GS1 Digital Link

Kick-off Belgilux Work Group

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Innovation Manager GS1 Belgium & Luxembourg

30th of March 2021

Thank you for being here - in these circumstances

Anti trust

GS1 Belgium & Luxembourg will not enter into any discussion, activity or conduct that may infringe, on its part or on the part of its members and participants, any applicable **competition laws**.

By way of example, members and participants shall not discuss, communicate or exchange any **commercially sensitive information,** including non-public information relating to prices, marketing and advertisement strategy, costs and revenues, trading terms and conditions and conditions with third parties, including purchasing strategy, terms of supply, trade programs or distribution strategy.

This applies not only to discussion in formal meetings but also to informal discussions **before, during or after meetings**.

https://www.gs1belu.org/nl/deontologische-code
https://www.gs1belu.org/fr/code-d%C3%A9ontologique

Privacy & IP disclaimer

This session will be recorded in order to be able to share it with the participants and partners/members of GS1.

By participating you are authorizing GS1 to process the input that you share for the realization of this Work Group.

Practical guidance

Different tabs
- To chat
- To ask and like questions
- To answer poll questions

I→	Chat	Questions	Polls	People
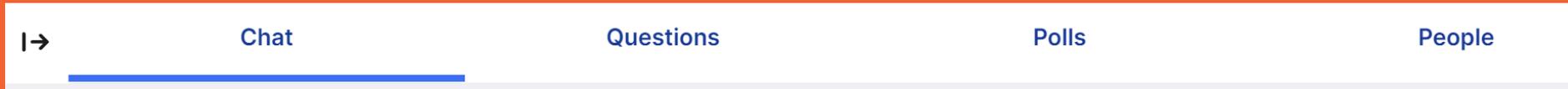
Possibility to mute notifications
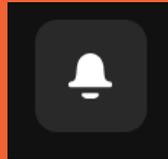
Practical guidance

Full screen in browser
- Modify screen resolution
- Click on square pictogram
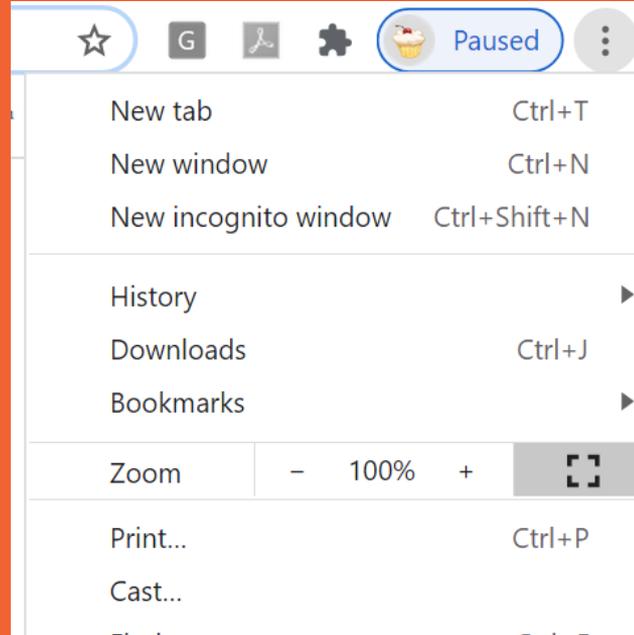
Agenda

GS1 Digital Link:
What is it?
Why use it?

GS1 Digital Link:
How do it?

GS1 Digital Link:
What's next?

Welcome guest speakers!

Nathalie Lambot
Marie Vande Ginste

Phil Archer

Michel Ottiker

Dirk Willekens

Pharma.be

GS1 Global

GS1 Switzerland

GS1 Belgilux

Welcome participants!

- Record number of registrations for GS1 Belgilux Work Group (> 250)
- Multi-sectoral with diverse core businesses:

Household Logistics Hospitals Personal care

Food & beverages

Fashion Coupons Pharmaceuticals

Chemicals

Tobacco Medical devices Electronics Construction Decorations ...

Why this Work Group?

- GS1 Belgilux Pluri-Annual plan and Innovation strategy
- Globally trending
- Demystify topic of GS1 Digital Link
  - WHAT?
  - WHY?
  - HOW?
- Receive input from you on next steps and future meetings

Poll

GS1 Digital Link: what is it?

What is DL?

- Method to **link any GS1 identifier to one or multiple data source(s)**
    - Give your physical product a unique **digital identity**
    - Connect a product to online sources of **accurate real-time dynamic information** that brand owners control
    - Share all types of **B2B and B2C** information in a simple way
- **More value, power and flexibility** to existing GS1 identifiers and data carriers
- Serve up richer **product experiences** for brands, retailers, consumers/patients

What is GS1 DL?

- Digital Link is not new but the GS1 standard is (2019)
- Providing a standard way of expressing GS1 keys + attributes in a format that can be used on the Web
- Why **standardization**?
    - Build onto existing and implemented GS1 standards
    - Leverage more applications
    - Ensure **interoperability and scalability**; ensure automated processing on a global scale
    - Move to **1 single data carrier** that can perform multiple functions

GS1 Digital Link: why use it?

Why use GS1 DL?

| One multi-functional data carrier | More data | Fewer data sharing ecosystems | No data delays |

Responding to stakeholder demands and behaviours
- Engage consumers: using your product as a media channel to connect to your customers
- Unlock visibility: transparancy through the end-to-end product lifecycle
- Protect your brand: protect consumer safety, anti-counterfeit

GS1 Digital Link: why use it?

Value proposition and use cases - Phil Archer, GS1 Global

Searching
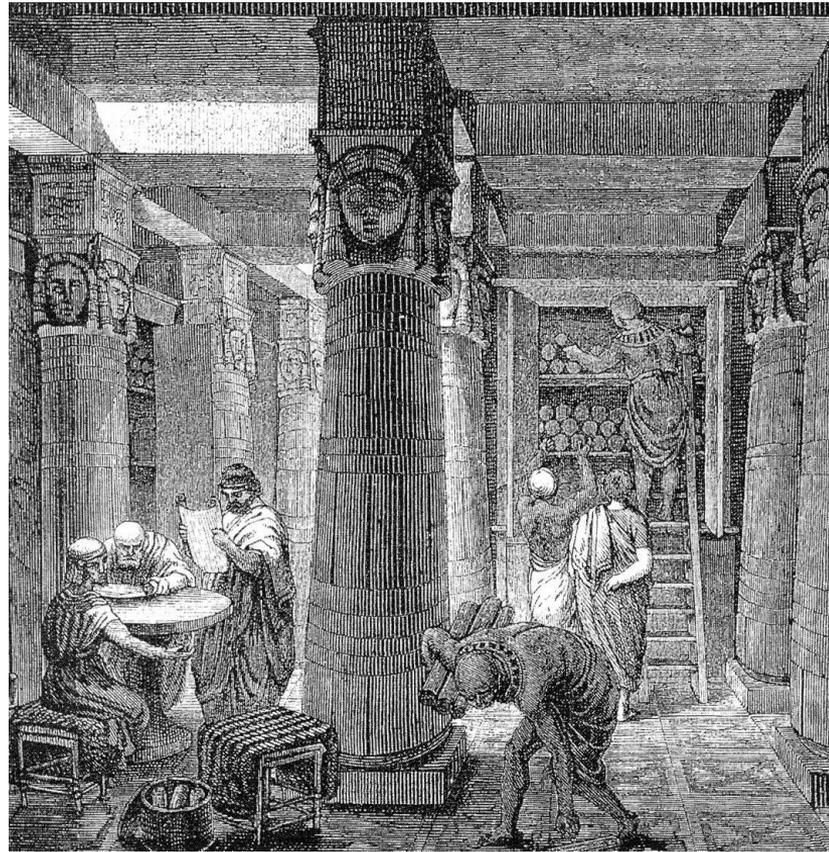
By O. Von Corven - Tolzmann, Don Heinrich; Alfred Hessel and Reuben Peiss. The Memory of Mankind. New Castle, DE: Oak Knoll Press, 2001, Public Domain,

Searching 2008

1974

1974

By Jud McCranie - Own work, CC BY-SA 4.0,
https://commons.wikimedia.org/w/index.php?curid=65164967

John Erickson, with kind permission

Internet & Web pioneers 1960s - 1991

Vint Cerf, Lawrence Roberts, Bob Kahn and Tim Berners-Lee receiving the Prince of Asturias Award for technical & Scientific Research, 2002

