

Innovation Café

GS1 Belgium & Luxembourg



GS1 SMARTBox

Welcome!



Wouter Schaekers
P&G
Vice President Board GS1 Belgilux



Karen Arkesteyn
GS1 Belgium & Luxembourg

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>

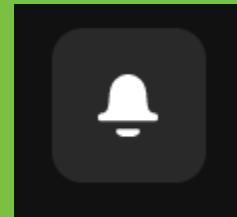
Practical guidance

Different tabs

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



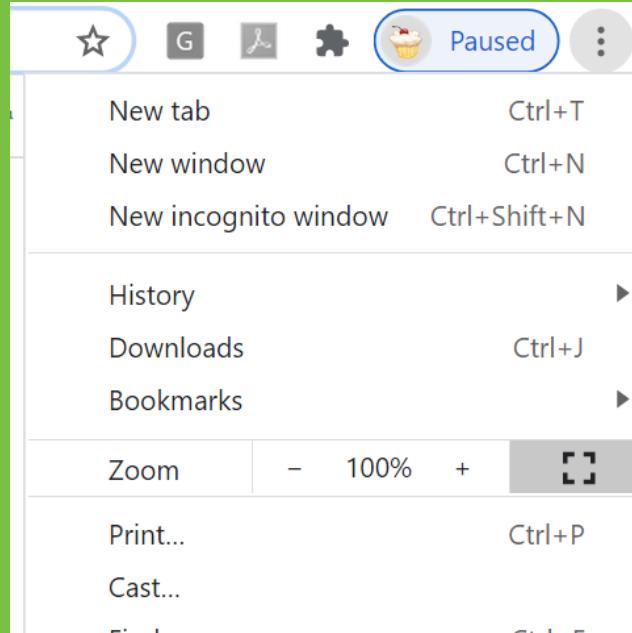
Possibility to mute notifications



Practical guidance

Full screen in browser

- Modify screen resolution
- Click on square pictogram



Our mission at GS1 Belgilux

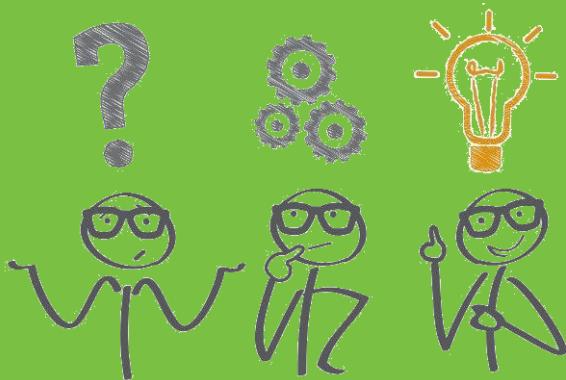
Strategic plan 2020-2022

1. Create value
2. Bridging the physical and digital world
3. Be an enabler
4. Be an innovator



Our objective is to contribute to the efficiency in the value chain, by anticipating future trends.

Innovation at GS1 Belgilux



Focus areas

- Transport and logistics sector
- Circular economy
- Trusted data quality today & tomorrow

Innovation Café

- Build community with all stakeholders,
 - Inform and receive your feedback,
 - Partner up and start to learn!



The supply chain challenge



Feasible



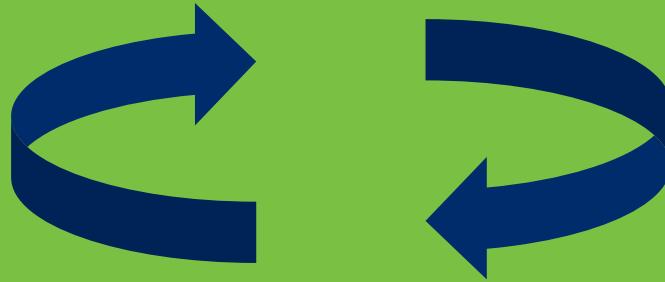
Sustainable



Profitable

Why GS1 SMART-box?





Let's have a look at the supply chain

Agenda



GS1 Germany

Nadine Rosenkranz & Matthias Haubenreißer



IPP

Dirk Freda

Colruyt Group

Dirk Leemans



L'Oréal

Tim Christiansen-Lenger

GEORG UTZ

Jochen Wessels



P&G

Reinhard Wesp

Poll



Welcome

GS1 Germany

Nadine Rosenkranz

Matthias Haubenreißer



Transparent, sustainable and cost-effective: the GS1 SMART-Box in manufacturers to retail networks

Matthias Haubenreißer, Competence Center Supply Chain Management /Competence Center MTV, GS1 Germany GmbH

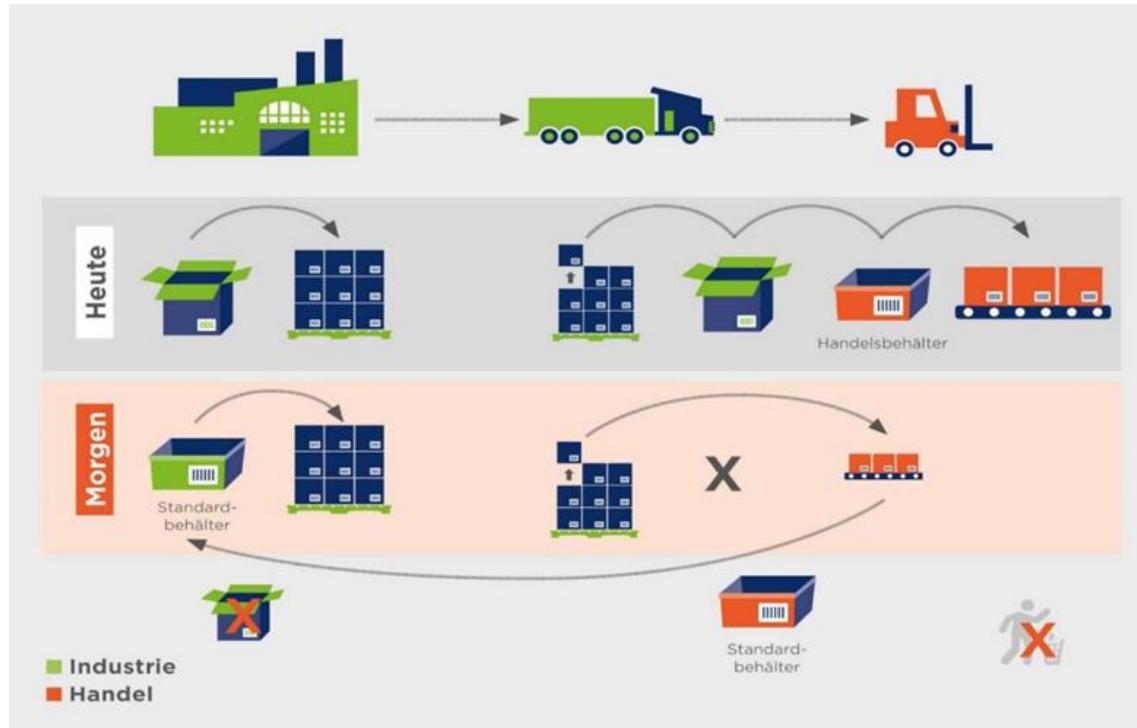
Dr. Nadine Rosenkranz, Project Management Office, GS1 Germany GmbH

2021





The process is, what matters





Business case: optimizing loading capacity



- change from stacked consignments with American boxes to EUL 1/2 consignments with the GS1 SMART-Box
- Reducing pallet space (transport)
- Reducing cost for pallet cycle (estimated av. 3,81€)*
- Reducing administration expenses



*based on a analysis of Fraunhofer IML

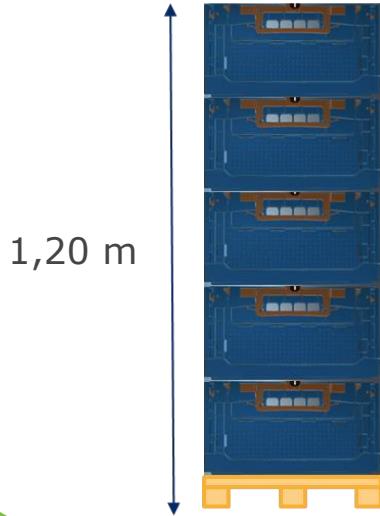
Business case: optimizing of processes



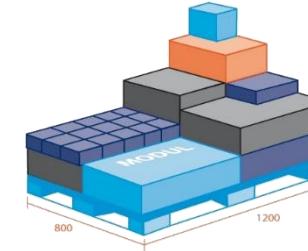
- change from opening the cardboard box, repacking the goods and dispose of packaging material to an optimized flow
- optimized picking process both at the manufacturer (mixed pallets) and the retailer
- saving in material costs



Business case: optimal transport and storage utilization



The GS1 SMART-Box Type E (211 mm) optimally meets the criteria of EUL 1 and EUL 2



The criteria for modularity can be applied to primary packaging as well in the long term

Grundmaß	Multimodul	Untermaße
600 x 400 mm	1.200 x 800 mm 800 x 600 mm	400 x 300 mm 300 x 200 mm 400 x 200 mm 400 x 150 mm 300 x 100 mm

additional potential: savings on foils and labels



- using serialized GRAI for identification instead of a separate article label (GTIN)
→ SSCC only on pallet
- the serialized GRAI is fixed to the box across all processes
- the removal of the label is not necessary after each circulation and thus reduces the pooling costs



85

GS1 SMART-Box



→ The label is supplemented by RFID right from the start

- 6 different sizes (based on 600x400 and 300x400 mm)
- Process requirements
 - fit to the conveyor system
 - Shutter for easier picking process
 - Nap field for easier removal of labels
- GS1 identification standards
 - Serialized GRAI for asset type and version
 - Left-/right-identification (shutter)
- Compliance with VdS* fire protection requirements

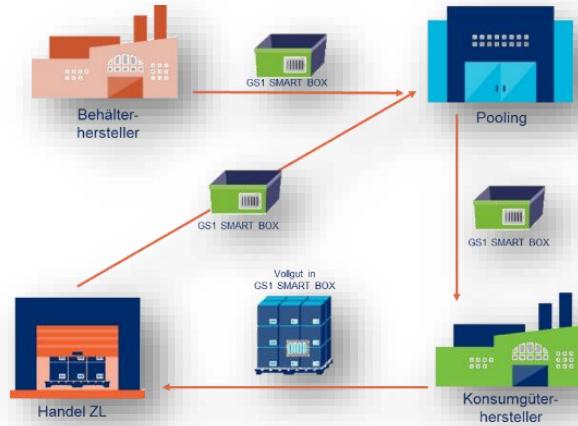
* VdS is an independent institution which has been ensuring safety and trust in the fields of fire protection and security



