# 22nd meeting of the Scientific Network on Risk Assessment in Animal Health and Welfare (Animal Health topic)

**21-22 September 2023**

**09:00-18:00 / 09:00-13:00 (CET)**

**Location**: EFSA - Parma (Meeting Room 00/M09) and Online (Teams Platform)

**Attendees**:

- Network Participants:

| Country | Name |
|---|---|
| Austria | Romana Steinparzer |
| Belgium | Kirstine Ceulemans |
| Bulgaria | Madlen Vasileva |
| Croatia | Dražen Knežević |
| Cyprus | Georgios Krasias |
| Czech Republic | Petr Kucinsky |
| Denmark | Anette Ella Boklund |
| Estonia | Age Kärssin |
| Finland | Heidi Rossow |
| France | Charlotte Dunoyer |
| Germany | Christoph Staubach |
| Greece | Sofia Boutsini |
| Iceland | Auður Arnþórsdóttir<br>Brigitte Brugger<br>Thelma Róbertsdóttir |
| Ireland | Audrey Jenkinson |
| Italy | Laura Amato |
| Latvia | Žanete Šteingolde |
| Lithuania | Paulius Busauskas |
| Luxembourg | Tom Petit<br>Caroline Merten |
| Malta | Gemma Pantaleo |
| Netherlands | Remco Schrijver |
| Norway | Hilde Mellegård |
| Portugal | Ana Nunes |
| Romania | Theodora Chesnoiu |
| Slovak Republic | Anna Ondrejková |
| Spain | Elena García Villacieros<br>Sergio Bonilla García |
| Sweden | Cecilia Hultén |

- Observers (Switzerland): Erina Panchaud
  Expert name (IPA country): Berat Hoxha, Vanja Kondratenko, Aleksandar Nemet, Marko Nikolic, Tamas Petrovic

Hearing Experts: Francesco Feliziani, Helena Ferreira, Alice Fusaro, Niccolò Vendramin

- European Commission/Other EU Agencies representatives: Francesco Berlingieri, Iulia-Delia Cohen, Dimitrios Dilaveris, Regina Eberhart, Simona Forcella, Fiona Geoghegan, Zilvinas Ilevicius, Faye Ioannou, Lazlo Kuster, Sanna Mesman, Pedro Rosado Martin, Marta Valenciano, Sigrid Weiland

# 1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received from Albania (Keti Margariti).

# 2. Declaration of Interest

In accordance with EFSA's Policy on Independence[1] and the Decision of the Executive Director on Competing Interest Management[2], EFSA requested the submission of the Annual Declarations of Interest to Network Participants, Alternates and Hearing Experts.

# 3. Agreement of the minutes of the 19th meeting of the Network (AH topic) held on 27-28 June 2022

The minutes were agreed in written form in July 2023.

# 4. Avian influenza

## 4.1 Overview of the disease situation in Europe (June-September 2023)

Lisa Kohnle from EFSA gave an overview of the avian influenza situation in Europe based on the latest avian influenza monitoring report due to be published by EFSA, ECDC and the EURL AI/ND on 28 September 2023. Two peaks of HPAI virus detections in wild birds occurred in 2023, one in early spring and one during the May/June period; HPAI virus continues to circulate with a high number of outbreaks occurring in wild birds throughout the year, whereas only sporadic outbreaks in poultry and captive birds were reported during the summer. The recent outbreaks in poultry along coastlines in the United Kingdom and continental Europe seem to be genetically linked to wild birds, in particular seabirds. The H5N1 subtype is still predominant in Europe, and mostly colony-breeding seabirds have been affected in the last couple of months. As regards the situation worldwide, the

[1] https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf
[2] https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

H7 subtype was detected in South Africa, while the H5 subtype continued to circulate in South America and Russia. H5N1 was also identified in outbreaks in fur animal farms in Finland, in domestic dogs and cats in Asia, and in several wild mammals worldwide. Two new mammalian species (seals) were affected for the first time during this reporting period. Options for response in birds include active surveillance in wild birds, improved species identification, prevention strategies in poultry production systems, and fast generation and sharing of viral sequences. Concerning mammals, options for response include timely reporting of HPAI virus detections, close monitoring of specific clinical signs and unusual mortality, preparedness and prevention strategies in fur animal production systems, passive surveillance in wild and free-roaming domestic carnivores, and avoiding exposure of pets to dead carcasses or feeding raw meat.

