GS1
Circular Economy
Pro Pare

Eugen Sehorz
Projectleader GS1 System, Head Public Affairs

GS1 at a glance

Neutral and
Not-for-Profit

User-driven

Global
and local

Inclusive and based on
cooperation

Sectors…

GS1 offers standards & solutions in more than 20 sectors …

Retail

Marketplace

Healthcare

Fashion, Sport & Textil

Rail & techn. Industries

Rawmaterial & Packaging

eGovernment

Building & Construction

Without STANDARDS…

Inefficient,
time-consuming,
painful,
expensive,
disruptive,
volatile,
faultily

GS1 – the global language of business...

GS1 System offers consensus-based **global**, **cross-sectorial Standards** for **Identification** and **Communication** based on agreements for the use of **barcode symbologies** and electronic data exchange.
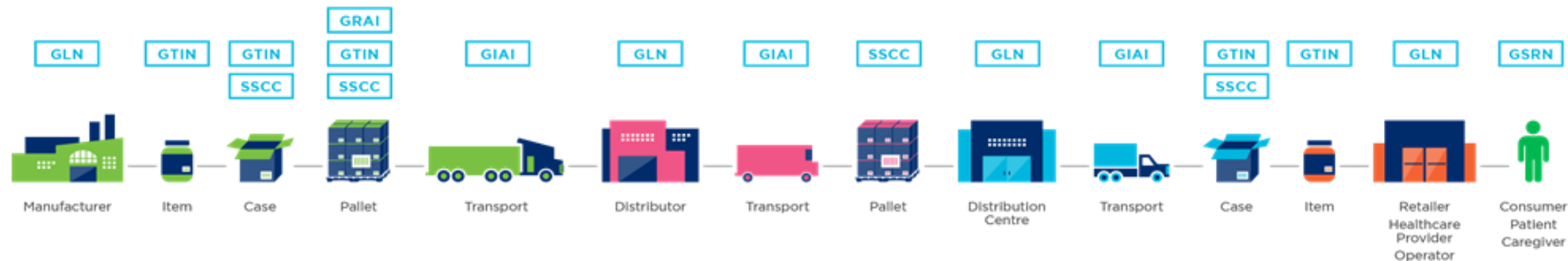

Identify   Capture   Share

Identify: GS1 Standards for Identification

GLN Global Location Number **GTIN** Global Trade Item Number **SSCC** Serial Shipping Container Code **GRAI** Global Returnable Asset Identifier **GIAI** Global Individual Asset Identifier **GSRN** Global Service Relation Number

| GLN | GTIN | GTIN / SSCC | GRAI / GTIN / SSCC | GIAI | GLN | GIAI | SSCC | GLN | GIAI | GTIN / SSCC | GTIN | GLN | GSRN |

Manufacturer · Item · Case · Pallet · Transport · Distributor · Transport · Pallet · Distribution Centre · Transport · Case · Item · Retailer Healthcare Provider Operator · Consumer Patient Caregiver

Capture: GS1 Standards for Barcodes & EPC/RFID

GS1 Barcodes   **GS1 EPC/RFID**

EAN/UPC · GS1-128 · ITF-14 · GS1 DataBar · GS1 DataMatrix · GS1 QR Code · GS1 Composite Barcode · EPC HF Gen 2 · EPC UHF Gen 2

9 501101 021037
(00) 3 9501100 000001001 9
09501101021037
(01) 0 9501101 02103 7
9501M1028
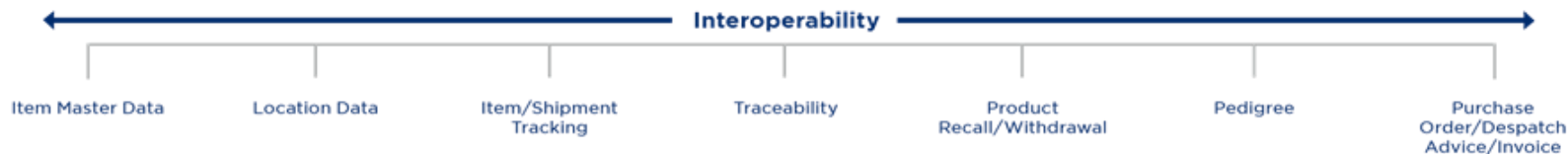
Share: GS1 Standards for Data Exchange

Master Data Global Data Synchronisation Network (GDSN)   **Transactional Data** eCom (EDI)   **Event Data** EPC Information Services (EPCIS)

← **Interoperability** →

Item Master Data · Location Data · Item/Shipment Tracking · Traceability · Product Recall/Withdrawal · Pedigree · Purchase Order/Despatch Advice/Invoice