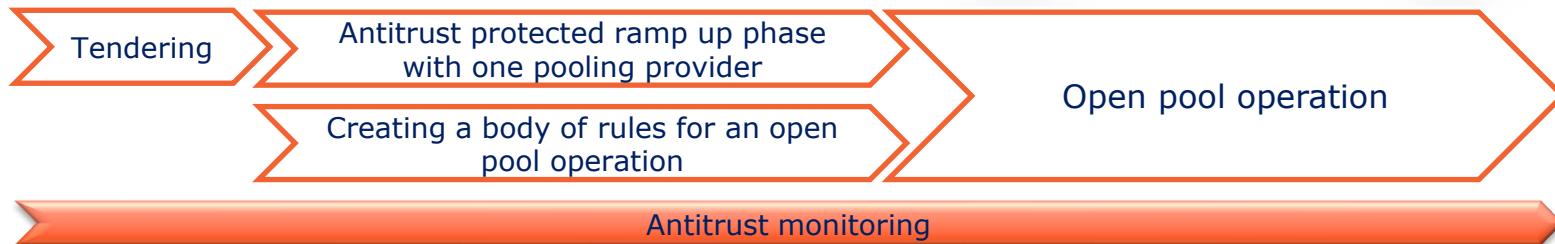
Designing returnable cycles

Optimal replenishment with highest possible sustainability in a circulating economy

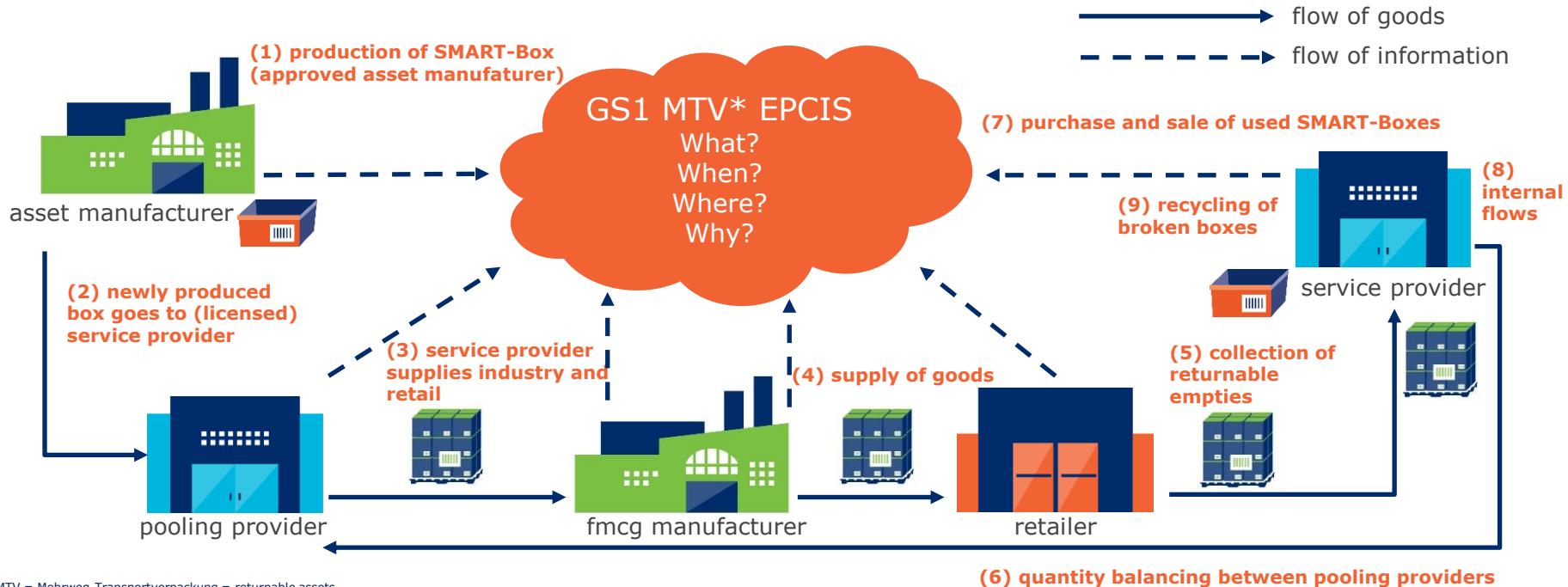
- ✓ Low complexity
- ✓ High standards of quality
- ✓ No sorting effort in the supply chain
- ✓ Maximum service at low costs
- ✓ High availability even at seasonal peaks



Approach:

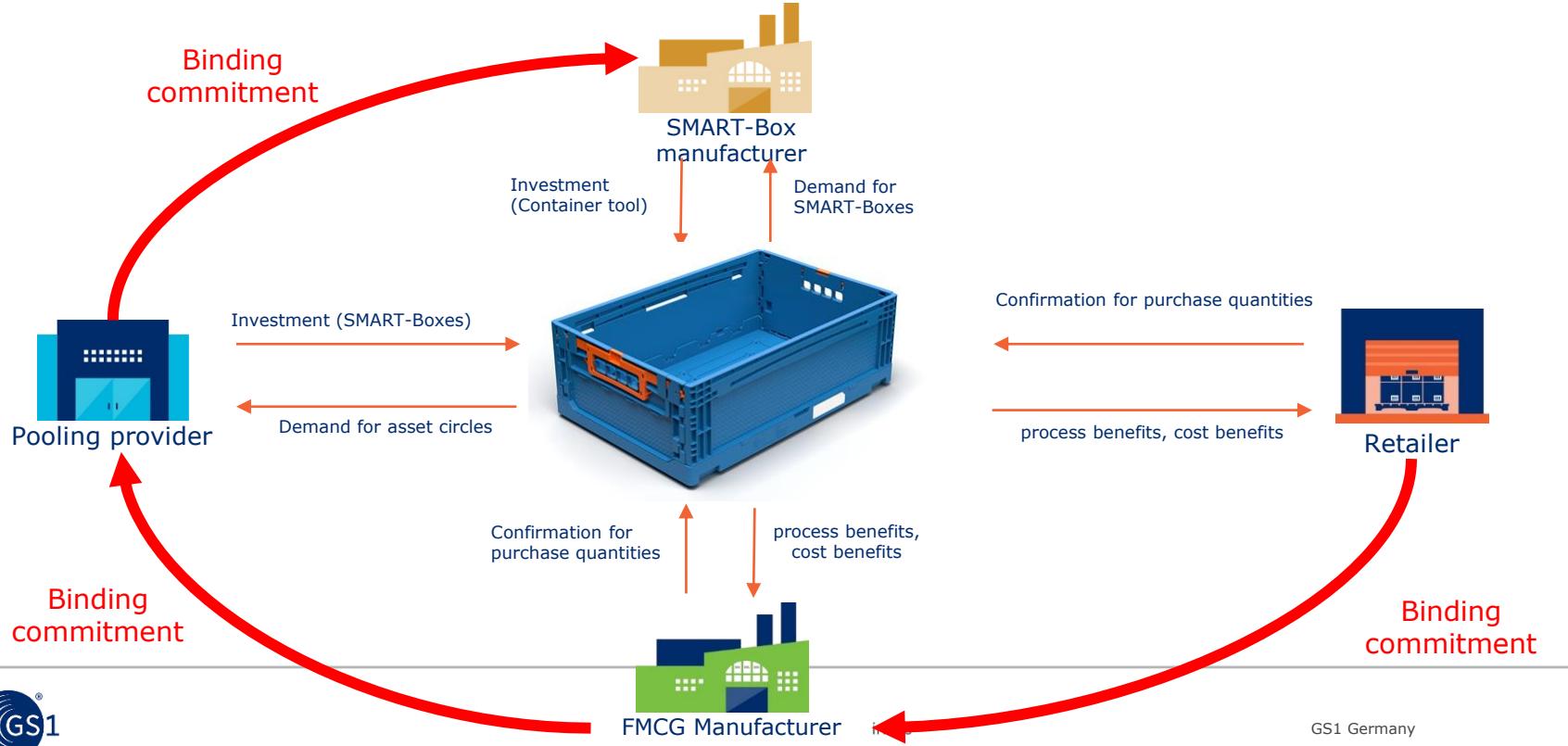


Future development of an innovative circular economy



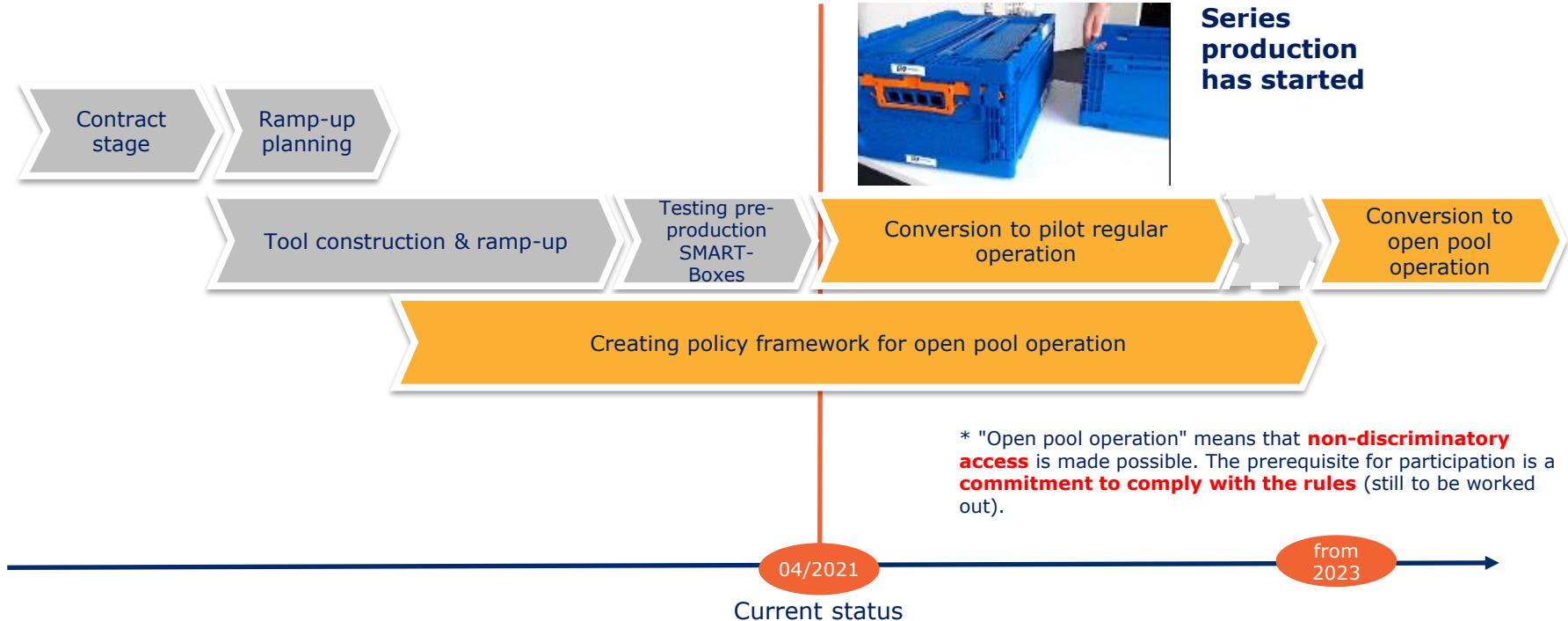
*MTV = Mehrweg-Transportverpackung = returnable assets

Achieving commitment between stakeholders





Planning based on contract conclusion





We expect big things

2015

2021

from 2022

Project phase

START



Getting started

Drugstore



from 2022

Successive expansion to further product lines

Drugstore



Sweets

Textile

DIY

XXX

XXX

XXX



The Global Language of Business

We believe in it!



