FrugiCom

Mini conference Sustainable Agriculture
Coding & ID in Agriculture/Fresh F&V (GPC, GLN) & eLAB

UN / CEFACT
March 28
2017

FrugiCom

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Coding & ID in Agriculture/Fresh F&V (GPC, GLN) & eLAB

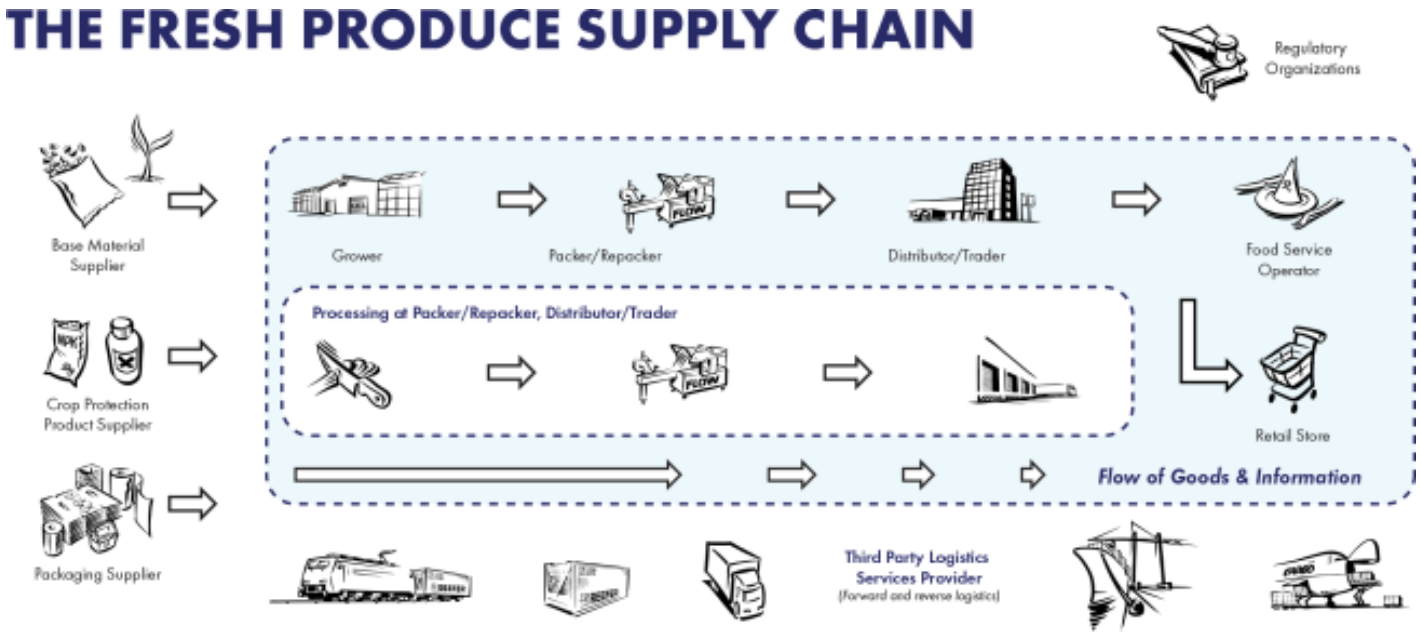
Agenda

- ❑ Introduction Frug I Com
- ❑ Identification Global ID key – GLN
- ❑ Classification Global “Sector & Supply Chain” key – GPC
- ❑ Development new GPC segment Crops
- ❑ Use cases GPC segment Crops
- ❑ UN/CEFACT eLAB
- ❑ GS1 in EU F&V WG – Agricultural Quality Standards
- ❑ Q&A

- Apples
- Appels
- Malus domestica
- Brick Code: 10005900

Introduction Frug I Com

Foundation
Dutch Fresh Produce Centre (GroentenFruit Huis in Dutch)
Standard GS1 (downstream) & UN/CEFACT (upstream)
Business needs (e.g. ISO BIC code as unique ID for containers)



GPC – Part of the GS1 System of Standards

Identify

GS1 Identification Numbers

Companies, Products, Locations, Logistics, Assets and Services

Capture

GS1 Data Carriers

Barcodes and EPC-enabled RFID

Share

GS1 Data Exchange

Classification, Master Data, Transactional Data and Physical Event Data

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Identification with Global ID Key GLN