6

Circularity – Digital Product Passport

LINEAR ECONOMY   RECYCLING ECONOMY   CIRCULAR ECONOMY

https://productasaservice.net
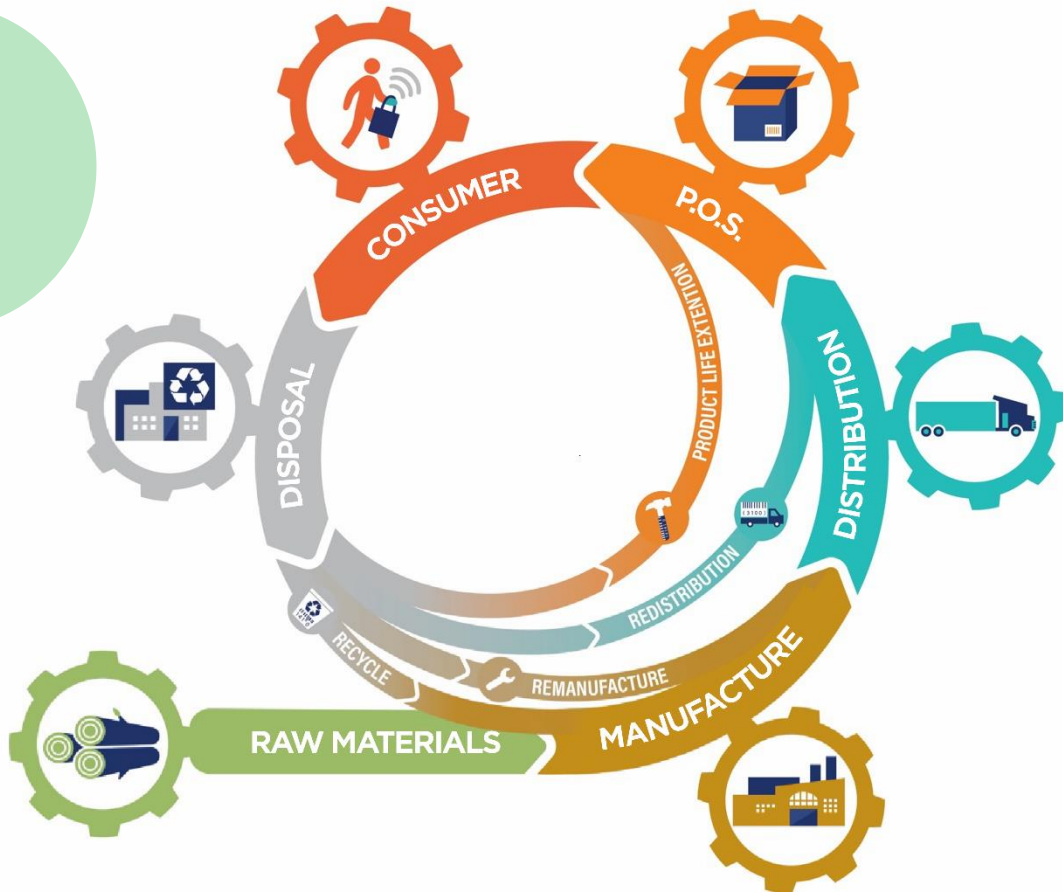
Digital Product Passport Data
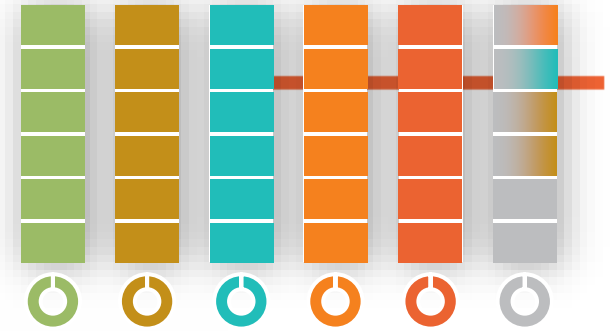
GS1 Standards

