



# WP3 Work on crop types

NIV telecon 08 April 2020

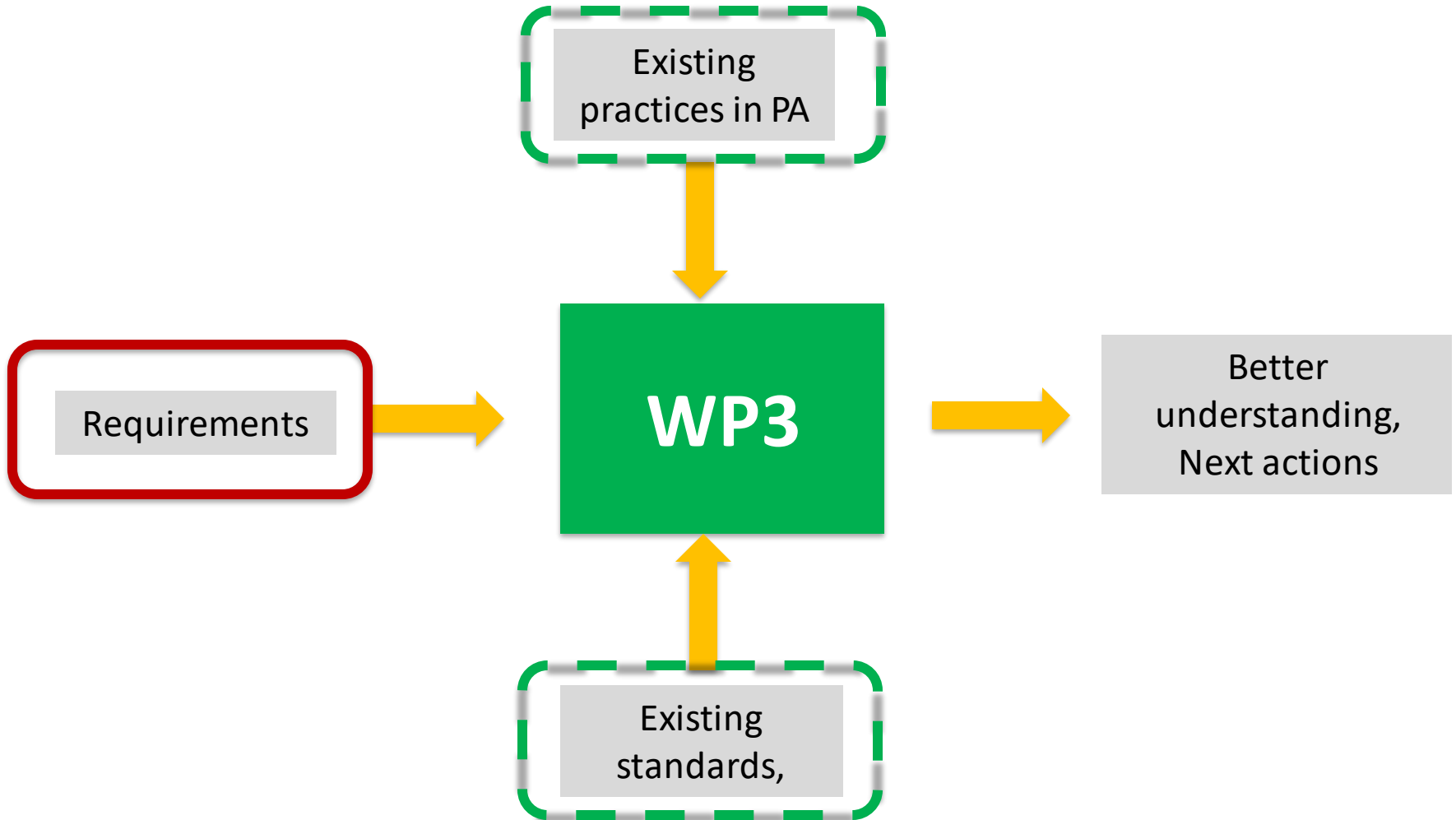
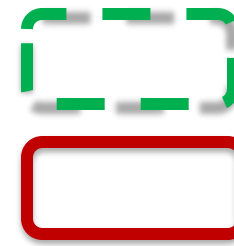


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## Why this work?