SCENARIO 3

SME - GROWER & PACKER

One physical location – Two roles – Three GLNs

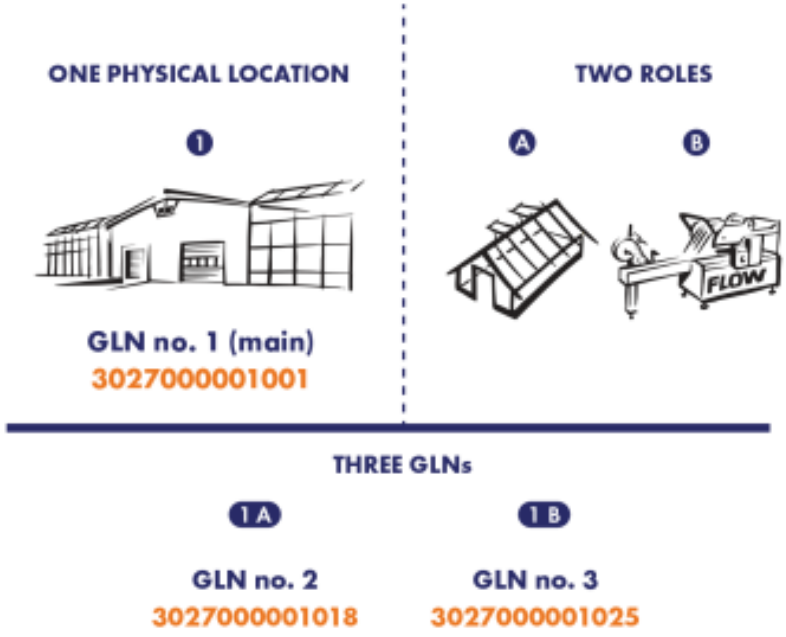
Each GLN is based in the same Global Company Prefix (GCP)

- One legal entity
- One physical location
- Two roles

  Role A - Growing

  (production unit including harvesting and sorting)

  Role B - Packing
- Results in: Three GLNs, because they are also doing packing activities for other SME's



Classification Global “Sector & Supply Chain” key – GPC

Pome Fruits / Pitvruchten

Class Code: 50250800

- Apples
- Appels
- Malus domestica
- Brick Code: 10005900

- Japanese Medlars
- Japanse Mispels/Loquats
- Eriobotrya japonica
- Brick Code: 10005901

- Nashi
- Nashi-Peren
- Pyrus pyrifolia
- Brick Code: 10005902

- Pears
- Peren
- Pyrus communis
- Brick Code: 10005903

- Quinces
- Kweeperen
- Cydonia oblonga
- Brick Code: 10006173

- Crabapples
- Wilde Appels
- Malus sylvestris
- Brick Code: 10006338

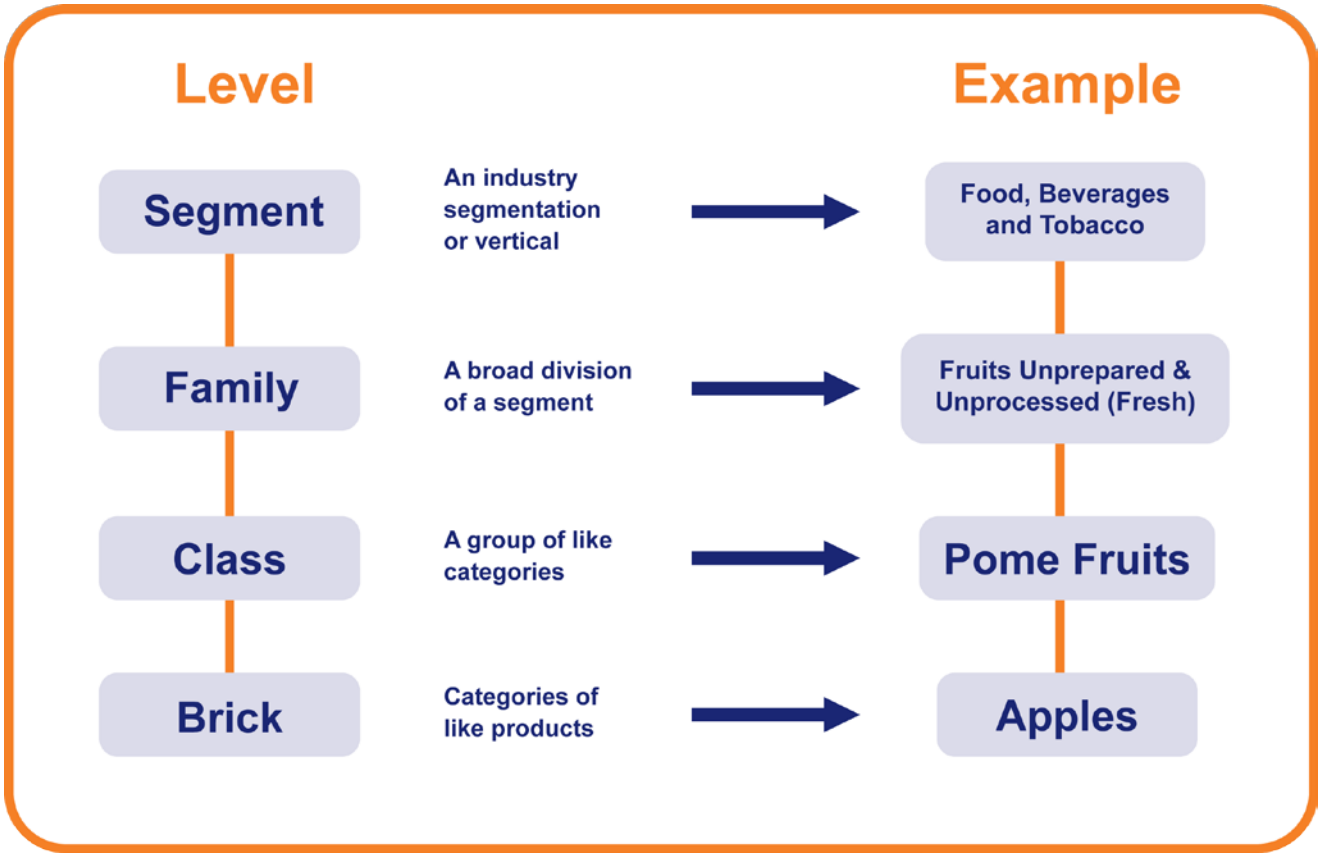
- Medlar
- Mispels
- Mespilus germanica
- Brick Code: 10006414

