



European Animal Health  
& Welfare Research  
COLLABORATIVE WORKING GROUP

# CWG Animal Health & Welfare Research

Plenary meeting, Rome

*10 December, 2024*

## Aim of the meeting

- To **consolidate the European network** with Funding Organizations, experts and private partners with a major interest in AH&W.
- Reach out to DG-AGRI, EFSA and WOA, incl. SANTE, MARE and RTD, RefreSCAR.
  - Invited SCAR Working Groups SAP, SCARfish, FoodSystems.
- Encourage the AH&W cooperation within countries.

*For those who are online: please **mute your microphone!***

*The meeting will be **recorded** for preparing the minutes, not for distribution.*

*You can **use the chat for questions**, which will be answered in the minutes.*

# Agenda 10 December 2024

- Official welcome by the Authorities; Introduction and objectives of the meeting; Follow up of the plenary TC meeting of 23 May 2024.
- Feedback
  - of the Animal Welfare and the Strategy & Foresight Unit Subgroup meetings.
  - from country research on Highly-Pathogenic Avian Influenza.
- Updates on
  - STAR-IDAZ, with a presentation of the CWG website.
  - ICRAD ERA-NET
  - The European Partnership Animal Health & Welfare.
  - DISCONTTOOLS.
- Research topics to discuss with RefreSCAR.
- The role of CWG in relation to EUP AH&W.
- Presentation of the SCARfish working group.
- Presentations: Diagnostics of virosis: the mind in the future with a look into the past (Antonio Lavazza, IZSLER, IT) and Artificial Intelligence in animal health research (Alasdair Cook, University Surrey).

Follow up of the CWG AH&W  
plenary of 23 May 2024

*Hein Imberechts*

## See agenda 23 May 2024

- Feedback from Animal Welfare and SFU subgroups.
  - **Action:** All to consider the call for **new chair persons** for the animal welfare subgroup.
  - **Action:** All to comment on the proposal to present Risk Communication and/or Regulatory AH&W Research as possible **research support topics for RefreSCAR**.
- Country AH&W priorities and challenges (survey).
  - **Action:** All to comment on the **reporting of the AH&W priorities and challenges** as presented at the May TC meeting.
- Updates STAR-IDAZ; EUP AH&W, ICRAD and DISCONTTOOLS.
- Scientific presentation: Animal Influenza in cattle (Wim van der Poel) and Burden of disease (Brecht Devleesschauwer).
- AOB
  - **Actions:** Hein Imberechts to inform the members about the **CWG website** and the next meeting.

Feedback from country research on  
Highly-Pathogenic Avian Influenza

*Hein Imberechts*

## Survey on HPAI in ruminants

- In the light of the first cases of HPAI H5N1 in cattle in the United States in March 2024, [STAR-IDAZ](#) was seeking to collect and disseminate relevant research information on **HPAI in ruminants**. CWG AH&W, as the European regional consortium of STAR-IDAZ, supported this initiative.
- Online survey organised by the CWG AH&W, from 27 June until 5 October, 2024.
- Report available on <https://scar-europe.org/ahwr-documents>
- **Action:** Let us know to who you distributed it to, e.g. authorities (Ministry of Health, Agriculture, Research), your CVO, National Mirror Groups on AH&W, AH&W Colleagues or other? Has it been well received? Comments (content, format, process, etc.) are welcome!

## Country AH&W research

- This is an essential part of the CWG activities: share information among members.
  - AH&W research **priorities**: what project topics are currently ongoing or planned for the near future? Addressing funders.
  - **Challenges and emergencies** for the country or region in the domain of AH&W; addressing research organisations.
- Format to collect such information: recurrent **agenda topic** (*tour de table*), or **online survey**.
  - **Suggestion:** Agree to organise a AH&W survey and discuss it at the next plenary meeting (before summer break); agree?

## Aims of SCAR's WG: RefreSCAR report

- Report 'On mapping and analysing the European Research and Innovation, Policy and Practice landscape in which SCAR WGs operate.'; to be published soon.
  - Report of **interviews** with CWG chair and co-chair, including CWG AH&W.
  - **Conclusion** of the mapping study.
- Conclusions
  - WGs are heterogeneous; with different interpretation of their role, few alignment.
  - Role of the chairs; recognition by hosting organisations and the EC would help.
  - Assist in specific SRIA's is common to various WGs; improves contacts with EC-DGs.
  - Various levels of interaction with stakeholders; lack of resources (time) hampers this.
  - Better interaction between SCAR WGs can improve stakeholder engagement.
  - Mirror groups may link WGs with national policy making.
  - The report provides information on good practices and examples of activities.

Feedback from SFU Subgroup

*Romano Zilli*



# European Animal Health & Welfare Research

COLLABORATIVE WORKING GROUP

## Report on Strategy & Foresight Unit (SFU) Meeting to the SCAR AHW CWG Plenary

Meeting of the SCAR CWG AHW  
9<sup>th</sup> of December 2024  
Rome, Italy

**Romano Zilli**  
SFU Chair  
IZSLT, IT

### Welcome and announcements, Minutes from last meeting (Romano Zilli)

- 14 participants (12 in-person, 2 online); Minutes of the last SFU meeting were approved, no amendments

### Global Perspective Studies (Lorenzo Giovanni Bellù, FAO Global Perspectives Studies Team)

- Overarching Strategic Foresight at FAO: What contributions from “Thematic Strategic Foresight”?
- (De) constructing (mis) leading narratives on development
- **FAO: Four alternative scenarios to 2030, 2050 and beyond:** 1. More of the same (MOS); 2. Adjusted future (AFU); 3. Race to the bottom (RAB); 4. Trading off for sustainability (TOS)
- **Scenarios and triggers for transformation:** 1. Governance; 2. Consumer (citizen) awareness; 3. Income and wealth Distribution; 4. Innovative technologies
- **Possible interesting AHW issues to investigate:**
  1. Vectors of diseases and other spreading causes under alternative scenarios. Are they plausibly increasing (decreasing) under alternative scenarios, considering the evolution of their drivers (e.g. trade, tourism, climate change...)
  2. Animal density. How is this plausibly changing under alternative scenarios? Is AHW going to be affected?
  3. Research and development in AHW: how is it plausibly evolve under alternative scenarios?
  4. Evolution of diets: Is there any specific pattern for AHW related to alternative evolutions of diets?
  5. Species jumps. Are they more or less plausible under alternative scenarios, keeping into account their determinants?



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## Themes for the RefreSCAR activities (Marina Bagni, Romano Zilli, Sadhana Sharma)

- Risk Communication
- Regulatory Science – Focus on the example of AW
- Climate Change: mutual impacts with Animal Health and Welfare
- The difference between RefreSCAR Portfolio Analysis, and Study
- Possibility to cooperate with SCAR Fish SWG on Climate change
- Teagasc is already informed that 3 topics are to be submitted by the CWG



European Animal Health  
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## Joint meeting with the AW subgroup (Romano Zilli)

- Integration of animal welfare in the assessment of **sustainability of farming systems** (Linda Keeling, SLU)
- **Trends and Developments** (Hermann Schobesberger):
  1. **Funding** mechanisms and examples for “funding lottery”
  2. **HPAI** outbreak in Austria in 2024, lessons learnt
- Objectives of the initiative, background, discussion and perspectives
- Strategic and Operational Objectives of the CWG
- The ambition is to bring the two WGs closer together to facilitate a mutual understanding to better integrate the interdependency between health and welfare of animals
  - History of CWG **structure**
  - SFU is a permanent body with a horizontal scope, AW is mainly on specialistic expertise

## Feedback from Animal Welfare Subgroup

*Alain Boissy &  
Francesca Fusi*



### Animal Welfare subgroup Minutes of the Rome Meeting, 9 December 2024

20 participants:

Co-chair: Alain Boissy (Co-chair, France); Francesca Fusi (Co-chair, Italy)

In person: Giovanna de Matteis, Silvia Baralla and Davide Bochicchio (Italy); Noraly van Hemert (Netherlands); Anna Orchel and Dorota Godyń (Poland); Maana Singh Sidhu (Norway); Nikki Mackie (UK)

On-line: Marta Garcia (Spain); Gérard Grémaud (Switzerland); John Moriarty (Ireland); Marie-Hélène Pinard van der Laan (France); Jessica Ekström (Sweden); Remco Schrijver (NL); Yves Van deer Steede (EFSA); Vytautas Ribikauskas (LT); Paula de Vera (Copa Cogeca); Jon Tinsley (UK)

+ 3 Guest speakers:

Linda Keeling (SLU); Elena Nalon (Eurogroup for animals) and Adam Drosio (Copa Cogeca)



# Animal Welfare subgroup Minutes of the Rome Meeting, 9 December 2024



- 13.30: Welcome & presentation of new chairpersons
- 13.40: Round table on national animal welfare research activities and current priorities
- 14.10: Update on the EU Research developments in animal welfare, *Gérard Gremaud*
- 14.20: Update on EU Policy document on animal welfare, *Francesca Fusi*
- 14.30: Update on the animal welfare actions included in the internal programme of the EUP AH&W, *Alain Boissy*
- 14.45: Role of animal welfare science, the viewpoint of animal protection organisations  
Guest speaker: *Elena Nalon (Eurogroup for animals)*
- 15.05: Role of animal welfare science, the expectations of livestock industry  
Guest speaker: *Adam Drosio (Copa Cogeca)*
- 15.25: Common discussion from the 2 presentations: AW science's impacts on public policy and stakeholders
- 15.40: Any other business
- 15.45: Coffee Break
- 16.00-17:30: Joint meeting with the Strategy & Foresight Unit of the CWG AHW  
Integration of animal welfare in the assessment of sustainability of farming systems  
Guest speaker: *Linda Keeling (SLU)*

## Animal Welfare subgroup 09 December 2024      Renewal of the chairmanship



**Françoise Divanach** (Dutch ministry)  
and **Alain Boissy** (INRAE) with the helpful support of **Marta Garcia** (INIA)



**Francesca Fusi**, PhD  
Experimental Zoo-prophylactic  
Institute of Lombardy & Emilia-  
Romagna - Italy  
Department of production and control  
of biological material  
Italian National Reference Centre  
for Animal Welfare (CReNBA)



**Gérard Gremaud**, PhD  
Federal Food Safety and Veterinary  
Office (FSVO) - Switzerland  
Head of the research commission



**Anja Bregger**, PhD  
Federal Food Safety and Veterinary  
Office (FSVO) - Switzerland  
Deputy Head of the Department  
Knowledge Foundation

## National AW research activities: Round table

11 members had updated the round table document that synthesises the major new items and initiatives for their countries.

The projects concern a broad scope of species and subjects.

A trend of reducing national calls to support the participation to the projects of the EUPAHW (In-kind funding)

## Update of the EU research projects in animal welfare by Gérard Grémaud & Francesca Fusi

The main new EU projects concerning animal welfare are:

- **EUPAHW** with more details given later in the meeting;
  - **EFSA**
    - **EFSA/BIOHAW/2023/03** Animal care & welfare: dairy herd welfare indicators. **Risk-based model for dairy herd welfare: Field data collection** for the validation of indicators suggested by EFSA opinion (running)
    - **EUBA-EFSA-2024-BIOHAW-02** Animal Welfare: **heat stress in livestock during transport** (grant expired in July)
    - **EUBA-EFSA-2024-BIOHAW-01** Pathway to animal welfare quantitative risk assessment: **piloting a harmonised collection of welfare data in pigs** (grant just expired)
  - **LIFE Calls for proposals 2024** → Coordination and Support Action Grants (**CSA**) for the harmonization of data collection in monitoring AW using sensor technology
- A need to avoid overlappings in research due to the multiplicity of calls

# Update of the EU policy on animal welfare by Francesca Fusi

- 1 December 2024: **Olivér Várhelyi** is the **new EU Commissioner on Health and Animal Welfare** (2024-2029)
- From 8 December 2023 to 12 April 2024 **Public feedback was collected** on the EU new rules proposed on animal transport and the welfare of dogs and cats in trade (dec 2023).  
Results summarized in the Commission's feedback report
- From January 2024 NEW **EURCAW-AQUA** → European Reference Centre for the AW of **Aquatic Animals**: led by the University of Crete in Greece in partnership with the Biology Centre of the Czech Academy of Sciences, Institute of Parasitology in Czechia and the Universitat Autònoma de Barcelona in Spain.
- EU Commission asked **EFSA** to deliver by 2026 two scientific opinions on **the protection of horses and donkeys and their hybrids**, and a **technical report on the keeping of Equidae**.
- Following the successful European Citizens' Initiative "**Fur Free Europe**", the EU Commission asked **EFSA** to deliver by March 2025 a scientific opinion **on the protection of animals kept for fur production**
- **Perspectives:**  
need to revise the template of the 2 files due to the cumulation of the information for many years.