Beiersdorf



kao

L'ORÉAL

MIGROS



P&G

ROSSMANN
DROGERIE PARFUMERIE



The Global Language of Business

GS1 Germany

THANK YOU

iGRACIAS

GRAZIE

고습니다

OBRIGADO!

Teşekkürler

MERCI

DANKE



Germany



Contact

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Competence Center MTV

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www.gs1-germany.de

Q&A

GS1 Germany

Nadine Rosenkranz

Matthias Haubenreißer

Welcome

Colruyt Group
Dirk Leemans





COLRUYT GROUP

Sustainable Supply Chain GS1 Smartbox



Dirk Leemans
Head CoE Supply Chain



Activities

Retail
82%
of group revenue
EUR 9,5 Billion



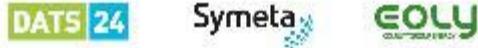
Participations



Wholesale and foodservice
10%
of group revenue



Other activities
8%
of group revenue



Participations



Sustainable entrepreneurship is in our **DNA**

Starting with an **economic** impetus, we also aim to bring about a positive **social** and **ecological** dynamism with long-term results in mind



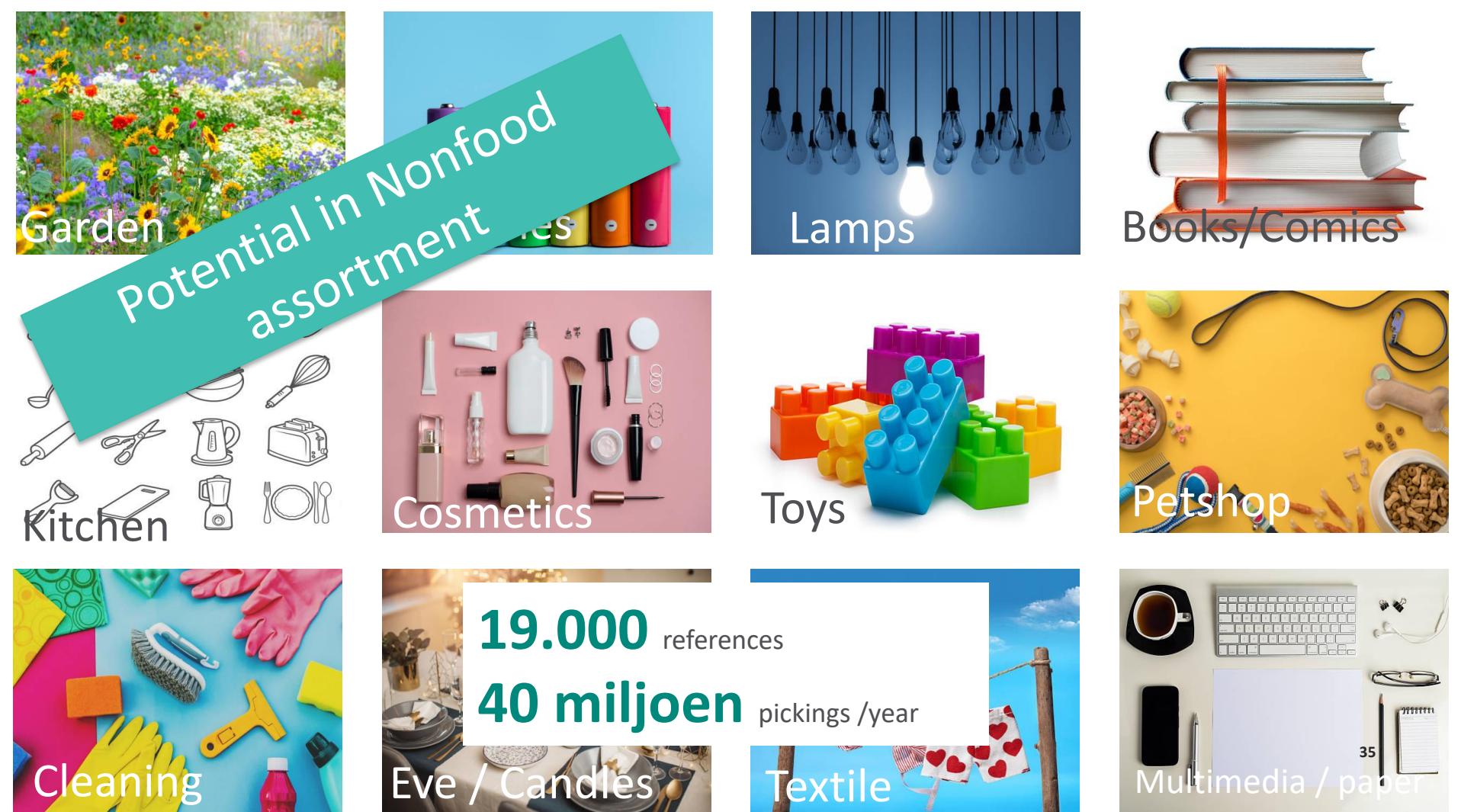
How did we find out about the GS1 SmartBox project?

Since 2019 member of **alice** |

Alliance for
Logistics Innovation
through Collaboration
in Europe

Collaboration with GS1 Germany in innovation project  BLOCK4LOG FUTURE OF LOGISTICS

Fits very well in our sustainable approach of supply chain



Potential for Colruyt



- Supply of on average **4000 smartboxes every week** (nonfood low rotation)
- If we include nearfood -> 64.000/week



L'ORÉAL



Beiersdorf

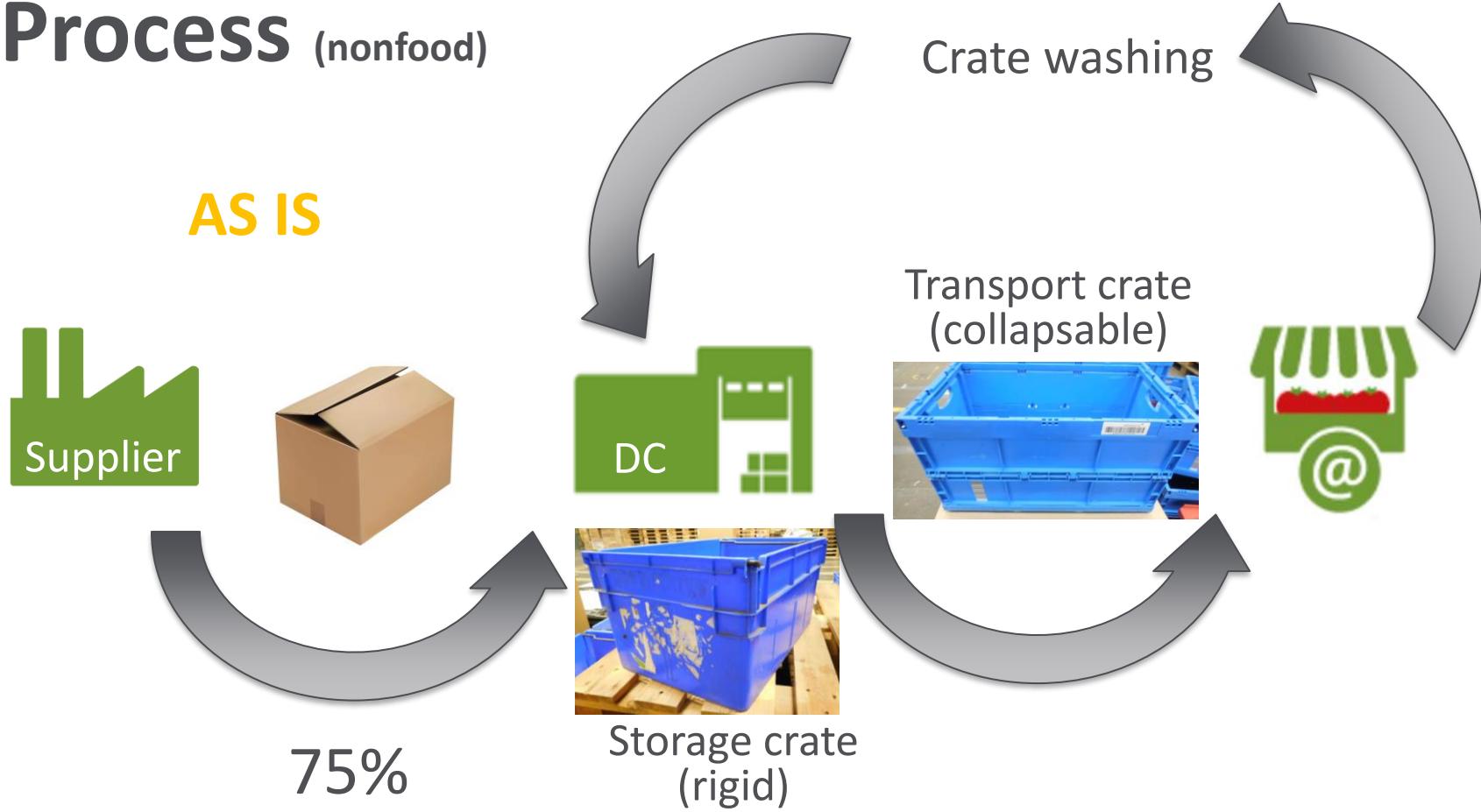




Study new nonfood DC
(operational in 2023)



Process (nonfood)



Process (nonfood)

TO BE

Crate washing



Avoid manual handling



Advantages Smartbox



- Lower cost (avoid extra handling)
- Lower complexity (only one load carrier in the entire process)
- More flexibility in peaks periods for storage
- Less waste (cardboard)
- Open pool based on GS1 standards



Next steps

- Check if the Smartbox meets all the requirements:
 - Ruggedness and user-friendliness
 - Fire safety
 - Dimensions -> ideal height for us: 32cm
- Have a look in the future , other potential assortments:
 - Nearfood
 - Newpharma
- Decision about use of Smartbox by end 2021 (for nonfood)



Q&A

Colruyt Group
Dirk Leemans

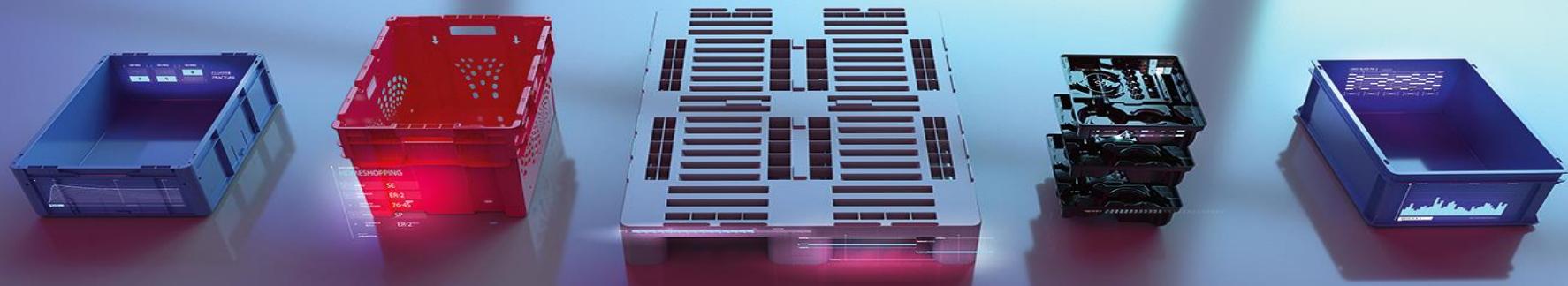
Welcome

GEORG UTZ GmbH

Jochen Wessels



clever – kreativ – nachhaltig – passend



Innovation Cafe 27th April 2021

GS1 Smartbox



Agenda

- Who is Utz?
- Project information
- GS1 Smart-Box



Who is Utz?