- Ya Pear (Shandong)
- Ya Peren (Chinese Peren)
- Pyrus ussuriensis var. viridis
- Brick Code: 10006415

What is GPC?

- A system that gives buyers and sellers a common language for grouping (or categorising) products in the same way, everywhere in the world
- Improves the GDSN data accuracy and integrity, speeds up the supply chain's ability to react to consumer needs, and contributes to breaking down language barriers.
- Since 2007, GPC adoption has grown in coverage and in implementation (in parallel with the use of GTINs) in GDS

Classification Global “Sector & Supply Chain” key – GPC



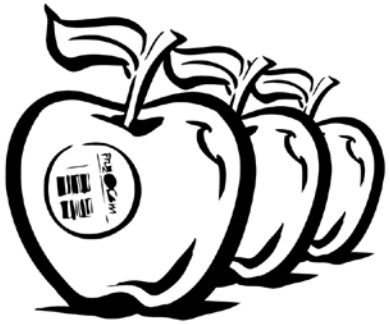
Classification Global “Sector & Supply Chain” key – GPC

Segment	Family	Class
Food, Beverages and Tobacco	Fruits U & U (Fresh)	Pome Fruits

Bricks	Brick Code	Brick Attributes	Attribute Values
Apples	10005900	Apple Variety	Elstar
Japanese Medlars		Country/Zone of Origin	Netherlands
Nashi		Growing Method	Conventional
Pears		Quality (UNECE Standard)	Class I
Quinces			

Classification Global “Sector & Supply Chain” key – GPC

A GTIN can only be assigned to one Brick
More GTINs are classified under one and the same Brick



Brick Description:
Apples

GTIN: Global Trade Item Number
GTIN = 123456789123C

Brick Code = 10005900

GPC Brick Code = Mandatory Field GDSN (GS1 DAS/1SYNC Datapool)

GPC Translations

GPC is officially published in Oxford English and is translated to **16** other languages

Arabic

Czech

Chinese

Dutch

Finnish

French

German

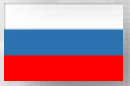
Hungarian

Italian

Japanese

Persian

Portuguese


Russian

Serbian

Swedish

Spanish

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Classification Global “Sector & Supply Chain” key – GPC

Class	Bricks	Bricks Attributes	Bricks Attributes Values
50260400 SS Peppers	• Chilli Peppers • Elongated Sweet Peppers (Pointed) • Flat Sweet Peppers (Tomato Peppers) • Hot Peppers • Pepper Variety Packs • Square Sweet Peppers (Blunt) • Square Tapering Sweet Peppers (Peg Top)	Colour	Orange
		Country/Zone of Origin	Netherlands
		Growing Method	Conventional
		Quality (UNECE Standard)	"Extra" Class

Brick + attributes geven complete informatie

Upstream Information Exchange needs GPC for apple trees and tomato plants

Development GPC new segment Crops

Overview GPC

Plant-based Agriculture

- **Fruit & Vegetables (Fresh Foods)**

  Available - main commodities western world (scope: trade)

- **Flowers, Plants & Bulbs (Horticulture)**

  Available - all relevant commodities (scope: trade)

