EIP-AGRI Seminar
New skills for digital farming

5-6 February 2020 – Aranjuez, Spain
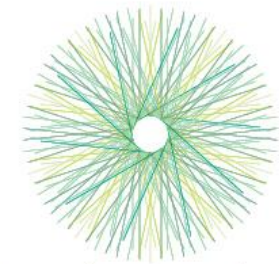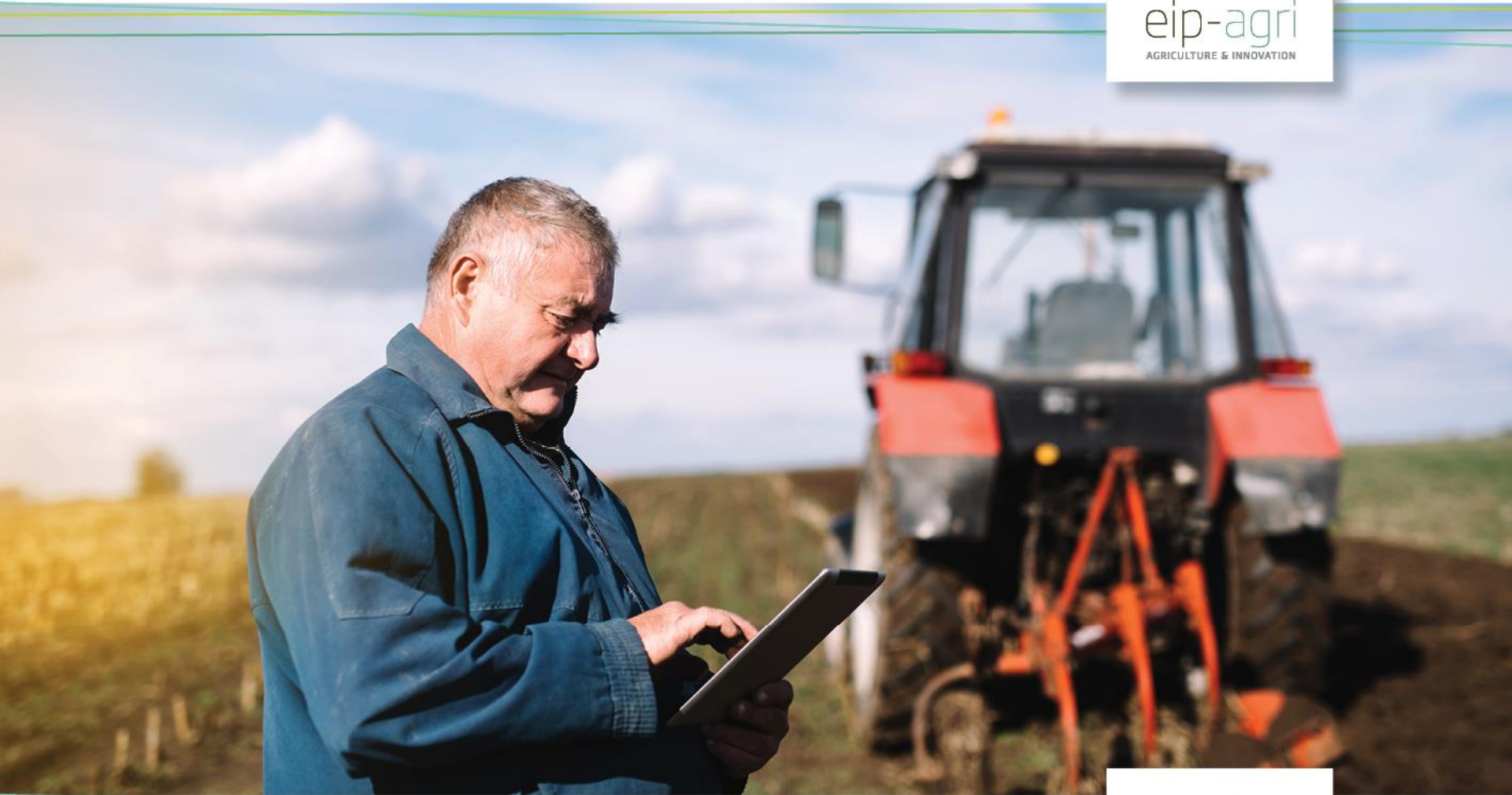
Programme

THURSDAY 6 FEBRUARY 2020

08:15 – 08:45   Registration for day 2

08:45 – 09:10   Introduction to the day

Session 2: How do we move forward?