Robert Cailliau

Tongeren, 26 January 1947

Co-inventor of the Web, very much part of the story
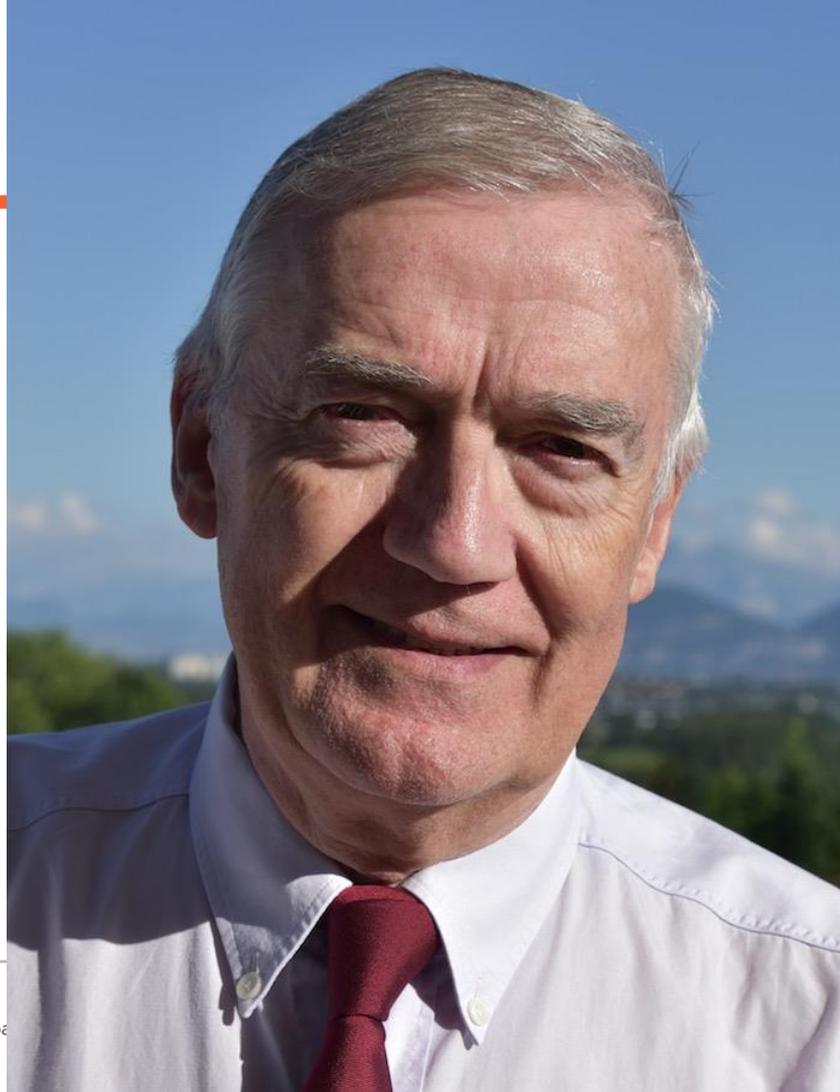
2007

iPhone by takao goto cc by

Demanding

Attention seeking

Magnificent Frigatebird by kuhnmi cc by

Compliance

28

Is the barcode up to it?

9 506000 134352

Can I find this number in my database?

My big database

9 506000 134352

It's not about the barcode

9506000134352

It's about the identifier

9506000134352

And GS1 Digital Link is about connecting it

https://example.com/01/9506000134352

And GS1 Digital Link is about connecting it

My big database

Traceability etc

Promos, Videos

Consumables

Master data

Consumer info

Marketing

Additional sales

https://example.com/01/9506000134352

Stock management

Regulator

Recall status

Inventory

35
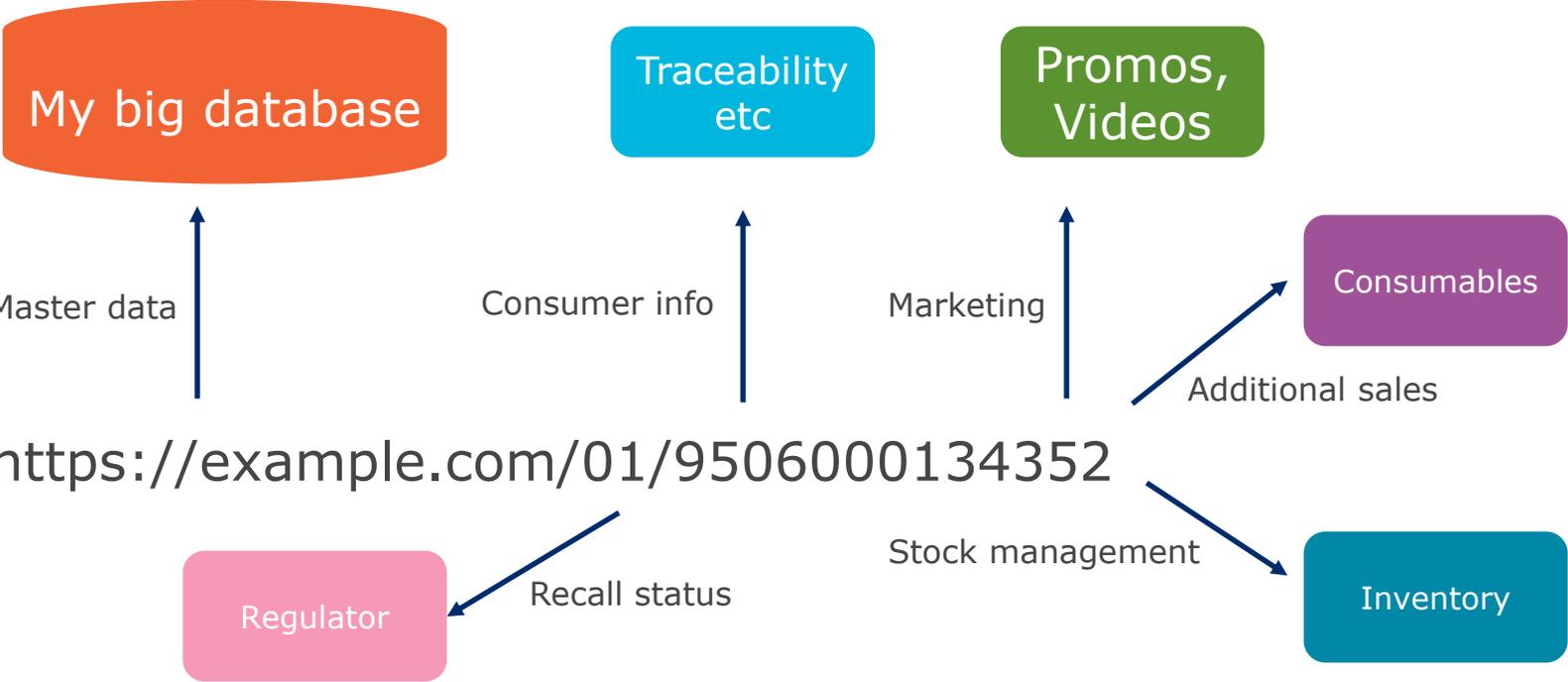
B2C

I don't want to have to look in some database I don't have to find out about your thing – just tell me what I need to know:

- Where did it come from?
- How was it made?
- What's the carbon footprint?
- Info for patients

More B2C

- See my product in action

- How to use
- How this helps you

- See why it's better than the other

- Buy me and get this extra thing free!

B2G

We don't want to put this on our packaging but here's a list of the European regulations we follow:
1
2
3
And the Belgian regulations (in 2 languages)
1
2
3
4
And the Luxembourgish regulations (3 languages)
1
2
3

B2B

- Master data
- SmPC
- Recall status
- Planogram
- Marketing material
- Media assets
- Re-ordering
- Inventory management including FIFO
- Hazardous handling

I know what I want – help me find it

GS1 Digital Link:
why use it?