## EUP AH&W Update on the animal welfare internal projects by Alain Boissy

- **Round 1:** selection of 17 actions from the EUP SRIA including 4 actions dedicated to AW
  - OO1- Action 6. Knowledge platform on animal welfare - SOA9
  - OO4 - Action 1. Assessment of positive welfare; defining animal-based measures - SOA13
  - OO4 - Action 3. Improved assessment of consciousness and death - SOA14
  - OO6 - Action 1. Animal welfare & sustainability - SOA17
- The 17 SOAs started in January 2024. AWP2 + Report of year 1
- **Round 2:** selection of 17 actions from the EUP SRIA including 6 actions dedicated to AW
  - OO1-5 Networks for surveillance of livestock and aquaculture - welfare and health issues
  - OO1-7 Real time monitoring of animal welfare issues to support policy objectives
  - OO2-6 Indicators and alarm levels for an animal welfare surveillance system
  - OO4-4 ABM to measure negative animal welfare consequences
  - OO4-5 Digitally assisted monitoring technologies enabling precision management on AH and AW
  - OO6-2 Improve animal welfare while maintaining farm economic and environmental sustainability
- Currently: WP3 is transposing the selected actions into new JIPs outlines before being commented by the SAB and SHC
- The new SOAs will start in January 2026

## Impacts of AW science on public policy and stakeholders

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- 2 invited speakers:
  - Elena Nalon (Eurogroup for animals)  
Making an impact on European policy-making on animal welfare
  - Adam Drosio (Copa Cogeca)  
The Role of Animal Welfare Science in Informing Stakeholders



## Impacts of AW science on public policy and stakeholders

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### Elena Nalon (Eurogroup for animals)

- 102 NGOs in 26 EU countries
- 3 missions:
  - Representing civil society at EU level regarding the well-being of animals
  - Campaigning to drive change in favour of animals across Europe
  - Fostering cohesion, exchanging experiences and disseminating knowledge
- Expectations: AW research for policy-making
  - Concrete socio-economic data on impact (€, numbers of animals, positive externalities)
  - Benefits to the main cost bearer
  - Usable indicators for policy



## Impacts of AW science on public policy and stakeholders

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Adam Drosio (Copa Cogeca)

Address challenges through collaboration in:

- Policy
- Research
- Practice

Expectations:

- Involve farmers in research
  - New technologies (digital tools for precision livestock)
  - Continue dialogue to bridge ambition and implementation
  - Align policy ambitions with research and practical implementation (until to practical solutions)
  - Implement strategies/innovation step by step
  - Bridge research results with practical solutions
  - Foster public-private partnerships
  - Align research with policy objectives
  - Enhance funding opportunities for farmers
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## Impacts of AW science on public policy and stakeholders

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Discussion:

- A need to better taking into account the expectations of the various stakeholders in research foresight
  - Proposal to invite Eurogroup for animals to integrate the AW sub-group as Observer
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# Integration of animal welfare in the assessment of sustainability of farming systems

Guest speaker: Linda Keeling (SLU) :

Elaboration of an innovative methodology:

1. Mapping potential links between AW and each SDG
2. Scoring the strength of the link between AW and each SDG
3. Qualitative exploration of links between AW and the targets under SDGs

Results:

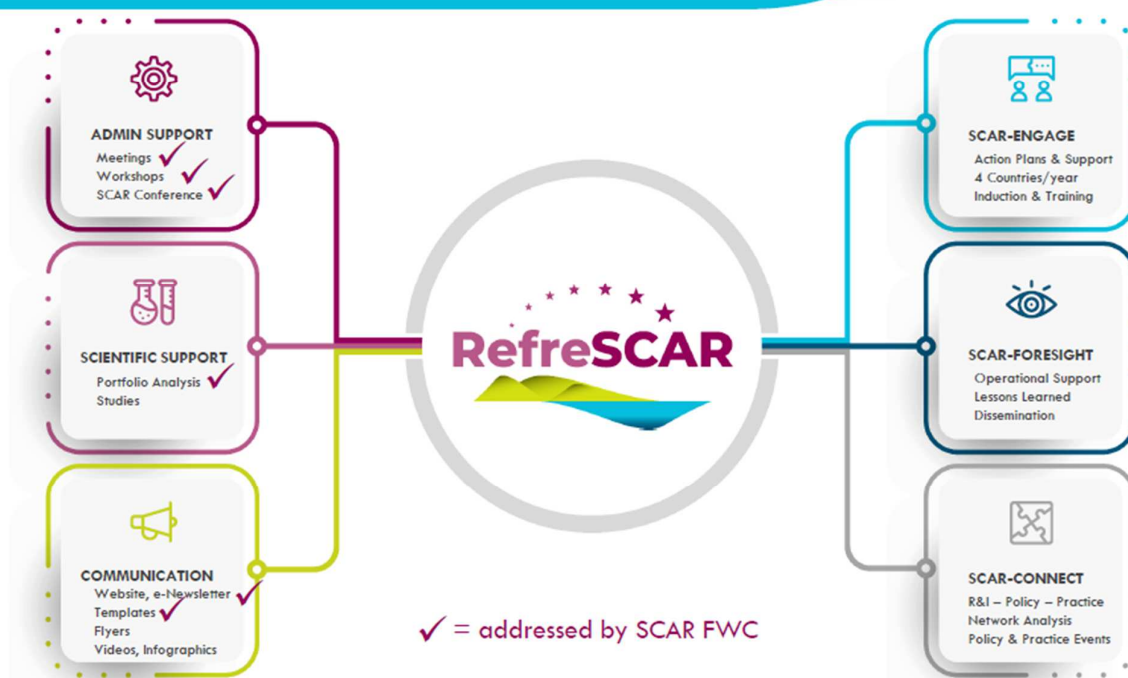
Although AW is not explicitly mentioned in the UN sustainable development goals (SDGs), working to achieving SDGs is compatible with working to improving animal welfare

Coffee break  
Until 12:00

## Research topics to discuss with RefreSCAR

*Marina Bagni, Hein Imberechts,  
Sadhana Sharma, Romano Zilli*

### OVERVIEW OF RefreSCAR ACTIONS



## Suggestions discussed in the MgtB

- Options to start with
  - Scientific support in the form of a Portfolio Analysis on **Risk Communication**: New needs for social science research to improve risk communication for Animal Health and Animal Welfare.
  - Scientific support in the form of a Portfolio Analysis on **Regulatory Science for Animal Welfare**: Connecting Policy Making to Research on Animal Welfare.
  - Scientific support regarding '**Climate change and its (expected) impact on AHW**'.
- Two proposals have been submitted: Risk communication and Regulatory science.
- Discussion in MgtB and subgroups.

Update on STAR-IDAZ  
(and website)

*Maddy Newman*

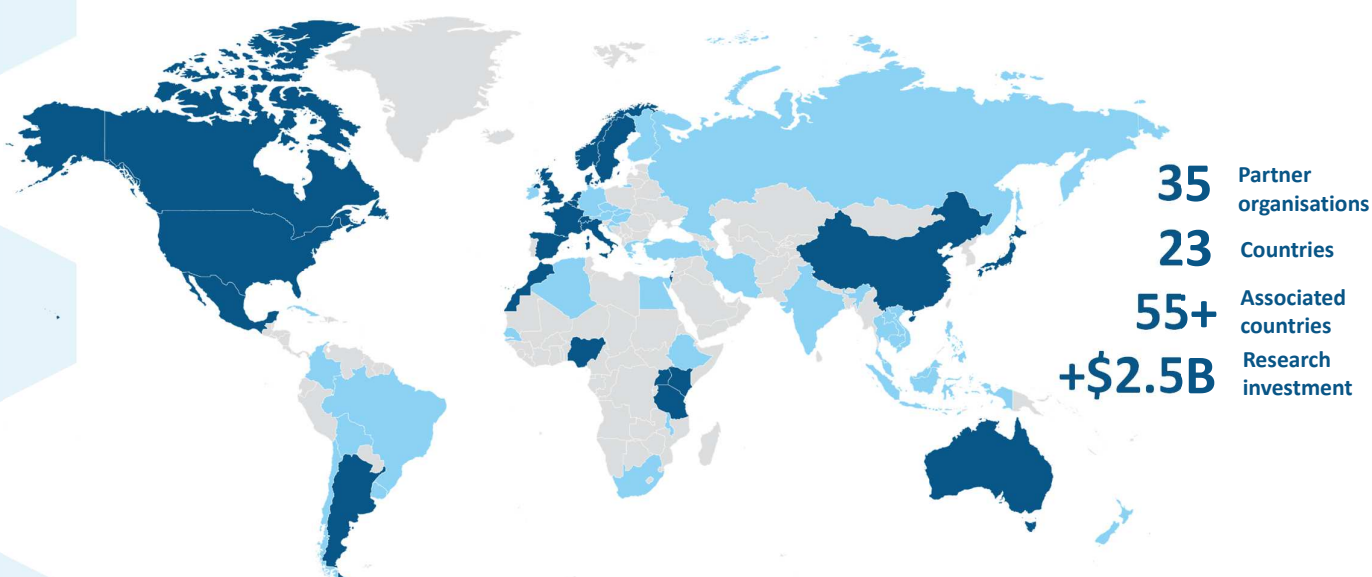


# STAR-IDAZ International Research Consortium on Animal Health: Update

Maddy Newman  
CWG AHW meeting, Rome, Italy  
10 December 2024



## STAR-IDAZ International Research Consortium for Animal Health



[www.star-idaz.net](http://www.star-idaz.net)

**Aim:** to improve coordination of research activities on the major infectious diseases of livestock and zoonoses to speed up the delivery of improved control methods.

# STAR-IDAZ International Research Consortium for Animal Health

Minimum level of investment in research on priorities over a five-year period required for IRC membership of **US\$ 10 million** (group funding commitment possible)



Agreed to delivery **targets**



Agreed to **coordinate**/align funding to **deliver** targets (members' own funding procedures, unless agreed otherwise; governance document & policy guidelines)



Agreed to **share** research results (as much as necessary, without jeopardising IPR)

**35** Partner organisations

**23** Countries

**55+** Associated countries

**+\$2.5B** Research investment

www.star-idaz.net



## IRC Executive Committee Partners (35)

### Africa & Middle East

- Israel - Kimron Veterinary Institute
- Kenya - Kenya Agricultural & Livestock Research Organisation (KALRO)
- Morocco - Office National for the Sanitary Safety of Food Products (ONSSA)
- Nigeria - Nigerian Animal Health Research Network led by National Veterinary Research Institute Vom
- Tanzania - Tanzania Veterinary Laboratory Agency (TVLA)
- Uganda - National Agricultural Research Organisation (NARO)

### Americas

- Argentina - Ministry of Science, Technology and Productive Innovation (MINTYT)
- Argentina - National Institute of Agriculture Technology (INTA)
- Canada - Canadian Food Inspection Agency (CFIA), Canada
- **Canada - International Development Research Centre (IDRC)**
- Mexico - National Advisory Council on Animal Health (CONASA) and the National, Mexico Autonomous University of Mexico (UNAM), Faculty of Veterinary Medicine and Zootechnics (FVMZ), Mexico
- USA - Agriculture Research Services, United States Department of Agriculture (USDA ARS)
- USA - National Institute of Food and Agriculture, United States Department of Agriculture (USDA NIFA)

### Asia & Australasia

- Australia - CSIRO Australian Centre for Disease Preparedness (ACDP)
- China - Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences (LVR, CAAS)
- Japan - National Institute of Animal Health, National Agriculture and Food Research Organisation (NIAH)

