCIATION
Receiving
Shipping
Handover
Ownership Transfer
Acceptance
Handoff
Consignment
Receipt

ASSOCIATION Module

BlockChain Smart Contract

Certificate of Origin
Bill of Lading
Commercial Invoice
Product Certificate
Certificate of
Conformity
Company License

POD
Proof of Delivery
Direct Store Delivery
EPCIS
Association
Event
Bizstep: "in-transit"

RECEIVING
EPCIS
Association
Event
Bizstep: "receiving"
Barcode Mapping
Serialization
RFID Encoding

BlockChain Smart Contract

Codification Verification
Global Product Classifications
Harmonized Codes
UNSPSC

GS1 ID
GTIN
VERIFICATION

BlockChain Smart Contract

SALES ORDER
EPCIS
Association
Event
Bizstep: "dispatch"

Delivery Updates
Location — Track Location — Track Location of the Driver — 1
Arrived — Arrival Stage — Driver reach on the Destination Location — 2
Unloading — Unloading Stage — Driver start unloading items — 3
Scanning — Scanning Stage — Scanning unloaded items — 4
Signature — Signature Stage — Driver Signing the bill — 5
Delivery Note — Delivery Stage — Driver Print Delivery bill — 6
Sales Invoice — Sales Invoice — Driver print sales invoice bill — 7

POD
Proof of Delivery
Direct Store Delivery
EPCIS
Association
Event
Bizstep: "in-transit"

RECEIVING
EPCIS
Association
Event
Bizstep: "receiving"

BlockChain Smart Contract

E-Invoice
GTIN Verification
QR Code

POS
EPCIS
Association
Event
Bizstep: "invoice"

BlockChain Smart Contract

BlockChain Smart Contract
CONSUMPTION

BlockChain
Smart Contract

EPCIS
REPOSITORY

Local Data Hub
GS1 Registry Platform
Data analytics
Local Registry

GDSN
GS1 MO
GS1 Registry Platform
Data analytics
GS1 MO
Global Registry