Use case e-leaflets
- Marie Vande Ginste, Pharma.be
- Nathalie Lambot, Pharma.be

E-PIL Pioneer Pilot Project

AN INNOVATIVE COLLABORATIVE PROJECT

With the collaboration of

Content

▶ **Why an e-PIL pilot project in Belgium and Luxembourg?**

- o Papier patient information leaflet (PIL)
- o Convenience of e-PIL

▶ **What does the project look like?**

- o Outline
- o Practical setting and methodology

▶ **How is the project evaluated and what are the results?**

- o Evaluation of the project
- o General conclusion of interim results

▶ **What are the next steps and how can the link be made with GS1 standards?**

Paper patient information leaflet (PIL) in every medicine package

Convenience of electronic PIL

Convenience of electronic PIL

Continued access to the most recent information Personalised and user-friendly information

Reducing **environmental** impact (paper and production)

Supporting the **mission of Public Health**

Quick access and dissemination of the most recent information **Personalised and user-friendly** information

Flexibility in the update of the information, reducing product recalls
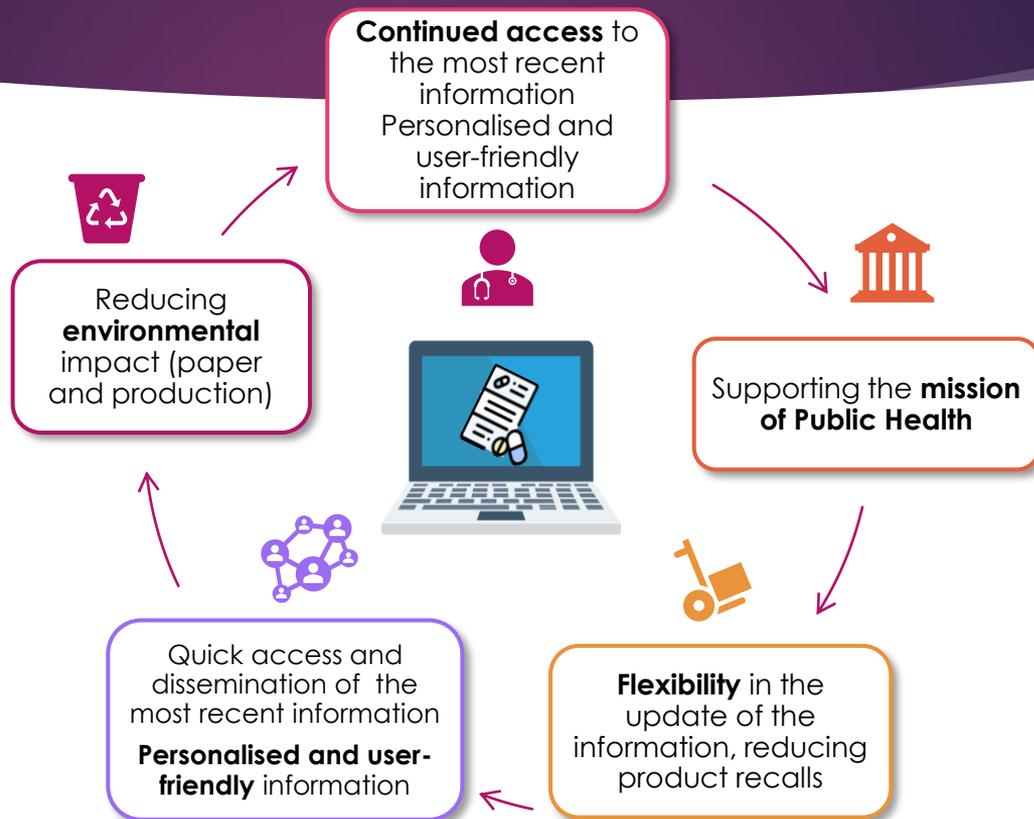
Outline of the pilot project

Concept

The **package leaflet** for a selection of medicinal products restricted to hospital use and marketed in Belgium and/or Luxembourg is **no longer included in their paper version** but is **available via online consultation** of trusted websites

Objective

To demonstrate **e-PIL is equivalent to paper PIL** to provide information on safe and effective use of medicines to healthcare professionals and patients in the context of hospital used medicines

Scope

- A selection of medicines in different therapeutics areas
- Hospital-only use
- No ambulatory use
- Approved and commercialized in BE and/or LUX

Time

- Time-limited project of 24 months, now extended to 48 months
- Project launched in August 2018

Practical setting and methodology

▶ Online consultation of product information

✓ Via **Competent Authorities website**
   & **official commented list of medicines**
   (CBIP-BCFI)

✓ Via **pharma.be e-notice**

- Adaptive site

- Search engine

- Xml layout

- Chapter by chapter

Evaluation of the project

Steering committee:
- Pharma industry representatives
- Hospital pharmacists
- BE & LU competent authorities

t=0m: Aug 2018

Evaluation of the project
- Survey for **hospital pharmacists** *(t=0m=baseline; t=12m; t=24m; t=48m)* to evaluate **the access, the use and the reading of electronic PILs** during the pilot project
  - o Incl. capture of the feedback of the healthcare professionals in hospitals (nurses, physicians)

- Survey for **participating pharma companies** *(t=12m; t=24m; t=48m)* to evaluate **the questions due to the absence of paper patient information leaflet** in the packaging.

Key outcomes to demonstrate:
- Electronic patient information allows to provide **sufficient**, **adequate and tailored** (e.g. language) information to healthcare professionals and patients in hospital setting **with no need to print** the patient information
- **Positive impact on daily practice** of hospital pharmacists

General conclusion of the interim results (t=12 & t=24m)

✓ **Very positive** interim results

✓ **98%** of the responding hospital pharmacists would agree that **the paper leaflet is removed from the packaging of the medicines restricted to hospital use** (with no ambulatory delivery/use)

✓ Pharma companies only received a **few questions**

European Commission agreed with **positive results** and agreed to **extend the project**

"Based on the positive results, we can support the extension of this pilot project from August 1, 2020 for a period of two years (until August 1, 2022) as well as extending its scope to new medicinal products, exclusively used in the hospital setting. […]. The experience acquired from this pilot project, notably via the evaluation reports is a valuable source of empirical evidence to support policy initiatives in this area."

What are the next steps?

Implementation of the approved extension of the project

▶ Now 42 participating products of 17 pharmaceutical companies

▶ The batches of participating medicines may be released without paper leaflet in the packaging until 01 August 2022

▶ European Commission was recently informed on interim results (t=24)

▶Yearly evaluation of the project and perspectives with the Steering Committee

▶ Next survey for hospital pharmacists and participating pharma companies after 48 months (August 2022)

How can the link be made with GS1 standards?

▶ **Falsified Medicines Directive:** all packages that fall under this regulation must have a unique two-dimensional barcode on the package (since Feb 2019)

▶ GS1 Datamatrix contains 4 types of information, including GTIN number

▶ Future? Scanning of barcode via mobile app or software → direct link to electronic product information
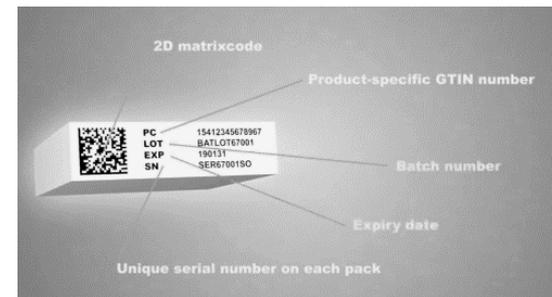
Thank you!

▶ Contact: Nathalie Lambot & Marie Vande Ginste

▶ e-pil@pharma.be

▶ https://pharma.be/nl/projects/e-pil-nl.html

▶ https://pharma.be/fr/projects/e-pil-fr.html

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pharma.be vzw|asbl

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GS1 Digital Link: why use it?

B2C Use Cases	B2B Use Cases	Operations	Solution Providers
• Product information	• Product master data	• Stocking on the shelf (first in first out)	• Open global infrastructure to develop new services
• Nutrition, allergens	• Product images	• Identify a recalled batches	• Faster data integration via resolvers
• Recipes	• Product recall status	• Prevent the sale of an expired item or perhaps to give a discount at POS for a near-expired item	• Natural, easy and cheap way to add new APIs and data services
• Company information	• Dangerous goods data	• Linking to hazardous materials (hazmat) information	• Highly customisable experiences for customers
• Social media links	• Warranty	• Triggering reordering processes	• Open source code available via GitHub
• Videos/Competitions	• Instructions for use	• Location master data	
• Instructions for use	• Patient leaflets		
• **Patient leaflets**	• **Traceability**		
• User forums	• Allergens		
• **Traceability**	• Certifications		
• Recycling information	• Coupon management		
• Augmented Reality	• **Supply Chain Visibility**		
• All multilingual, highly customisable	• All multilingual, highly customisable		

Why use GS1 DL?