### Europe

- Belgium - Universiteit Gent (Ghent University), Université de Liège, the Federal Public Service Health, Food Chain Safety and Environment (unit Contractual Research) and Sciensano
- Denmark - Danish National Veterinary Institute (DTU Vet)
- EU - European Commission
- France - National Institute of Agricultural Research (INRAE)
- France - The French Agency for Food, Environmental and Occupational Health & Safety (ANSES)
- Italy - Ministry of Health
- Norway - Norwegian Veterinary Institute (NVI)
- Spain - National Institute for Agriculture and Food Research and Technology (INIA)
- Sweden - Swedish Veterinary Agency (SVA)
- Switzerland - Regional Consortium Switzerland
- The Netherlands - Ministry of Agriculture, Fisheries, Food Security and Nature (LNVN)
- UK - Biotechnology and Biological Science Research Council (BBSRC)
- UK - Department for the Environment, Food and Rural Affairs (Defra)

### International organisations & others

- World Organisation for Animal Health (WOAH)
- International Livestock Research Institute (ILRI)
- Bill and Melinda Gates Foundation (BMGF)
- Zoetis
- HealthforAnimals
- Diagnostics for Animals (Veterinary Diagnostics Manufacturers) (formerly EMVD)

www.star-idaz.net



# Executive Committee Meetings

19-20 June 2024, São Paulo, Brazil

31 October 2024, Virtual

| STAR-IDAZ IRC<br>Webinars<br>Rebouças Co                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Day 1: Wednesday 19 June<br>Sala Coral, Rebouças Convention Centre<br>9:00 Brasília Standard Time: Meeting 8<br>Housekeeping<br>Welcome and introductions<br>Welcome remarks: EMBRAPA and PROC<br>STAR-IDAZ IRC<br>a. Minutes of the last IRC Executive<br>meeting on 31 January 2024<br>b. Election of IRC Deputy Chairperson<br>c. New partners<br>Update on Scientific Committee<br>a. Membership<br>b. Meeting of June 2024, São Paulo<br>10:30 – 11:00 Coffee break<br>Update on STAR-IDAZ IRC activities<br>a. Regional Networks<br>b. Collaborative Working Group on A<br>Wellness Research<br>c. Discovery to Innovation in Animal<br>Communications, Vaccination and STI<br>a. New STAR-IDAZ Website<br>b. Update on Executive Comm<br>15 June 2024<br>12:30 – 13:30 Lunch and Group photo<br>Working Group Updates<br>a. Mycoplasma and CBPP<br>b. Vector biology and disease transmission<br>c. Vaccinology<br>d. One Health<br>e. Helminths<br>f. Foot-and-mouth Disease<br>g. Bovine Tuberculosis<br>h. Mastitis<br>i. Contraception | Infectious<br>15:00 – 15:30 Coffee break<br>15:30 – 16:00<br>African Swine Fever<br>AMR and Alternatives to Antibiotics<br>Aquatic Diseases<br>IRC partner funding mechanisms<br>USDA Agriculture Research Service<br>Rosario Motroni, USDA-ARS<br>National Institute of Agricultural Technology, Argentina<br>Mariano Pérez Figueroa, INTA<br>International Development Research Center, Canada<br>Najela Sallin, IDRC<br>Feed the Future: Innovation Lab for Veterinary Vaccines<br>Cynthia Bakken, Scientific Committee<br>Delivery<br>Any Other Business<br>Closing remarks for Day 1<br>Hong Yin, CAAS, IRC Chair<br>19:00 Dinner at A Figueria Rubaiyat |
| Day 2: Thursday 20 June [Closed meeting]<br>Sala Coral, Rebouças Convention Centre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 9:00 Meeting Start<br>Scientific Committee recommendations<br>Johannes Charlier<br>Coordinated research funding programmes and calls<br>European Partnership on Animal Health and Welfare<br>Hein Imberechts, Sciensano<br>Options for a STAR-IDAZ coordinated approach<br>Valeria Mariano<br>Breakout groups to discuss topics and areas of interest for<br>coordinated funding<br>IRC partners<br>11:30 – 11:50 Coffee break<br>Priority Discussion of topics for coordinated funding<br>IRC partners<br>Decisions on any remaining topics<br>Johannes Charlier<br>Closing remarks<br>Hong Yin, CAAS, IRC Chair<br>12:30 – 13:30 Lunch                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Goal of STAR-IDAZ IRC: To coordinate research at the international level to contribute to new and approved animal health<br>strategies for at least 10 priority diseases/infectious diseases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Objectives of the meeting:<br>To update on STAR-IDAZ IRC and SIRCAH activities<br>To discuss progress and further activities of the Working Groups and publication of research roadmaps<br>To discuss and agree an approach and type for coordinated funding programmes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| STAR-IDAZ IRC Executive Committee Meeting<br>Webinar 12<br>Thursday 31 October 2024<br>13:00 – 15:00 GMT |                                                 |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| AGENDA                                                                                                   |                                                 |
| 13:00 UTC Meeting Start                                                                                  |                                                 |
| 1 Welcome and introductions                                                                              | Maryam Muhammad, IRC<br>Chair                   |
| 2 Minutes of the Executive Committee meeting on 19-20 June 2024, São<br>Paulo, Brazil [FI]               | Maddy Newman, SIRCAH<br>Gareth Dicks, SIRCAH    |
| 3 STAR-IDAZ IRC Update                                                                                   |                                                 |
| a) Election of new IRC Deputy Chair [FI]                                                                 | Maddy Newman                                    |
| b) Admission of new IRC Partners [DM]                                                                    | Valeria Mariano, SIRCAH                         |
| 4 STAR-IDAZ Network [FI]                                                                                 |                                                 |
| a) Scientific Committee meeting, 16 October 2024                                                         | Wim van der Poel, Scientific<br>Committee Chair |
| b) Scientific Committee Membership                                                                       | Gareth Dicks                                    |
| c) Regional Networks                                                                                     | IRC Members                                     |
| 5 IRC Partners: Updates on programmes and opportunities for<br>collaborations [FI]                       | Valeria Mariano                                 |
| 6 UN General Assembly High-Level Meeting on AMR declaration [ST]                                         | Maddy Newman                                    |
| 7 Long-term sustainability for STAR-IDAZ IRC [ST]                                                        | Maddy Newman                                    |
| 8 STAR-IDAZ IRC Priority Topics [ST]                                                                     |                                                 |
| 9 Any Other Business and Next Meeting                                                                    |                                                 |
| 15:00 UTC Meeting End                                                                                    |                                                 |

Legend: Agenda items classified as: DM= decision making, ST= strategic discussion, FI= for information

**New Chair of STAR-IDAZ IRC:**  
**Dr Maryam Muhammad (NAHRN, NVRI, Nigeria)**

To discuss option of running exercise to update IRC Priority Topics

## Working Group updates

# Mastitis



**Workshop: Bridging Research Gaps in Bovine Mastitis**  
**14 August 2024, National Mastitis Council, Ghent, Belgium**

## Objectives:

- International engagement
- Establish working group
  - Identify key individuals for WG
  - Identify WG leaders
- Roadmap development
  - Discuss and prioritise focus for roadmaps
  - Plan development of vaccine roadmap?

Next steps: engage with  **DISCONTTOOLS** to carry out gap analysis, prioritisation and begin roadmap development

[www.star-idaz.net](http://www.star-idaz.net)

Scientific Committee Lead: Ruth Zadoks



**STAR-IDAZ**  
International Research Consortium on Animal Health

**STAR-IDAZ IRC Workshop: Bridging Research Gaps in Bovine Mastitis**  
Wednesday 14 August 2024, NMC Ghent  
(14:00 – 17:00 CET)  
AGENDA (3 hours)

**Session 1: Setting the scene (45 min)**  
Chair: Johannes Charlier, [Kreavet, Belgium](#)

- Introduction to STAR-IDAZ IRC and overview on the workshop objectives (Johannes Charlier, Kreavet / secretariat STAR-IDAZ IRC – 10 min)
- DISCONTTOOLS gap analysis on *S. aureus* and Streptococcal mastitis (Fernando Souza, Federal University of Alagoas/University of São Paulo, Brazil) – 15 min
- STAR-IDAZ roadmaps, how do they work? (Latifa Elhachimi, Kreavet / secretariat STAR-IDAZ IRC) – 10 min
- Questions and discussion – 10 min

**Session 2: Alternatives to antibiotics in mastitis management (45 min)**  
Chair: Vinicius da Silva Duarte, [University of Life Sciences, Norway](#)

- The role of synbiotics, prebiotics and probiotics in mastitis prevention (Vinicius da Silva Duarte, University of Life Sciences, Norway) – 15 min
- Phage therapy and phage-derived enzymes: potentials and challenges (Luis Melo, University of Minho, Portugal) – 15 min
- Group discussion: Key gaps and which need to be addressed first? – 15 min

**COFFEE BREAK – 30 min**

**Session 3: Mastitis vaccine development (45 min)**  
Chair: Orla Keane, [Teagasc, Ireland](#)

- Mastitis vaccines – harnessing the potential of recent advances in antigen discovery and delivery (Orla Keane, Teagasc, Ireland) – 10 min
- Charting new paths: identifying critical gaps in bovine mastitis research and vaccine design (Fernando Nogueira Souza, Federal University of Alagoas/University of São Paulo, Brazil)
- Group discussion: Key gaps and which need to be addressed first? – 15 min

**Session 4: Conclusions (15 min)**  
Chair: Ruth Zadoks, [University of Sydney, Australia](#)

- What have we learned? What are the next steps?

Goal of STAR-IDAZ IRC:  
To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.



# Coronaviruses

## Research Roadmap Workshops, October 2024

**Aim:** To identify and prioritise research needs to develop vaccines, diagnostic tests, and control strategies for coronaviruses

## Three workshops:

- Development of candidate vaccines (2 October)
- Development of Diagnostics (8 October)
- Development of Control strategies (10 October)

**Topics discussed included:** Research questions, challenges, solutions, dependencies, and state of the art.

Next steps: workshop report published and roadmap finalisation.

Validation by Scientific Committee and Executive Committee, before publication

[www.star-idaz.net](http://www.star-idaz.net)

Scientific Committee Lead: Linfa Wang and Wim van der Poel



**STAR-IDAZ**  
International Research Consortium on Animal Health

**STAR-IDAZ workshop on coronavirus research roadmap – Control Strategies**  
Thursday 10 October 2024  
13:00 – 15:00 CET – [Different Time Zone here](#)

Join Zoom Meeting: <https://join.zoom.us/j/96599945492>

**AGENDA**

| Time        | Topic                                                  |
|-------------|--------------------------------------------------------|
| 13:00-13:20 | Welcome and introduction on STAR-IDAZ IRC              |
| 13:20-13:40 | Focused discussion on research roadmap part 1          |
| 13:40-13:50 | Priority research needs part 1: voting by online tools |
| 13:50-14:10 | Focused discussion on research roadmap part 2          |
| 14:10-14:20 | Priority research needs part 2: voting by online tools |
| 14:20-14:30 | Break                                                  |
| 14:30-14:50 | Focused discussion on research roadmap part 3          |
| 14:50-15:00 | Priority research needs part 3: voting by online tools |
| 15:00-15:20 | Focused discussion on research roadmap part 4          |
| 15:20-15:40 | Priority research needs part 4: voting by online tools |
| 15:40-15:50 | Wrap up and ongoing research projects                  |
| 15:50-16:00 | Conclusion and next steps                              |

Goal of STAR-IDAZ IRC:  
To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.

Objectives of the meeting:  
To identify and prioritise research needs for coronavirus control strategies





## STAR-IDAZ IRC Workshop: Shaping the Future of Livestock Tick Vaccines

Monday 17 June 2024

(9 am – 4 pm)

Sala Coral, Rebouças Convention Centre, São Paulo, Brazil

### Introduction

Welcome to the STAR-IDAZ IRC scientific workshop on Tick Vaccines! The aim is to share experiences on livestock tick control and share recent research results. Specific focus will be given to the need for standardisation of tick vaccine trials, experimental models and integrated control through combination with other approaches including genetic and acaricide approaches. The workshop is targeted at researchers, tick control decision makers, research funders and industry to jointly unravel the complexities of this critical field and work towards sustainable solutions. There will be plenty room for discussion and the aim is to develop a scientific target product profile (S-TPP) for the ultimate cattle tick vaccine and discuss how we can standardize tick vaccine trial. A draft S-TPP will be shared after the workshop with participants to comment and finally publication.