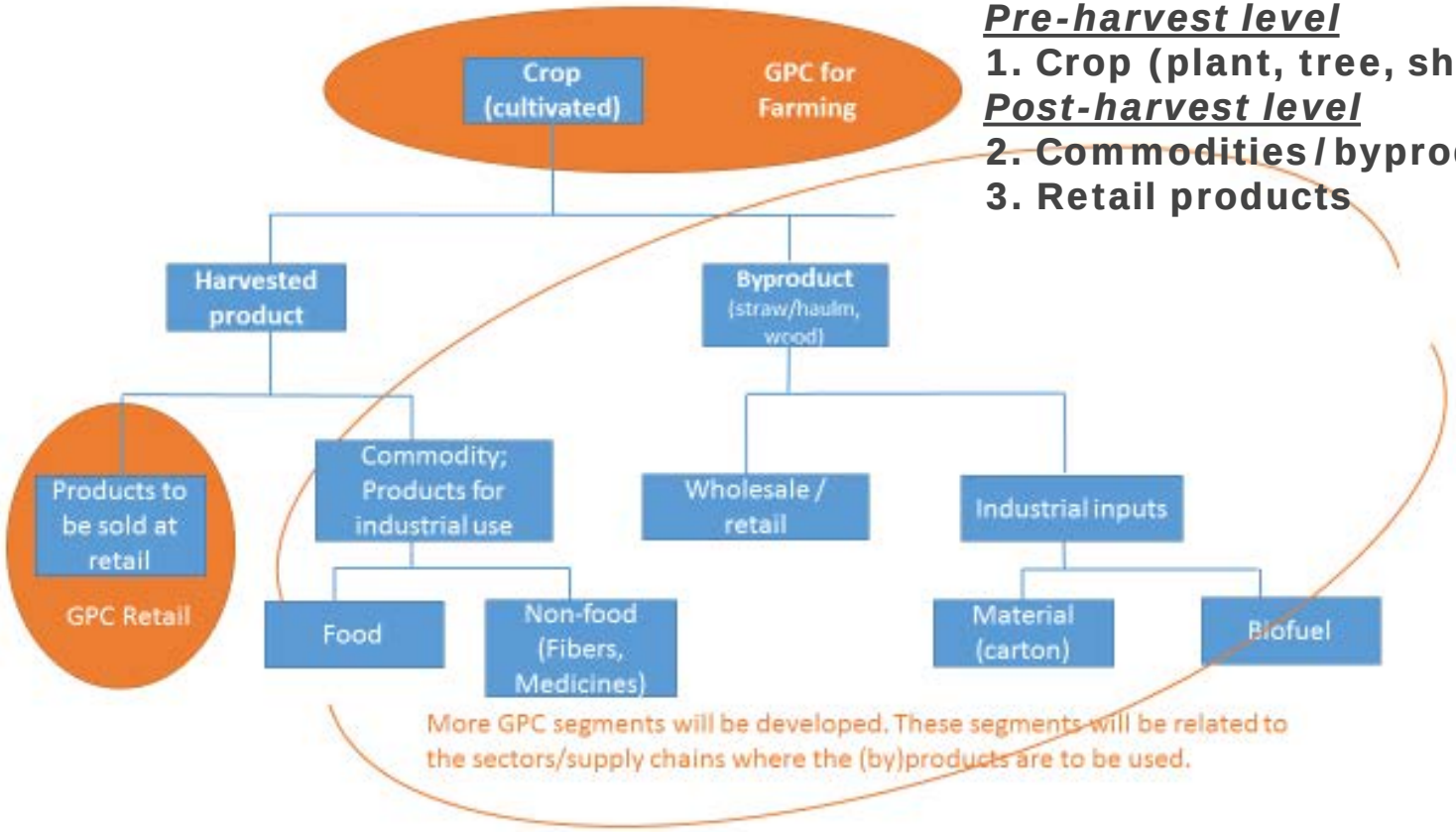
- **Crops cultivated, Plants Products**

  New development (NOT related to trade legislation)
  - ✓ Animal feed: corn/maize, alfalfa
  - ✓ Processed foods: grains, rice, potatoes, sugar beets and sugar cane
  - ✓ Other processing industry: cotton, flax, rapeseed, olives (olive-oil) and winegrapes

Development GPC new segment Crops

- **Overlap in sectors**
  GPC available for Horticulture and Fresh Foods
- **Plants**
  More commodities/products from the same plant
  Wheat vs byproduct Straw
  Celery leaves, Stem celery, Turnip rooted celery
- **Purpose**
  Tomatoes for industry – fresh consumption
  Byproducts (tomato-straw) – added value for waste
- **Type of commodity**
  Grain – Vegetable – Fruit - Fiber

Development GPC new segment Crops



Pre-harvest level

1. Crop (plant, tree, shrub)

Post-harvest level

2. Commodities / byproducts

3. Retail products

Classification with Global ID - GPC

What
Supply chain partners do need the **“GS1 Key” GPC** as unique Global ID

General primary production identification (upstream)
Classification Plant based pre-harvest phase & animal based