09:10 – 10:45 Developing skills for digitalisation: An inspirational journey

Presentations by: *George Beers (NL), Miguel Cordero (ES), Beatrice Dingli (FR), Thomas Engel (DE), Hubert Gerhardy (DE), Lotte Ipsen (DK), Tom Kelly (IE), Gintare Kucinskiene (Lt), Hercules Panoutsopoulos (GR), Tetiana Pavlenko (DE), Jürgen Vangeyte (BE)*

10:45 – 11:15   Coffee break

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Programme
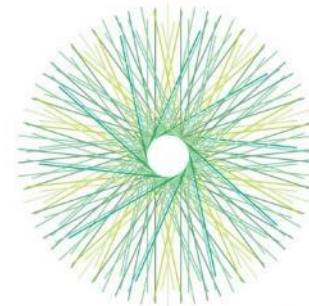
THURSDAY 6 FEBRUARY 2020

11:15 – 12:30   Tools and approaches for skills development in the farming sector: Breakout session

12:30 – 12:50   Feedback from the discussion

12:50 – 13:00   Closing of the seminar

Kerstin Rosenow, European Commission, DG AGRI

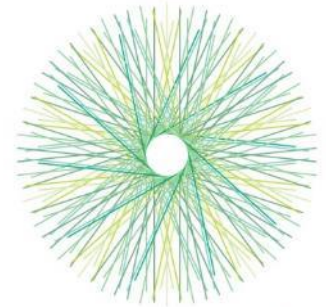# Developing skills for digital farming:
An inspirational journey

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4. Learning about and with digital tools

Focus on e-learning, e-resources, e-platforms…

Not only learning to use digital tools but using digital tools for learning. Digital technologies can **enhance opportunities** for skills development in schools, higher education and throughout life. Digital **platforms**, **portals…** provide online **learning resources** and help connect people who produce and use knowledge.	Examples: - France, VIVEA blended digital training (**Beatrice Dingli**) - Finland, JAMK University of applied sciences – Digital e-learning resources (*Anne-Mari Malvisto*) - Erasmus+, Biocontrol E-Training (Laurent Dedieu) - Lithuania, EIP Operational Group 'Gate of innovations' (**Gintare Kucinskiene**) - H2020 EURAKNOS / EUREKA (**Hercules Panoutsopoulos**)

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**Connecting Thematic Networks as Knowledge Reservoirs
towards a European Agricultural Knowledge Innovation Open Source
System**

New Skills for Digital Farming EIP-AGRI Seminar
February 6, 2020 - Aranjuez, Spain

Hercules Panoutsopoulos email: hpanoutsopoulos@aua.gr

Agricultural University of Athens
Department of Natural Resources Management & Agricultural Engineering

PRESENTATION OUTLINE

- Context

- e-KRP architecture

- Storing data into a HIKR

- An ontology of Thematic Networks

- EURAKNOS database model

- User interaction & user experience

- Added value

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CONTEXT

THEMATIC NETWORK
Knowledge Reservoirs

EURAKNOS
electronic Knowledge Reservoir Platform

EURAKNOS
High Impact Knowledge Reservoir

Need to integrate data from **Thematic Network Knowledge Reservoirs** into a **central data repository**

of importance to involved actors **high uptake of results** by farmers, foresters, advisors