### AGENDA

Morning Session – Chair: Isabel Kinney Ferreira de Miranda Santos (University of São Paulo)

8:45 - 9:00 Working together for tick vaccines

- Welcome address – Isabel Kinney Ferreira de Miranda Santos (University of São Paulo) (10 min)
- Introduction to STAR-IDAZ IRC – Latifa Elhachimi (SIRCAH / Kreavet) (5 min)

9:00 - 9:45 The state of tick vaccine research – Isabel Kinney Ferreira de Miranda Santos (University of São Paulo)

9:45 - 10:15 STAR-IDAZ IRC roadmaps on vector transmission control – Bruno Goddeeris (UGent)

[www.star-idaz.net](http://www.star-idaz.net)



### BREAK

10:45 - 12:00 Challenges for vaccine standardisation

- Challenges in vaccine efficacy and trial design – Halid Kirunda (the National Agricultural Research Organisation (NARO)) (15 min)
- One-host Tick Challenge Models – Maxime Modder (Clinglobal) (15 min)
- Industry perspective: Bm86 antigen – Suman Mahan (Zoetis) (15 min)
- WOAH minimum requirements for vaccine: WOAH Collaborating Centre for Vaccine Evaluation in the Americas – Jim Roth, pre-recorded presentation (15 min)
- Discussion

### LUNCH + POSTER SESSION

Afternoon session – Chair: Vish Nene (ILRI, WSU)

13:30 - 14:30 Integrated control

- Genetic approaches: The Oxitec Friendly™ Cattle Tick Program - Mattia Poletto (Oxitec Ltd.) (15min)
- Acaricides vs. vaccines – industry perspective - Paul Selzer (Boehringer Ingelheim) (15 min)
- The evolution of tick vaccinology - Jose De La Fuente, (IREC, pre-recorded presentation (15 min)
- Discussion

### BREAK + POSTERS

15:00 - 15:50 Discussion: making a scientific target product profile for cattle tick vaccine

15:50 - 16:00 Closing Remarks – Isabel Kinney Ferreira de Miranda Santos (University of São Paulo)



View roadmap

vector

Scientific Committee Lead: Bruno Goddeeris, Cynthia Baldwin, Isabel Kinney Miranda Santos



## Aquaculture: Fish diseases

STAR-IDAZ Working Group around Aquaculture to focus on Fish Diseases

### Research gap analysis:

#### 1. Survey for global consultation

- Aquatic Animal Health experts
- Provisional launch date Jan 2025

#### 2. Consensus workshop

- 20 and 21 February 2025, Paris
- ~30 global experts
- World café discussions

Proposed sessions focused on 1. Control strategies, 2. Diagnostics, and 3. Vaccines and Therapeutics

[www.star-idaz.net](http://www.star-idaz.net)

TABLE 4 – ACTIVITIES TO SUPPORT THE ACHIEVEMENT OF OBJECTIVE 4:

| Activity                                                             | Description                                                                                                                                     |                                                             |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 4.1 Further develop international partnerships                       | Develop work plans for collaborative, outdoor activities that can be implemented with inter partner organisations on shared priorities          |                                                             |
| 4.2 Develop the OIE's aquatic animal health and welfare capabilities | Develop a plan to build aquatic animal health capabilities throughout the OIE's functional areas (Headquarters and Regional offices)            | Existing OIE resources / further investment may be required |
| 4.3 Engage OIE scientific networks                                   | Consider approaches to more fully engage and utilise OIE scientific networks of diagnostic and scientific support at regional and global levels | Existing OIE resources / further investment may be required |
| 4.4 Establish forums for the OIE Community                           | Explore opportunities to bring the OIE Community together to share ideas for strengthening global management of aquatic animal health           | Investment required                                         |
| 4.5 Identify the highest-priority research areas                     | Provide strategic prioritisation of research areas of importance to the OIE and the implementation of OIE standards                             | Investment required                                         |



Scientific Committee Lead: Ruth Zadoks





# One Health

Focused on **optimising funding mechanisms** to embed the One Health approach to research funding

Report with **initial recommendations for better alignment** between funders strategies and the priorities of One Health research community

- Presented at World One Health Congress, September

## Next steps:

1. **Publication:** Why One Health is important for animal health
2. **Workshop** (March 2025)
  - Bring together the OH research community (through WG) and selected research funders and programme owners
  - Identify current obstacles to OH research and actions to better align needs of research community and priorities of funding organisations

[www.star-idaz.net](http://www.star-idaz.net)

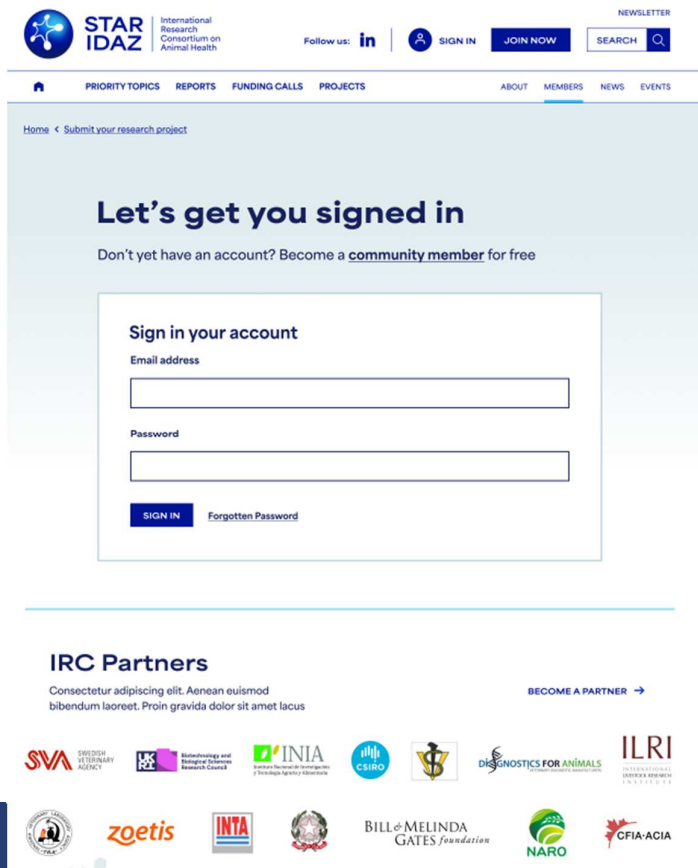


## CWG AHW Webpage

## Wireframe 1: Member Login and Regional Network Pages

- **Unique Member Logins:** Each CWG member will have their own personalised login for secure access.
- **Regional Network Pages:** The members' section will feature regional network pages, offering a consistent layout for SCAR-CWG, AMERN, Asia & Australasia, and Americas regions

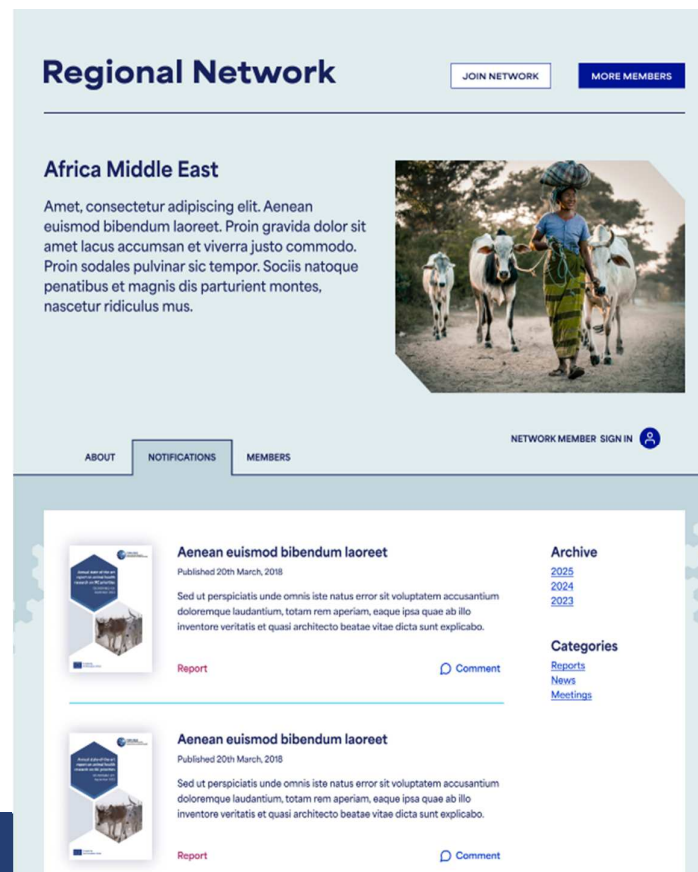
www.star-idaz.net



## Wireframe 2: Main Page Features

- **Centralised Information:** The main page will provide access to key information, a full list of members, and a notifications hub.
- **Document Notifications:** A dedicated notifications page will store documents and alert members when new content is added.
- **Customisable Categories:** Documents will be organised into customizable categories for ease of navigation.
- **Member-Only Content:** All documents will be accessible to members only, with an option to select specific files for the public-facing page.

www.star-idaz.net



### Wireframe 3: Document Homepage

- **Document Summaries:** Each document will have a dedicated homepage with a concise summary and the option to download directly from the website.
- **Interactive Discussions:** A comments section at the bottom of the page will allow members to discuss and provide feedback on documents.

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by: Forename Surname | 13th September, 2024

10 Comments

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DOWNLOAD



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13th September, 2024

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REPLY



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13th September, 2024

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### Wireframe 4: Member Directory

- **Member Listings:** A complete list of network members will be available.
- **Clickable Profiles:** Each member's name will link to an individual profile page with detailed information.

#### Regional Network

JOIN NETWORKMORE MEMBERS

##### Africa Middle East

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ABOUTNOTIFICATIONSMEMBERSNETWORK MEMBER SIGN IN



**Dr Alejandra Capozzo**  
Applied Veterinary Immunology  
CONCEIT  
[African Swine Fever](#) [Emerging issues](#)  
Canada



**Dr Alejandra Capozzo**  
Applied Veterinary Immunology  
CONCEIT  
[African Swine Fever](#) [Emerging issues](#)  
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Applied Veterinary Immunology  
CONCEIT  
[African Swine Fever](#) [Emerging issues](#)  
Canada

STAR-IDAZ  
International Research  
Consortium on Animal Health



## Wireframe 5: Member Profiles

- **Personalised Profiles:** Members can showcase their areas of interest and key information to help facilitate meaningful networking opportunities.

www.star-idaz.net

### Member

MORE MEMBERS

#### Dr Adam Millington

Member since: Jul 1, 2021

##### Job Title/Description

Lead Animal Health Researcher

##### Profile

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##### Organisation / Institution

University of Naples

IRC PARTNER



VISIT LINKEDIN PROFILE

##### Website

thisismodular.co.uk

##### Working Group Member

African swine fever

##### Regional Network

Africa Middle East

##### Committee Member

Scientific Committee

#### Priority Topics and areas of interest

##### Relevant animals

Pigs

##### Diseases and infections

African swine fever

##### Practices and diagnostics

Animal genomics/genetics for animal health

www.star-idaz.net

## Wireframe 6: Project and Contribution Encouragement

- **Project Listings:** Members are encouraged to share their associated projects in our centralized projects database.
- **News and Opportunities:** Please notify STAR IDAZ of any relevant funding calls, news, or events so we can share them on our platform.
- **Research Submission:** Easily submit your research projects to contribute to the network's collective knowledge.

www.star-idaz.net

### Projects

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#### Tell us about your project

Working on a research project that aligns with the highlighted gaps and challenges?