- Crops (cultivated)
- Livestock (live animals) *(out of scope in this presentation)*

More specific product identification (downstream & upstream)
Plant based post harvest & animal based and not alive

- Identify Harvested product/commodity
- Identify Livestock products (more or less available, improvements)

Use cases GPC segment Crops (beyond GDSN=Master data retail)

Three use cases:

- ITC Global Sustainable Network/Colombian Coffee Growers Federation
- UN/CEFACT eCrop* - Crop Data (e.g. Farm Digital project)
- UN/CEFACT eLab - Laboratory Observation Report

**** UN/CEFACT eCrop supported by countries: US, Austria and The Netherlands. Based on GS1 Keys***

Identification with Global ID - GLN

The Sustainability Network Initiative of **UN / ITC** & **GS1** supports a unique Global ID for each individual agricultural producer

Who

All supply chain partners do need the GS1 Key **GLN** as unique Global ID. (Also starting point GS1 in Europe standards deployment Fresh Produce)

General identification in Agriculture

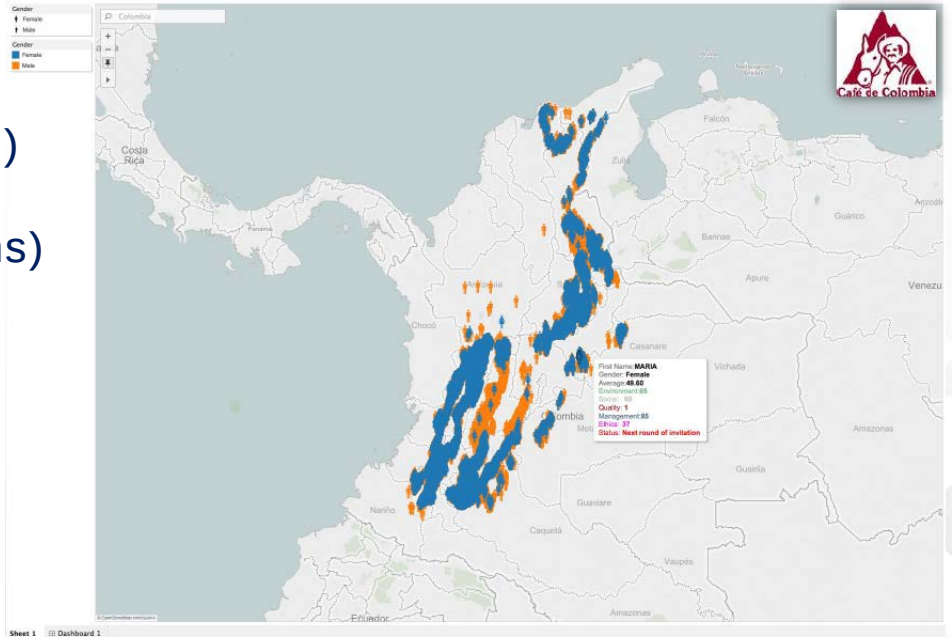
- SME of primary producer food & non food

More specific identification in Agriculture

- Production Site of primary producer
- Produce Handling Unit of primary producer/packer

Use cases GPC segment Crops

- Different plots
- Crop - coffee bean plant
- Harvested product (beans)
- Commodity (roasted beans)
- Product (at retail store)
- Growers with other crops