- National pilots e.g. Sopraco
- International use cases
    - US (P&G)
    - Netherlands (Friesland Campina)
    - Hong Kong
    - Slovenia
    - Switzerland
    - Brazil
- Useful videos
    - B2B: https://www.youtube.com/watch?v=vhDqYwUUybM
    - B2C: https://www.youtube.com/watch?v=J49M4pbxw4Y

Poll

GS1 Digital Link: How do it?

How do GS1 DL?

Resolver

Link types

Syntax

(Phone) App

Match maker
- Phil & Michel

Labels
- Phil

Language
- Karen

Interpreter
- Dirk

GS1 Digital Link: How do it?

Resolver and link types
- Phil Archer, GS1 Global

The GS1 DL Layer Cake

A live/slightly adapted version of the recent video at
https://www.youtube.com/watch?v=H2idDJeH3o4

It's not about the technology

GS1 Digital Link *is* about

Traceability

Recalls

GS1 Digital Link *is* about

Consumer interaction and product information

GS1 Digital Link *is* about

Back of store ops, hazardous handling etc.

GS1 Digital Link *is* about

Info for patients, clinicians, regulators

GS1 Digital Link *is* about

Marketplaces, online shopping, SEO

GS1 Digital Link *is* about

Shopper analytics/market intelligence

GS1 Digital Link *is* about

Basic message

Your GS1 identifier(s)/barcode can do everything it does today *plus*:

- Link to your website
- Link to your promotions
- Link to extended consumer info
- Link to multiple solution providers
- Link to third party certificates
- Link to the structured data that search engines and marketplaces need
- Link to data needed by your business partners

Victorinox Swiss Army Knife by James Case

The GS1 Digital Link layer cake

Linked Data

Share authoritative data for eCommerce

Apps

Supports any number of third party apps

Resolvers

Serve many uses with one simple infrastructure

Link types

Identify and classify related resources

GS1 Digital Link URIs

Start here with the basics

Value

Machine-interpretable data for automated machine-to-machine communications

Empowering others

Actionable basis for data ecosystem

A human and machine-readable menu, e.g. product info page, instructions, promotions etc.

GS1 identifiers as persistent URLs for items

The GS1 Digital Link layer cake

GS1 Digital Link URIs

GS1 identifiers as persistent URLs for items

Start here with the basics

A typical GS1 DataMatrix
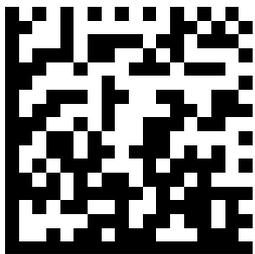
GTIN: 0540014113081 2

Measured weight (g): 000500

Batch/lot: 08153365

(01)05400141130812(3103)000500(10)08153365

Same data, same symbol, different syntax

GTIN: 05400141130812

Measured weight (g): 000500

Batch/lot: 08153365

https://example.com/01/05400141130812/10/08153365?3103=000500

The GS1 Digital Link layer cake

Link types

Identify and classify related resources

A human and machine-readable menu, e.g. product info page, instructions, promotions etc.

GS1 Digital Link URIs

Start here with the basics

GS1 identifiers as persistent URLs for items

Link types = menu options

Link types = menu options

Link types = menu options

Search jobs   My account ⌄   Search ⌄   The Guardian   UK edition ⌄

| News | Opinion | Sport | Culture | Lifestyle | More ⌄ |

UK   World   Business   Coronavirus   Football   Environment   UK politics   Education   Society   Science   Tech   Global development   Obituaries

E-Paper   Tageblatt LËTZEBUERG   Anmelden | Zu den Abos

Startseite /   Politik   Lokal   Meinung ▾   International   Wirtschaft   Sport ▾   Kultur   Magazin   /   Premium

LE SOIR .be   S'identifier   S'abonner

🏠   Fil info   Belgique   Monde   Économie   Sports   Culture   Opinions   L'actu en vidéo   Services   7°   1.29%   LE SOIR+

Link types = menu options

In GS1 terms…

- You have an entity identified by a GTIN, a GLN etc.
- It might be more finely identified by a batch/lot, a GLN extension; it might be an SSCC
- You need to know the location of
  - the product information page
  - the instructions
  - The patient information
  - The clinical information
  - the quick start guide
  - The HAZMAT info
  - Track and trace etc.

We call these *link types*

The GS1 Digital Link layer cake

Resolvers

Serve many uses with one simple infrastructure

Link types

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GS1 Digital Link URIs

Start here with the basics

Actionable basis for data ecosystem

A human and machine-readable menu, e.g. product info page, instructions, promotions etc.

GS1 identifiers as persistent URLs for items

Simple redirects are easy

https://example.com/01/05400141130812/10/08153365?3103=000500
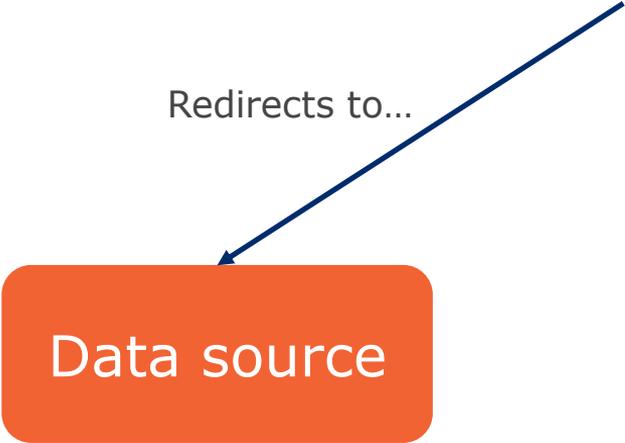
Redirects to…

Data source

Simple redirects are easy

https://example.com/01/05400141130812/10/08153365?3103=000500

Redirects to…

Data source

Data source

Resolvers support *multiple* connections simultaneously

https://example.com/01/05400141130812/10/08153365?3103=000500

Traceability

Consumer info

B2B info

Patient info

Data source

Data source

Data source

Data source
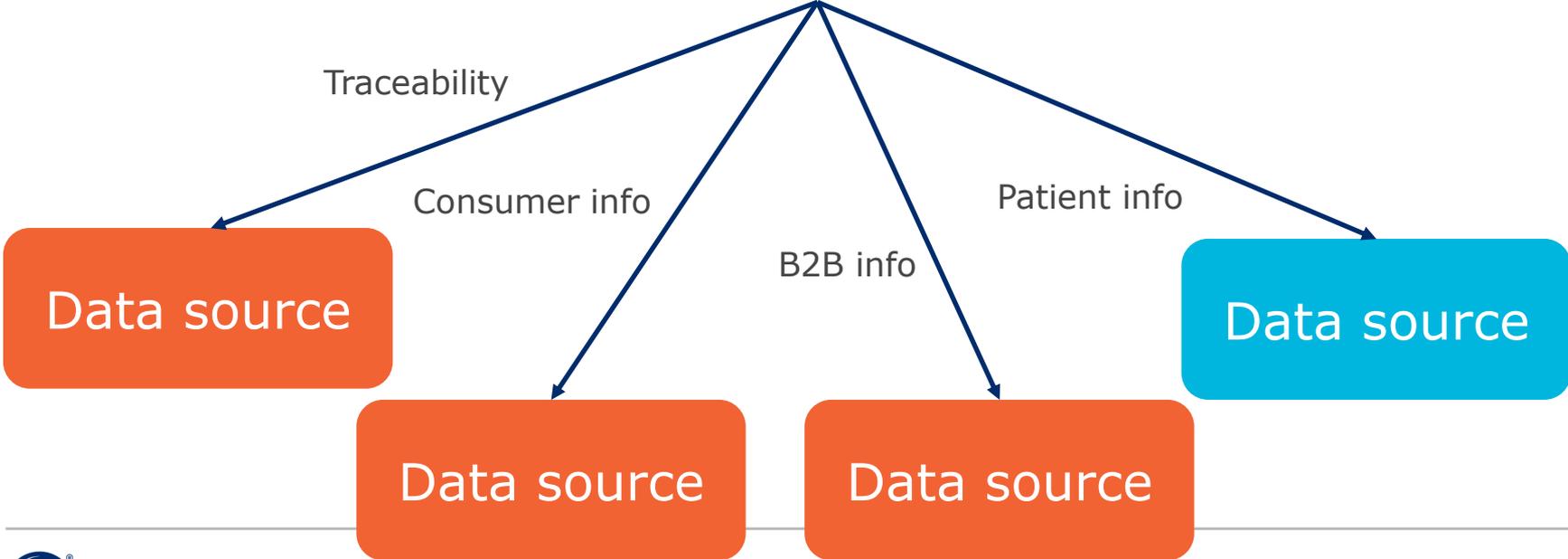
# Resolvers add power & flexibility

https://example.com/01/09506000134376/10/ABCDEF/21/1234?17=221225
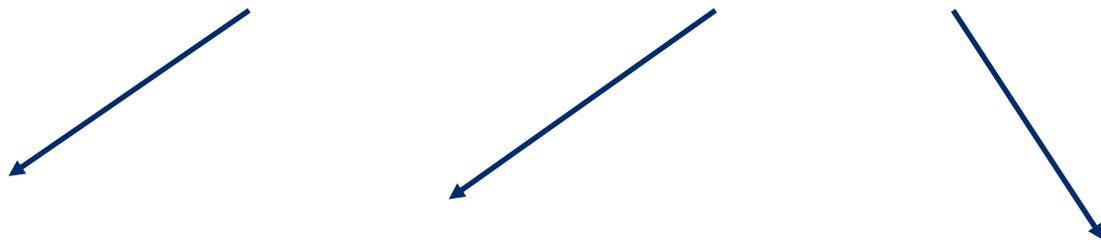
GTIN-level links:
General info
Instruction videos
Regulatory info

