



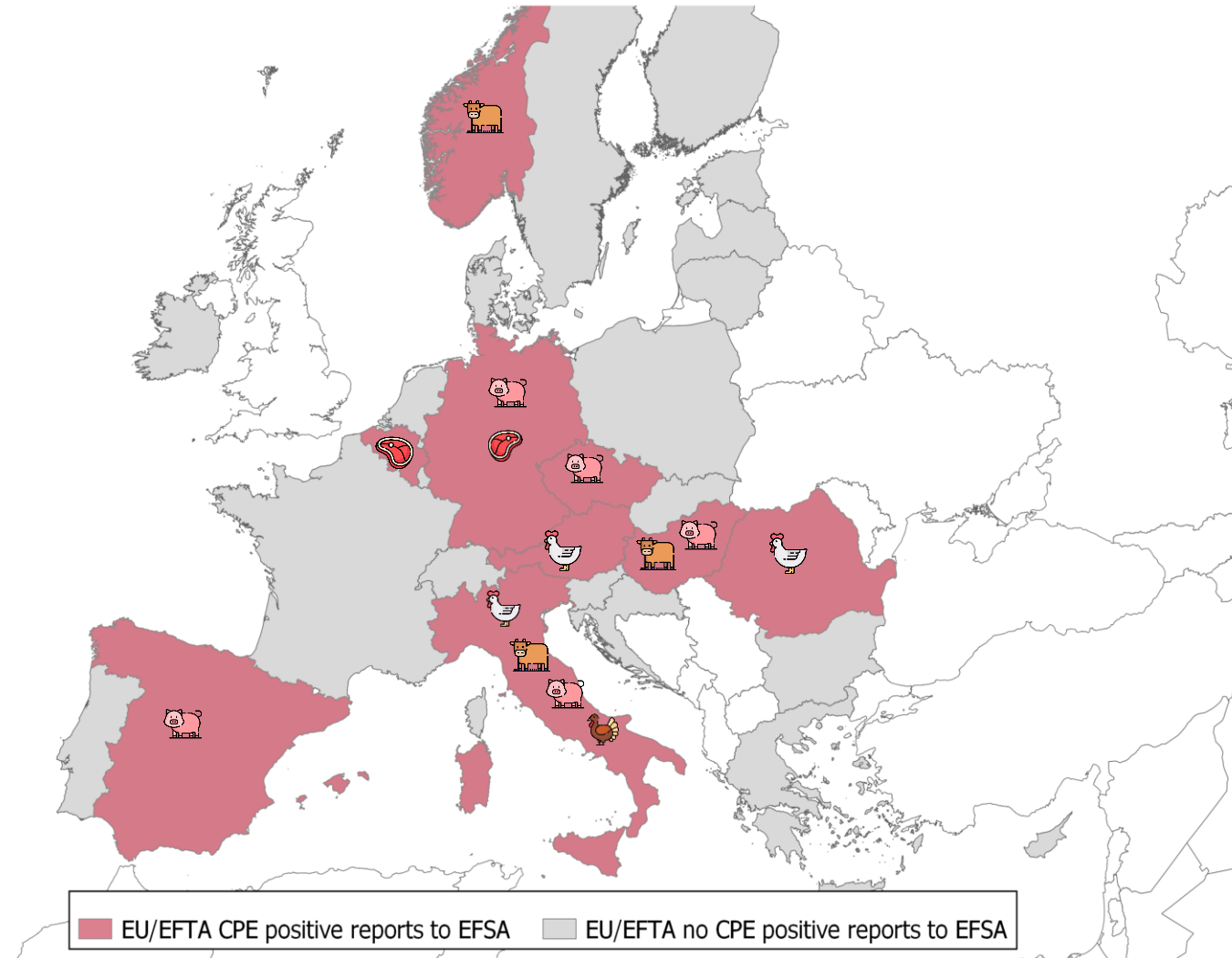
# Carbapenemase- producing Enterobacterales in the food chain

