



European reference laboratories, a strong EU network supporting the plant health sector

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WHAT?

WHAT is a European Reference laboratory (EURL)?

A EURL is a EU laboratory which contributes to the improvement and harmonization of methods of analysis, test or diagnosis to be used by EU official laboratories, and of the analytical, testing and diagnostic data generated by them.



Official control Regulation (EU)2017/625

WHY?

WHY establishing a EURL?

The European Commission establishes EURLs where the effectiveness of official controls and other official activities also depends on the quality, uniformity and reliability of methods and results.



Official control Regulation (EU)2017/625

Plant health specificities?

- Over 500 EU regulated pests
- Often very different substrates (hosts) for the same pest
- Diverse diagnostic methods
 - Conventional (Morphological, microscopy)
 - Immunological (e.g. Elisa, IF)
 - Molecular (e.g. PCR, qPCR, RT-PCR, LAMP, sequencing, HTS)
 - Combination of the above!
- Validated diagnostic protocols or even methods or **not available** for all (regulated) pests

EURLs (and EURCs)

- Official controls and activities in plant health are performed:
 - For EU productions AND for imports
 - By 27 EU Members States



need of harmonization for diagnostics!



2019 => 5 EURLs in Plant Health!!!

coordinated by the Unit Plant Health of DG Health and Food Safety (DG SANTE)

- DG SANTE
 - 26 EURLs in Food & Feed
 - 15 EURLs in Animal Health
 - 3 EURCs in animal welfare

WHO ?

Bacteria NVWA-NIVIP (NL), ILVO (BE), CREA-DC (DIALAB) (IT) & NIB (SLO)

Viruses, Viroids and Phytoplasmas NVWA-NIVIP (NL), CREA-DC (DIALAB) (IT) & NIB (SLO)

Insects and Mites, ANSES (France) & AGES (Austria)

Fungi and oomycetes, ANSES (France)

Nematodes, ANSES (France) & ILVO (BE)

Priority given to?

- Union quarantine pests pursuant to Art, 5 of Regulation (EU) 2016/2031
- Plant pests not yet listed as Union quarantine pests, but are subject to the measures to be adopted pursuant to Art. 30(1) of Regulation (EU) 2016/2031 ;
- Others which might represent an emerging risk for (a part of) the Union territory, and the entry or spread of those pests might have a significant impact for the Union agriculture or forests;
- +any pests requested by the Commission.

WHAT FOR ?

1. Improvement and harmonization of methods



**2. Performance tests
&
Proficiency tests**

3. Reference material

4. Trainings

5. Support, dissemination, collaboration

WHAT FOR ?

1. Methods for analysis, testing or diagnosis

- Providing EU National reference laboratories (NRLs) with **details and guidance** on existing methods;
- Producing **improved or modified methods** on plant pests, or/and participating in validation studies of methods;



Coordinating practical arrangements necessary to **apply new methods** and informing EU NRLs of advances in this field.

WHAT FOR ?

2. Inter-laboratory tests

- **Organising Performance tests** or **proficiency tests** for EU NRLs, and ensuring appropriate **follow-up** in case of non-conformities.

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- **Organise Performance tests** or **proficiency tests** for EU NRLs, and ensure appropriate **follow-up** in case of non-conformities.

3. Reference Material

- Providing **reference material** to EU NRLs;
- Coordinating or performing tests for the verification of the quality of **reagents** used for analysis, testing or diagnosis of plant pests,

WHAT FOR ?

4. Trainings

- Ensuring that the **EURL staff is well trained**, up-dated and knowledgeable about the area of plant pests;
- Conducting **training courses** for staff from NRLs and, if needed, from other official laboratories, as well as for experts **from third countries**.

WHAT FOR ?

5. Support – dissemination - collaboration

- Providing scientific and technical assistance to the European Commission;
- Assisting actively in the diagnosis of contaminations or outbreaks in EU Member States, by carrying out, e.g., confirmatory diagnosis;
- Providing information on relevant national, Union and **international** research activities to NRLs;
- Collaborating within the scope of their mission with laboratories in **third countries**;
- Collaborating within the scope of their mission with the **European Food Safety Agency (EFSA)**;