SUBMIT PROJECT

##### DISEASES & INFECTIONS

- ☒ Aquatic Diseases (3)
- ☐ Porcine Respiratory Disease Complex (2)
- ☐ Porcine Reproductive & Respiratory Syndrome (2)
- ☐ Mycoplasmas including CBPP/CCPP (2)
- ☐ Mastitis (3)
- ☐ Helminths (including anthelmintic resistance) (2)
- ☐ Influenza (3)
- ☐ Foot and Mouth Disease (3)
- ☐ Coronaviruses (3)
- ☐ Brucellosis (3)
- ☐ Bovine Tuberculosis (bTB) (3)
- ☐ African Swine Fever (3)

##### CROSS-CUTTING TOPICS

- ☒ Animal Genomics/ Genetics for Animal Health (1)
- ☐ Porcine Respiratory Disease Complex (2)
- ☐ Vaccinology (tools and technologies) (2)
- ☐ One Health (including food-borne pathogens) (1)
- ☐ Foresight (1)
- ☐ Emerging Issues (1)
- ☐ Diagnostics (tools and technologies) (1)

Results: 20 Projects

Sort by Newest to oldest

#### A Cross-Disciplinary Alliance to identify, predict and prepare for Emerging Vector-Borne Diseases Project (PREPARE)

Planned Completion date 30/03/2024

##### Principal Investigator(s)

Laura Rinaldi  
Anna-Sotie Stensgaard

##### Funder(s):

Horizon 2020  
European Union Funding  
for Research & Innovation

##### Participating Country(s):

Denmark South Africa Italy Uganda Tanzania

#### From proteogenomic host response signatures of persistent foot-and-mouth disease virus (FMDV) infection to diagnostic markers and therapeutic control

Planned Completion date 30/03/2024

##### Funder(s):

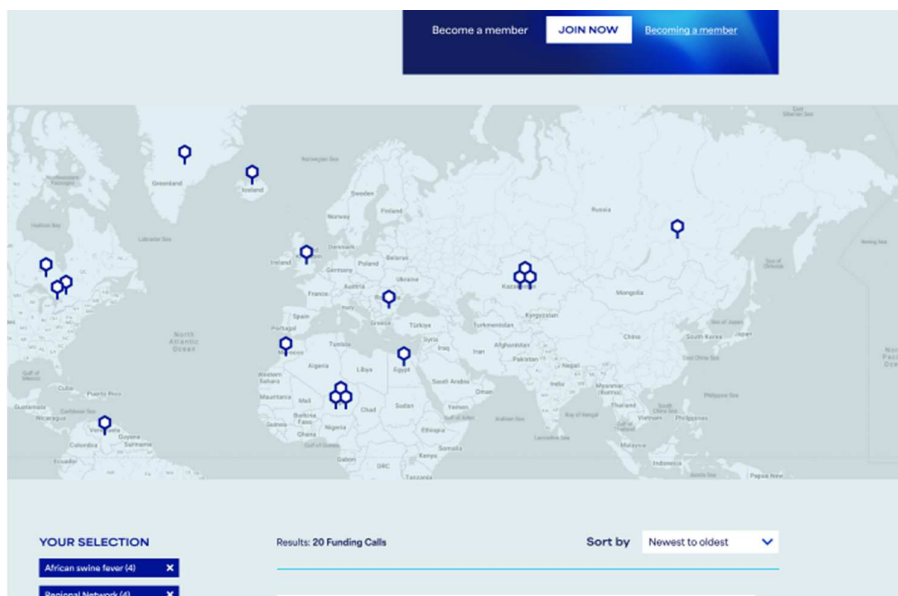
icrad

##### Participating Country(s):

France Belgium Turkey

## Wireframe 7: Global Network Overview and Feedback

- **Building Global Impact:** These tools aim to provide a comprehensive view of the STAR IDAZ network's representatives and their global contributions.



**Development Timeline:** The wireframes are entering development and are set to launch in January 2025

**Seeking 5 volunteers to test the system**

[www.star-idaz.net](http://www.star-idaz.net)



For more information on STAR-IDAZ IRC, how to become an IRC partner or join the Regional Networks:



[www.star-idaz.net](http://www.star-idaz.net)



[www.linkedin.com/company/star-idaz-irc/](https://www.linkedin.com/company/star-idaz-irc/)



[twitter.com/StarIdaz](https://twitter.com/StarIdaz)

Contact STAR-IDAZ IRC Secretariat (SIRCAH):



**Madeline Newman** ([Madeline.Newman@defra.gov.uk](mailto:Madeline.Newman@defra.gov.uk))



**Johannes Charlier** ([j.charlier@animalhealtheurope.eu](mailto:j.charlier@animalhealtheurope.eu))



**Gareth Dicks** ([g.dicks@cabi.org](mailto:g.dicks@cabi.org))



**Georgina Grell** ([g.grell@cabi.org](mailto:g.grell@cabi.org))



**Valeria Mariano** ([v.mariano@woah.org](mailto:v.mariano@woah.org))



**Latifa Elhachimi** ([latifa@kreavet.com](mailto:latifa@kreavet.com))

# Thank you for your attention

[www.star-idaz.net](http://www.star-idaz.net)





**STAR  
IDAZ**

International  
Research  
Consortium on  
Animal Health

Thank you for your attention

[www.star-idaz.net/](http://www.star-idaz.net/)

# ICRAD Update

International Coordination of Research on  
Infectious Animal Diseases



## Membership

- Twenty-nine consortium members, across nineteen countries



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 862605

[www.icrad.eu](http://www.icrad.eu)



## ICRAD Aims



- Develop novel and improved instruments to address and control infectious diseases.
- Increase preparedness and response to emerging and endemic livestock threats.
- Reduce antimicrobial and antiparasitic use in livestock, minimizing resistance.
- Enhance animal welfare through better disease prevention and management.
- Contribute to food security and sustainable livestock systems by reducing disease burden and impact on international trade.

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## ICRAD Key Dates So Far



Launch of Call  
1 – January  
2020

Launch of Call  
2 – October  
2021

Launch of Call  
3 – April 2023

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## ICRAD 1<sup>st</sup> Call

- Funded 19 collaborative research projects from 20 countries.
- Focus on improving animal health and welfare, addressing key epidemic and emerging threats like African Swine Fever and Animal Influenza.
- Received 67 pre-proposals, invited 34 to full proposal, funded 19.
- Projects received €20 million in national contributions and European Commission top-up.
- Project abstracts and editorial published on GMPC Thesis & Opinions Platform.

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## ICRAD 2<sup>nd</sup> Call - Summary

- Launched in October 2021, titled “One Health Approach to Zoonoses Research and Innovation”.
- Funded 10 international collaborative research projects from 40 proposals.
- Utilized €12.5 million in national contributions.
- Involved 66 partners from 20 countries, including universities, public research organizations, and industry.

60

## ICRAD 3<sup>rd</sup> Call - Proposals

- Aim: Increase understanding and preparedness for climate change effects and anthelmintic resistance.
- Received 11 pre-proposals, invited 9 to full proposal stage.
- Focus areas: 7 on anthelmintic resistance, 1 on climate change impacts, 1 on diagnostics development.
- Approximately €5.5 million in national contributions available for 4 successful projects.

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## 3<sup>rd</sup> ICRAD call – Successful Projects

- **METABOL-AR:** Metabolomics application for detecting anthelmintic resistance in goats.
- **HARTEMIS:** Evolution mechanisms and innovative solutions for *Haemonchus* anthelmintic resistance.
- **ANTHELMOGRAM:** Next-generation decision-making tool for anthelmintic resistance management in Europe.
- **MAP-TCBZR:** Mapping resistance loci and mechanisms of triclabendazole resistance in European *Fasciola hepatica* isolates.



# ICRAD Final Showcase Meeting

- **Date:** 26th March
- **Location:** Paris (WOAH Offices) or Brussels
- **Purpose:** Showcase and celebrate the achievements of the ICRAD ERA-NET Co-fund
- **Audience:** Animal health stakeholders, ICRAD members, scientific community
- **Scientific Sessions:**
  - PPPs (public private partnerships)
  - Vaccines and Diagnostics
  - Responding to emergencies
  - AH and climate change/food security/welfare
- **Other Sessions:**
  - ICRAD's influence on animal health R&D
  - Interdisciplinary Insights
  - Future of animal health R&D in Europe



## ICRAD Future Activities

- 3<sup>rd</sup> Call Monitoring to be conducted in a 'light-touch' manner with the coordinator FO distributing reports to relevant FOs.
- Plan to submit an editorial for the 2nd call to GMPC Journal in early 2025.
- Supporting the EU Partnership for Animal Health & Welfare as needed.



# Thank you for listening...

Thom Erritt – [thomas.erritt@defra.gov.uk](mailto:thomas.erritt@defra.gov.uk)



Department  
for Environment  
Food & Rural Affairs

65

Official welcome by the  
Italian Authorities

## Update on DISCONTTOOLS

*Johannes Charlier*



Research gaps for improving  
infectious disease control  
in animals

## DISCONTTOOLS update

Johannes Charlier, DISCONTTOOLS project manager



**European Animal Health  
& Welfare Research**  
COLLABORATIVE WORKING GROUP

CWG AHW meeting, Rome, 10 December 2024

## What is DISCONTOLS?

- 1) Database – 57 infectious diseases of animals
- 2) Gap-analysis – diagnostics, therapeutics, vaccines
- 3) Prioritisation model

Managed by European stakeholders – Open-access

## For whom?



*Research policy makers*

Development of research  
agendas



*Researchers*

Writing and evaluating  
research proposals



*Students*

Thesis, written works

# Diseases

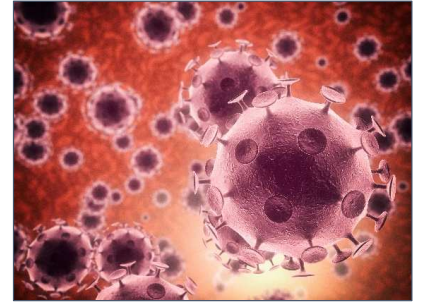
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Endemic



Epidemic



71

## Previous update

- Helminths
- Coccidiosis
- Emerging diseases (EHD, WNV, BTV)
- CSF



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## Disease updates: mammalian tuberculosis

- A better understanding of **transmission pathways and risk factors** for mammalian TB transmission is required and there is also a need to improve **diagnostics and vaccine options**.
- There are knowledge gaps around **the role of the environment** in mammalian TB transmission and in many countries **the role of wildlife**, implicated in the transmission of mammalian TB, is not known.
- The **role of environmental persistence** of *M. bovis* needs further investigation to assess its role in the epidemiology and transmission of mammalian TB to cattle.
- **Genetic resistance**, the possibility, and implications, of latency of *M. bovis* in cattle and the host-pathogen relation in cattle and wildlife species are areas that could be targeted by researchers.
- Link established with [STAR-IDAZ roadmaps on bTB](#)

73

## Disease updates: Brucellosis

Ignacio Moriyón, Universidad de Navarra et al.

- **Separate Gap analysis** for: cattle, small ruminants, *B. ovis*, pigs, other domestic species, marine and terrestrial wildlife & dogs
- A better understanding of the virulence and mechanisms of pathogenicity to design better vaccines and treatments.
- **New *Brucella* species**: importance, epidemiology, virulence, antigenic structure.
- Studies on human incidence and clinical presentations according to *Brucella* species
- More efficacious/cheaper **antibiotics** and further trials on monotherapy with doxycycline and on streptomycin replacement by gentamycin.

74

# Disease updates: CCHF

A Brun, CISA-INIA-CSIC et al.

- Over the last years, CCHF outbreaks have become **more frequent** in several European countries and neighbouring areas, and an increase in the number of large outbreaks caused by CCHFV has been observed.
- The knowledge on CCHF **pathogenesis and immune response** is limited. The research activities concerning CCHF disease have been restricted to very few institutes/laboratories
- Future research on the virus-vector interaction, the CCHFV dynamics in reservoirs and vectors, the role of birds and wildlife.
- **One-Health framework.**

75

## Other diseases in progress

- Mastitis
- Trypanosomiasis
- Avian Influenza
- Salmon Infectious Anemia
- ....