Batch-level links:
ePIL, SmPC
Batch characteristics

Serial-level links:
Dispense history

Batch inherits GTIN links

Inherits upper level links

Two resolvers

Developers' (resolver-dv1.gs1.org)

Ribbit "Spring Spawn" - Developer Event, 2008 by Ribbit cc by-nc

Production (id.gs1.org)

Womens Business Owners awards by Maryland GovPics cc by

Developers' resolver (resolver-dv1.gs1.org)

Ribbit "Spring Spawn" - Developer Event, 2008 by Ribbit cc by-nc

- Designed for tests, PoCs, experiments etc.
- Anyone can request an account
- GS1 makes no commitments concerning
  - link quality
  - Persistence
  - Platform performance
- Trust model (play badly and we'll delete your stuff)

Production resolver (id.gs1.org)

Womens Business Owners awards by Maryland GovPics cc by

- High performance (typical reply in <20ms)
- High resilience (99.999% uptime)
- Scalable (expands to meet demand)
- Part of the GS1 Registry Platform
- MO-controlled
- Links brand (and MO) authorised
- Must be associated with an active licence (recorded in the licence registry)

The GS1 Digital Link layer cake

Apps

Empowering others

Supports any number of third party apps

Resolvers

Actionable basis for data ecosystem

Serve many uses with one simple infrastructure

Link types

A human and machine-readable menu, e.g. product info page, instructions, promotions etc.

Identify and classify related resources

GS1 Digital Link URIs

GS1 identifiers as persistent URLs for items

Start here with the basics

We help others develop their own apps

Open source code
Open licence

See https://github.com/gs1

The GS1 Digital Link layer cake

Linked Data

Machine-interpretable data for automated machine-to-machine communications

Share authoritative data for eCommerce

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GS1 Digital Link URIs

GS1 identifiers as persistent URLs for items

Start here with the basics

GS1 Digital Link is all about Linked Data

Item

Connect

Resolver
you trust

GS1 Digital Link is all about Linked Data

Item

Connect

GTIN

Resolver you trust

Data source

Product name
Brand
Size
Availability

GS1 Digital Link is all about Linked Data

Item

Connect

Resolver you trust

GTIN → Data source → Product name / Brand / Size / Availability

GLN → Data source → Location / Address / Contact info

GRAI → Data source → Ownership / Last washed / Temperature history

GS1 Digital Link is all about Linked Data

Global ID

Authoritative

Data

Item

Connect

Resolver you trust

GTIN

GLN

GRAI

Data source

Data source

Data source

Product name
Brand
Size
Availability

Location
Address
Contact info

Ownership
Last washed
Temperature history

Linked Data

The GS1 Digital Link layer cake

Linked Data

Share authoritative data for eCommerce

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GS1 identifiers as persistent URLs for items

GS1 Digital Link: How do it?

Use of resolver
- Michel Ottiker, GS1 Switzerland

Testimonial for the
GS1 Digital Link Resolver

Michel Ottiker, GS1 Switzerland
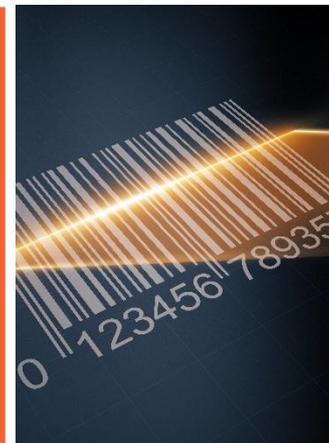
Rationale for offering a service

GS1 Switzerland targets to provide services to its member base in addition to Standards

- Ease the implementation of GS1 Standards

- Facilitate the use of GS1 Standards

- Reducing efforts for our SME members to provide GS1 conformant solutions for their customers

Think global - act local

GS1 is a federation and GS1 Member organizations as GS1 Belgilux are there to help implement GS1 Standards locally, based on the need of their members and users

The GS1 member organizations manage the allocation of GS1 keys to their member base and users

Any details you may query on a global scale in any global solution provided by GS1 is sourced by the GS1 member organizations

a) Centralized b) Federated c) Decentralized
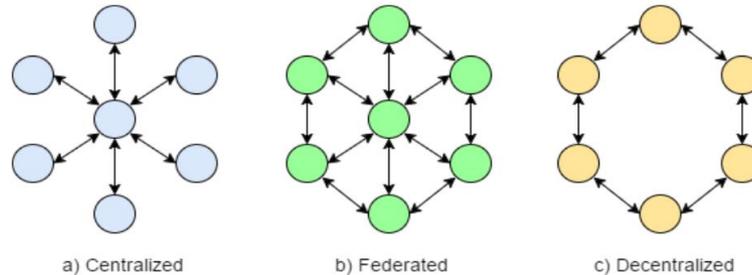
Why GS1 Switzerland offers a local GS1 Digital Link Resolver (1/2)

- The web is as trustworthy as the content provider(s) you engage with
- People demand transparency and expect the providers to participate –
  - GS1 is the only body which may authorize which company may use which GS1 keys, we are the issuing agency


„On the Internet, nobody knows you're a dog."

cartoon drawn by Peter Steiner
published by *The New Yorker* on July 5, 1993

Why GS1 Switzerland offers a local GS1 Digital Link Resolver (2/2)

- Our GS1 GO is offering the GS1 DL Resolver, GS1 Member Organizations may use this solution to cover local needs as well

- It's as well expected that global players will introduce their own GS1 DL company resolvers

- GS1 Switzerland is nevertheless convinced, that SME companies expect us to offer a local GS1 DL Resolver on Member Organization level

GS1 Global Office resolver
https://id.gs1.org

GS1 Switzerland resolver
https://id.gs1.ch

Forwarding to the member's website(s)

Forwarding to the member's resolver
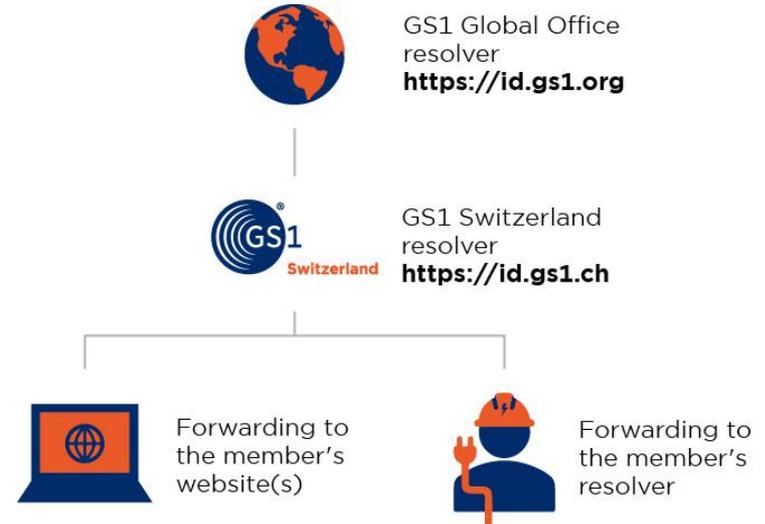
Service offering by GS1 Switzerland (1/2)

GS1 Switzerland decided to outsource the operation of our resolver to a service provider, we are convinced this will generate the most added value for our members

Offer to our members (included in the annual membership fee)