- Utz creates and manufactures suitable, sustainable reusable logistics packaging and technical parts made from plastic for over 70 years
- Together with our customers, we develop customized, customer-specific packaging solutions for automated and digitized logistics processes worldwide.



Solution Partner
Georg Utz GmbH

- 1200 employees at 8 locations on 3 continents





Project information GS1 Smart-Box

- **Start of project:** September 2016
- **Development:** until January 2020
- **Start with the tool:** August 2020
- **Order:** about 100.000 Boxen
- **First sampling:** January 2021
- **Start of production:** 20th April 2021

GS1 MTV-Smart-Box

<https://3d.alchemisten.de/view/gs1>



*Opening the side
wall with one
single handle.*

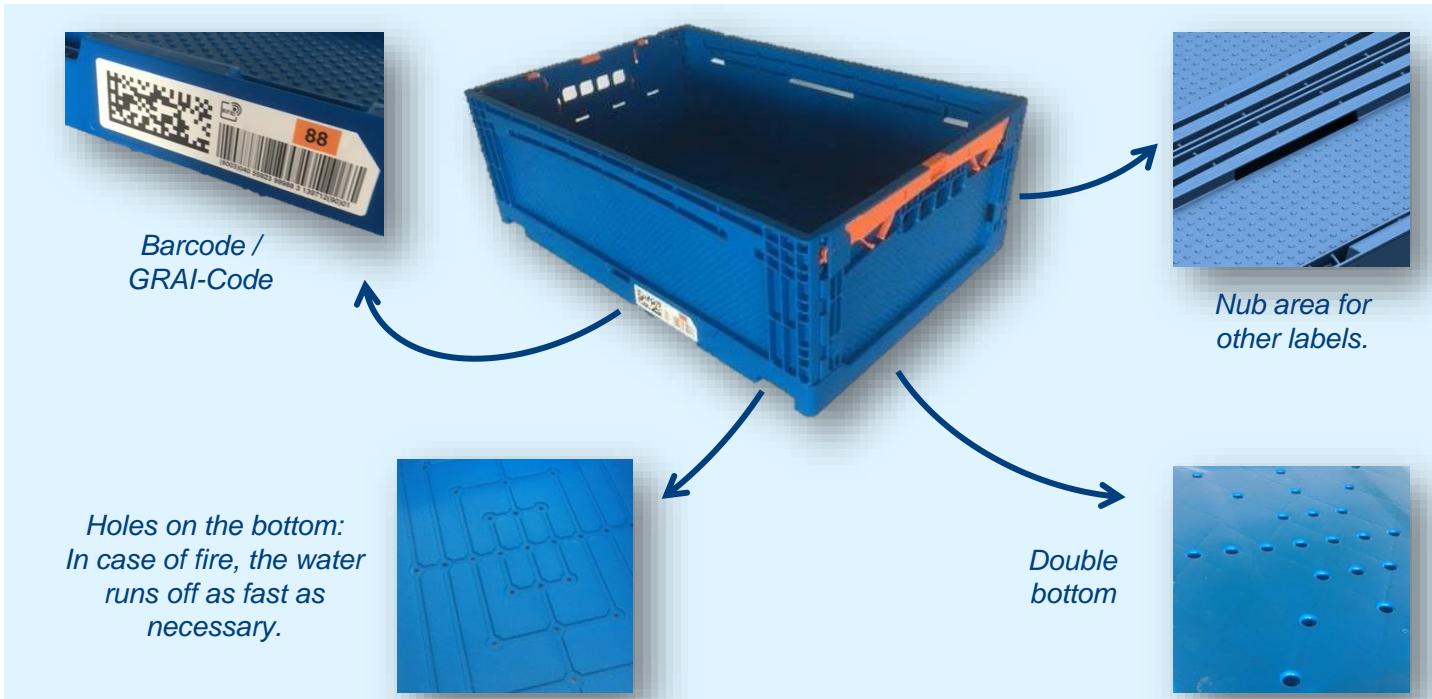


*Unlocking the
side wall with one
single handle.*



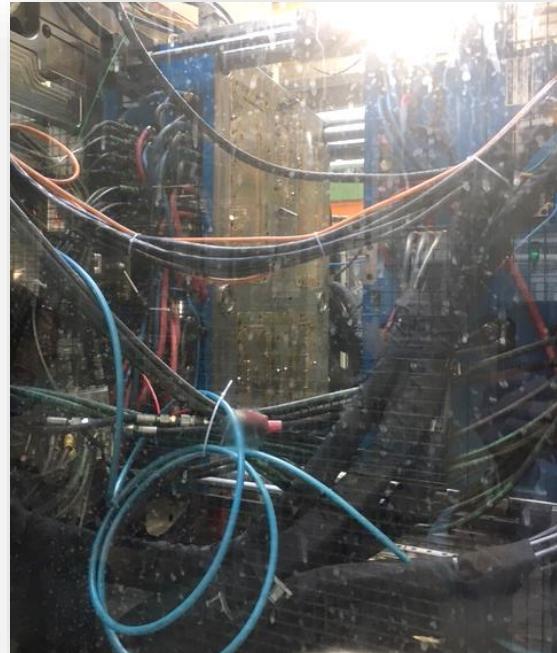
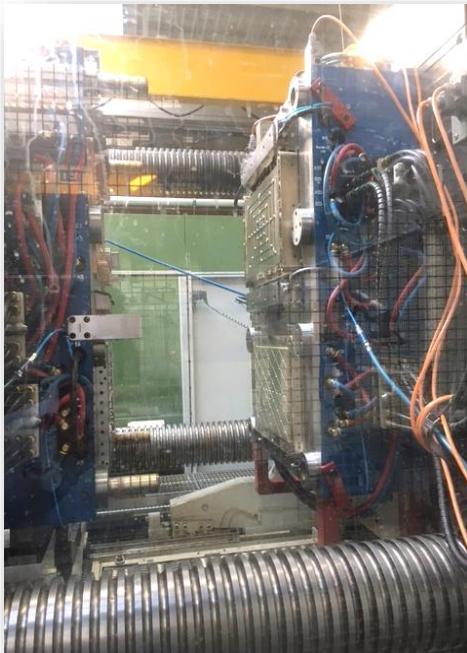
GS1 MTV-Smart-Box

Features



GS1 MTV-Smart-Box

Injection molding tool





GS1 MTV- Smart-Box

Award „product of the year 2021“ by „Materialfluss“ (logistics magazine)

- **Category:** Containers
- Voted by the readers

Utz
GS1 Smart-Box

Effizienz entsteht durch Standardisierung und Modularität. Aufgrund einer genauen Analyse der Prozessketten verschiedener Produzenten und Händler aus der Drogeriebranche und der GS1 Germany hat Utz ein neues Verpackungskonzept entwickelt: das GS1 Smart-Box-System. Mithilfe dieser neuen Klappbehälterfamilie können von der Produktion bis hin zum Point of Sales Handlungsaufwendungen reduziert und Einwegverpackungen eingespart werden. Dabei zeichnet sich das Behältersystem unter anderem durch eine volumenoptimierte Rückführung, automatisiertes Beladungshandling, eine auf wenige Größen reduzierte Behälterfamilie sowie digitale Erkennbarkeit aus. Prozesskosten sollen so um mehr als 40 Prozent gesenkt und gleichzeitig der CO₂-Footprint um bis zu 80 Prozent reduziert werden können.

.....
www.utzgroup.com





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Stand 23.04.2021

Q&A

GEORG UTZ GmbH

Jochen Wessels

Welcome

IPP

Dirk Freda



SMART BOX Project with GS1 Germany IPP – your pooling partner

GS1 innovation cafe, 27.04.2021



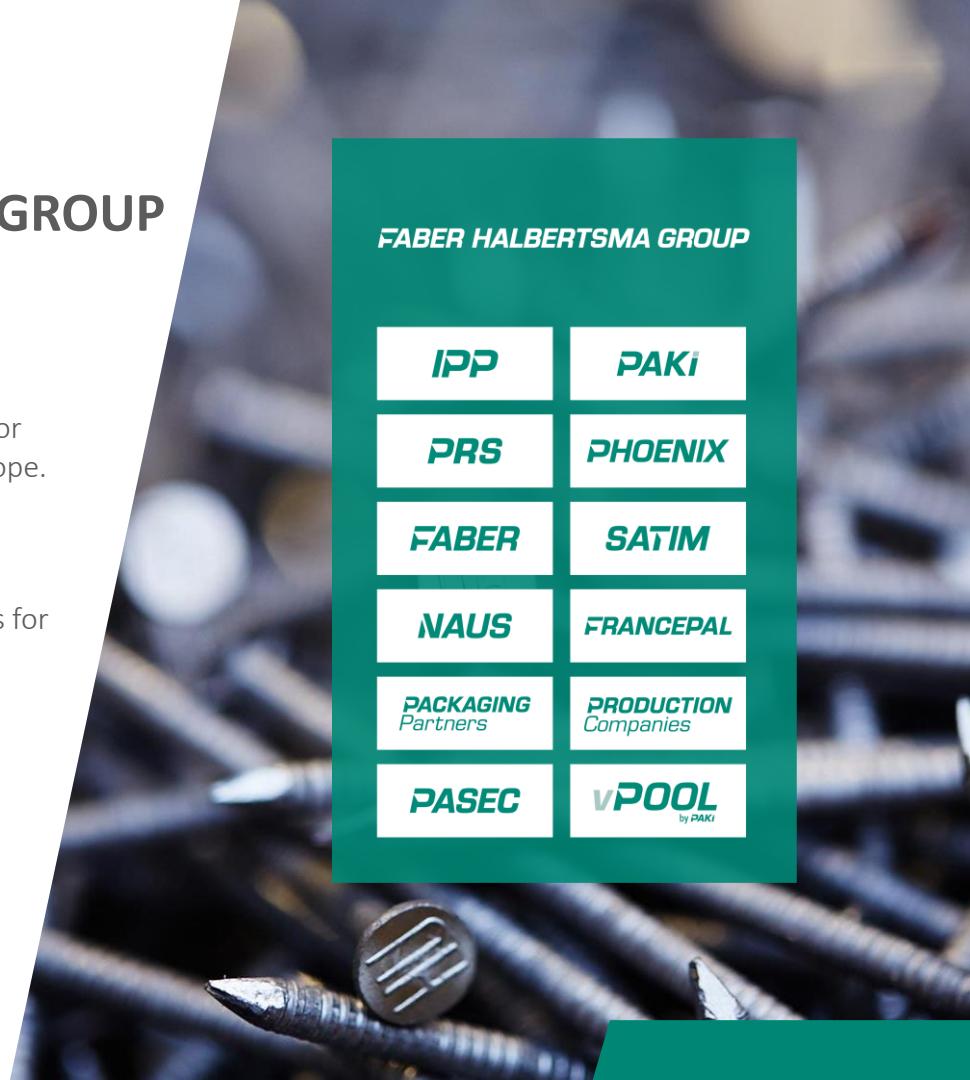
IPP – part of the FABER HALBERTSMA GROUP