## 4.2 Update on the disease situation in the Netherlands

Remco Schrijver from the Netherlands presented an update on the HPAI situation in the country. It was stated that outbreaks are now detected all year round with no more seasonality being observed. In the 2022-2023 epidemic season, 92 commercial poultry and 2 non-commercial poultry/captive bird outbreaks were reported in the Netherlands. In addition, many wild birds and several mammals were found infected. Currently, in some regions, post-outbreak restriction measures have been lifted, whereas they remain for the South – a region densely populated with poultry farms. Viral sequencing would be needed to fully understand the source of infection for poultry, which may be either wild birds, a lack of biosecurity, or a combination of both. A vaccination trial in poultry has been started in the country, which involves over 2,000 animals vaccinated with two different vaccines – two HVT-based vector vaccines by CEVA and Boehringer Ingelheim. There is also a plan to vaccinate zoo birds with the Nobilis vaccine by MSD Animal Health. A necessity for intensified preventive measures and compulsory biosecurity checks in farms was identified. Early warning systems and rapid risk-based culling were considered crucial for efficient outbreak control. Challenges highlighted include a One Health approach in prevention and control, rapid vaccine adoption system, culling capacity, cost control, and biosecurity measures that are more in line with the public opinion (for example, preventive culling may not be perceived well).

## 4.3 HPAI in mammals: farmed fur animals in Spain

Elena García Villacieros from Spain gave an overview of the October 2022 outbreak of H5N1 in a mink farm in Galicia, where most mink farms in Spain are concentrated. In those partially open farms, minks are kept in wire netted cages and fed with poultry by-products, cereals and blood meal. Surveillance for early detection is in place according to EU regulations, which includes staff awareness, hygiene, biosecurity, and both passive (abnormal mortality and systematic PCR testing of dead animals) and active surveillance. On 6 October 2022, abnormal mortality in a mink farm was reported and outbreak investigation indicated that onward mink-to-mink transmission of the virus might have occurred. Control measures were immediately applied, including immobilisation of the affected farm, culling of minks to avoid further exposure to the virus, disposal of carcasses,

disinfection of the facility (which is currently still empty), and enhancement of biosecurity measures to avoid contact between minks and wild birds. Samples of dead animals were sent for PCR testing, through which SARS-CoV-2 was ruled out, while H5N1 was confirmed. At the same time, an outbreak of H5N1 in wild birds in Spain was confirmed. Viral sequencing by the EURL showed an abnormal mutation of the virus with potential public health implications. Epidemiological investigations concluded direct or indirect contact with wild birds as the most probable source of infection for the minks. Feed, however, was first considered and investigated but then ruled out. The Official Veterinary Service of Galicia, in coordination with MAPA and the public health authorities, decided to stamp out the farm on 28 October 2022. No further cases have been detected since then.

## 4.4 HPAI in mammals: farmed fur animals in Finland

Heidi Rossow from Finland gave an overview of the recent outbreak of H5N1 in minks, foxes and raccoon dogs in fur farms, which is still under epidemiological investigation. Twenty-six farms were affected during summer, all located close to each other, with first clinical signs arising in June-July 2023. Affected minks were farmed in open shade houses to which wild birds easily had access. Control measures were implemented at the beginning and throughout the course of the outbreak: movement restrictions for affected farms, culling of all animals in affected farms (all minks on affected farms, even if only foxes were affected were culled from the beginning; if disease spread was limited, only foxes and raccoon dogs in affected shade houses were culled), and disinfection. Emphasis was placed on implementing enhanced biosecurity measures. Finland also started a serological survey in affected farms.

## 4.5 HPAI in mammals: red foxes in Sweden

Cecilia Hultén from Sweden presented the HPAI cases in red foxes reported so far. In the country, infection of mammals has sporadically occurred since 2021. In the past three years, outbreaks in poultry and captive birds have decreased, while cases in wild birds have increased. In the 2021-2022 epidemic season, mainly seabirds were affected, whereas mostly landbirds were found infected with HPAI virus in the current epidemic season. In May 2023, one dead red fox was reported, one was found with neurological signs, and another one was euthanised. These foxes were found in the proximity of a lake area, where also 1,000 gulls had been found dead. Laboratory analyses confirmed infection with H5N1 virus. The presentation highlighted how citizen-based reporting and awareness plays a critical role in controlling outbreaks in Sweden.

## 4.6 HPAI in mammals: genetic characteristics

Alice Fusaro from the EURL AI/ND gave an overview of the genetics of HPAI viruses found in mammals. Numerous reassortment events have given rise to 70 different H5 genotypes since October 2020. H5N1-genotype AB was predominant in 2022, whereas H5N1-genotype BB has been predominant in 2023. The latter is well adapted to seabirds and has seen a rapid geographic expansion. It is also the genotype reported in mammals, with the exception of the outbreak in domestic