collection of data objects

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ARCHITECTURE

presentation tier …………………………………… what the user sees

application tier …………………………………… search engine

data persistence tier ……………….………… where data is stored

three tier architecture

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STORING DATA

- Flexibility
- Data redundancy tolerant
- High performance
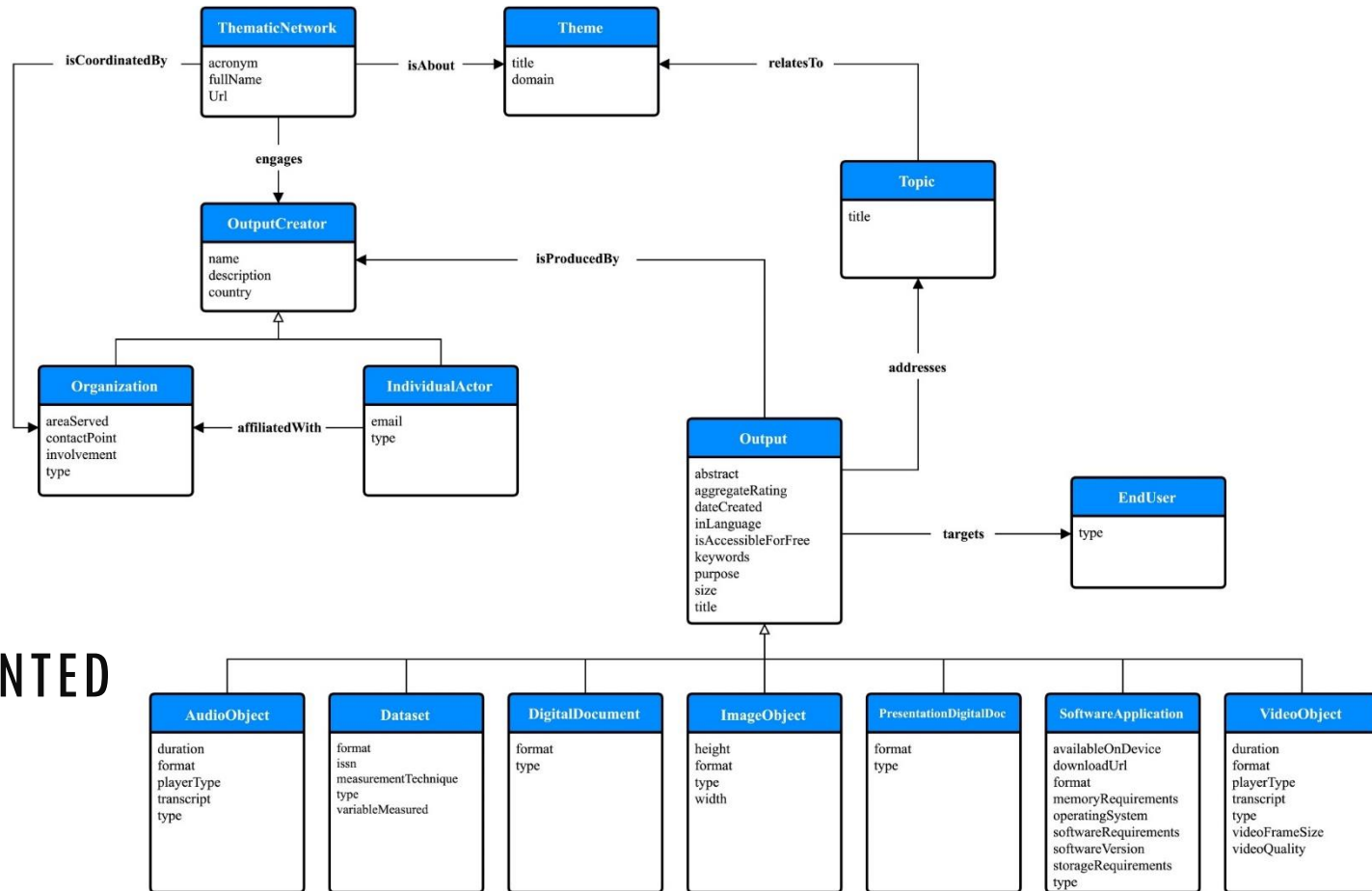- Horizontal scalability
- Rich query language