GTIN	GLN	SSCC
RFID	barcode	2D
EPCIS	GDSN	Digital Link

Connecting the product to distributed DPP data
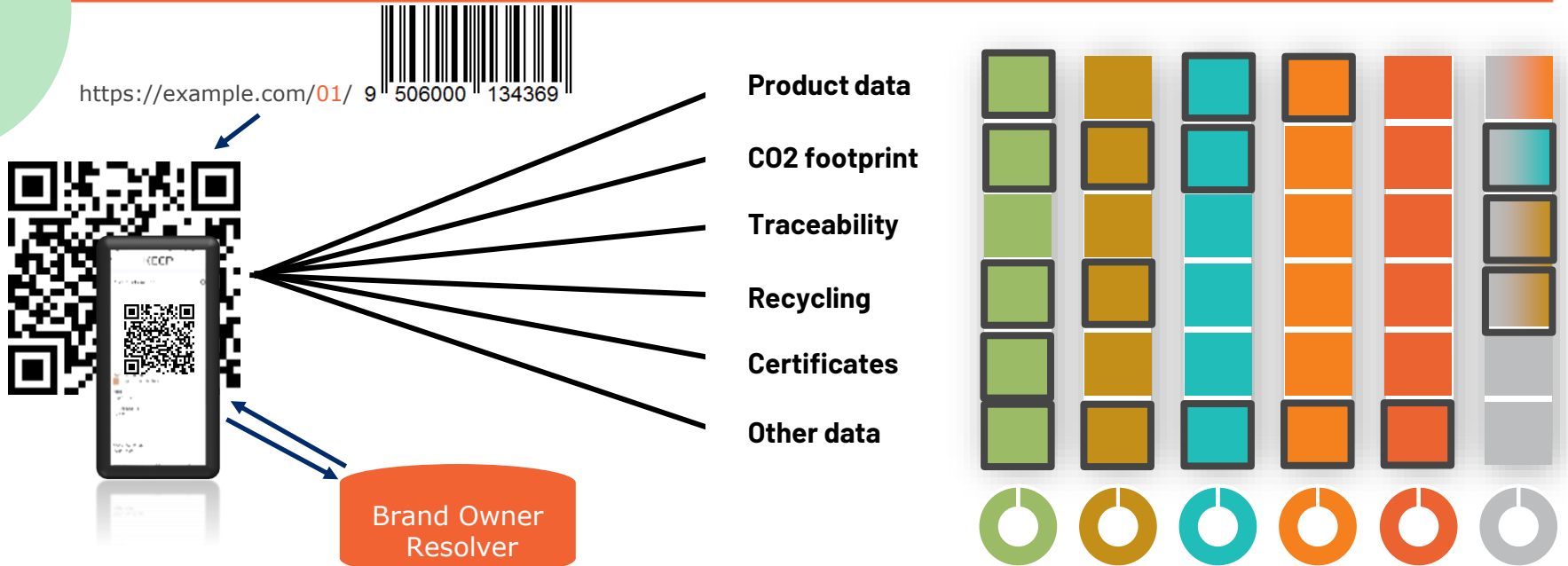
https://example.com/01/ 9 506000 134369

Product data

CO2 footprint

Traceability

Recycling

Certificates

Other data

Brand Owner Resolver

Resolver: IT system that allows verified product data to be transferred in real–time from a variety of different sources to many recipients, without being compromised.

GS1 Austria

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Prepare for

ProPare — Product Passport Resolver

Download on the App Store

GET IT ON Google Play

GS1 Austria

Partners

Steering group

Brand owners

App Developer

https://youtu.be/VIDnqWCQvOk

Connecting the product identifier with the Digital Product Passport
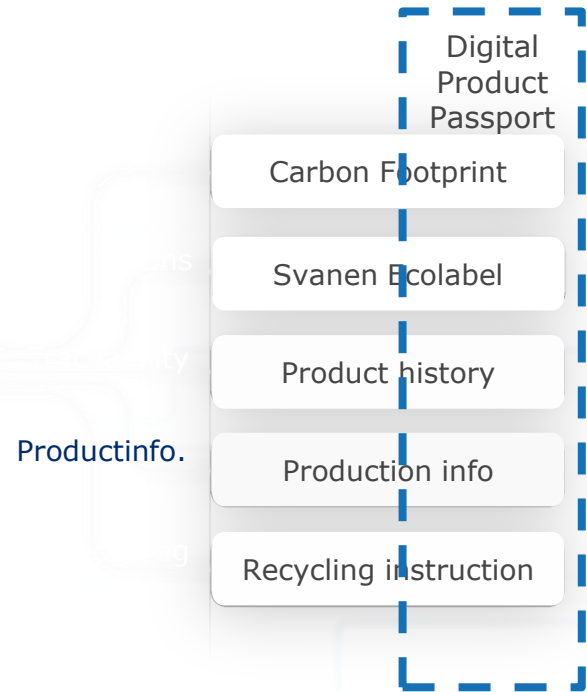
https://example.com/01/ 9 506000 134369 /21/jk8jnnN67dj

Productinfo.

Digital Product Passport

Carbon Footprint

Svanen Ecolabel

Product history

Production info

Recycling instruction

Resolver: IT system that allows verified product data to be transferred in real–time from a variety of different sources to many recipients, without being compromised.

RESOLVER

GS1 Austria

Now, let's scan!

- Scan with the ProPare app to get DPP data
- Scan with camera or other scanning app to see default product page

(01)07322976568142

(01)07340083481826

(01)07340080791454

GS1
Austria

How it works

https://id.gs1.se/01/ 9 506000 134369

Productinfo.