WE ARE A FAMILY OF COMPANIES

- IPP provides sustainable closed pallet and box pooling services for the FMCG and recycling industry, covering most of Western Europe.
- PRS, short for Pallet Return System, provides sustainable closed pallet pooling services to the European polymer industry.
- PAKi is one of Europe's leading sustainable open pooling services for exchangeable standardised load carriers.
- vPOOL offers sustainable open pooling services for food grade load carriers throughout Europe.

FABER HALBERTSMA GROUP

IPP	PAKi
PRS	PHOENIX
FABER	SATIM
NAUS	FRANCEPAL
PACKAGING Partners	PRODUCTION Companies
PASEC	vPOOL <small>by PAKi</small>



We aim for sustainable value

All Faber Halbertsma Group members are autonomous and responsible for their day-to-day management, profit & loss and the execution of their division strategy.

However, it is our shared commitment to continuous improvement and ambitions for the circular economy that drive our corporate success.



With 61 Service Centers We Deliver Loadcarriers Across Europe



- BeNeLux
- Germany, Austria, Switzerland
- UK & Ireland
- France
- Iberia
- Poland



IPP is the nominated pooling partner for the roll-out of the Smartbox



... fitting into our strategic portfolio
of load carriers and services

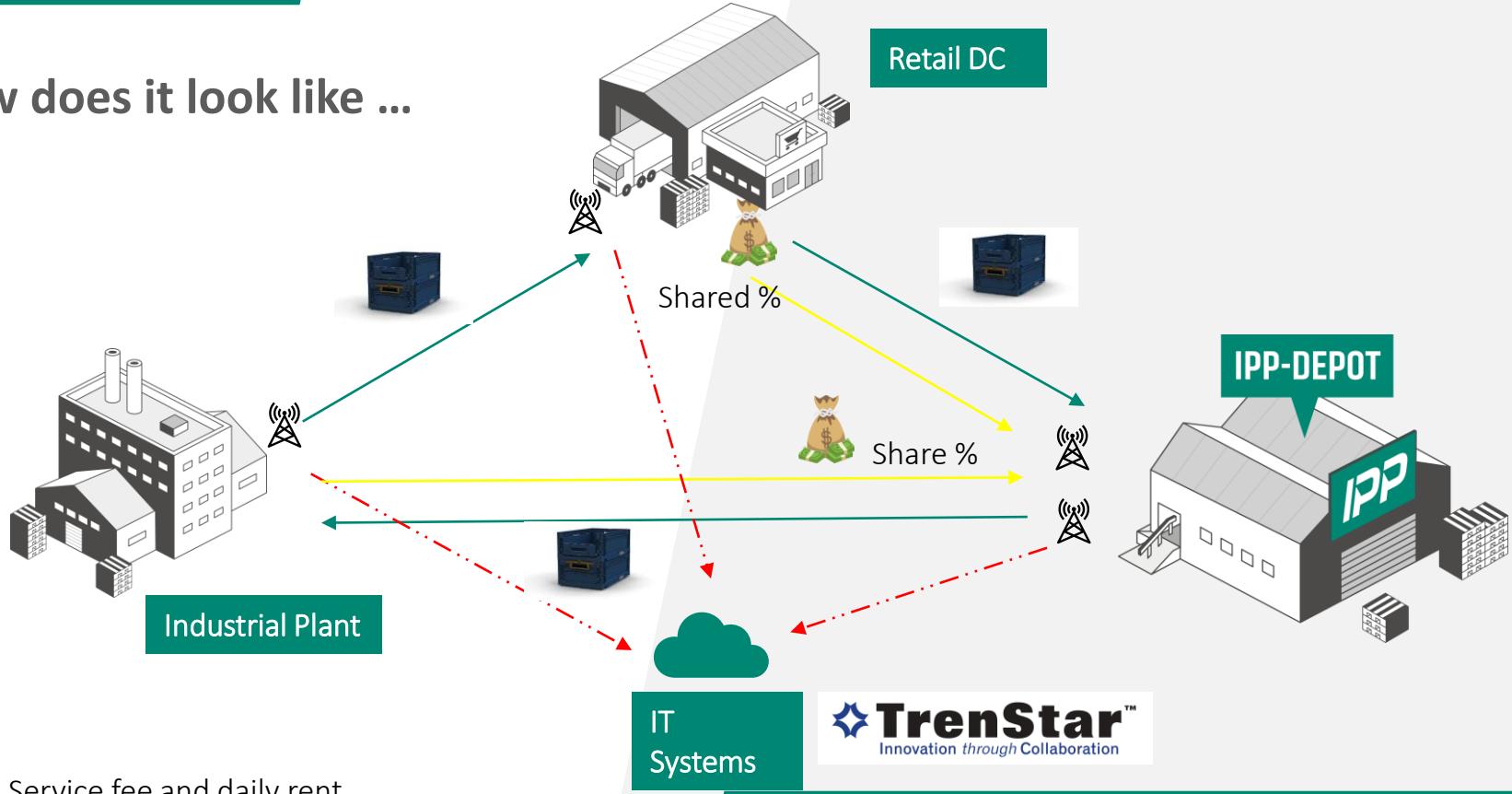
- Synergies with existing flows and products
- Sustainable multiple-use approach
- New, innovative technologies and options
- Road towards serialized, data-based management of returnable assets
- 7 digit initial invest into the future ...

Standards and collaboration enable pooling services

- From Intra-logistical view towards cooperative asset use and management
- Collaboration in technical and organizational development
- Acceptance & Commitment
- Gain- & Cost-Sharing



How does it look like ...



Service fee and daily rent

Unique identification within the network – optimized asset control and flows



From load carrier to data carrier ...

- Step by step ramp-up
- Identification-Software and Hardware
- Barcodes supplemented by RFID tags
- 2D barcodes enable camera based bulk-reading
- Linking the physical to the digital world
- Linking box to the goods inside