76



# Website

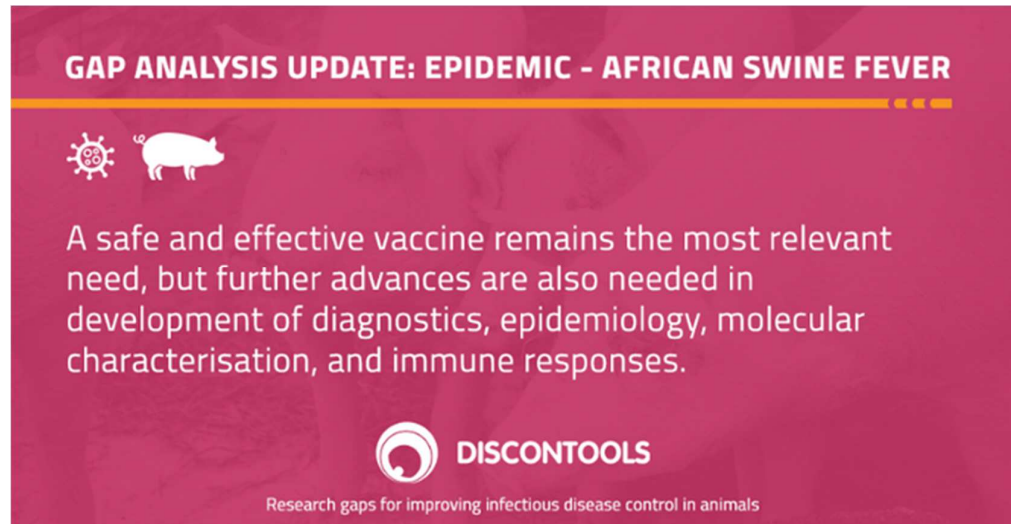
|                                                                                                                                               |   |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---|-------|
| <b>Coronaviruses in pigs</b><br>Epizootic diseases                                                                                            | ✓ | 15078 |
| <b>Coronaviruses in poultry</b><br>Epizootic diseases                                                                                         | ✓ | 14980 |
| <b>Q-Fever</b><br>Zoonotic diseases                                                                                                           | ✓ | 14374 |
| <b>Contagious Bovine Pleuropneumonia</b><br>Epizootic diseases                                                                                | ✓ | 5973  |
| <b>Toxoplasmosis</b><br>Zoonotic diseases                                                                                                     | ✓ | 4289  |
| <b>Nematodes</b><br>Food producing animal complexes                                                                                           | ✓ | 3197  |
| <b>E. coli</b><br>Zoonotic diseases                                                                                                           | ✓ | 3015  |
| <b>West Nile Virus</b><br>Zoonotic diseases                                                                                                   | ✓ | 2747  |
|  <b>Epizootic haemorrhagic disease</b><br>Epizootic diseases | ✓ | 2154  |
| <b>Avian chlamydiosis (C. psittaci)</b><br>Zoonotic diseases                                                                                  | ✓ | 1904  |

## Disease updates: mammalian tuberculosis

- A better understanding of **transmission pathways and risk factors** for mammalian TB is required and there is also a need to improve **diagnostics and vaccine options**.
- There are knowledge gaps around **the role of the environment** in mammalian TB transmission and in many countries **the role of wildlife**, implicated in the transmission of mammalian TB, is not known.
- The **role of environmental persistence** of *M. bovis* needs further investigation to assess its role in the epidemiology and transmission of mammalian TB to cattle.
- **Genetic resistance**, the possibility, and implications, of latency of *M. bovis* in cattle and the host-pathogen relation in cattle and wildlife species are areas that could be targeted by researchers.
- Link established with [STAR-IDAZ roadmaps on bTB](#)

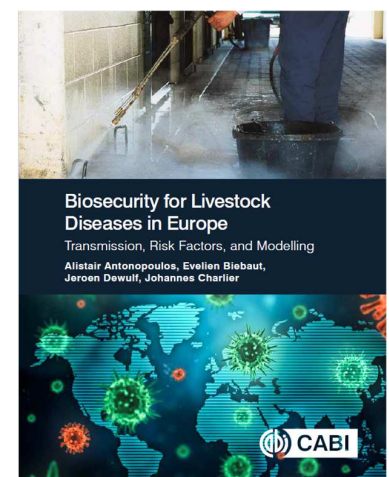
# Social media (@AnimalhealthEurope)

#DISCONTTOOLS



## Dissemination

- Lectures:
  - Ghent University, MSD, Saint Nicholas University,
- Collaborations:
  - EAEVE, IVSA, EBVS
- Publications
  - Biosecurity for Livestock Diseases in Europe (Release 2025)
  - Diagnostic gap analysis through combining public databases (Res Vet Sci, submitted).



# We need your support!

| Country         | Funder of DISCONTTOOLS                                                                                       |
|-----------------|--------------------------------------------------------------------------------------------------------------|
| Austria         | University of Veterinary Medicine Vienna                                                                     |
| Belgium         | Federal Public Service Health, Food Chain Safety and Environment                                             |
| Greece          | Hellenic Agricultural Organization (Ellinikos Georgikos Organismos) - DIMITRA, Veterinary Research Institute |
| Italy           | Ministero della Salute                                                                                       |
| The Netherlands | Ministry of Agriculture, Nature and Food Quality                                                             |
| Spain           | Agencia Estatal Consejo Superior de Investigaciones Científicas (INIA-CSIC)                                  |
| Switzerland     | Federal Department of Home Affairs, Federal Food Safety and Veterinary Office, Division of Innovation        |
| UK              | Department for the Environment, Food and Rural Affairs (DEFRA)                                               |
| UK              | Biotechnology and Biological Sciences Research Council (UKRI-BBSRC)                                          |

Research gaps for improving  
infectious disease control  
in animals

## Thank you!

VISIT:  
[www.discontools.eu](http://www.discontools.eu)



Lunch  
until 14:15

European Partnership  
Animal Health & Welfare

*Nathalie Vanderheijden*



European Partnership on  
Animal Health and Welfare

## European Partnership on Animal Health & Welfare: progress and upcoming Horizon Europe programme

Nathalie Vanderheijden, Véronique Rebholtz, coordination, Ghent University

*SCAR Animal Health & Welfare Research CWG - Plenary meeting*

*10 December 2024, Ministero della Salute, Headquarter, Rome*



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European Partnership on  
Animal Health and Welfare

### Vision of the EUP AH&W

‘To provide society with a **sustainable livestock production sector** where **infectious animal diseases** are prevented and controlled with appropriate means, **antimicrobials are used prudently**, and **animal welfare** is respected in every phase of the production process, until death.’

The EUP covers animals:

- primarily destined for food production
- terrestrial or aquatic
- and all production systems (from conventional to organic)

Due to the close link between animal health, animal welfare and human well-being, the **One Health-One Welfare perspective** will take a prominent place in the EUP AH&W.

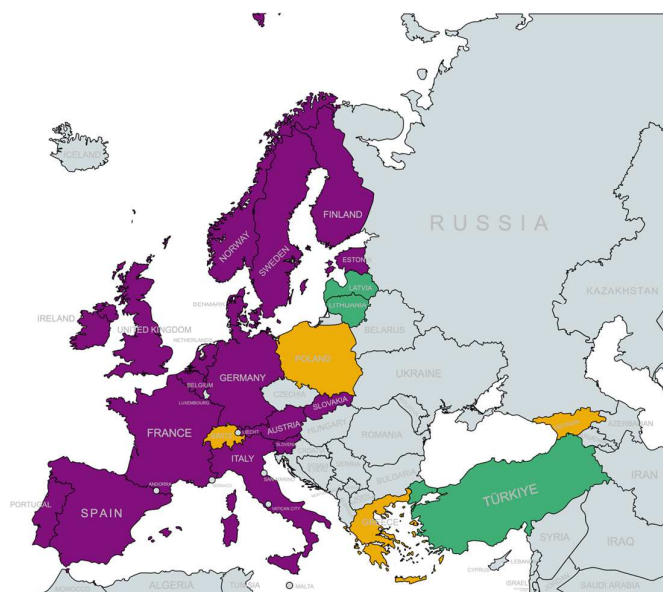


# European Partnership on Animal Health & Welfare

- 90 partners
- 56 Research Performing Organizations (RPO)
- 30 Funding Organizations (FO)
- Some other entities EFSA, EMA, Authorities
- From 19 EU and 5 non-EU countries
- Duration 7 years (+3)
- 50% Co-funded Partnership
- Expected total budget: 360 MEUR
- Coordinated by



Type of partners  
■ Only RPO  
■ FO/AUTH and RPO  
■ Only FO/AUTH



Project 101136346 – EUPAHW - HORIZON-CL6-2023-FARM2FORK-01



Co-funded by  
the European Union



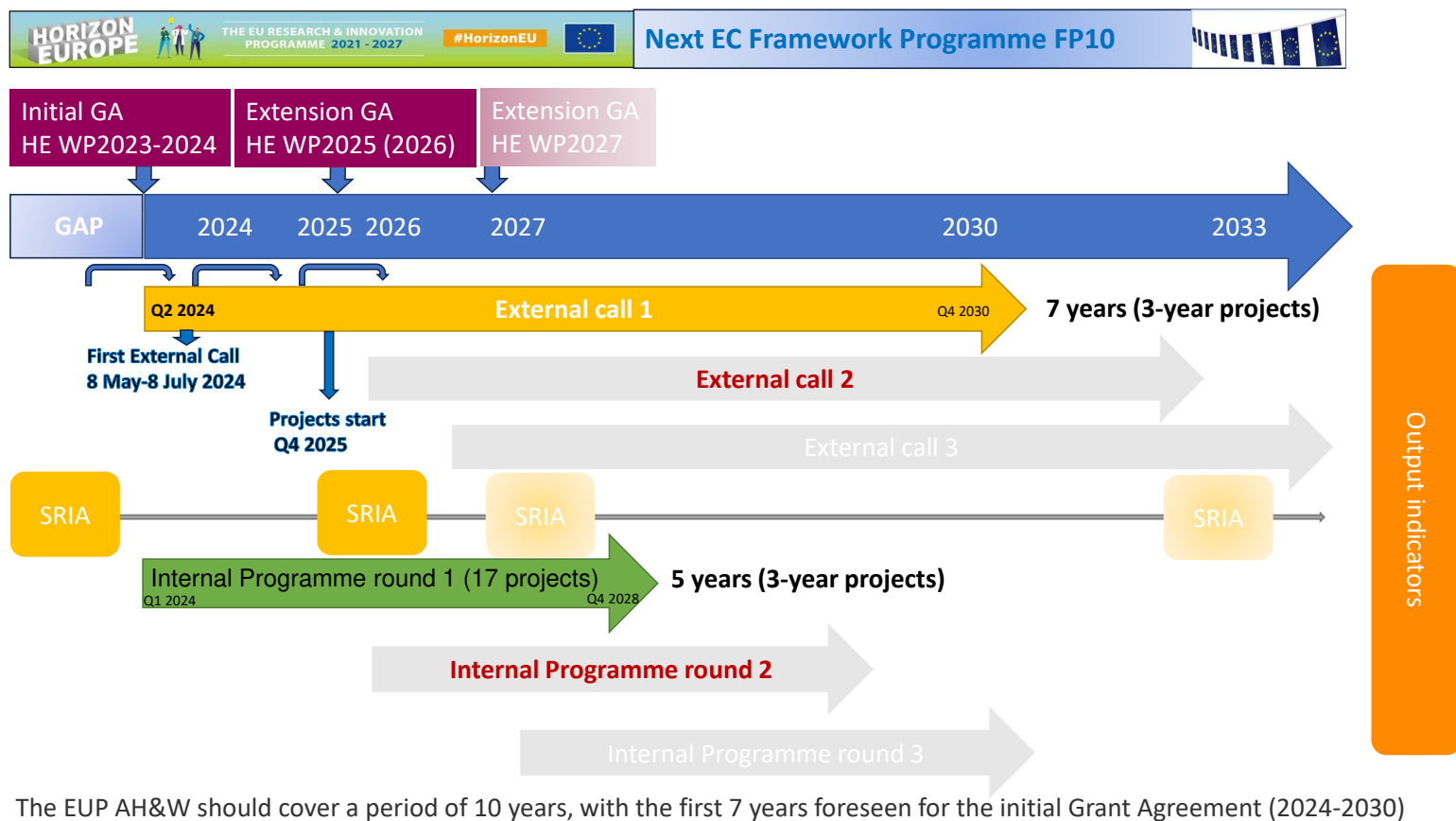
## Main characteristics of the EUP AH&W

- Activities:
  - **Internal programme** (integrative & research activities) performed by member-RPO.
  - **External research calls** performed with (mostly) non-member RPO and possibly, industry.
- **Member-RPO** bring **in-kind** contribution.  
→ internal projects only partially (48%) funded.
- **FO** bring **cash** for external calls: financial support to third parties (FSTP)  
→ external projects 100% funded.
- **EU Co-fund Action:** 50% EC-funding overall (cash + in-kind from beneficiaries).

Non-member RPO will receive funding from their national/regional FO (FSTP) or use own resources.