- Request from WP2 (December 2019)
- Crop type catalogue announced as one of the expected outputs of NIVA
  - Workshop about UC1b on 05/02/2020
- But no more details about the demand

# Make state-of-play



Current practices (PA)

## Current practices (PA)

- Source: survey about semantic interoperability
  - number of crop types

	Denmark	Estonia	France	Greece	Ireland	Italy	Lithuania	Netherlands	Spain	Finland	Sweden	Saxony (Germany)	Cataluña (Spain)
number	322 main crops, 29 catch crop codes	502	around 300	45 crop types, 3326 varieties	191 (including 37 non eligible)	about 500	156	375	322 (in 2019)	150	99- ish or almost 200	185	around 200

## Current practices (PA)

- Source: survey about semantic interoperability
  - Crop grouping
    - Grouping under a small number of high level values according to **land cover type** : mainly arable land, permanent crops, permanent grassland + some specific national values
    - There are several **groupings depending on the eligibility rule**; this grouping is generally done in a **dynamic way**, when calculating the aid.

## Current practices (PA)

- Source : crop type tables from Sen4CAP
  - Spain
  - Italy
  - France
  - Lithuania
  - Romania
  - Netherlands
  - Czech Republic
- Make compilation under Excel
- Resulting document available on sharepoint

## Current practices (PA)

- Source : crop type tables from Sen4CAP
  - Almost 1 500 values
  - Limited overlaps between countries

CT	LC	CZE	ESP	FRA	ITA	LTU	NLD	ROM
GALEGA	1	Galega			GALEGA			
garlic (spring)	1	garlic (spring)						
garlic (winter)	1	garlic (winter)						
Garlic	1			Garlic	GARLIC	Garlic	Garlic	
Geranium	1			Geranium				
GERBERA	1				GERBERA			
Gesse	1			Gesse				
ginger	1				ginger			
GINKGO BILOBA	0				GINKGO BILOBA			
GIUGGIOLO	2				GIUGGIOLO			
Gladiol other flower nursery plants	1							Gladiol other flower nursery plants



# Reasons for discrepancies

- Various granularities

Cucumbers  
Cucumbers SERE  
Cucumbers SOLARII

Winter oats  
Winter peas  
Winter rape

Spring barley  
Spring Common wheat  
Spring durum wheat  
Spring hard wheat

Other sainfoin  
Other seradelle  
Other small fruit (such as gooseberries kiwis)  
Other soft clover

Sorghum-hybrid early variety  
Sorghum-hybrid late variety  
Sorghum-hybrid semi-early variety  
Sorghum-hybrid semi-late variety

Mix of cereals  
Mix of dehydrated legumes (among them)  
MIXED WHEAT  
Mixture of forage legumes (among them)

# Reasons for discrepancies

- Mixing crop types with other criteria

Flax for fibre  
Flax for oil  
FLAX

Leek summer production  
Leek summer seeds and reproductive material  
Leek winter production  
Leek winter seeds and reproductive material

Energy alfalfa  
Energy Artichoke  
Energy Beet  
Energy CAMELINA  
Energy corn  
Energy elephant grass

Use of the crop

Fruit trees nut trees open ground  
Fruit trees nut trees pot and container field  
Fruit trees other open ground

Greenhouse cabbage  
Greenhouse pepper  
Greenhouse tomatoes

Onions plant 1st year  
Onions plant 2nd year

Agricultural practice

# Reasons for discrepancies

- Mixing crop types with other criteria

Sugar beet  
Sugar cane - fermage  
Sugar cane - indivision  
Sugar cane - land reform  
Sugar cane - other  
Sugar cane - property or direct claim  
SUGAR CANE

Public meadows used individually  
Public permanent grasslands used in common  
Public permanent grasslands used individually

nitrogen-fixing crops mix with grains  
nitrogen-fixing crops mix without grains  
nitrogen-fixing crops mix

Land tenure

Eligibility rule

- Including ‘things’ that are not crop types

Land under greenhouses and solariums - cultivated  
Land under greenhouses and solariums - not cultivated  
Land under preparation for orchards  
Land under preparation for other permanent crops  
Land under preparation for vineyards