... more than a box

Our Contact Details

BNL

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Q&A

IPP

Dirk Freda

Welcome

L'Oréal

Tim Christiansen-Lenger

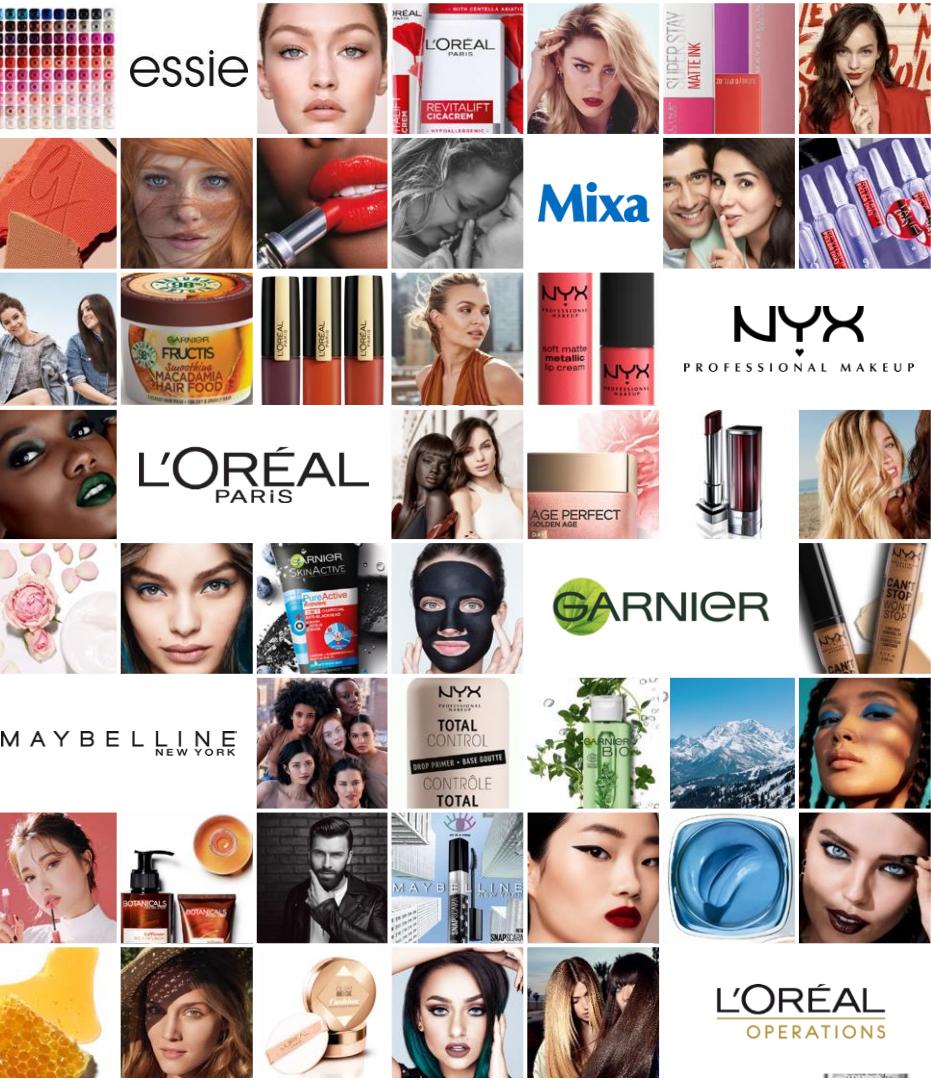


GS1 Smartbox Innovation Café

Tim Christiansen-Lenger

L'Oréal Germany/Austria

27.04.2021



Introduction

About me

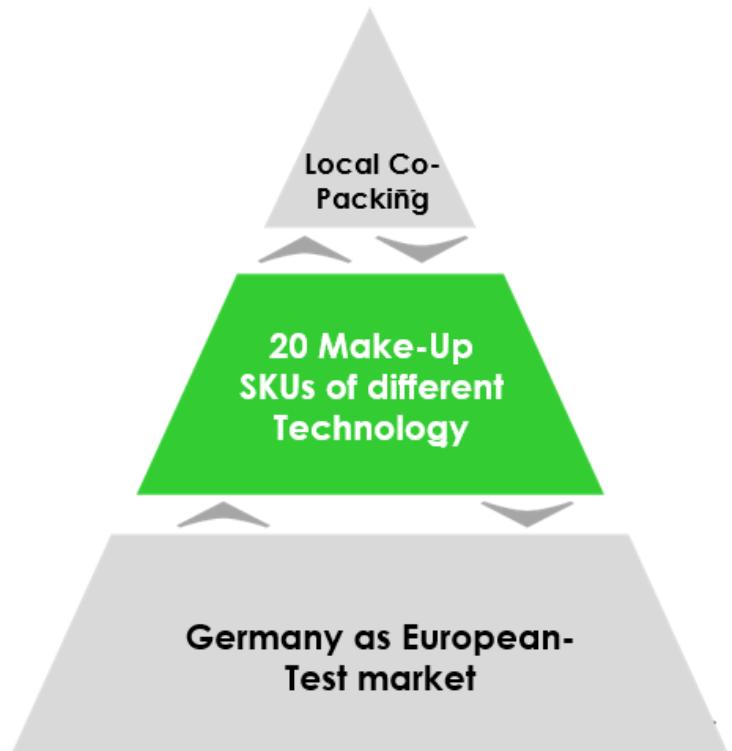
Working at L'Oréal since 2015

Position: Head of Customer Supply CPD

Germany & Austria

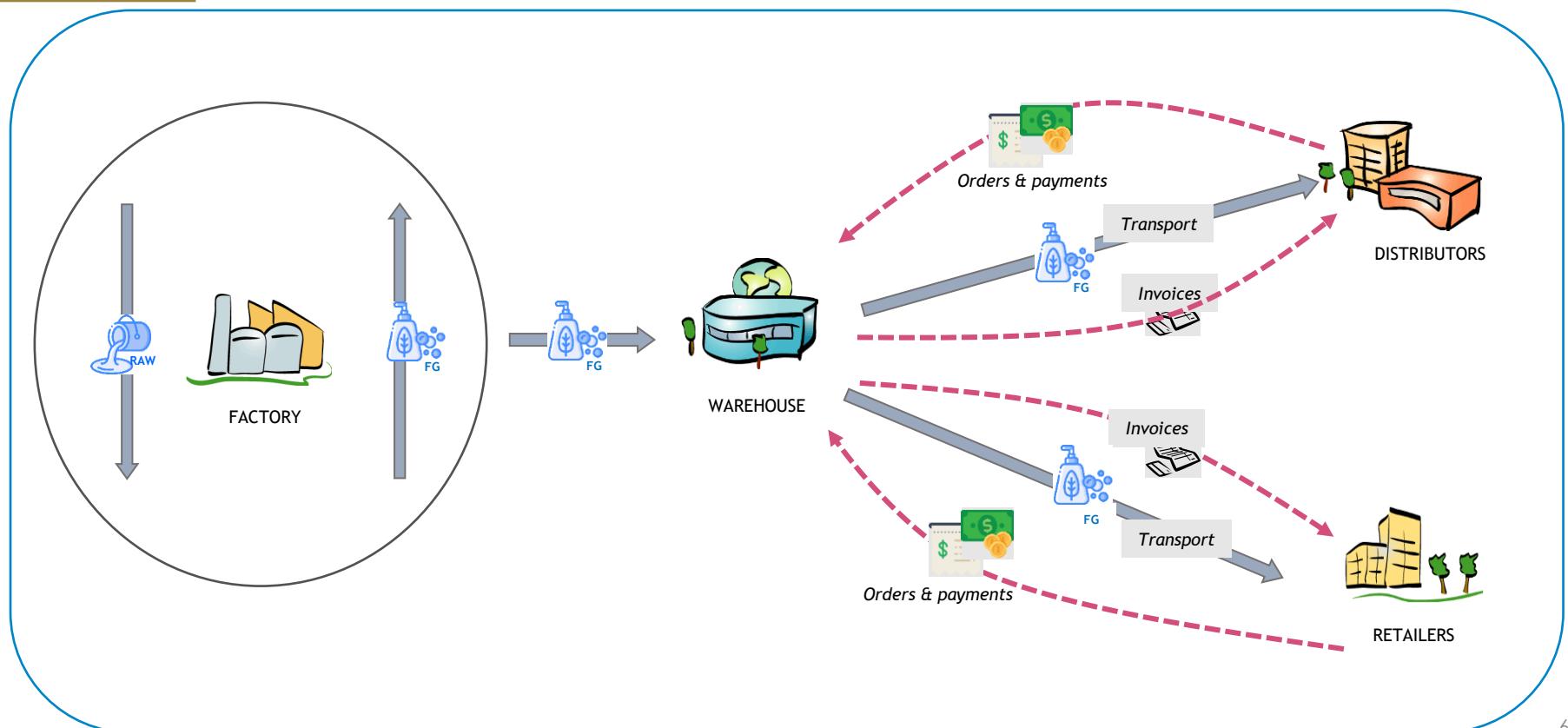
Involvement: Part of the GS1-Germany Smartbox Project group & internal coordinator at L'Oréal

About the Test





Generic Distribution Model: E2E Supply Chain Solutions needed for Smartbox



Smartbox-Vision: Added Value along the Chain

Sustainability: Cardboard box waste reduction

Cost Optimization: Packaging materials, handling costs and waste disposal fees

Incentivization for automation within the Warehouse

Standardization: one “box” that becomes the standard



Structural Challenges to Overcome

One-Size does not fit all: box + transport utilization

Dual-Stream of Flows: MasterData, Warehouse space, manufacturing etc.

Safety: sensitive packaging's

Quantities per Box to match a retailers Demand





Thank you

Q&A

L'Oréal

Tim Christiansen-Lenger

Welcome

P&G

Reinhard Wesp





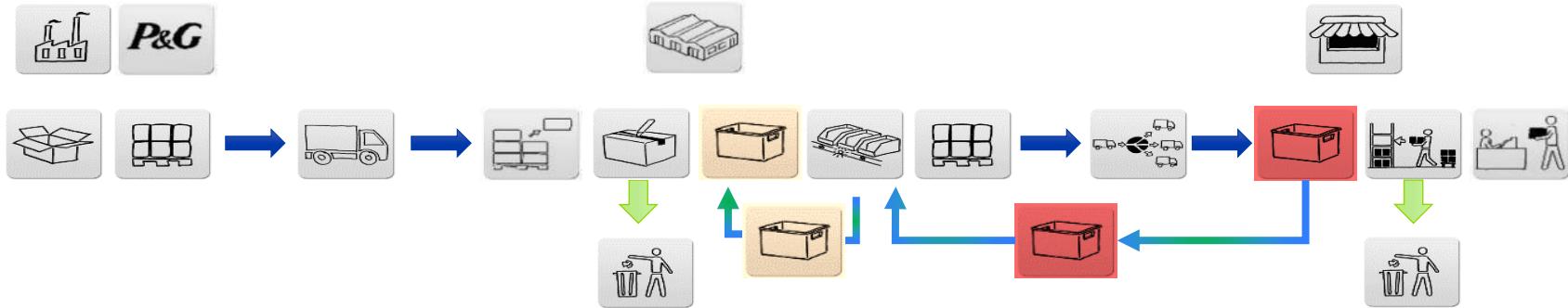
GS1 SMART-Box

'Supply Chain (R)evolution'



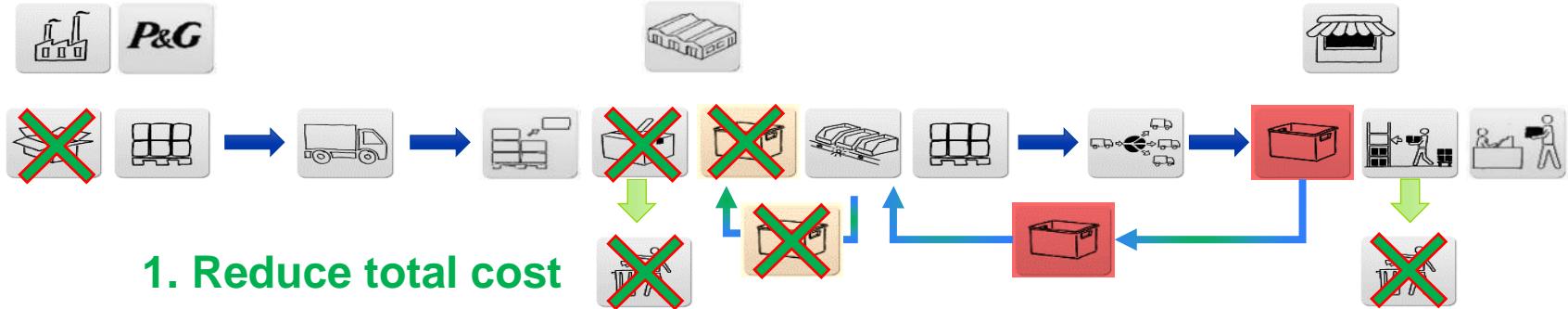
GS1 SMART-Box: E2E Value Stream (R)evolution