Beatriz Guerra/Ernesto Liebana

92th Advisory forum

# AS A FOLLOW UP OF THE INFO PRESENTED AT THE 89<sup>TH</sup> AF MTG...

## Carbapenemase-producing *E. coli* in the food chain in the EU/EFTA



From 2015 -2023

- AT: VIM-1 in broilers 2020, 2022
- BE: VIM-1 in minced pork, 2020
- CZ: 1) NDM-5 pigs; 2) another report in pigs. 1) 2021; 2) 2023
- DE: 1) VIM-1 in pigs; 2) VIM-1 pig meat; OXA-48, GES-5 pigs 1) 2015, 2017; 2) 2019
- HU: NDM-5 pigs, cattle 2021
- IT: 1) OXA-181 bovines, pigs; OXA-48 pigs, NDM-5 calf; 2) VIM-1 broilers, OXA-181 turkeys; 3) OXA-181 pigs, bovines 1) 2021; 2) 2022; 3) 2023
- NO: NDM-5 cattle 2023
- RO: OXA-162, broilers, 2016
- ES: OXA-48 pigs 2021, 2023

### Recent ECDC report:

*E. coli* carrying *bla*<sub>NDM-5</sub> is established as a significant concern in humans in EU/EEA.

Spread of *E. coli* isolates carrying *bla*<sub>NDM-5</sub> is occurring rapidly and on a large geographic scale



# BIOHAZ SELF TASK MANDATE: CPES IN FOOD CHAIN

ToR1

## State of the art 2024

To **gather information** from countries reporting data to EFSA for the AMR monitoring on:  
(i) **planned or on-going studies/investigations** spanning from recent surveillance findings  
(ii) **contingency plans and/or control measures implemented/planned** to halt their spread  
(iii) **Published reports/papers** on occurrence EU/worldwide since previous BIOHAZ Opinion

March 2025

ToR2

## New data generation, partnership MSs

To **collaborate** with the above-mentioned **countries and with the EURL-AR** with the purpose of **generating new data** through a specific project (**EFSA outsourcing, 2024 to 2026**).

Countries interested in participating could express their interest in one or several of the work packages with the following objectives: a) protocols, b) epidemiological studies, c) in depth (WGS) analysis, d) genomics comparison analyses.

Q3 2024-  
Q3 2026

ToR3

## State of the art 2027

To **review all new data/evidence** generated by the Member States and the EURL-AR, **issuing one or more scientific opinion(s)** targeting the different topics identified in ToRs 1 and 2.

June 2027

3



# MANDATE TIMING, OUTPUTS, ORGANIZATION

**Time:** 3 years, May 2024- June 2027.

## Outputs *ad hoc*:

- **ToR1.** One initial BIOHAZ **scientific opinion** presenting the **state of the art** (including results to a survey to MSs), by **March 2025**
- **ToR2.** **Monopole Framework Partnership agreement (FPA)** with EURL/NRLs-AR Network, **external reports**, Q3 2024-Q3 2026.
- **ToR3.** Final **BIOHAZ scientific opinion** evaluating the **results of the project**, **advice** to risk managers, by **June 2027**
- More scientific opinions in between if needed (e.g. NDM-5)



**Biological Hazards**



**WG Carbapenemases**



**FPA “data generation on CPs in food-producing animals”**  
**Contract: 2.5 years (mid 2024-end 2026),**  
**Budget 1.5 mill Co-funding (20%).**

**Contractor (coordinator + MSs):**  
**EURL-AR/NRLs-AR Network labs, Art. 36**  
<https://www.eurl-ar.eu/participants.aspx>



**ECDC Networks, to collaborate in ToR2d**



# WG CARBAPENEMASE IN ENTEROBACTERIALS (CPEs)



## Expertise:

- Antimicrobial resistance (AMR)
- Carbapenemases
- Molecular epidemiology (genes, resistance determinants, plasmids, clones, comparative genomics)
- Isolation, detection and characterization (phenotypic and genotypic) methods
- Food-producing animals and their environment
- Epidemiology

## WG Mandate from 2024-2027:

**8 experts (panel members, previous CPE/AMR opinions, ECDC Networks), 6 confirmed, 2 still pending. ECDC and EMA staff.**