Carbon Footprint

Svanen Ecolabel

Product history

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RESOLVER

GS1 Austria

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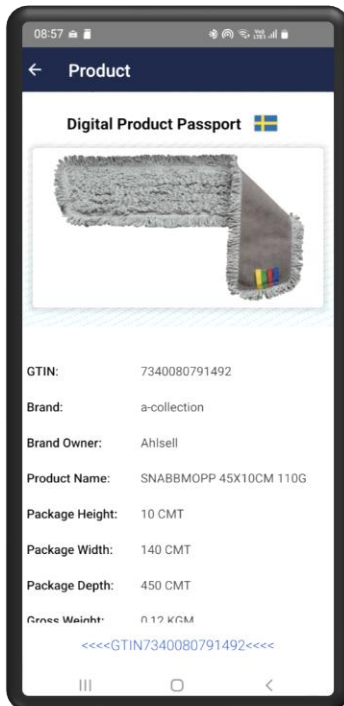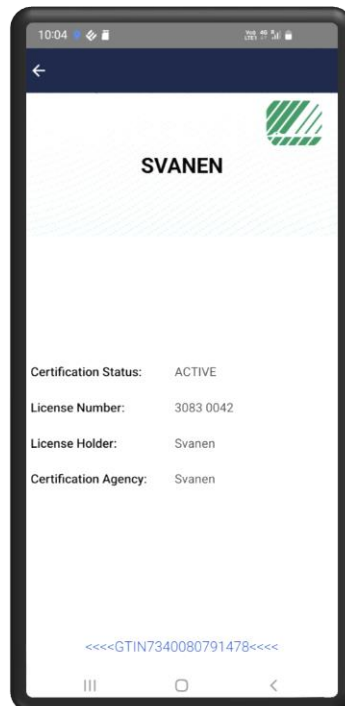# Fallback slide: How it looks in the ProPare app
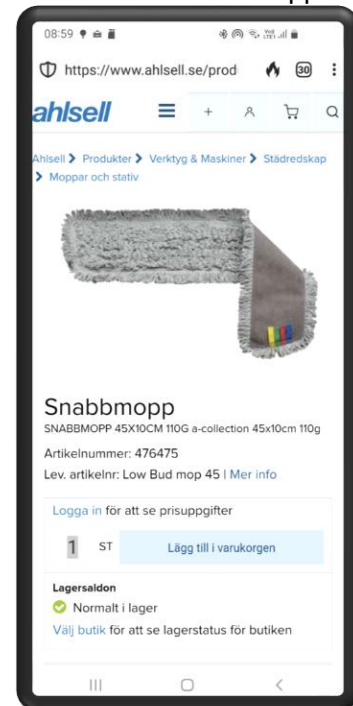

Open app

Scan QR code

View basic data

View certification

Same QR without app

What are the ProPare deliverables?

Third party cerification

Product data

Product data

Product data

Product data

Demo app

**Technical Solution Guide
- this is how the prototype works**

Resolver Proof of Concept

Prototype implementation at different data sources

Our very basic data model

CONTENT:	GS1 WEB VOCABULARY NAME
GTIN*	**gs1:gtin**
Brand*	**gs1:brandName**
Subbrand	gs1:subBrandName
Brand Owner*	**gs1:brandOwner**
Product Name*	**gs1:productName**
Size	gs1:descriptiveSize
Height	gs1:inPackageHeight
Width	gs1:inPackageWidth
Depth	gs1:inPackageDepth
Weight	gs1:grossWeight
Country	gs1:countryOfOriginStatement
Product image*	**gs1:referencedFileURL**
Certifications	gs1:packagingMarkedLabelAccreditation

CONTENT:	GS1 WEB VOCABULARY NAME
Certification agancy	gs1:certificationAgency
License number*	**gs1:certificationIdentification**
Licensee	gs1:certificationSubject
Status (active/inactive)*	**gs1:certificationStatus**

For brand owners
- Dagab
- Ahlsell
- Mio

For certification companies
- Ecolabeling Sweden (Nordic SwanSVANEN)

Technical References for ProPare

Standards used:

- GTIN (https://www.gs1.org/standards/id-keys/gtin)
- GS1 Digital Link uri syntax standard (https://ref.gs1.org/standards/digital-link/uri-syntax/)
- GS1 Digital Link link types and resolver standard (https://ref.gs1.org/standards/digital-link/)
- GS1 Web Vocabulary (https://www.gs1.org/voc/)
- JSON-LD (https://www.w3.org/TR/json-ld/)

Project deliverable

- ProPare DPP Guide (https://gs1.se/en/digital-product-passports/propare-digital-product-passport-solution-guide/)

Kontaktinformationen

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