Current State

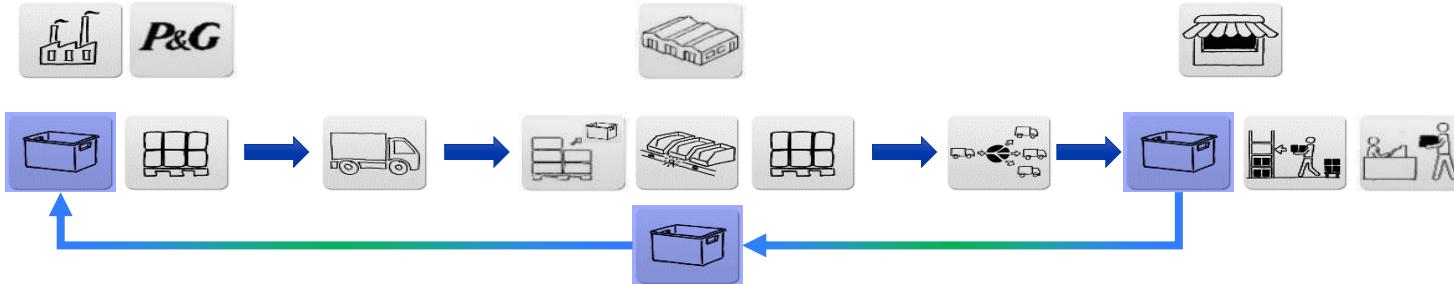


GS1 SMART-Box: E2E Value Stream (R)evolution

Current State

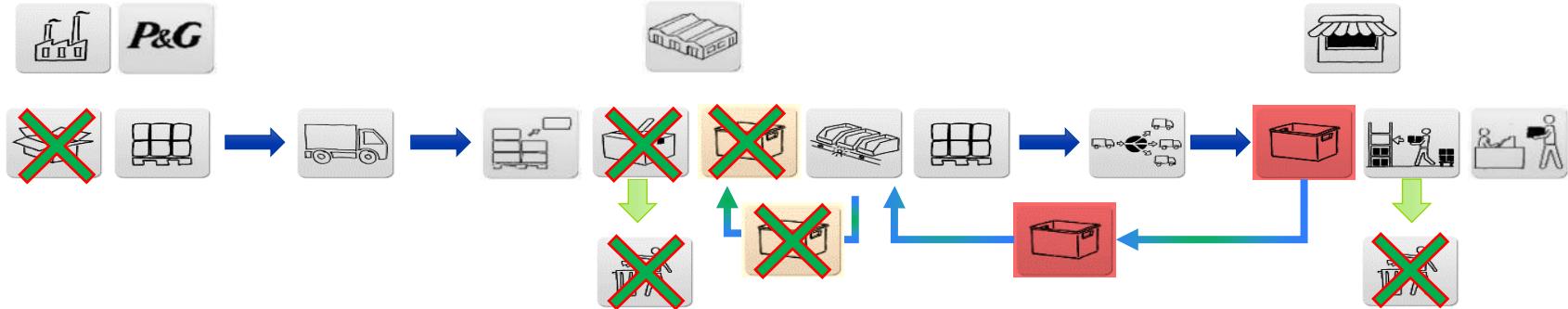


Ideal State

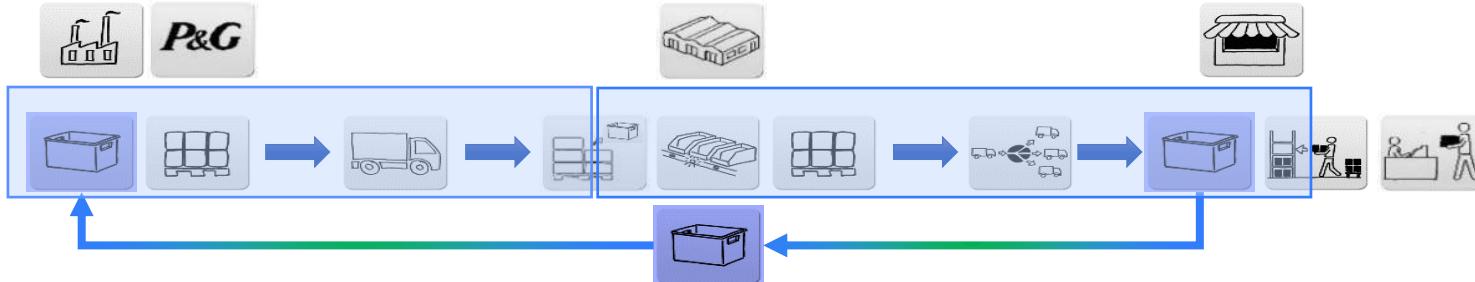


GS1 SMART-Box: E2E Value Stream (R)evolution

Current State



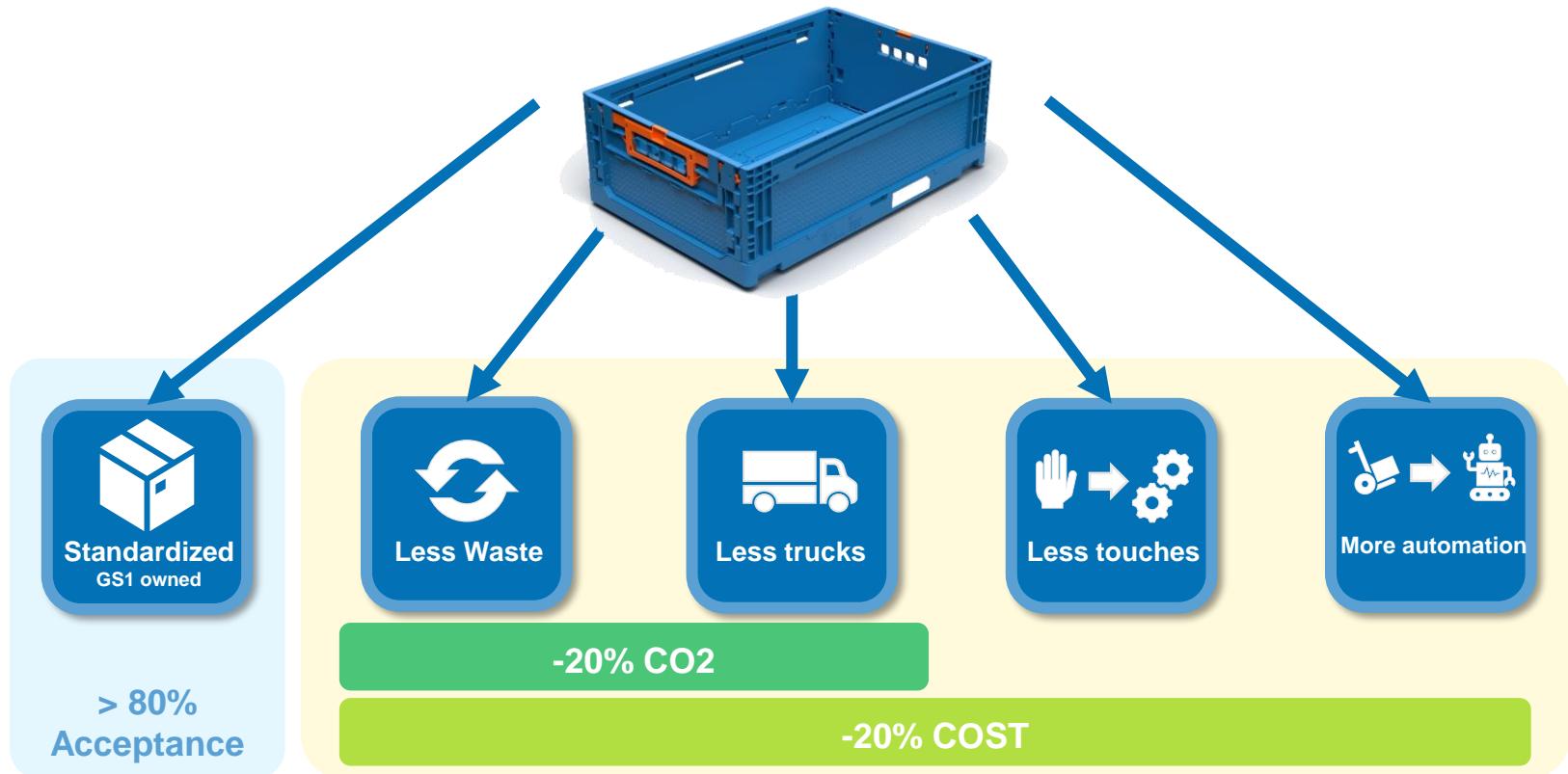
Ideal State



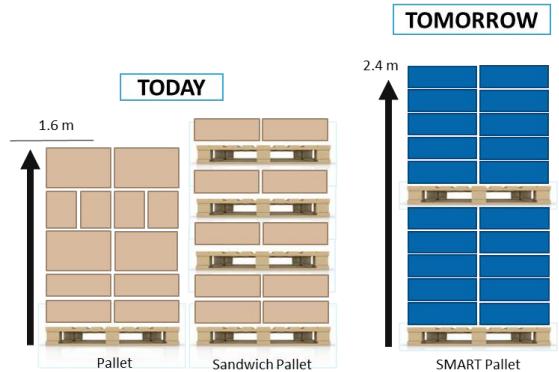
2. Share reduced cost between stakeholders



GS1 SMART-Box: E2E Transformation benefits



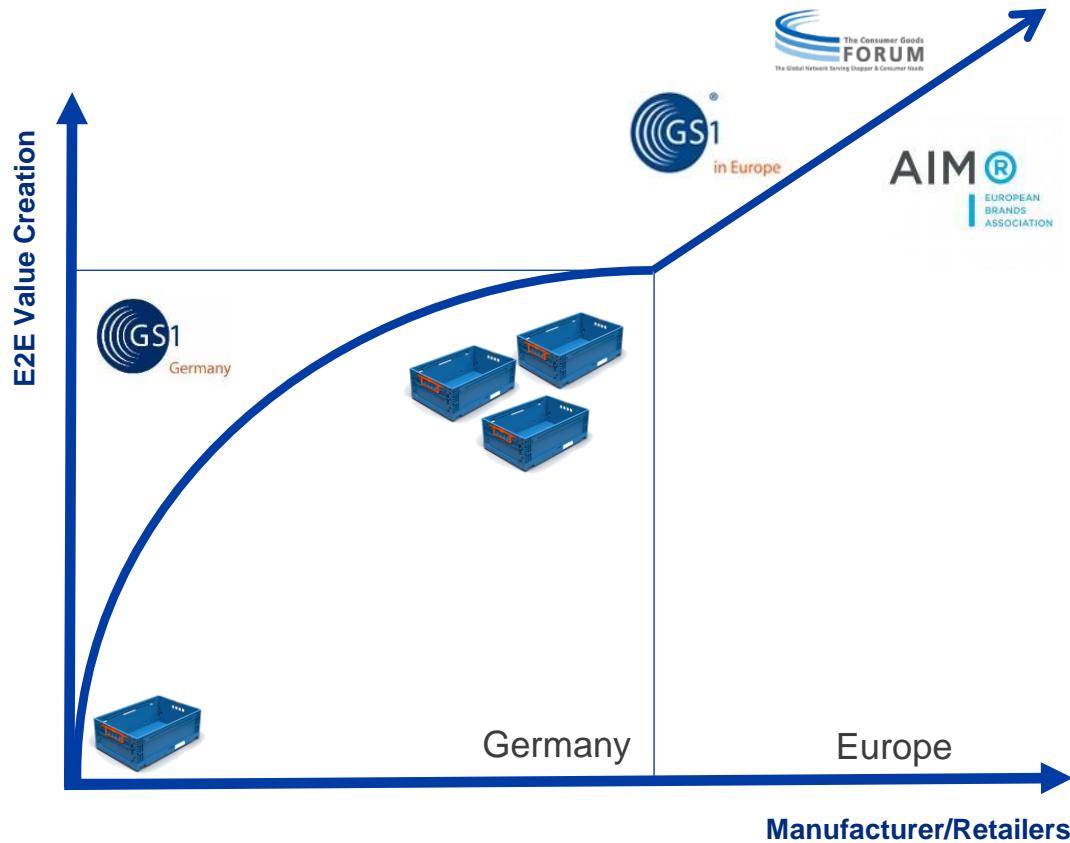
GS1 SMART-Box: Manufacturer Opportunity



GS1 SMART-Box: Manufacturer Challenges



GS1 SMART-Box: Challenge EUROPEAN STANDARD



What's needed:
European Business case
Box Harmonization - Europe
European Reverse Logistics
Migration plan - Europe