- Luisa Peixe, Chair (BIOHAZ Panel, University of Porto, PT)

**Plans 2024: 4 online mtgs, 2 physical ones, from May to December.**

## Tasks:

- Design and evaluation of **survey to the NRLs-AR to gather data/info on going activities.**
- Revise deliverables.
- **Contribute to draft scientific opinions** evaluating/review the data generated from the outsourcing, conclusions and recommendations

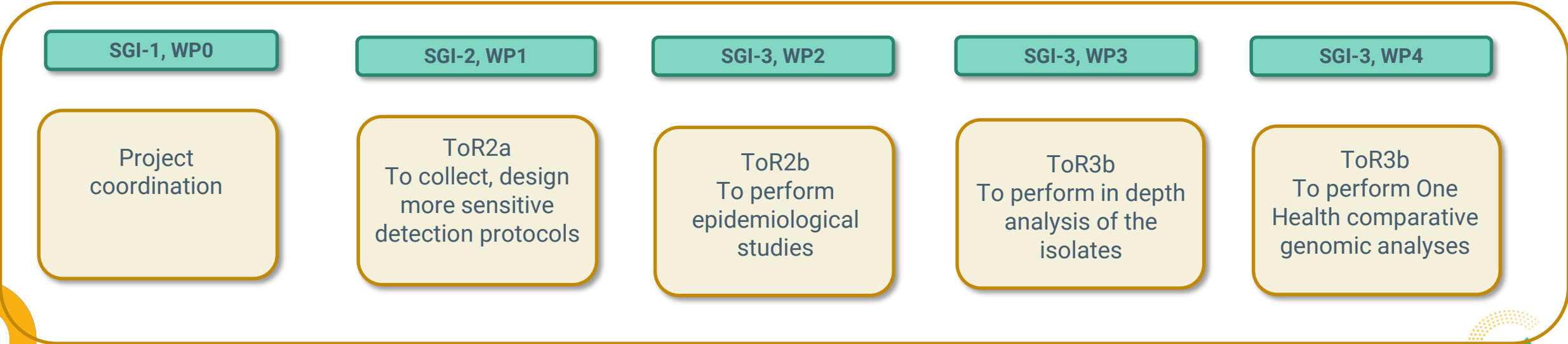
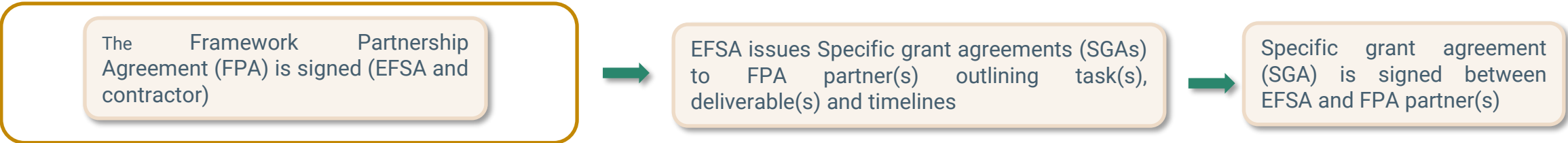


# FRAMEWORK PARTNERSHIP GRANT

ToR2: Data generation Carbapenemase in Enterobacteriaceae to support Self-Task Mandate

To be launched in May/beg. June, Monopole EURL-AR Network Labs, Art. 36 list.

Webinar done on 14 May to inform the Network



# CONCLUSION AND DISCUSSION

- **EFSA has taken action**
- Tackled within a **One Health approach**
- The **participation of the MSs** through the **EURL-network laboratories (NRLs)** in the planned outsourcing, and **data sharing** is essential to understand the magnitude of the problem. To be eligible, the **Institutions** hosting the NRLs shall be included in the **EFSA Art. 36 list**.
- **Collaboration with the public health laboratories/ECDC Networks** will be essential to address ToR2d, comparative analyses.
- Depending on the findings, **timely advice** will be given to the managers



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# Thanks for your attention!

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