## Current practices (PA)

- Draft conclusions :
  - Wide variety of practices
    - Content of crop types list
      - concepts under “crop type”
      - number of values of crop types
    - Management of crop types (grouping)
  - Crop type looks relevant for arable land and for permanent crops, less for grassland

## Current practices (PA)

- Draft proposals:
  - Keep practices, use, land tenure out of crop type list scope
    - Too much specific, not common to most countries
    - Would not be achievable
  - Need for a hierarchic code list
    - To facilitate use of the EU crop type “catalogue”
    - For data sharing (implementation of INSPIRE)

Name in English
Cereals and pseudo-cereals
Proteaginous
Oleaginous
Fibre culture
Fallow
Leguminous
Fodder leguminous
Fodder
Temporary herbaceous areas
Permanent grassland
Vegetables and fruits
Arboriculture and viticulture
Ornament plants, aromatic plants, medicinal plants
Miscellaneous
Cultures specific to over-sea departments

Existing standards

## Context

- Parallel work on-going in DG AGRI (Katalin Toth)
- Looking for relevant standard (s)
  - to match LPIS-GSAA data to INSPIRE LU or LC
- Several candidate standards from EU

# State-of-play

Name	Link	Investigated	Description – Comment
Indicative Crop Classification	On sharepoint	yes	Global crop classification (FAO)
Farm Structure Survey (FSS)	Included in the JRC data model	yes	Previous Eurostat crop classification
Integrated Farm Statistics (IFS)	On sharepoint	yes	Current Eurostat crop classification
LUCAS	<a href="https://ec.europa.eu/eurostat/ramon/other_documents/index.cfm?TargetUrl=DSP_LUCAS">https://ec.europa.eu/eurostat/ramon/other_documents/index.cfm?TargetUrl=DSP_LUCAS</a>	yes	LUCAS is Land cover & Land Use product Land Cover classification includes crop types.
<i>Common catalogues of varieties of agricultural plant species and varieties of vegetable species</i>	<a href="https://ec.europa.eu/food/plant/plant_propagation_material/plant_variety_catalogues_databases_en">https://ec.europa.eu/food/plant/plant_propagation_material/plant_variety_catalogues_databases_en</a>	yes	EU catalogue
Farm Accountancy Data Network	<a href="https://ec.europa.eu/agriculture/rica/">https://ec.europa.eu/agriculture/rica/</a>	yes	Grouping of crops that is widely used across EU
AGRIPROD	RAMON server of Eurostat	no	Detailed classification of agricultural products (crops and animal products) – around 1000 values
Agrovoc	<a href="http://aims.fao.org/vest-registry/vocabularies/agrovoc">http://aims.fao.org/vest-registry/vocabularies/agrovoc</a>	no	Agricultural ontology with embedded crop

More standards not yet investigated (difficult access)



## First results

<b>Standard</b>	<b>Potential relevance for NIVA</b>	<b>Comment</b>
Integrated Farm Statistics (Eurostat)		Statistical purpose – Mixt of concepts
Indicative Crop Classification (FAO)	*	Global , non-botanical classification
Common Catalogues of agricultural plants and vegetable varieties	**	Missing items (e.g. fruits) => to be enriched
LUCAS classification	***	No drawback identified until now

Next steps

# User requirements

- Main purpose :
  - Understand why NIVA needs a common crop type list
    - For UC tools? Which ones?
    - For data sharing ?
    - To be used natively by PA (new CAP)?
  - => Understand which kind of crop type list we need

# Next envisaged actions

- Work on discussion paper on-going
  - Make first guess of requirements
  - Clarify concepts
    - Species - variety
    - Crop type - crop group
    - Botanical/product classification
    - ....
  - Extract first learnings
  - Consolidation with French Paying Agency



Publish  
discussion  
paper

## Next envisaged actions

- Collect feed-back from NIVA partners
  - Purpose: **why need of common crop type list in NIVA?**
  - Method
    - Review of discussion paper ?
    - Questionnaire?
    - Other?
- Keep in touch with DG AGRI

But your immediate  
feed-back is also  
welcome

## Next envisaged actions

- Decide what to do:
  - Give up the objective of a common crop type list
  - Maintain the objective of common crop type list(s)
    - Adopt existing standard
    - Adapt (lightly) existing standard
      - which one?
    - Make NIVA specific code list(s)

# THANK YOU!



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