cats in Poland, where the CH genotype was reported. In domestic birds, the main genotype reported was the AB genotype, whereas the BB genotype was mainly reported in wild birds and mammals, indicating that the most probable source of infection for mammals are wild birds. Concerningly, there are mammalian adaptation events occurring in HPAI viruses that increase their zoonotic potential. About half of the viruses characterised from mammals possess at least one of the molecular markers of mammalian adaptation, while only 0.6% of avian viruses possess such markers. There is clear evidence that these avian viruses may have circulated in mammals before infecting birds. Emergence of such molecular markers also differs in different mammalian species. Regarding the recent HPAI outbreaks in mammals in Europe, viruses collected from fur farms in Spain and Finland belonged to the BB genotype and were closely related to the genotype circulating in wild birds, whereas the virus found in the outbreak in domestic cats in Poland belonged to the CH genotype, which circulated in winter and in wild birds in Poland. Several mutations that confer higher zoonotic potential were characterised, in particular mutations in the PB2 and neuraminidase proteins (in both the BB and CH genotypes). These mutations were found in viruses collected from fur farms in Spain and Finland, and in domestic cats in Poland. Notably, all viruses characterised in Europe to date retain preferential binding to avian-type receptors. However, key mutations on the HA receptor binding site that can switch the binding affinity from avian- to human-type receptors have been identified, such as in viruses responsible for dog and human infections in China. Surveillance and real-time genetic characterisation is therefore highly recommended to promptly identify viruses with mutations that are able to increase their zoonotic potential. It was also highlighted that asymptomatic infections with H5 viruses had been found in mammals, which is why it is of utmost importance to fully understand their individual pathogenicity.

## 4.7 HPAI in mammals: discussion

An interesting debate of questions and answers was held among participants. Anette Ella Boklund from Denmark pointed out that samples from mammals sent for sequencing were not always randomly selected, as samples from newly affected species were sent more frequently. Romana Steinparzer from Austria was interested in the citizen reporting system in place in Sweden, and asked how it was set up and what it relied on – there is a web-based reporting system in place through which the citizen filing the report is contacted by the authorities to provide more information. Paulius Busauskas from Lithuania was pleased to announce that on this date a vote would be held to decide on a potential ban of fur farms in Lithuania. Audrey Jenkinson from Ireland asked about the role of citizens in the collection of dead birds in the Netherlands and whether there were any issues around the validation of serology tests for HPAI viruses. Remco Schrijver replied for the first question that there were information campaigns for citizens on how to behave when dealing with dead animals, while the EURL would be contacted to answer the latter question. Iulia-Delia Cohen from EC announced that, as of 21 September 2023, an amendment was added to Commission Delegated Regulation (EU) 2020/689 (rules for Union surveillance programme for avian influenza), requesting surveillance for avian influenza in mammals – as currently done in poultry and wild birds. Cecilia Hultén from Sweden asked about how the Netherlands would enable compulsory biosecurity checks, and Remco Schrijver

explained that the protocol was still under discussion and revision. Andrea Gervelmeyer from EFSA pointed out that, despite biosecurity, infections in farms still occured, so it would be recommended to further investigate the actual sources of infection by implementing analytical epidemiological studies. Anette Ella Boklund from Denmark explained that there would be too few outbreaks to reach statistical significance for any analytical study. Denmark asked the Netherlands to comment on culling activities during windy conditions. The Netherlands replied that the approach of '1 km ring culling around infected farms' has been replaced by a more 'risk-based approach', in which culling is carried out based on connectivity and distance between farms, and characteristic of the farms. Luxembourg was wondering whether there would be a clash of the One Health surveillance programmes with the upcoming changed in the EU legislation. EC replied that it would be the Member States to decide, as there would be no double funding. Charlotte Dunoyer from France informed the network about their plans to start a vaccination program in duck farms, which will also include a surveillance system with the objective to differentiate vaccinated from infected birds.

## 4.8 How to stimulate biosecurity uptake in poultry holdings using supporting measures? Preliminary findings from the NetPoulSafe project

Helena Ferreira from the Flanders Research Institute for Agriculture, Fisheries and Food presented a project with the objective of looking into ways for increasing biosecurity in European poultry production. The presentation particularly focused on biosecurity uptake in poultry holdings by using supporting measures. The NetPoulSafe project comprises several cost-benefit analyses and estimations of economic losses associated with outbreaks. It aims to connect between existing research and knowledge, and to deliver results to the public, including making them accessible to the poultry industry and its advisors. Another aim is the creation of a network through which good practices could be communicated and eventually used by governmental agencies, regional regulatory bodies, and the poultry industry. The NetPoulSafe project followed different poultry farms (layers, broilers, breeders, hatcheries, turkeys and ducks) in seven European countries to cover a wide range of different scenarios and conditions in its studies. By improving production parameters and avoiding losses, the project aims to make farmers activities more cost-effective – poor implementation of biosecurity measures means increased risk of pathogen exposure and may lead to economic losses, of which not all farmers are aware. One step was to evaluate the economic benefits of implementing supporting measures (coaching farmers to improve their biosecurity) by using a scoring tool. If a positive change was recorded by the scoring tool, the change was attributed to the implementation of biosecurity measures, which were then evaluated from a cost-effectiveness point of view and added to the actual cost of implementing that measure. The project will end in March 2024 with most of the data analyses still going on. Preliminary results show that, to stimulate the implementation of biosecurity through coaching, it would require an average of eight hours of active involvement of coaches with farmers. The project also tried to economically quantify economic losses due to avian influenza and other disease outbreaks, with the objective of informing farmers about the economic losses to be expected in case no biosecurity measures were

applied. After the presentation, the Netherlands asked whether it would be possible to update the figures from 2020, and it was highlighted by the presenter that any collaboration with country authorities to update and improve their data collection would be very welcome. Luxembourg was interested in knowing more about the type of coaches used in their studies, and it was clarified that the coaches used were veterinarians already working in those farms and trained for coaching. It was pointed out that there were differences in the results according to the specific relationships between farmers and veterinarians.

