



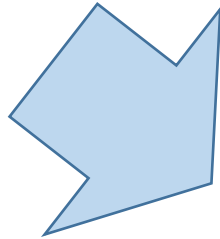
# Request for a new geographical object to cover business needs of the agriculture sector.

Frans van Diepen  
Coordinator agriculture

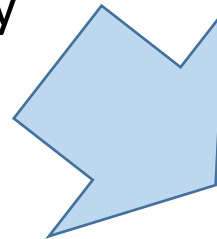


# Issues in agriculture

- Sustainability
- Food safety
- Market access



- Traceability
- Transparency



Product information

Who; What; Why; When; Where



# Process and products in agriculture:

## Identification:

- Location of farm, field, storage
- Product batch, type
- Party producer, processor, transporter, supplier, buyer
- Process treatment, aggregation, transformation, packing



UNECE – United Nations Economic Commission for Europe  
UN/CEFACT – UN Centre for Trade Facilitation and e-Business

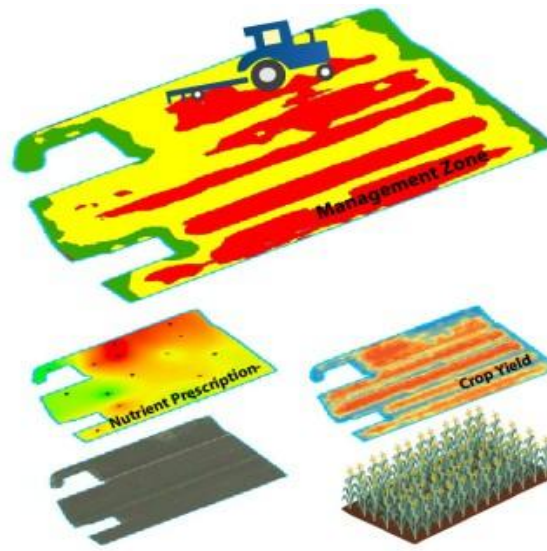
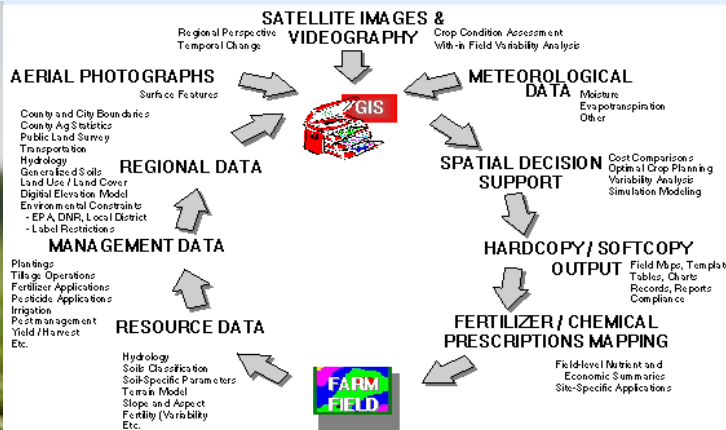
# Example field geometry