FACTS

- Need to integrate data from different sources
- Wide range of data object types, formats and sizes of information material
- Each source database makes use of a different model
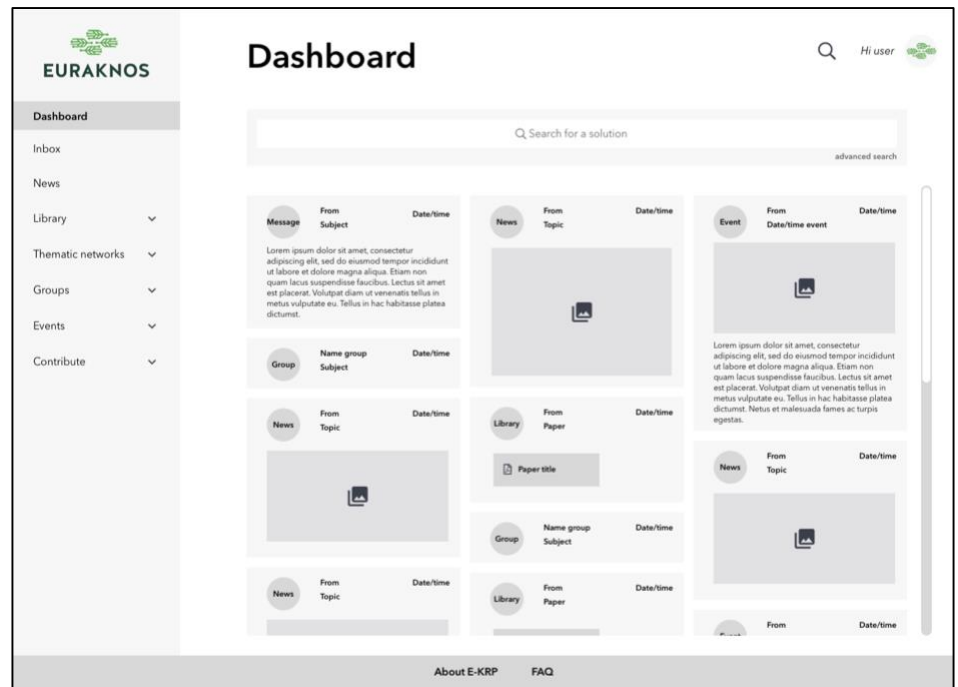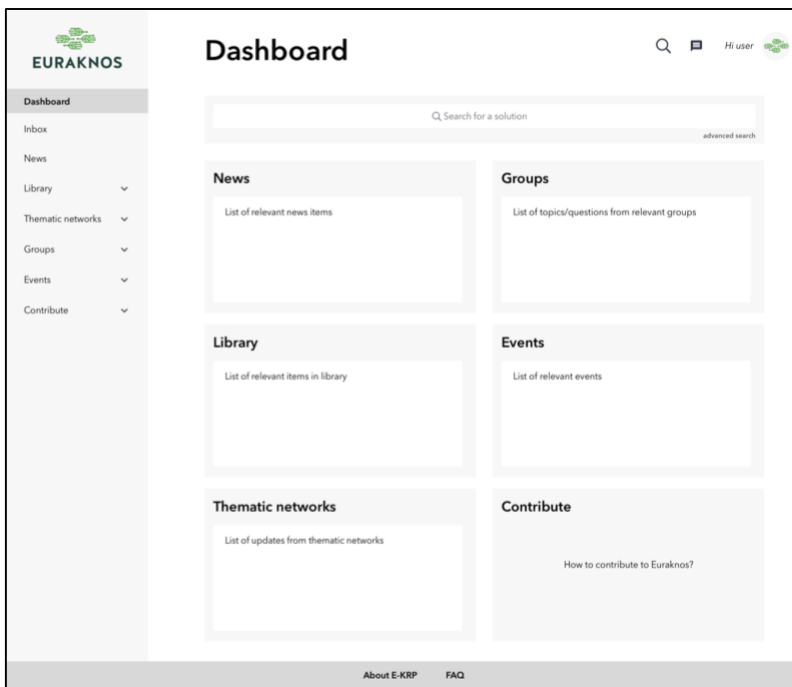- Lack of sufficient metadata
- Compliance with FAIR data principles

CHALLENGE

AN ONTOLOGY OF THEMATIC NETWORKS

A PATHWAY TO ORGANISE PRACTICE-ORIENTED KNOWLEDGE

ThematicNetwork
- acronym
- fullName
- Url

Theme
- title
- domain

Topic
- title

OutputCreator
- name
- description
- country

Organization
- areaServed
- contactPoint
- involvement
- type

IndividualActor
- email
- type

Output
- abstract
- aggregateRating
- dateCreated
- inLanguage
- isAccessibleForFree
- keywords
- purpose
- size
- title

EndUser
- type

AudioObject
- duration
- format
- playerType
- transcript
- type

Dataset
- format
- issn
- measurementTechnique
- type
- variableMeasured

DigitalDocument
- format
- type

ImageObject
- height
- format
- type
- width

PresentationDigitalDoc
- format
- type

SoftwareApplication
- availableOnDevice
- downloadUrl
- format
- memoryRequirements
- operatingSystem
- softwareRequirements
- softwareVersion
- storageRequirements
- type

VideoObject
- duration
- format
- playerType
- transcript
- type
- videoFrameSize
- videoQuality

Relationships:
- isCoordinatedBy
- isAbout
- relatesTo
- engages
- isProducedBy
- addresses
- affiliatedWith
- targets

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USER INTERACTION & USER EXPERIENCE

ADDED VALUE

- **Perspective of the end-user**

  - **A common dynamic EU repository** of Agriculture- and Forestry-related practice-oriented knowledge serving and connecting AKIS's in all member states and regions