- Redirection of GS1 keys to a website or resolver
  - Default redirections
  - Redirections based on LinkType(s)
  - Extended services offered by our solution provider (subject to fee)

Service offering by GS1 Switzerland (2/2)

Conditions

- Registrations of redirections may take up to three business days

- We may only redirect GS1 keys or GS1 Company Prefixes (GCP) which are based on the GS1 Prefix 760 to 769

	GS1 Mexico
- 755	GS1 Canada
759	GS1 Venezuela
760 - 769	GS1 Schweiz, Suisse, Svizzera
771	GS1 Colombia
	GS1 Uruguay

You will find more details about our offer on our GS1 Digital Link Landing page:
https://www.gs1.ch/en/home/topics/gs1-digital-link

Use case: trustbox (..the swiss one)

Increase the reach of local solutions

- Our B2C solution, trustbox, already provides well over 40,000 product declarations for the Swiss market
- Few know that every market participant may look for comprehensive product information on the publicly accessible trustbox website
- GS1 Switzerland has registered the GTINs published in trustbox in the GS1 Digital Link Resolver
- The trustbox customers now have the possibility, without any additional efforts, to place a QR code onto the products, which may be scanned by any app and leads the consumer directly to the corresponding publication in trustbox
- https://id.gs1.ch/01/7612345002002 leads you to one of the example products that we have registered in trustbox – but https://id.gs1.org/01/7612345002002 does too!

GS1 Digital Link: How do it?

Identification, barcodes and syntaxes

How do GS1 DL?

- Identification: any GS1 identifier (GTIN, SSCC, GIAI, GRAI, …)
- Data carriers: any data carriers (barcodes, RFID, GS1 vs non-GS1)

(01) 05412345000013

1D or 2D barcodes?
- 2D: more data capacity, smaller size, higher readability
- Ongoing Belgilux implementation GS1 DataMatrix in healthcare and at retail POS for variable measure items

How do GS1 DL?

GS1 DataMatrix	QR Code or Data Matrix
GS1 barcode	Non-GS1 barcode
(01)05412345000013**(10)**ABC123	https://id.gs1.org/**01**/05412345000013/**10**/ABC123
Application Identifiers – GS1 Element String syntax	URI (Uniform Resource Identifier) DL syntax
Mostly supply chain oriented	Mostly consumer oriented
Needs app to interpret AIs	Can be scanned by native camera app on phone
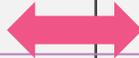
How do GS1 DL?

- **Syntax neutrality = goal**
    - Conversion software offered by GS1 as free, open source
    - DL URI syntax for non-GS1 barcodes (QR, Data Matrix) included in GS1 General Specifications v2021
    - Approach Google and Apple
    - GS1 US sunrise date 2027: all US POS ready to scan 2D barcodes with GS1 AI element string syntax OR DL syntax
    - "Future of On-Pack Coding" group at GS1 to prepare and manage transition

GS1 Digital Link: How do it?

**Demo app: digital link in action
- Dirk Willekens, GS1 Belgilux**

Goals of demo app

- What: explain and show possibilities of Digital Link

- Why: Digital Link seems hard to understand by members (transform technical stuff into showing it for real)

- How: Get users to think about what could be done with DL (using GS1 standards) by showing business opportunities in a small app

-> to help understand members how to start

GS1 Belgium & Luxembourg

Some ideas

- Purpose APP = add extra 'logic' layer between carrier & resolver + get familiar with Digital Link
  - Start from data carrier (1D, GS1 DataMatrix, QR, RFID, …)
  - Any GS1 identifier (GTIN, SSCC, …)
  - Any language, any region, any sector, any source, …
- Cases
  - FMCG Sopraco case (1D - GTIN) -> recipe info
  - Healthcare example (2D DataMatrix - GTIN) -> leaflets
  - Apparel (QR – GIAI) -> product information
- Next steps

GS1
Belgium & Luxembourg

Example FMCG Sopraco

Art. Nr. 15301 - Kalfslever gesliced / Foie de veau tranché

URL:

English	https://www.sopraco.eu/en/fried-calfs-liver-apple-and-red-wine
Nederlands	https://www.sopraco.eu/nl/gebakken-kalfslever-met-appel-en-rode-wijn
Français	https://www.sopraco.eu/fr/foie-de-veau-po%C3%AAl%C3%A9-aux-pommes-et-vin-rouge
Deutsch	https://www.sopraco.eu/de/gebackene-kalbsleber-mit-apfel-und-rotwein
Italiano	https://www.sopraco.eu/it/fegato-di-vitello-padella-alla-mela-e-al-vino-rosso
Español	https://www.sopraco.eu/es/higado-de-ternera-frito-con-manzana-y-vino-tinto

Intern Artikel: 15301
Omschrijving: KALFSLEVER +/- 180 GR
GTIN: 5420033102628

Example FMCG Sopraco

5420033102628

https://www.sopraco.eu/en/fried-calfs-liver-apple-and-red-wine

(01)05420033102628(3103)000189(3923)2172(10)ABC123

APP: Home

Goal: create intermediate between
scan and resolver

Steps:
1. Scan (something)
2. Logic + interpretation
3. Link to resolver
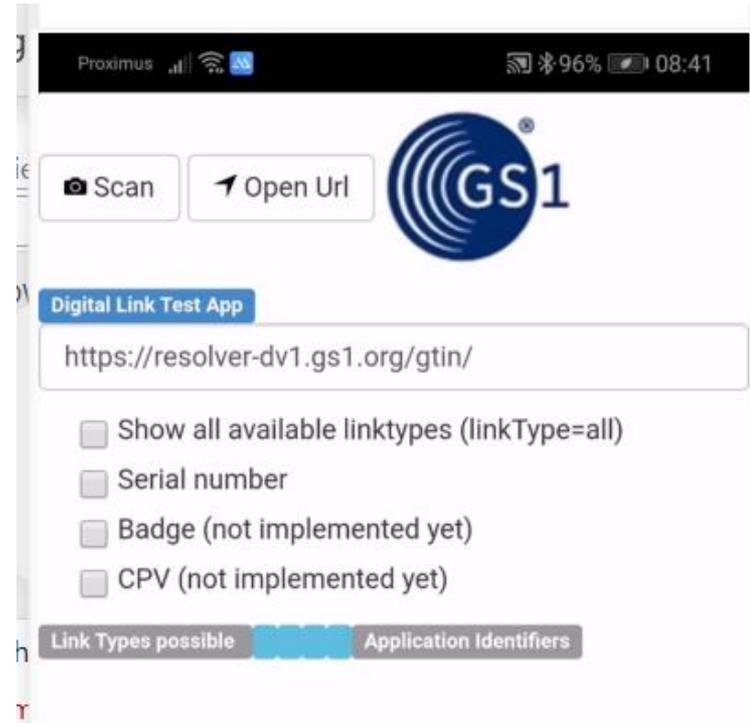
APP: scan GS1 DataMatrix