## 4.9 New features of EFSA's Bird Flu Radar

Lisa Kohnle from EFSA presented EFSA's new Bird Flu Radar – an online tool based on spatio-temporal risk assessment to estimate the weekly probability of HPAI outbreaks in wild birds at the scale of 50x50 km. It aims to provide the public with estimates of the probability of HPAI introduction in wild birds for their specific areas of interest in Europe. The launch of the new interface and improved functionalities will take place later in September 2023. Users may then switch between the already existing Migration Mapping Tool and the Bird Flu Radar, and display interactive risk maps that allow zooming in and out (exploring in space), and going back and forth in time (exploring in time). There will also be different personalisation options available that can be turned on and off (actual reported outbreaks, sensitivity, country borders). Most importantly, it will be possible to subscribe to weekly alerts for specific countries and/or areas of interest.

## 4.10 Upcoming call on active surveillance in wild birds

Lisa Kohnle from EFSA presented on the upcoming call on active surveillance of HPAI in wild birds. Rationale for this call is the continuously high number of HPAI outbreaks in wild birds, which has also been associated with an increasing number of cases in poultry and fur animal farms. There is a need for a better understanding of avian influenza viruses persistently circulating in Europe and regularly being introduced from outside. With this call, EFSA would like to test the added value of an active wild bird surveillance component in complementing the already existing surveillance activities in Europe. Recommendations of previous scientific work on the topic were to use a combination of ornithological and virological information to inform sample site selection. By applying this principle, nine surveillance nodes were proposed, which cover nine geographic locations across Europe – many of them in close proximity to major wild bird flyways. Aims of this call are to establish a coordinated network of sampling sites across Europe, build capacities and long-term partnerships for active wild bird surveillance, and to get a fuller picture of the HPAI viruses circulating in Europe – also to create a larger pool of genomic data for further analyses. Only Article 36 organisations will be eligible to apply for this call, although non-Article 36 organisations can be involved as sub-contractors for specific non-core tasks. Beneficiaries will need to participate in the network that will be established, in regular trainings and the annual meetings that will be organised by a central coordination team formed by EFSA. They will follow a harmonised sampling plan and data collection framework, including the requirement to make all results available to the public. The call will be launched in November with an overall budget of €2 million and a project duration of three

years. The aim is to sign contracts in April-May 2024 to start activities in summer 2024 and allow sampling to start in autumn 2024.

## 4.11 Vaccination of poultry against HPAI

Francesca Baldinelli from EFSA gave a presentation on the Scientific Opinion on vaccination in poultry against HPAI. The outcome of the first two TORs of the mandate are due to be published on 10 October 2023. It was highlighted that the scope of the vaccination proposed will be to complement already existing preventive measures but not to replace them. TOR 1 focused on available vaccines as defined in the Scientific Opinion, and on description of their characteristics. Vaccine efficacy and antigenic distance were further analysed and investigated. It was mentioned that currently, only one vaccine is authorised in the EU with a wide antigenic distance from the currently circulating strain, and that it has not been proven effective in chickens after one dose. Main conclusions were that there is a large array of available vaccines, and that nucleic acid-based vaccines allow fast adaptation to new circulating viral strains. Continued research and development was recommended, as there is a lack of harmonised and comparable data. Emphasis was placed on the need to produce such data to assess vaccine efficacy and understand better the onset and length of protection. Most vaccines are tested in chickens and are mainly administered via injection. TOR 2 covered different vaccination scenarios for different vaccination strategies (emergency protective vaccination, emergency suppressive vaccination, preventive vaccination). The results of these different scenarios, estimated by using a kernel model, showed that there was no single solution to fit all situations; any strategy should be based on several factors. For example, in the case of emergency protective vaccination, it may be needed to vaccinate poultry of different ages in one area – therefore, an inactivated vaccine may be more suitable than any other vaccine. In preventive vaccination, there may be a need to target more susceptible species and to vaccinate in high-risk areas – therefore, vector vaccines may be more suitable. Depending on the objective of vaccination, a type of strategy should be chosen. It was underlined that monitoring vaccine efficacy over time remained crucial.