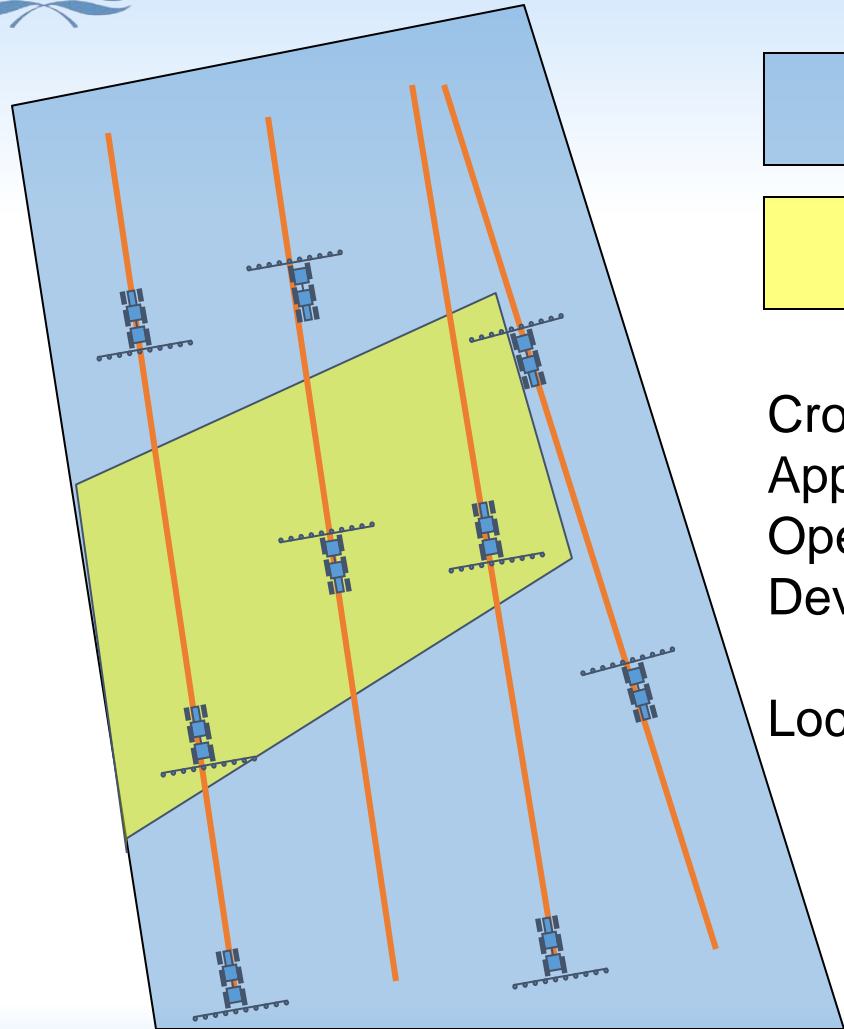
# Precision Farming







# GeoObject assigned to PropertyValue



 PropertyValue A

 PropertyValue B

Crop in areas

Application concentrate in areas

Operation spray tracs in lines

Device instruction in lines or grids

Location is related with PropertyValue



# Field type and instances farmers useage



Topografic parcel



Parcel



Crop field



Activity field





# Geo location accuracy

## Field

- Precision farming: up to 0.01m
- Administration (EU CAP): up to 0.2 – 0.5m
- Point, Line, Polygon, Grid

## Transport

- Dock station (load – unload):
  - Entry point field, yard,
  - Situation building, installation
  - Point
- } up to 0.5 - 1.0m