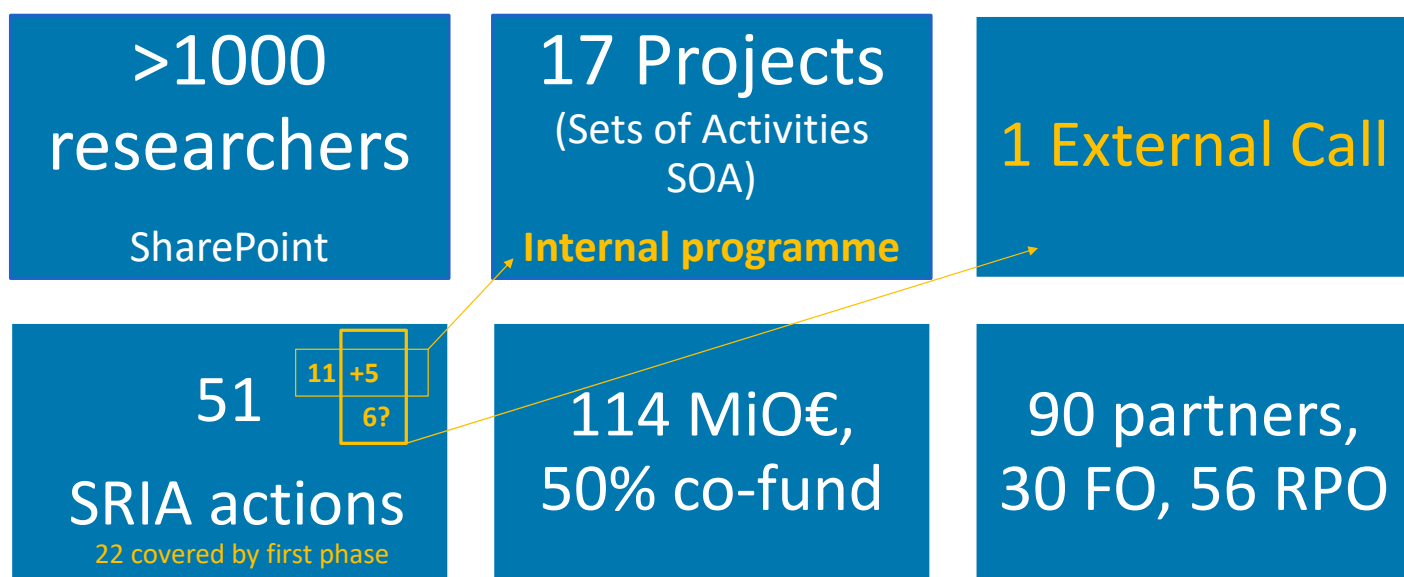
The EUP AH&W should cover a period of 10 years, with the first 7 years foreseen for the initial Grant Agreement (2024-2030)

## EUPAHW: update

- Retro-active start **1 January 2024**
- Kick-off meeting February 2024
- Grant Agreement signed by all beneficiaries end of March
- Ethics Advisory Board (EAB, 3 members)
- Scientific Advisory Board (SAB, 14 members)
- Stakeholder Committee (SHC, 23 members)
- National Mirror Groups (NMGs for 23 +1 countries)
- Amendment for **inclusion of UK partners as beneficiaries**: just approved by the EC!
- Consortium Agreement: signature phase
- **First External Call**: 30 funders from 20 countries, 130 pre-proposals, 43 selected for the full-proposal step, 24 MiO€ + EU contribution



## First phase of the EUPAHW



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## 2 WHAT WE DO:

### Our Priority Areas

- **Surveillance/Monitoring System and Risk Assessment**
- **Procedures, methodologies and tools to analyse AH&W**
- **Animal management on farm, at sea, during transport, and at slaughter**
- **Treatments and Vaccines**
- **Socio-economic area**



SCAN TO LEARN MORE →



# The EUP AH&W SRIA

- Describes 51 actions in 9 Operational Objectives
  - OO1. Design and harmonize **surveillance and monitoring systems**
  - OO2. Adapt **risk assessment and alert communication** to the new needs
  - OO3. Procedures and **tools for disease surveillance**
  - OO4. Procedures and **tools for welfare monitoring**
  - OO5. **Fight against animal infectious diseases** on farm and during transport
  - OO6. **Advance animal welfare** on farm, during transport, at end of life
  - OO7. **New interventions & treatments** against specific priority diseases
  - OO8. To develop new **vaccines** or improve existing vaccines
  - OO9. An integrated approach on AH&W including **socio-economic aspects**
- These will be transposed in either:
  - Specific actions for the **internal programme** (integrative and research projects) (WP3).
  - Specific actions for **external research calls** (WP4).



## 17 Internal Projects started in January, based on 16 actions from SRIA; 56 RPO involved

- SOA06\_OO1 - Action 2. Wildlife network - mammals and birds
- **SOA07\_OO1 - Action 2. Wildlife & disease of aquatic organisms: a European perspective**
- **SOA08\_OO1 - Action 4. Surveillance of AMR in animal pathogens**
- **SOA09\_OO1 - Action 6. Knowledge platform on animal welfare**
- **SOA10\_OO2 - Action 1. Rapid Risk Assessment also aquaculture**
- **SOA11\_OO3 - Action 1. Basic knowledge on priority pathogens and infectious diseases also fish and shellfish**
- **SOA12\_OO3 - Action 2. Better tools for the diagnosis of infectious diseases**
- SOA13\_OO4 - Action 1. Assessment of positive welfare; defining animal-based measures
- **SOA14\_OO4 - Action 3. Improved assessment of consciousness and death for livestock and fish including crustacean**
- **SOA15\_OO5 - Action 1. Network of experts on biosecurity measures to reduce infections, also on aquatic organisms**
- **SOA16\_OO5 - Action 4. Reinforcement of animal resilience through fundamental research for animal feeding and breeding**
- **SOA17\_OO6 - Action 1. Animal welfare & sustainability including aquaculture & fisheries**
- **SOA18\_OO7 - Action 1. Pathogen-microbiome interactions, immune system & mechanisms of AMR**
- **SOA19\_OO7 - Action 2. New antimicrobial, antiparasitic drugs & tools for assessing their efficacy and safety**
- **SOA20\_OO8 - Action 1. The role of the immune system of food producing animals**
- **SOA21\_OO8 - Action 2. Tools such as vaccine platforms, expression systems, etc.**
- **SOA22\_OO9 - Action 1. Assess the economic and societal burden of selected priority diseases**

SOA= Set of Activity

## Phase 1: the 17 joint internal projects cover all 9 operational objectives from the Strategic Research and Innovation Agenda

### Surveillance and risk assessment

- A European **wildlife network** for **terrestrial** animals
- **Wildlife** and diseases of **aquatic** organisms
- **Surveillance** of pathogens of veterinary importance and their **antimicrobial resistance** profiles
- **Knowledge platform** in the EU to collect, analyse, share and use integrated scientific and technical data on **animal welfare**
- **Rapid Risk Assessment**: Improvement of epidemic intelligence methodologies

### Procedures, methodologies and tools

- **KNOW-PATH** - Knowledge on priority pathogens, infectious diseases and their detection methods
- **BETO** - **Better tools for diagnosis** of infectious diseases
- **Assessment of positive welfare**; defining animal-based measures
- Improved **assessment of consciousness and death**

### Management and husbandry

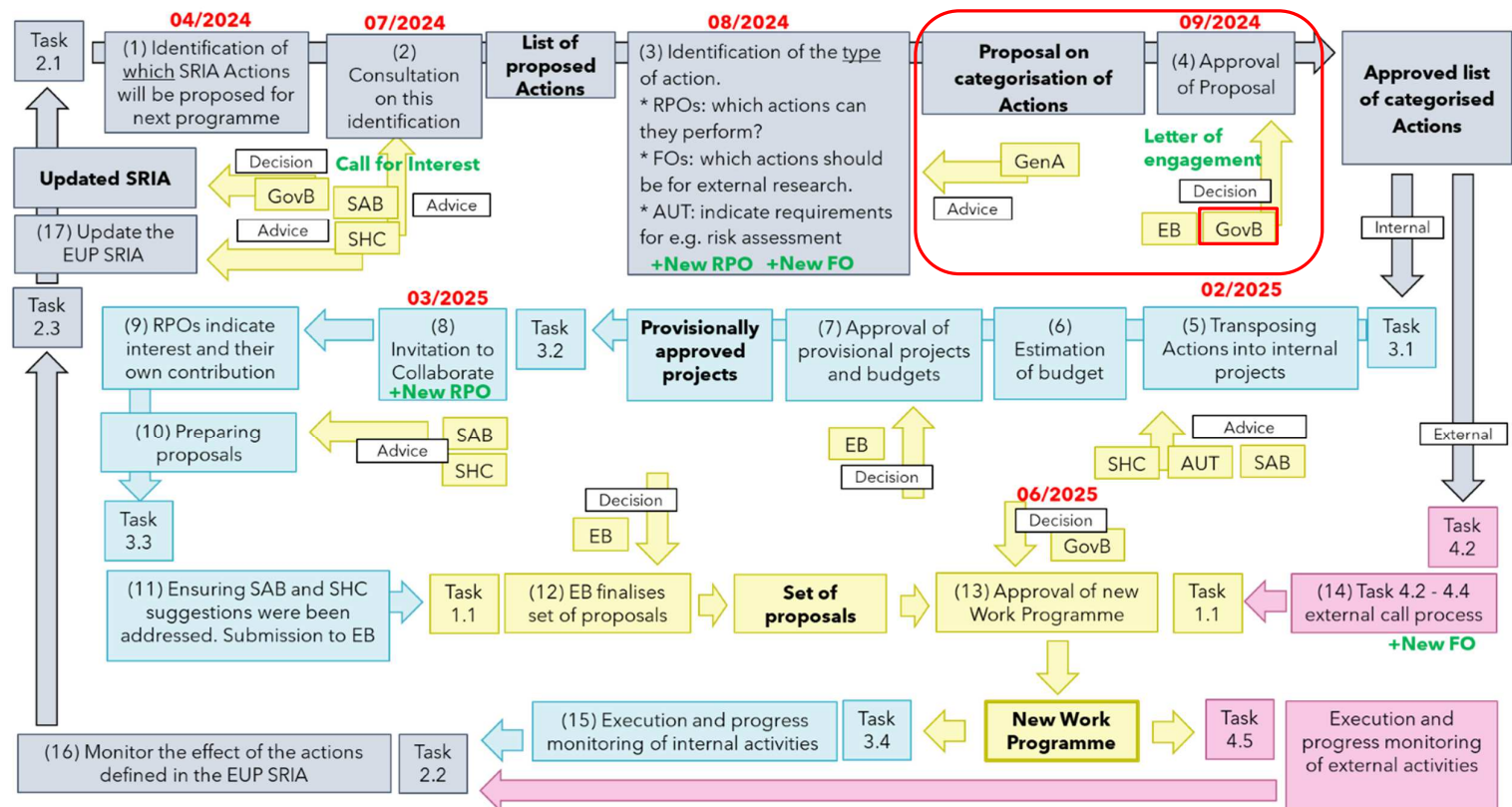
- **Biosecurity measures** to prevent and control AID on farm and during transport taking into account effects on AW
- Reinforcement of **animal resilience**
- **Sustainability** aspects of **AW**-promoting livestock systems

### Treatments and vaccines

- **Pathogen-microbiome interactions**, immune system & **mechanisms of AMR**
- Development of new **antimicrobial and antiparasitic** compounds and tools for assessing efficacy and safety
- Study the **role of the immune system** of farm animals
- Develop **vaccine platforms** and expression systems, immunological toolboxes and delivery system

### Transversal area

- Assess the **eco-economic and societal burden** of selected priority diseases and production diseases



Deadline  
Newcomers

## The Implementation Cycle WP2025

## Phase 2: 17 actions selected for next round of Joint Internal Projects for 2026

### Surveillance and risk assessment

OO1-3 Networks for epidemiology, sequence data and bio-informatics applicable to wildlife and livestock/aquaculture  
 OO1-5 Networks for surveillance of livestock and aquaculture – welfare and health issues  
 OO1-7 Real time monitoring of animal welfare issues to support policy objectives  
 OO2-2 Relations between human activities related to wildlife and disease spread  
 OO2-3 Methodologies to integrate genomic surveillance data and risk assessment  
 OO2-4 Risk of spread of AMR in veterinary pathogens  
 OO2-6 Indicators and alarm levels for an animal welfare surveillance system

### Procedures, methodologies and tools

OO3-3 Tools to distinguish between infected and vaccinated animals  
 OO3-4 Multi-target diagnostics to identify infection levels and microorganisms that can interfere with treatment decisions  
 OO3-6 Host pathogen environment interactions focus on characterization of microbial ecosystems  
 OO4-4 ABM to measure negative animal welfare consequences  
 OO4-5 Digitally assisted monitoring technologies enabling precision management on animal health and welfare

### Management and husbandry

OO5-2 Enforcing external and internal biosecurity while limiting antimicrobial use  
 OO5-3 Prudent use of antimicrobials research on treatment concepts  
 OO6-2 Improve animal welfare while maintaining farm economic and environmental sustainability

### Treatments and vaccines

OO8-3 Develop or improve vaccines and immunomodulators and deliver proof of concept



### Transversal area

OO9-5 Integrated strategies for policy development regarding control of animal diseases

## Actions not covered by external call 1 after pre-proposal stage

**OO4 - Action 2.** Development of **technologies on the slaughter line to assess animal welfare** on farm and/or during transport. Identification of suitable ABM with appropriate level of validity, sensitivity and specificity; development of in-line sensors, large scale data collection.