# 5. Aquaculture

## 5.1 Infectious haematopoietic necrosis virus

Niccolò Vendramin from the EURL for fish and crustacean diseases gave a presentation on infectious haematopoietic necrosis virus, for which there is currently no treatment. Susceptible species include salmonids, but all susceptible species are listed in Regulation (EU) 2018/1882. EFSA has recently revised the species that are considered vectors and reservoirs of the virus. As there is no treatment available, there are regulations in place for the trade of live fish – the main source of disease spread. Canada already introduced a vaccination strategy with a DNA vaccine in 2010. Infectious haematopoietic necrosis virus originated from the American Pacific coast and the genogroups observed reflect the geographical distribution of the virus. The EURL annually collects information on the aquacultural industry from different Member States, gathering also information

on aquacultural health. Data collected include general data (e.g. number of farms, different health status, presence of control programs), epidemiological data, laboratory data, and additional information from Member States. Main task of the EURL is to sequence and characterise the different isolates of the virus.

## 5.2 Aquatic animal diseases in the framework of the Animal Health Law

Sotiria-Eleni Antoniou from EFSA presented the mandate received on listing and categorisation of five aquatic animal diseases – infectious pancreatic necrosis (IPN), spring viraemia of carp (SVC), bacterial kidney disease (BKD), infection with *Gyrodactylus salaris* (GS), and infection with salmonid alphavirus (SAV) – in the framework of the Animal Health Law. Only the results on the assessment of IPN were published so far. To fulfil the TORs of the mandate received, several assessments were carried out: to assess whether the disease meets the criteria of Article 5 to be listed or not, to assess whether the disease could be classified in one of the five categories of the Animal Health Law on the basis of the criteria listed in Annex IV, and to assess the animal species to be listed as susceptible, vector and reservoir species, using the criteria set out in Article 8. To conduct the assessments, parameters listed in Article 7 of the Animal Health Law were considered and matched with criteria laid down in Article 5 and Annex IV. An example of the assessment and methodology used was provided. Regarding the results of the assessment for IPN, it was uncertain (50–90% probability) whether IPN could be considered eligible to be listed for Union intervention. It was concluded that it was not possible to categorise the disease in category A, it was uncertain (33–66% probability) whether IPN met the criteria to be classified in category B or C, and uncertain (50–90% probability) whether IPN met the criteria as to be classified in category D or E.

## 5.3 Reservoirs and vectors of Animal Health Law-listed pathogens of aquatic animal species

Sofie Dhollander from EFSA presented the ToRs of the mandate received on the listing of vector species for aquatic animal diseases. An extensive literature review was carried out to conduct the assessment on the role of aquatic animal species, divided into molluscs, fish and crustaceans, as vectors or reservoirs of specific pathogens listed by the Animal Health Law. The assessment was performed by using Distiller for screening of abstracts and full texts before extracting relevant information and data. All data collected through the extensive literature review were then assessed by the working group experts.

## 5.4 Aquacultural production in North Macedonia

Vanja Kondratenko from North Macedonia gave a presentation on aquaculture production in the country. North Macedonia has seen an increase in aquaculture production, despite its geographic position far from coastlines. The presentation covered the framework of such production systems and relevant legislation, involving surveillance, biosecurity, and registration of establishments. Current legislation is not based on EU legislation.

# 6. One Health

## 6.1 Example of a One Health initiative (EU4Health) in Portugal

Ana Nunes from Portugal presented the Integrated Zoonosis Surveillance System, which was proposed together by the competent authorities for human (DGS) and animal health (DGAV), and the national reference laboratories (INSA and INIAV), and is part of the EU4Health program. The project will start in 2024 and has the objective to develop an information system for supporting the One Health approach. Targeted diseases will be West Nile fever, Rift Valley fever, Crimean-Congo haemorrhagic fever, tick-borne encephalitis, Q-fever, and hepatitis E. Different sample matrices will be chosen for the targeted diseases. Outputs of the project will include procedures for animal, vector and environmental sampling, sharing of data on humans, and the development of new laboratory techniques.

## 6.2 One Health surveillance under direct grant initiative CP-g-22-04.01 of the EU4Health programme

Andrea Gervelmeyer from EFSA presented updates on the direct grant initiative CP-g-22-04.01 of the EU4Health programme, which aims to look into animals and the environment for identifying new and emerging threats to public health. EFSA was first asked to identify priority pathogens that should be the focus of this One Health surveillance, and then to propose appropriate surveillance strategies for those priority pathogens. The first two Scientific Reports explaining those steps have already been published and are available online, while 11 disease briefs and 32 surveillance cards are available on the EFSA Knowledge Junction. Implementation of the proposed surveillance, data collection and assessment will follow. A One Health surveillance subgroup of the AHAW Network was established for the continuous collaboration through workshops and Microsoft Teams. Twenty-three Member States have submitted nine applications, seven of which are for mono-beneficiary grants, and two of which are for multi-beneficiary grants. For each of the priority pathogens identified, at least one country will carry out the proposed surveillance. Immediate next steps comprise the signature of contracts, a proposal for data reporting and visualisation by EFSA, and a workshop of the One Health surveillance subgroup in November.