- Scan GS1 DataMatrix (see prev. slide)
- APP is breaking up Application Identifier
- APP is consulting metadata in resolver
  - Takes language/region smartphone
  - Is considering default in resolver
  - Is showing linktypes available depending language/region/…
- APP is constructing url
  - Extra keys might be added (serial)
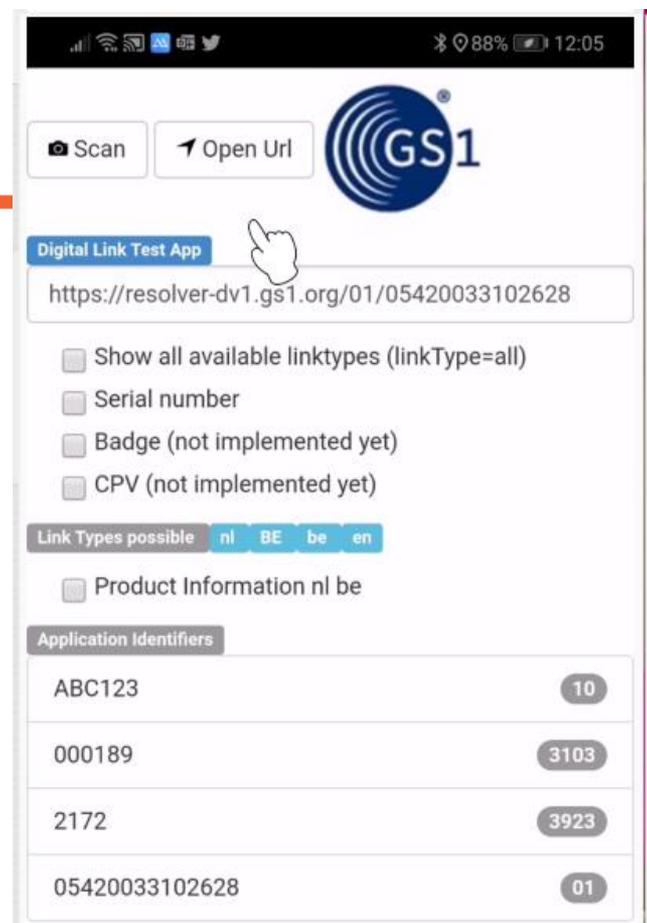
Example Healthcare
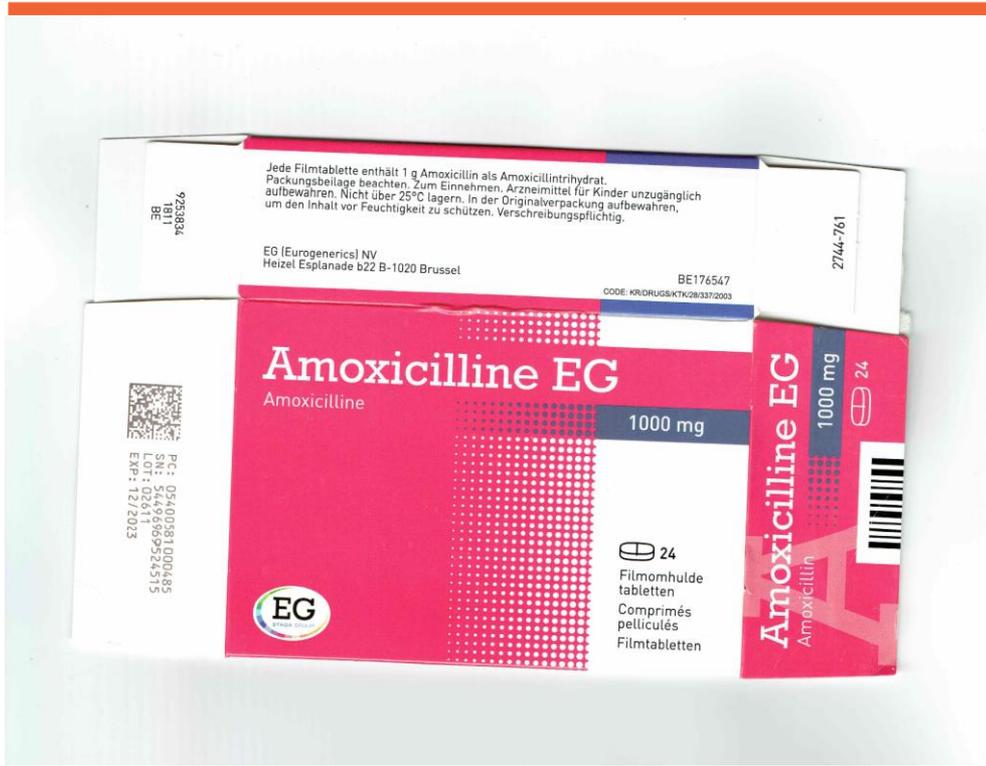
GTIN (01)
05400581000485

Exipration date (17)
31/12/2023

Lotnumber (10)
02611

Serialnumber (21)
54496969524515

APP: Amoxicilline EG
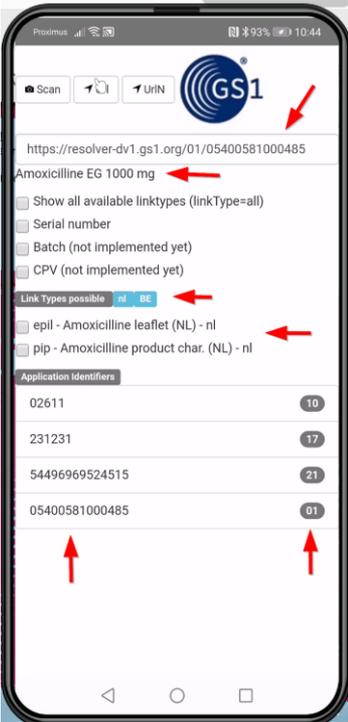
APP: Amoxicilline EG resolved

- Show leaflet/… based on:
  - Language
  - Region (country)
  - Personal library?
  - …

myHealthbox   Search...

Documents in other languages

PDF   Patient Information leaflet - German
      23-02-2021

PDF   Patient Information leaflet - French   PDF   Summary of Product characteristics -
      01-11-2020   French
                                                    01-11-2020

PDF   Patient Information leaflet - Dutch   PDF   Summary of Product characteristics -
      23-02-2021   Dutch
                                                    01-11-2020

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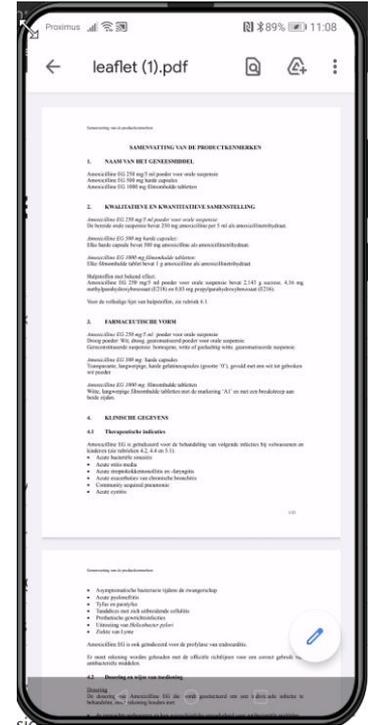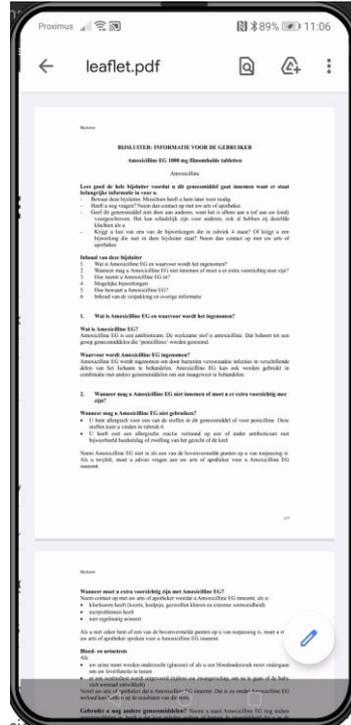
Example Apparel

GIAI (8004)
Global Individual Asset Identifier

https://resolver-dv1.gs1.org/8004/872057273A3702E0460

Format:
N4+X..30

Example Apparel
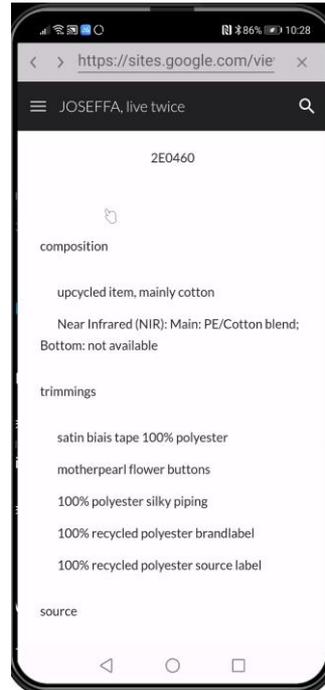
# "Verified by" can add much more