  - Availability of Agriculture-related data objects in a variety of forms and formats capable of **covering a wide range** of **user needs**

- **Technical perspective**

  - A step towards the **establishment of standards** for Thematic Network – related (and Agriculture-related in general) data repositories

  - A step towards the **establishment of some commonly accepted patterns** for designing user interaction and experience
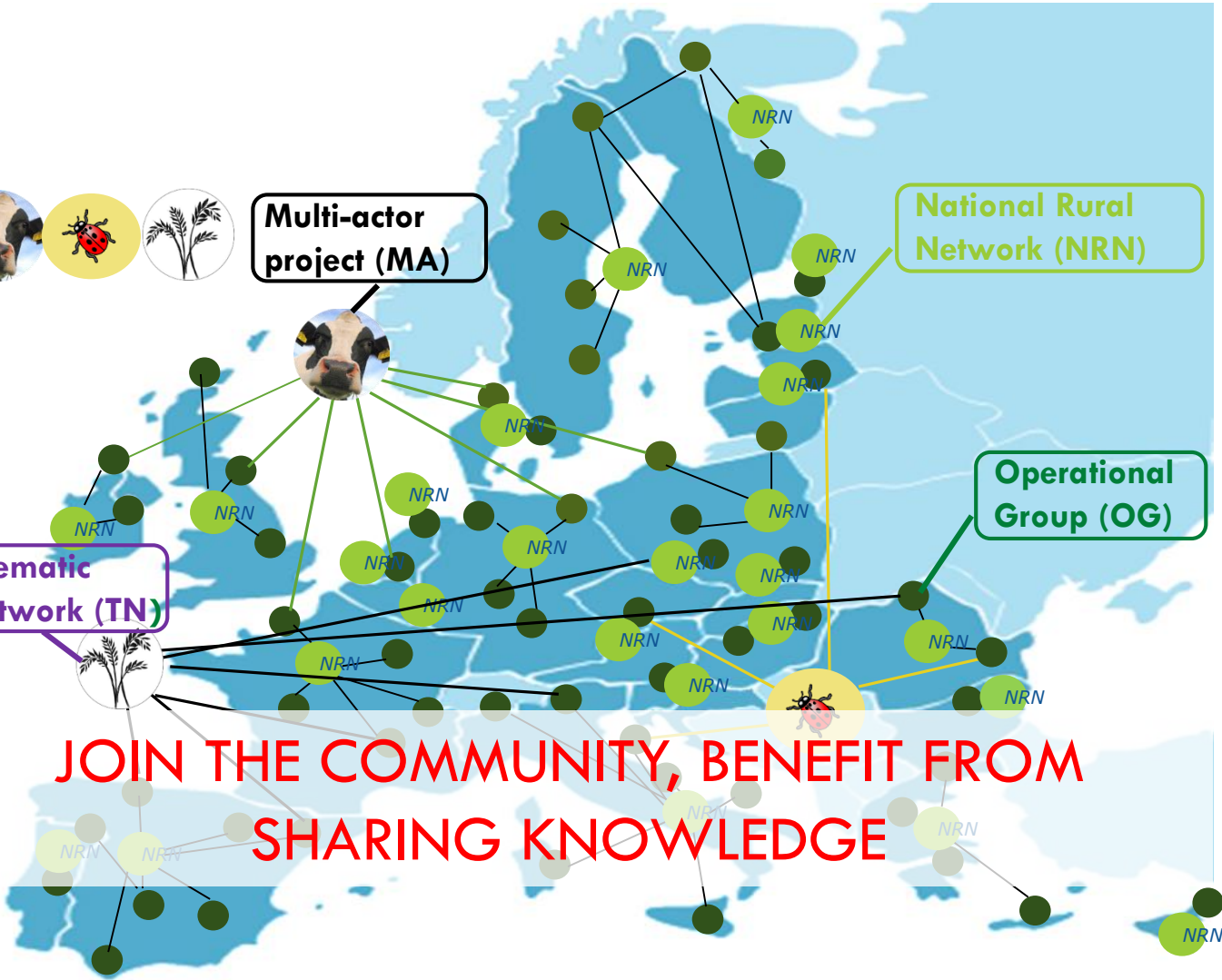
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JOIN THE COMMUNITY, BENEFIT FROM SHARING KNOWLEDGE

THANK YOU VERY MUCH FOR YOUR ATTENTION!