**OO4 - Action 6.** Development of **technologies to assess animal welfare during transport.** Affordable and reliable solutions to prevent serious welfare problems through early detection of signals before and whilst in transit, e.g. lameness, lesions, heat stress, aggression, thirst or hunger, exhaustion, etc. Development of sensor technology, data analysis tools, data collection and integration platforms, decision support for the driver; related staff training.

**OO9 – Action 2.** Assess **the socio-economic consequences** of the possible changes in livestock and fish farming that may result from e.g. **changes in citizen demand** regarding animal welfare or that may be an effect of new legislative requirements.



## Second phase HE WP2025: extension proposal, September 2025

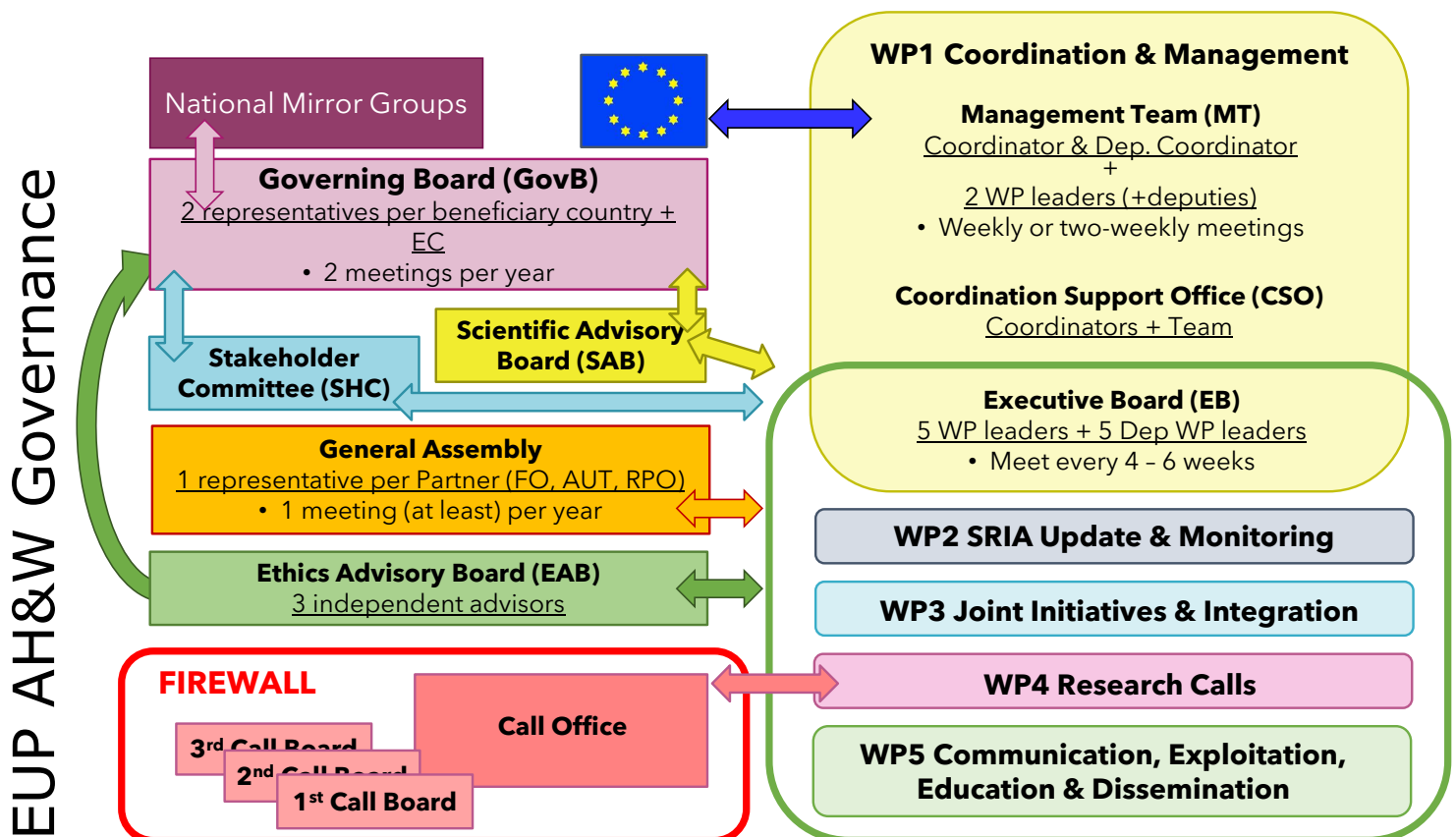
➤ **6 new partners (4 RPO, 2 FO)** including **3 new countries: Romania, Bulgaria, North Macedonia**

Still missing participation of **6 EU Member States:**

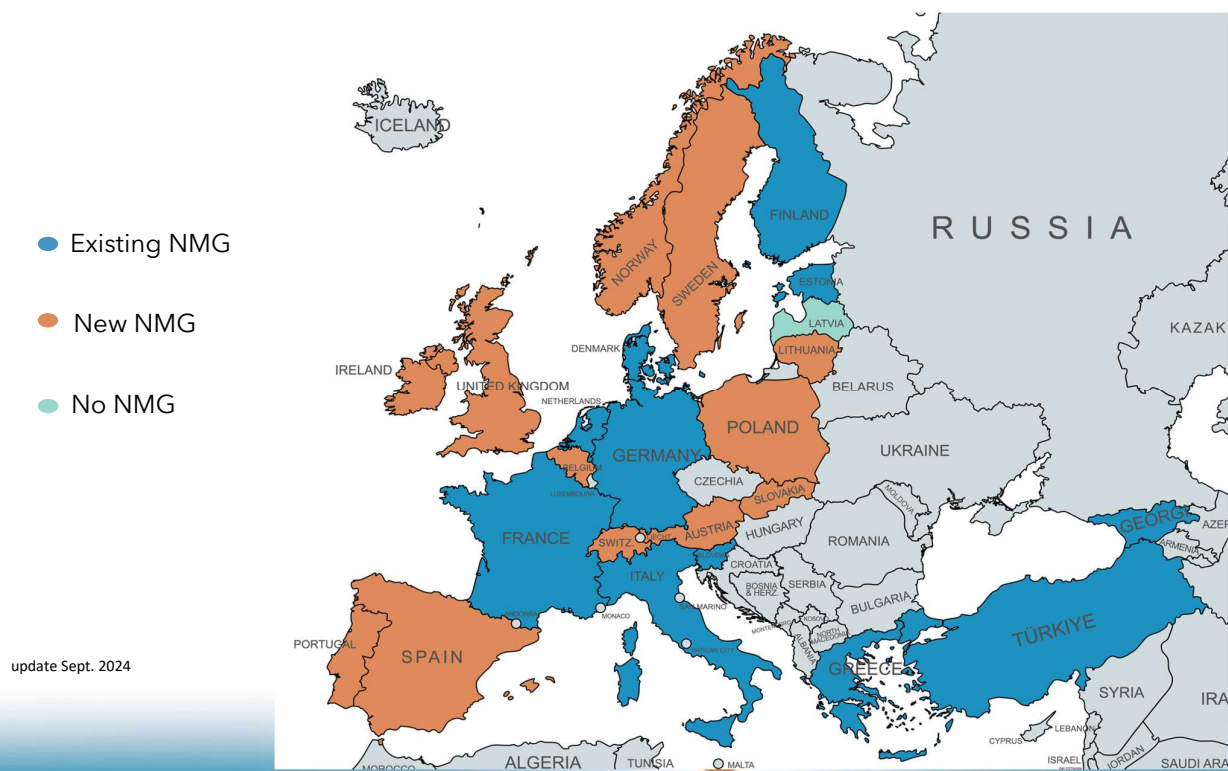
Croatia,  
Republic of Cyprus,  
Czech Republic,  
Hungary,  
Luxembourg,  
Malta

Also, other **Associated Countries** could be interested to join.

**Support from the CWG-AHW to find Funding Organisations?**



## AH&W National Mirror Groups



## Governing Board representatives from countries

| Countries | Organisations representatives for the GovB                          | Countries       | Organisations representatives for the GovB |
|-----------|---------------------------------------------------------------------|-----------------|--------------------------------------------|
| Austria   | BMBWF and FWF                                                       | Lithuania       | ZUM                                        |
| Belgium   | FPS Health and VG                                                   | Norway          | RCN and LMD                                |
| Denmark   | DAFA and IFD                                                        | Poland          | NRIAP and PIWet                            |
| Estonia   | ETAg and REM                                                        | Portugal        | FCT                                        |
| Finland   | MMM and Ruokavirasto                                                | Slovakia        | MARD                                       |
| France    | <a href="#">Ministries: Research (MESRI) and Agriculture (MASA)</a> | Slovenia        | MKGP                                       |
| Georgia   | SLA and <a href="#">MEPA</a>                                        | Spain           | AEI and CDTI                               |
| Germany   | BLE and BMEL                                                        | Sweden          | Formas                                     |
| Greece    | <a href="#">Ministry of Rural Development and Food</a>              | Switzerland     | EDI-IVI                                    |
| Ireland   | DAFM and Teagasc                                                    | The Netherlands | MINLNV and <a href="#">NVWA</a>            |
| Italy     | Masaf and MOH                                                       | Türkiye         | TAGEM and TUBITAK                          |
| Latvia    | LZP                                                                 | UK              | DEFRA and Surrey                           |

- + DG AGRI / EFSA for input

In Blue: organisations out of the Consortium



# Internal Scientific Meeting, Thessaloniki, June 2024

## Refining each SOA's programme and connecting SOAs





European Partnership on  
Animal Health and Welfare

# Thank you for your attention!

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Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



# The CWG and the Partnership

- **Sharing information** on AH&W activities is a key element of the CWG AH&W, for example research priorities and country research agendas, to avoid duplication of work.
  - See above: recently started or planned **AH&W research priorities** (Funders) and **AH&W challenges and emergencies** (Research organisations), either as an agenda topic or an online survey. Can the outcome be made **public**, under certain conditions?
  - **Action:** let us know!
- Most CWG members are partners of the **EUP AH&W**, although not all.
  - The CWG network acted as a **basis** for creating the EUP AH&W!
  - **Specific objectives** of the Partnership: to bring animal health and welfare actors together, organise research, support One Health-One Welfare and aim at gaining medium and long-term impact.
  - Comparison of CWG and EUP: see next slide.

- **CWG AH&W**
  - 27 countries
  - 55 members and observers (funders, research institutions, international organisations)
- **EUP AH&W**
  - 24 countries
  - 90 partners
- Both CWG and EUP share 27 institutions from 20 countries.
  - 3 EUP stakeholders are observers to the CWG.



## CWG & Partnership

- (Operational) Objectives of the CWG (see website)
  - Create and maintain **the European AH&W forum**; links with ICRAD, STAR-IDAZ, DISCONTTOOLS, EUP AH&W, the EU AW Reference Centres; share info & experience between countries.
  - **Tighten bonds with peer SCAR Working Groups** and avoid overlap.
  - Align **AH&W research agendas**: regular exchange of priorities, AH&W challenges and emergencies, and relevant activities.
  - Search for research **funding opportunities**.
  - When requested, or in case of emergencies, **explore possible joint initiatives**.
- Practical: The CWG is well placed to **provide input through the AH&W SRIA** and to **assist in the dissemination** (and uptake?) of **EUP outcomes** (authorities, CVO, private partners).
  - **Action:** How do you see the interaction between the two consortia? What do you expect from the CWG other than knowledge exchange? Would you like to play an active role?