And even more attributes …

Now let's get serious

FMCG example – how it could work

GTIN
5410438001633

FMCG example – how it could work
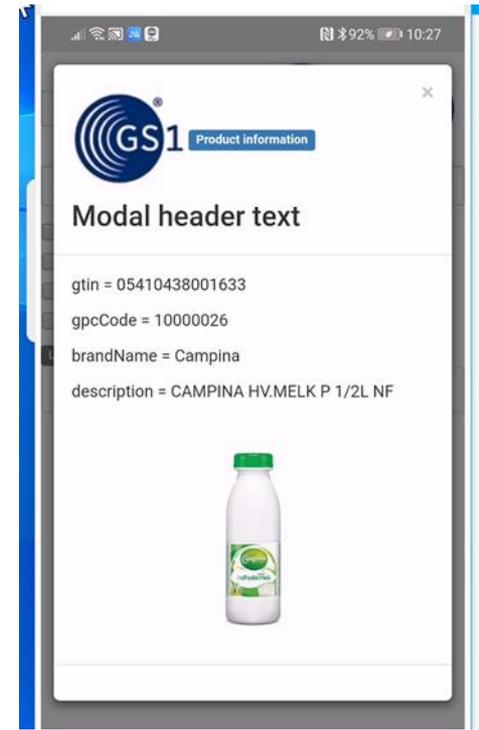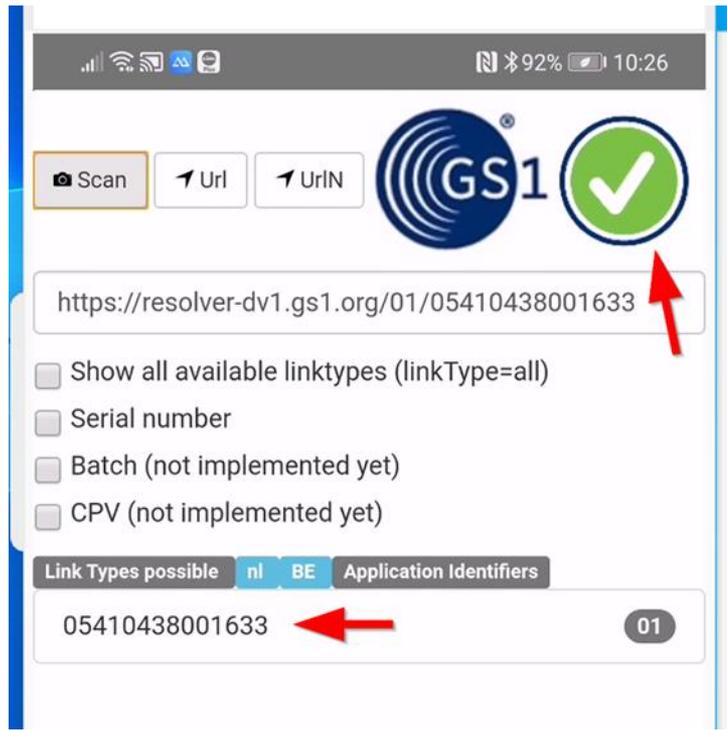
Potential next step – MPM attributes

- Same technology as 'Verified By'
- Can be branded (selection on attributes)
- To be discussed in next meetings …

Conclusion

- GS1 Digital link
  - Carrier independent
  - Flexible (resolver)
  - Combine existing data (identifier, language, region, …)
 - Link other data sources

  - …

- The sky is the limit

Poll

What's next?

At Global level
– Phil Archer, GS1 Global

Known knows

- The GS1 Digital Link syntax is a fully-defined alternative syntax for GS1 identifiers
- At least 5 multi-nationals are implementing GS1 DL
- Multiple solution providers offering GS1 DL-based services
- Projects and interest from multiple sectors
  - Healthcare
  - Retail
  - Construction
  - Logistics (Scan4Transport)
- Scanner manufacturers all interested
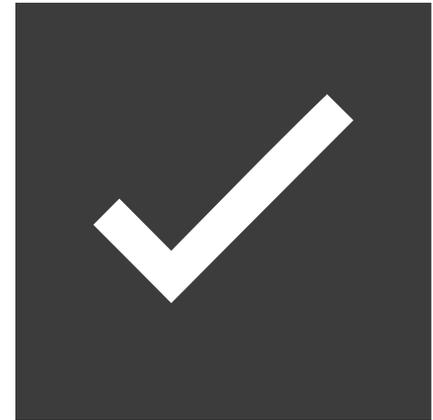
GS1 US Position paper

GS1 US Advanced Data Carrier for
Point-of-Sale (POS) Getting Started Guide

Release 1.0 December 2020

From 2027:

2D at POS with
either GS1 element
syntax or GS1
Digital Link syntax

https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=2277

2D Migration – Coming Soon!

Global Migration to 2D Programme Charter

Global Migration to 2D Programme Charter

Release 0.2, Draft, March 2021

Known unknowns

- Can brand owners collate links to their other sources of data?

- So far, evidence is that people want to run their own resolvers. Good. But will they redirect to each other in a network or operate in siloes?

- How will brands, solution providers, digital marketing companies, regulators, master data managers all react?

- Will GS1 Digital Link syntax or element syntax be dominant? (and does it matter?)
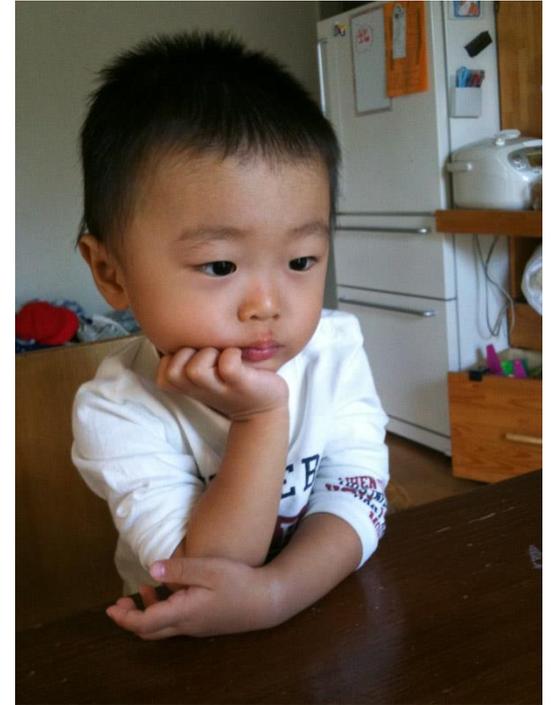
thinking... by Yoshiyasu NISHIKAWA cc by-nc-nd

Unknown unknowns
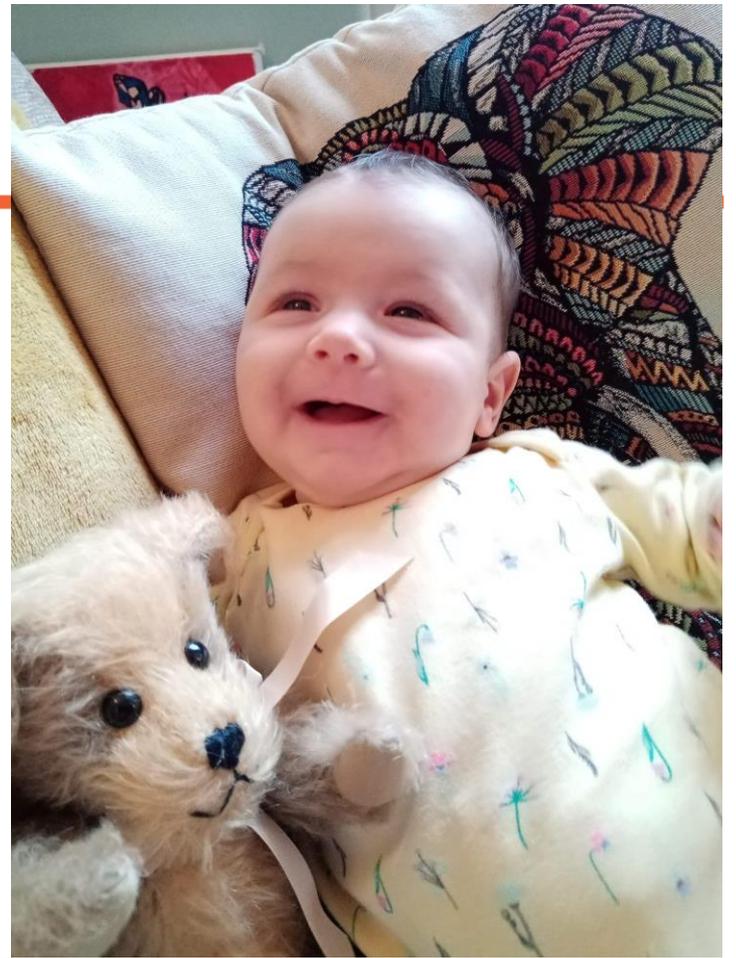
What's next?

At Belgilux level

What's next?

- Plenty of materials from GS1 (documentation, videos, source codes, …)
- Input from Work Group
    - Strategy → Resolver, app, syntaxes, …
    - Pilots
    - Structure next work group meetings
   → **please fill out survey you will receive after the session**

Pilot vs non-pilot	Strategic vs technical	Participating vs informed	Timing

What's next?

- Unknown unknowns...

Poll

Thank you all!

Please fill out survey

Contact at
karkesteyn@gs1belu.org