Q&A

P&G

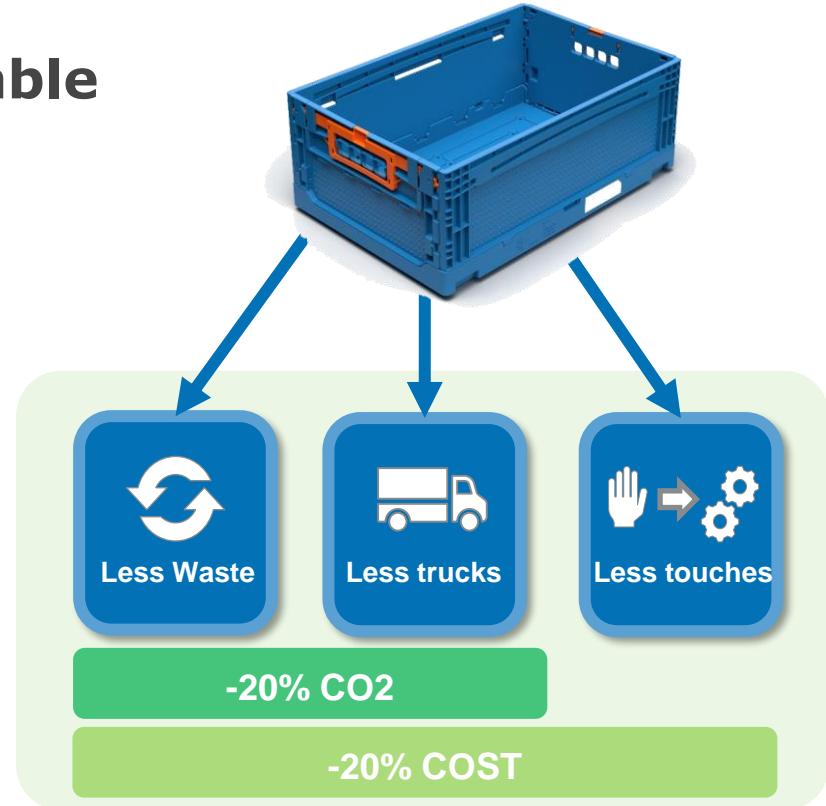
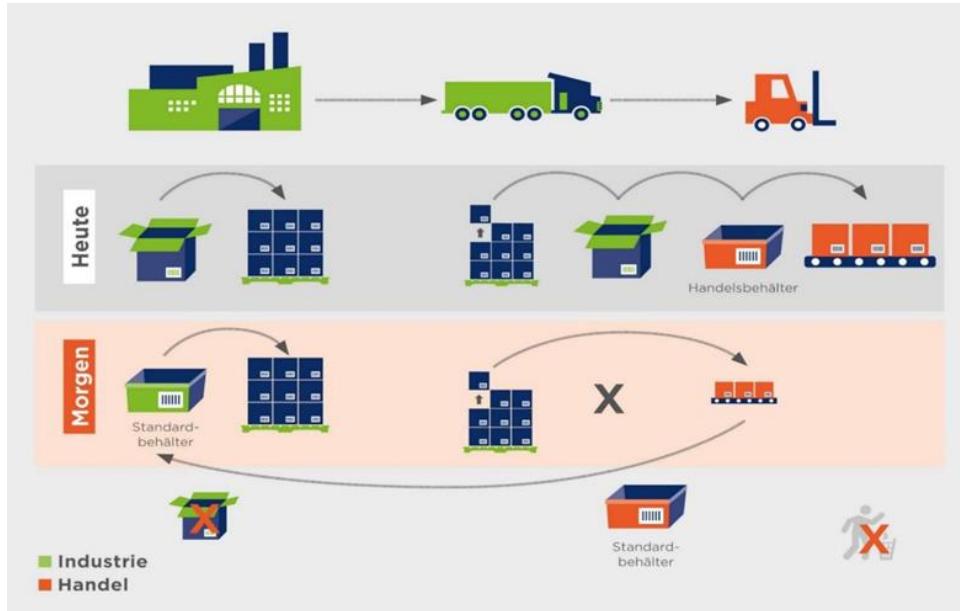
Reinhard Wesp



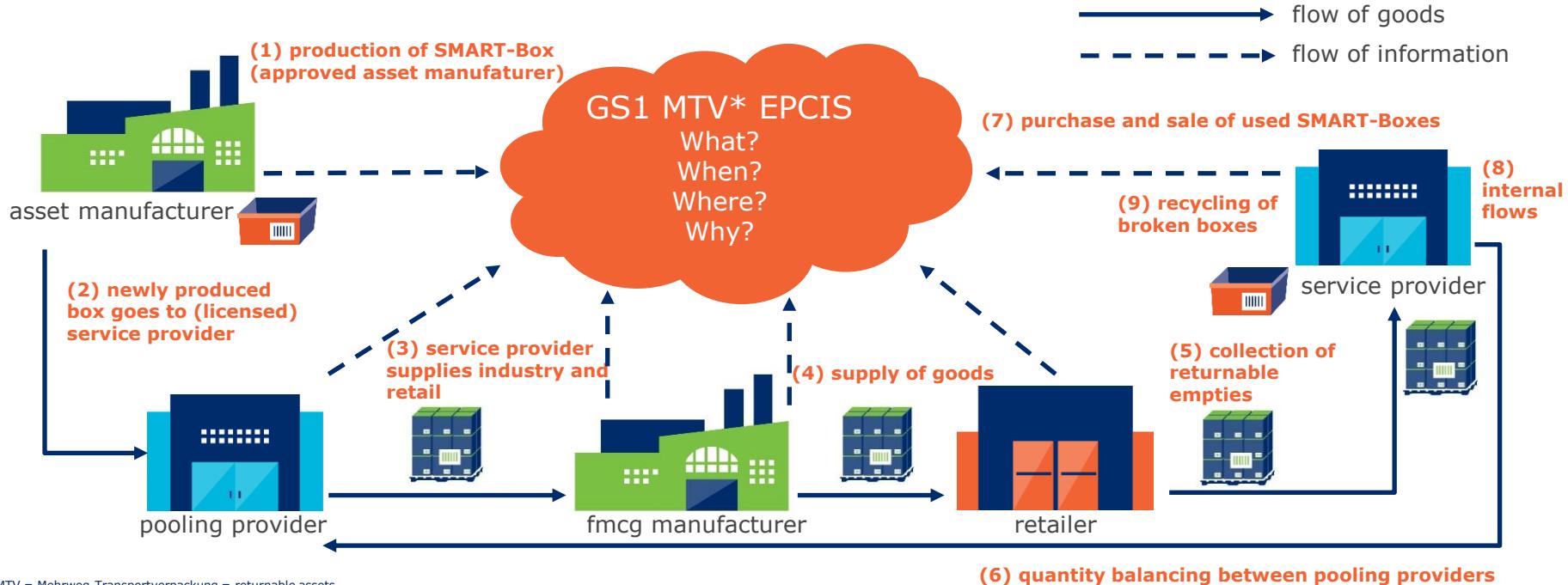
What did we learn today?

#GS1 SMART-box?!

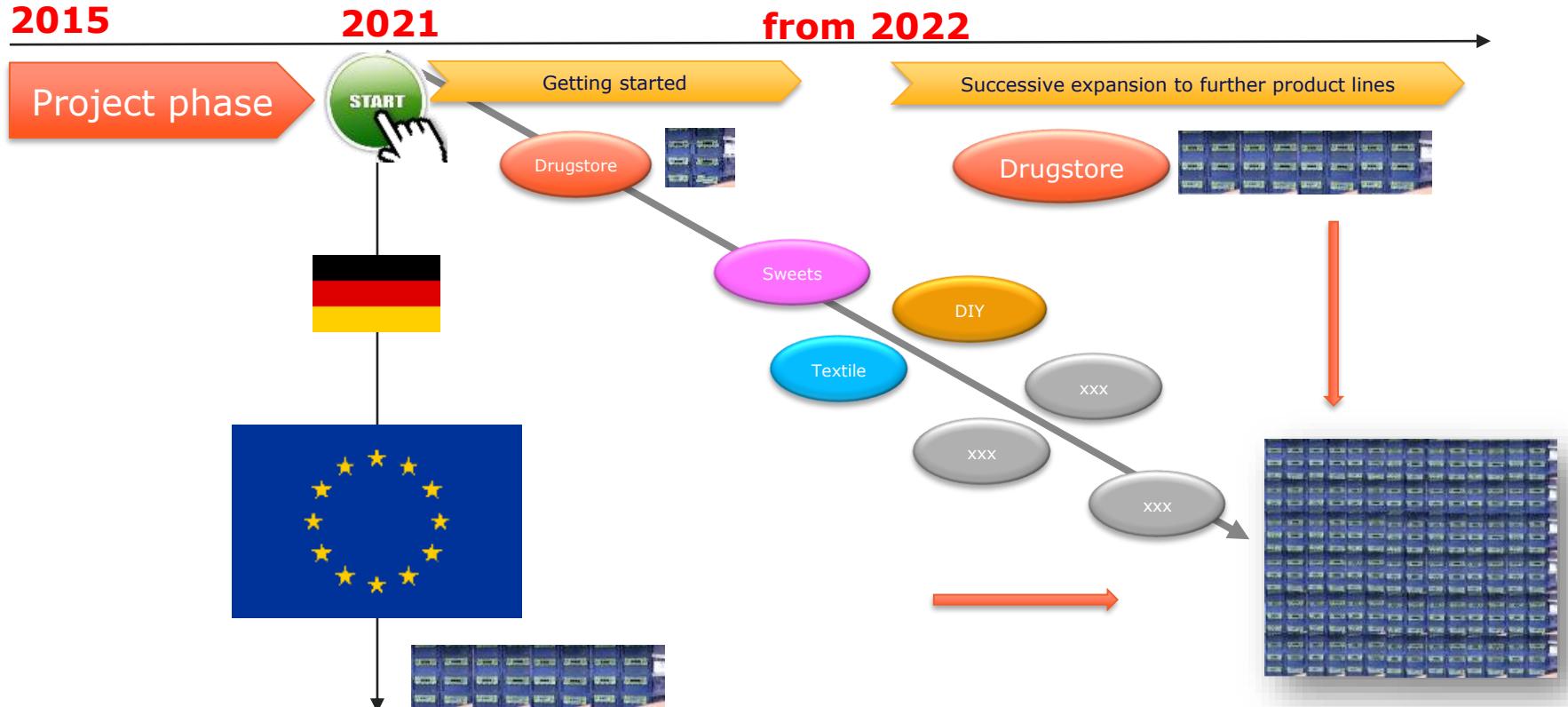
#feasible #profitable #sustainable



#GS1standards_rock, enabling circular economy



Project roadmap – different roles to contribute



Poll





Thank you!

Contact at
karkesteyn@gs1belu.org