Use cases GPC segment Crops

eCultivation
eCrop eLab +

CULTIVATION MESSAGE

LOCATION / CROP RELATED INFO PRE–HARVEST

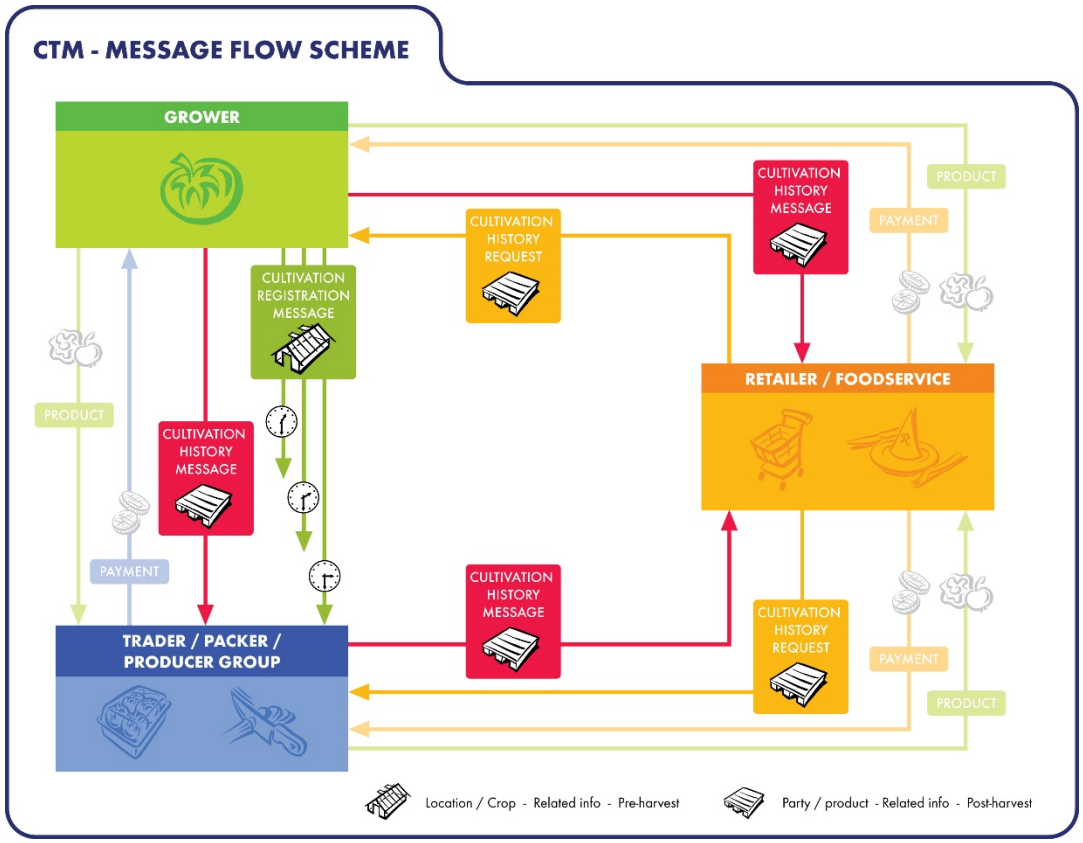
OR

PARTY / PRODUCT RELATED INFO POST–HARVEST

ABOUT

LOCATION	PRODUCT	TREATMENTS			DELIVERY	QUALITY
				&		
• LOCATION ID or GLN • M2	• PRODUCT-TYPE or GPC • CULTIVATION METHOD • PERIOD	• WHEN • WHAT			• BATCH ID • GTIN • ADDITIONAL TRADE-INFO	• CERTIFICATE (GLOBAL GAP, BRC, ETC.) • LAB RESULTS

Use cases GPC segment Crops



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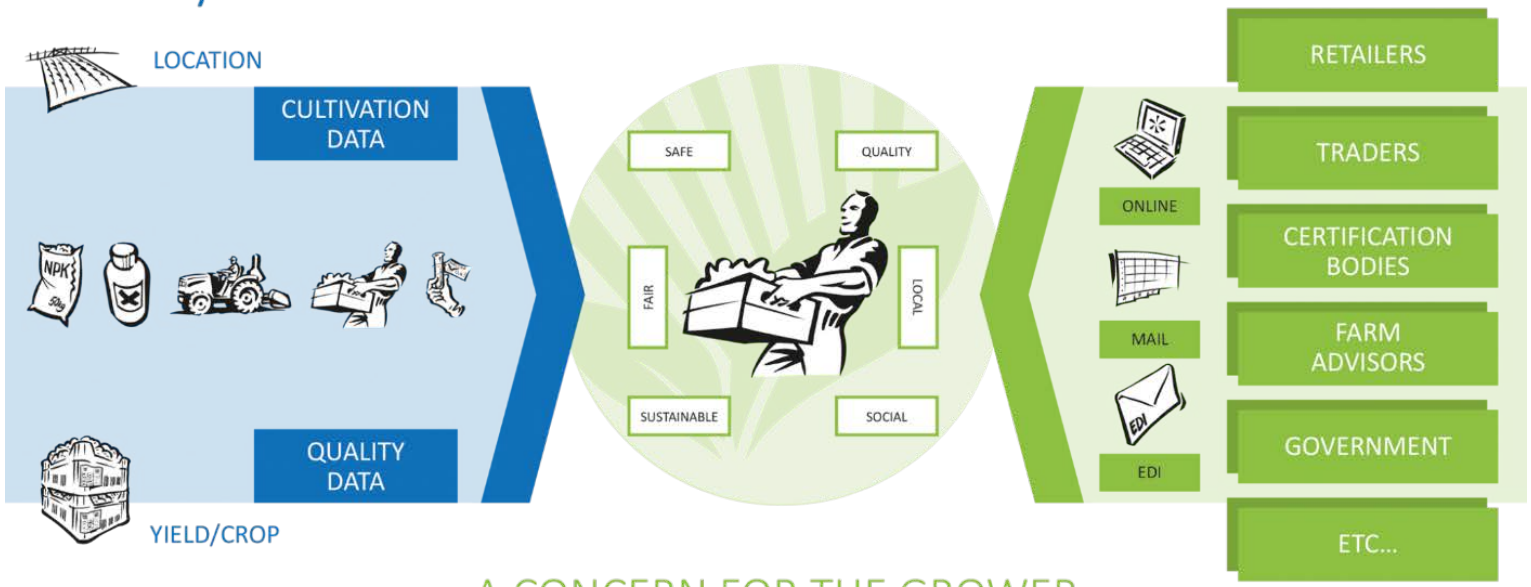
Use cases GPC segment Crops - eCrop

FarmDigital

Why...