## 6.3 One Health operationalisation at EU level

The word One Health encompasses human health, animal health, plant health, and in the environment. These are all elements that appear in EFSA’s mission statement. In the past years, EFSA has been promoting One Health extensively (foodborne outbreaks, antimicrobial resistance, zoonosis monitoring) and one of the main outputs of this work have been the European Union One Health

Zoonoses Reports. Over the years, cooperations have been strengthened with organisations such as ECDC, the European Medicines Agency (EMA), the European Chemicals Agency (ECHA), and the European Environment Agency (EEA). The European Green Deal is also pushing in the One Health direction, in particular the European One Health Action Plan against Antimicrobial Resistance (AMR). The new Horizon Europe programme brings together a number of new partnerships, involving an even large number of partners; EFSA is involved in a number of these partnerships, among which the Animal Health and Welfare European Partnership is the most relevant. In 2022, EFSA organised and held the One Conference in Brussels, where also all sister agencies participated to celebrate the 20th One Health anniversary. Recommendations that were formulated during the conference have been published and highlight the importance of taking actions together between the agencies to access all relevant expertise, data, and knowledge. Among those are six high-level recommendations, most of which are related to food safety. One major recommendation was the establishment of the so-called Cross-Agency Task Force on One Health, which has already published a first a report in which the terms of reference define the four work priorities that should be developed. A survey was launched among EFSA staff to identify barriers people experience with the One Health approach and, not surprisingly, the boundaries given by regulatory frameworks were perceived as being the highest hindrance to apply a full One Health approach.

## 7.1 Outbreak of epizootic haemorrhagic disease in Portugal

Ana Nunes from Portugal presented the situation of epizootic haemorrhagic disease (EHD) in the country. The first outbreak was reported in July 2023 and, at the time of the presentation, a total of 79 outbreaks have occurred so far. Several bovines on affected farms showed clinical signs, but their condition improved significantly after treatment. Portugal already implemented measures after another outbreak was reported in Spain on 23 November 2022, with an edit stating requirements for movements of kept animals. A second edit was released after the confirmation of the first case in Portugal, which strengthened clinical surveillance and communication as well as rules for internal movements from affected areas. Following the spread of the disease, a third edit was released with the same measures but with an extended ban on movements from affected farms. The disease has also affected trade with a restriction on exports of live animals. Spain also gave an update on the disease situation in the country and reported that, during their outbreak, the mortality rate was less than 1%, while the morbidity rate was 7%. Spain informed the network about having started vector surveillance activities, such as collecting Culicoides from traps, and reported that *C. imicola* and *C. obsoletus* complex were implicated in the transmission of the disease. France reported three cases of EHD in autochthonous cattle.

## 7.2 Sheep and goat pox situation in Spain

Sergio Bonilla García talked about the outbreak of sheep and goat pox in Spain. A total of 30 outbreaks were detected in two different clusters involving four provinces of the country. These two clusters seemed to be interconnected by animal movements. Regarding animals affected, a total of 52,000 sheep and 18 goats were involved. The first case occurred in sheep, in a breeding farm for meat production, in September 2022. Subsequently, the farm was immobilised and samples were sent for laboratory analysis. Prevention and control measures were immediately applied, and movements of animals were traced. Laboratory analysis confirmed that a sheep strain of sheep and goat pox virus was involved, which was sequenced by the EURL and reconducted to a strain coming from North Africa. All affected farms in the region of Andalucía had a similar structure (small breeding farms for meat production with few animals and exit to pastures), while the situation in the region of Castilla - la Mancha was different, with affected farms of bigger size and census (various thousands of animals), usually milk production farms, assembly centers and fattening farms, and with more epidemiological links between them. Adoption of a further-restricted zone and of enhanced surveillance measures resulted in the very early detection of other outbreaks. After a number of outbreaks, saliva samples were taken, in which the virus appeared to be more concentrated. At the time of the presentation, no new cases had been registered since May 2023, and restrictions were going to be lifted.

## 7.3 Anthelmintic resistance in France

Charlotte Dunoyer from France presented the problem of anthelmintic resistance in France, which appears to have a huge environmental impact on wildlife, insects, and the fauna of soil, on one hand, and a big concern of therapeutic 'dead end', especially in small ruminants and horses, on the other hand. Concerns are also increasing due to climate change and extensive farming on pastures. The presenter asked the other participants to share their experience and situation in their country. Ongoing research projects were mentioned, e.g. in Serbia.