Network and Collaborations

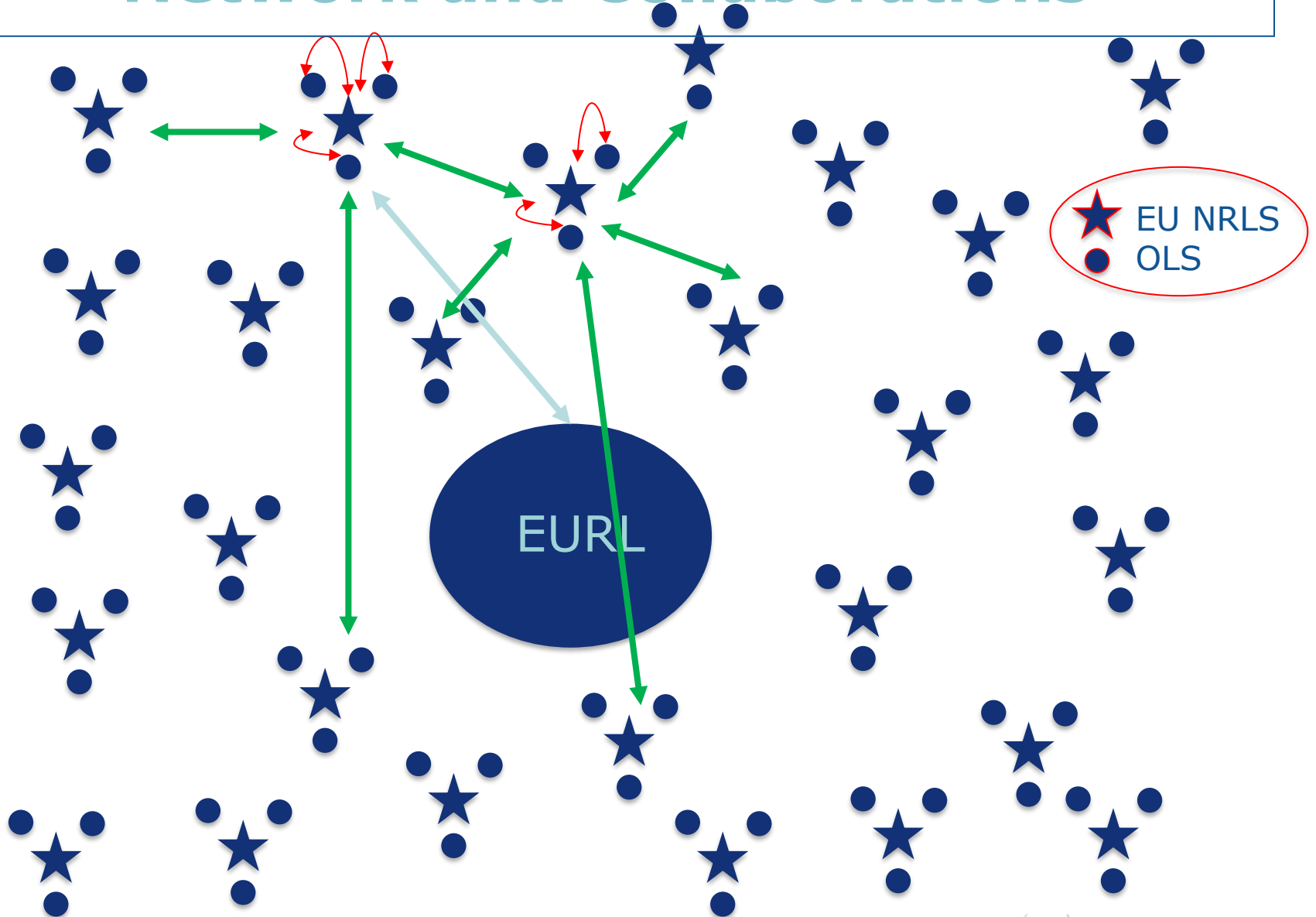
EURLs are not:

- PT organizers for accreditation maintenance
- International collections
- Auditors
- “Fundamental research” centre
- Policy makers
- In judgement : technical
- ...



Main EURL target audience are EU NRLs

Network and Collaborations



NETWORK!

Network and Collaborations

EFSA

- Collaboration to pest survey cards for the section on diagnostics

Network and Collaborations

EFSA

- Collaboration to pest survey cards for the section on diagnostics

EURLs are also involved in international matters

EPPO

- Synergies : EURL's member(s) in each diagnostic panel
- Provide validation data in the Database on Diagnostic Expertise,
- Sequences are deposited in Q-bank, Q-bank curation, ...
- Consistency between EPPO standards, EURL methods and protocols, EU laws.

Network and Collaborations

Non EU-laboratories (when concerns linked to diagnostics issues in trade)

- Invitation to proficiency tests
- Organisation of trainings
- Missions for reference material collect and exchanges
- ...



Next presentations by each EURL 😊

2019

=>2026



Thank you for your attention