A CONCERN FOR THE GROWER...

Use cases GPC segment Crops

Gain for industry

- Proper international classification for several use cases
- Suitable for The Global Sustainability Network
- Suitable for UN/CEFACT eCrop (pre harvest)
- Suitable for UN/CEFACT eLab (pre harvest)
- Common upstream applications in horticulture, fresh produce & commodities and animal feed

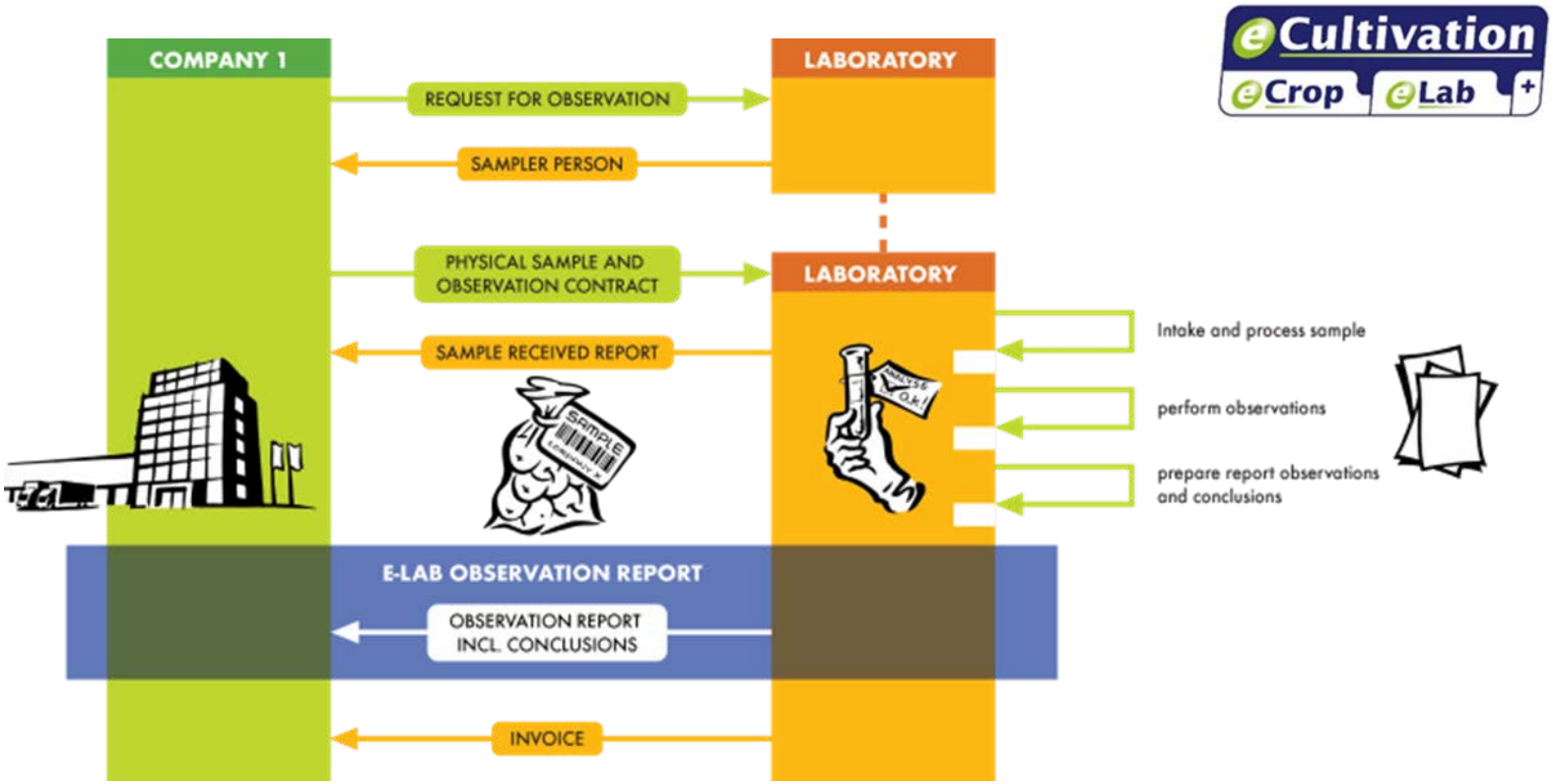
✓ Quality Control

✓ Crop Protection

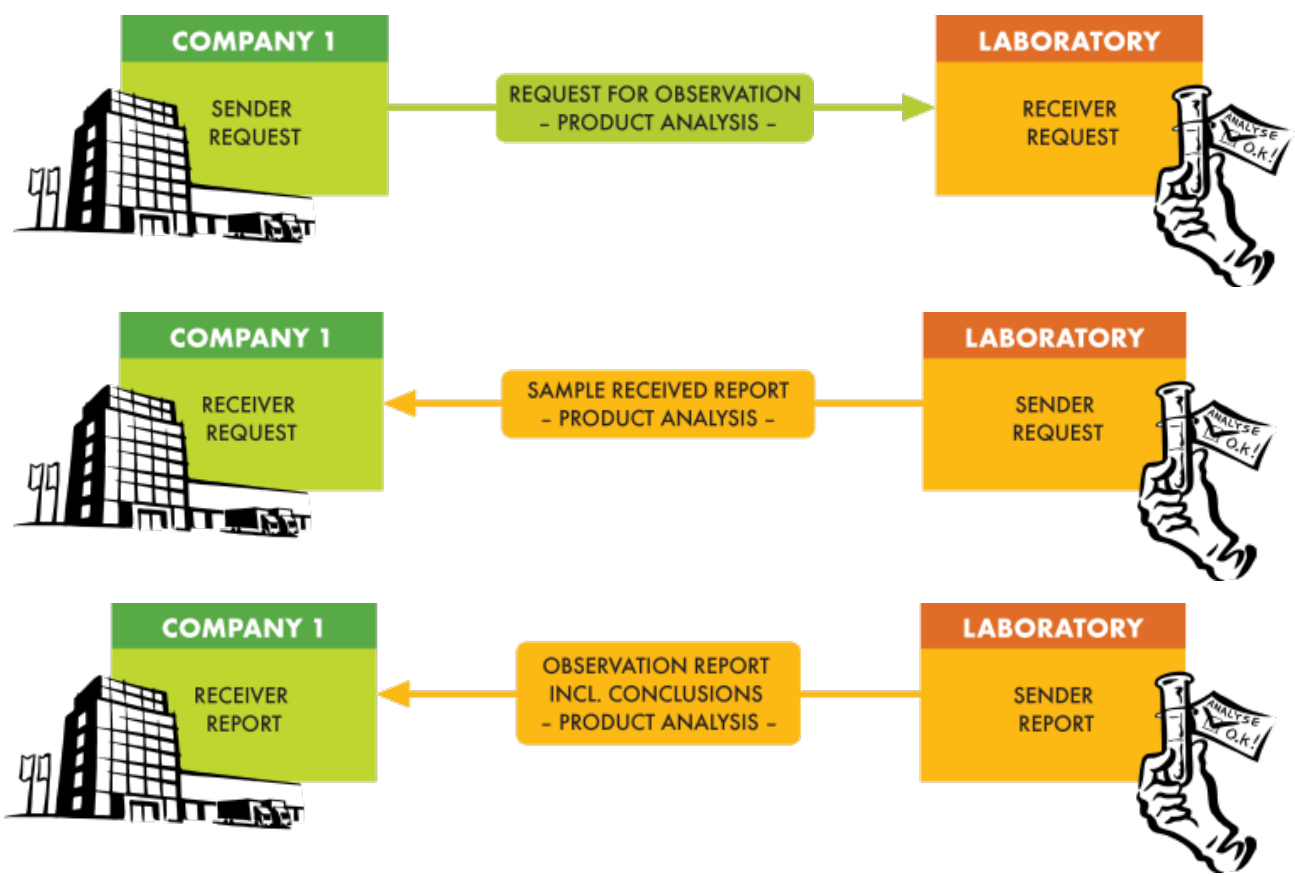
✓ Yield Measurement including Waste Management

- Suitable for UN/CEFACT Traceability (pre- and post harvest) business need for further development of EPCIS standard

UN / CEFACT eLab



UN / CEFACT eLab



eCultivation eCrop eLab

GS1 in EU F&V WG – Agricultural Quality Standards

Next steps to think about – solving problems for SME's

- **Information on F&V labels – digitization**
  Guidance regarding use of 2D barcodes with label information for the consumer (GS1 2D or QR-codes)

- **Identification grower & packer (dispatcher/shipper)**
  Simple Global ID's for companies will support sustainability. Not for every certification scheme a separate producer ID. Unique ID's needed for Quality reasons/trust (legislation) and certification schemes (grower / packer have to comply with several certification schemes).

Q & A

Questions?

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