# 7. African swine fever

## 8.1 Overview of the disease situation in Europe

Lina Mur from EFSA presented the mandate on African swine fever (ASF) and its respective TORs. EFSA is requested by EC to provide an annual report on the epidemiological situation of the disease, and an assessment of risk factors for ASF every two year from 2022 to 2028. Lina Mur presented the report for 2022 and gave an update on the situation in 2023. In 2022, samples taken from domestic pigs for active surveillance decreased significantly compared to the previous year, while the number of tests performed for passive surveillance increased, in accordance with a change in the legislation. In 2022, 93% of the outbreaks reported were detected through clinical suspicion, 5% through tracing from establishments, and 2% through weekly testing of two dead pigs per establishment. Compared to 2021, the situation in Europe improved during 2022 despite the introduction of the disease in Italy and North Macedonia. In terms of number of outbreaks, the situation worsened during summer 2023 for almost

every affected country, with the exception of Lithuania. Up to 15 September 2023, 10 EU countries and 6 non-EU countries notified outbreaks in both domestic pigs and wild boar to ADIS. Regarding the situation in wild boar in 2022, surveillance activities have been intensified in affected areas. The highest positivity rates were obtained in samples taken from wild boars found dead and tested by PCR. In 2023, positive wild boar were found in four different regions in Italy. The most recent country to be affected was Sweden, which, at the time of the presentation, counted 19 positive wild boar. It has also been observed that the proportion of PCR-positive wild boar has increased in the Baltic States. Regarding seasonality in wild boar, a typical winter seasonality (peaks in November, December and January) was observed in some countries, while others experienced two peaks in spring and winter.

## 8.2 Update on the disease situation in Lithuania

Paulius Busauskas from Lithuania presented the epidemiological situation of ASF in Lithuania. The first introduction of the virus into the country dates back to 2014, with the findings of two positive wild boar. In 2023, only few outbreaks occurred in small backyard farms, with the total number of backyard farms in the country having decreased from 40,000 to 5,000. Different biosecurity requirements are currently in place, depending on the type of production system. Therefore, disease spread has been very slow and no larger jumps have been observed during years. Currently, Lithuania is observing the fifth wave of ASF in wild boar. One of the challenged the country is facing is the growing wild boar population, with hunters refusing to hunt females. From 2021-2022, the wild boar population started growing, and the positive cases among animals found dead increased. Therefore, the country is working on long-term strategies to control the wild boar population. To prepare the action plan required by EC, Lithuania shared a survey with hunters and collected around 1,000 answers. In total, 70% of respondents agreed that measures should be taken after the detection of ASF in the hunting unit to eradicate the disease. Results also showed that, between the eradication measures proposed, hunters were more likely to intensify wild boar hunting around the infected unit, followed by biosecurity measures and searching for carcasses, while the temporary ban of hunting activities was not very attractive for hunters. In total, 70% of hunters agreed to significantly reduce the wild boar population in the hunting ground to prevent the introduction of the virus.

## 8.3 Update on the disease situation in Slovakia

Anna Ondrejková from Slovakia presented the situation of the disease in the country. In 2023 (up to 7 September), 499 outbreaks have occurred in wild boar, but the disease has been present in the country since 2019. The total number of outbreaks in domestic pigs since the introduction of the virus amounts to 43 (with 0 outbreaks in 2023 in domestic pigs). Out of those 43 outbreaks, it was possible to determine the source of infection and transmission only for three of them. Almost half (47%) of the outbreaks in domestic pigs from 2019 to 2022 occurred in August, 22.5% in July, and 13% in September. In wild boar, the virus spread mainly during the winter season.

## 8.4 Update on the disease situation in Greece

Sofia Boutsini from Greece presented the epidemiological situation of ASF in the country. The first outbreak occurred in 2020 and then, three years later, a new case occurred in wild boar in January 2023. After the first outbreak in 2023, the National Disease Control Centre was activated. Outbreaks in domestic pigs in April-June followed. After the case in wild boar in January 2023, restriction zones were implemented. A programme for rural development to improve biosecurity measures on pigs farms was implemented, and the country is currently collaborating with neighbouring countries to control the spread of the disease. In addition, public awareness campaigns in region of Eastern Macedonia and Thrace were organised.

## 8.5 Update on the disease situation in Italy

Francesco Feliziani from Italy presented the epidemiological situation of ASF in the country. In Sardinia, no ASF virus (genotype I) has been detected since 2019, while there were still serological positives due to the presence of antibodies against ASF virus until 2022. To date, no serological positives have been detected in 2023, but one case of ASF virus (genotype II) was confirmed on 20 September 2023 in Sardinia in a small farm in Dorgali. Recently, as of 13 September, a total of 26 cases in wild boar have been found in Campania region. After a peak in May-June 2023, no more positive carcasses have been found despite intense search activities. Regarding the region of Calabria, ASF is currently present in both wild boar and domestic pigs. It was stated that, according to the current situation, it would be possible to eradicate the disease in Rome by the end of winter. Regarding the situation in the region of Calabria, more information would be needed before making previsions.