# Geo location in fisheries

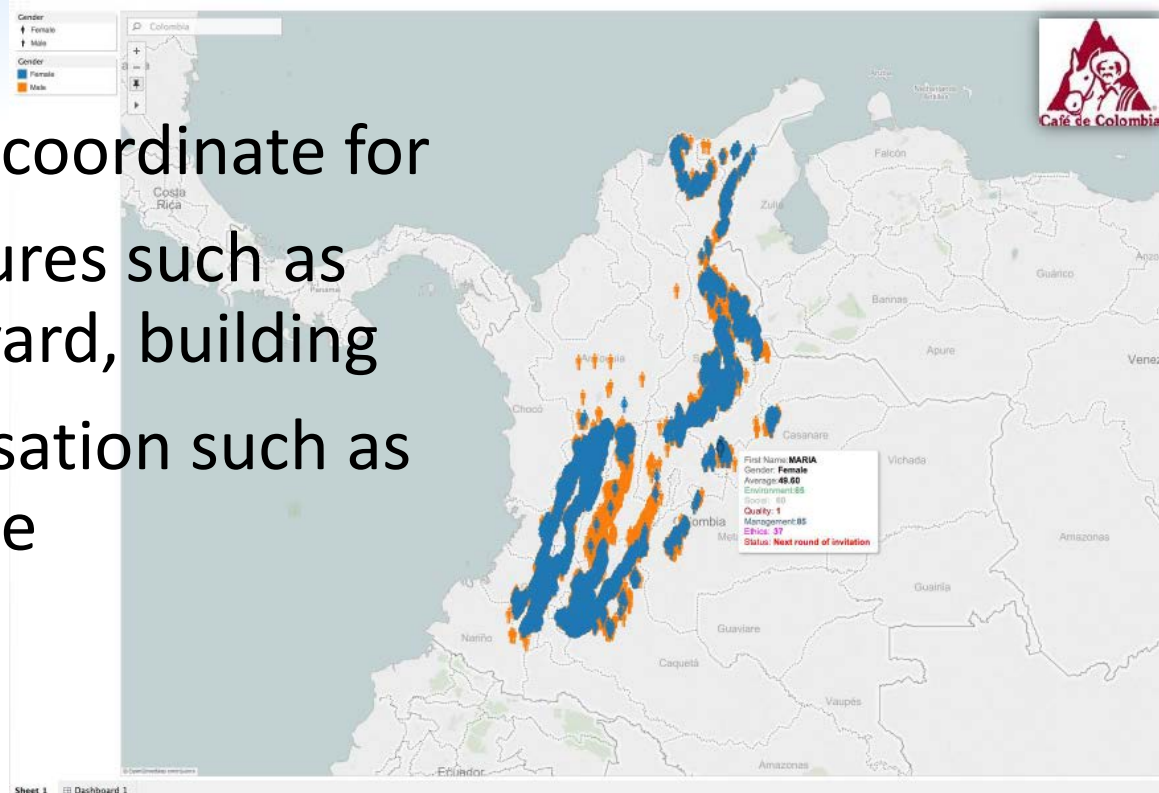
- Port / berth / dock location
- Vessel position and activity
- Vessel track and activity
- Fishing regions
  
- Geographical features:  
point, line, polygon, grids



# Blue Numbers and or GLN

(Point) Identifier + coordinate for

- Geographical features such as farm, field, farm yard, building
- Agriculture organisation such as farmer, cooperative





# Use of GLN

- **GLN:** an identifier for a party (legal entity) and/or a physical location of that party
- **Agriculture (horticulture )**
  - legal entity
  - production section (greenhouse)
  - dock station
- **Transport (Port of Rotterdam)**
  - berth location



# UNLOCODE

UN/LOCODE assigns codes to locations used in trade and transport with functions such as seaports, rail and road terminals, airports, postal exchange office and border crossing points

LOCODE	Name	NameWoDiacritics	SubDiv	Function	Status	Date	IATA	Coordinates
CH GSR	Genestrerio	Genestrerio	TI	--3----	RQ	9704		
= CH	Geneva = Genève	Geneva = Geneve						
CH GVA	Genève	Geneve	GE	-2345---	AI	9601		
CH GNL	Genolier	Genolier	VD	--3----	RL	1207	4626N	00612E
CH GNT	Genthod	Genthod	GE	--3----	RL	1501	4616N	00609E
CH GFG	Gerlafingen	Gerlafingen	SO	--3----	RQ	9705		

Accuracy :  
1 nM, 1.8 km

Max 39,304 codes per country

- 1 = port (for any kind of waterborne transport)
- 2 = rail terminal
- 3 = road terminal
- 4 = airport
- 5 = postal exchange office
- 6 = Inland Clearance Depot – ICD or "Dry Port", "Inland Clearance Terminal", etc.
- 7 = fixed transport functions (e.g. oil platform)";
- B = Border crossing function
- 0 = function not known, to be specified



# UNLOCODE and agriculture

## Commonalities:

- Identification of the location of an object

## Upgrade UNLOCODE:

- Identifier using a GUID (Global Unique Identifier)
- Accuracy (ddd mm → ddd mm.mmmm)
- Qualification of the object (not only transport nodes)
- Maintenance process
  - annual by UNECE → daily by issuing agencies (ISO 15459) and business party