## 8.6 Update on the disease situation in Sweden

Cecilia Hultén from Sweden presented the disease situation in the country. Sweden has performed rapid risk assessment for ASF over the years, and the probability of exposure was assessed to be 'low' for wild boar and 'very low' for domestic pigs. A case in wild boar in Fagersta occurred recently, in a zone with a small number of domestic pigs – the size of the established infected zone is 1000 $km^2$ (all 55 domestic pigs present in the zone were culled). It could not be excluded that the source of infection was access of wild boar to a garbage deposit. Sweden reported great support received from hunters familiar with the affected area and that the carcass search is still ongoing. A total of 37 wild boar out of 47 investigated in the area were found positive. It was decided to fence the core area where wild boar had been found positive.

## 8.7 Update on the disease situation in North Macedonia

Vanja Kondratenko from North Macedonia presented the disease situation in the country. The first outbreak occurred in January 2022, and a total of 42 outbreaks have since occurred in the eastern and north-eastern part of the country. North

Macedonia categorised a total of 5,600 pig farms according to the biosecurity measures implemented with most of the backyard farms going to have disappeared in the future. Since the beginning of 2023, eight new outbreaks have occurred, with one outbreak for the first time affecting a large commercial farm, which led to a massive culling of domestic pigs. Epidemiological investigations of the outbreak did not provide further insights, but private investigations are still ongoing. Regarding wild boar, 49 positive and 2,334 negative animals have been detected through active surveillance, and 36 animals have been tested through passive surveillance. All of the latter resulted positive. Therefore, the situation in wild boar appears to be worsening, which is aggravated by the fact that there is underreporting by hunters who fear the prohibition of hunting in areas where positive cases have been detected and reported.

## 8.8 Update on the disease situation in Croatia

Dražen Knežević from Croatia presented the disease situation in the country. On 26 June 2023, the first case of ASF in domestic pigs was confirmed and, up until 11 September 2023, 750 establishments have been found positive in Croatia. In Vukovar-Srijem County, almost 3,000 domestic pigs showed clinical signs and almost 17,000 domestic pigs were culled, while in the other affected county, Brod-Posavina County, 681 pigs were culled. Regarding wild boar, from July until 8 September 2023, only eight animals were found positive. Croatia intensified public awareness campaigns and launched educational campaigns for farmers. In addition, Croatia has support programmes for farmers in place to improve biosecurity conditions of pig farms.

## 8.9 Use of fences in the management of wild boar populations: discussion

Lina Mur from EFSA presented the results of the questionnaire survey launched to collect information on artificial and natural barriers for controlling wild boar populations in the ASF context. Lithuania, Denmark, Germany, the Czech Republic and Italy reported the use of artificial barriers to control the movement of wild boar, providing information on the type of fences, location, structural characteristics and effectiveness. Lithuania also reported the use of odour repellents. The Czech Republic, Denmark, Lithuania, the Netherlands and Germany provided information on natural barriers present in the countries which helped in controlling the spread of the disease. Some countries will be contacted again and will be asked to provide additional information, as the situation appears to be complex and very different among countries. Participants then discussed the main aspects and challenges faced, taking into account their own experience with fences. Main difficulties and delays in building fences were reported to be due to administrative procedures. Christoph Staubach from Germany reported the effectiveness of fences built when combined with surveillance (drones and helicopters) and increased hunting.

# 8. AOB

## 9.1 The present and future of EFSA's animal health data collection

Gabriele Zancanaro from EFSA informed participants about the SIGMA approach and its main features. The SIGMA framework permits an integrated approach to data collection and analysis, which has already been adopted for the ASF data collection (SIGMA 1.0). SIGMA 2.0 comprises the avian influenza data collection, including a new data model and the use of the SIGMA EST web application tool. For the avian influenza data collection, a training will be held with data providers on 17-18 October 2023.

## 9.2 EFSA's activities in the area of wildlife

Alessandro Broglia from EFSA talked about EFSA's activities in the area of wildlife. The aim is to better assess diseases in which wildlife is involved although only little and non-harmonised data is available. Collection of such data (published and unpublished), the generation of new data, and providing a network of wildlife professionals are core activities. These are covered by three different projects: the ENETwild project (past and following six years), the partnership on Animal Health and Animal Welfare (recently started), and the EU4Health grants. The continuation of the ENETwild project enlarges its focus, hence it has been renamed 'Wildlife and OneHealth', in which wildlife ecology is accompanied by surveillance, and there is a focus on wildlife interaction with livestock, the human population and environment. Aims are to collect, share and analyse data on wildlife demography, disease surveillance, and wildlife interaction. The consortium counts 27 partners and sub-contractors. Building up on the ENETwild 1.0, it now moves to the generation of new data with new tools and technologies such camera trapping and citizen science. This has also given rise to a new sub-project for creating a network of observation points based on camera trapping. An app, iMammalia, has been developed, which allows the recording of mammals observed by citizens.

## 9.3 Network communication and exchange: discussion

Participants agreed to meet more frequently than annually to discuss on selected topics in a more informal environment.