SCIENTIFIC NETWORK ON RISK ASSESSMENT IN ANIMAL HEALTH AND WELFARE

25th meeting of the AHAW Network (AW topic) Network meeting

02-03 April 2025
10:00-18:00 / 09:00-12:00
Minutes agreed on 28 April 2025

Location: EFSA - Parma (00/M08+00/M09) and Online (Teams Platform)

Attendees:

- Network Participants:

Country	Member State Organisation
Bulgaria	• Risk Assessment Center on Food Chain
Cyprus	• Veterinary Services
Czech Republic	• State Veterinary Administration
Denmark	• Danish Veterinary and Food Administration
Estonia	• Estonian University of Life Sciences • Ministry of Regional Affairs and Agriculture
Finland	• Finnish Food Authority
France	• ANSES
Germany	• Friedrich-Loeffler-Institut
Greece	• Ministry of Rural Developement and Food
Iceland	• Icelandic Food and Veterinary Authority
Italy	• Istituto Zooprofilattico della Lombardia e dell'Emilia Romagna, Brescia
Latvia	• Institute for Food Safety, Animal Health and Environment "BIOR" • Food and Veterinary Service
Lithuania	• State Food and Veterinary Service
Netherlands	• Office for Risk Assessment and Research (BuRO), Netherlands Food and Consumer Product Safety Authority (NVWA)
Norway	• Norwegian Scientific Commitee for Food and Environment
Poland	• Wroclaw University of Environmental and Life Sciences
Portugal	• Direção de Serviços de Proteção animal
Romania	• National Sanitary Veterinary and Food Safety Authority
Slovak Republic	• Slovak Academy of Sciences, Institute of Parasitology
Spain	• Ministry of Agriculture, Fisheries and Food

- Observers:
  Swiss Federal Food Safety and Veterinary Office - FSVO (Switzerland); Food and Veterinary Agency of Kosovo* (Kosovo*); Administration for Food Safety, Veterinary and Phitosanitary Affairs (Montenegro); Food

and Veterinary Agency (North Macedonia); General Directorate of Food and Control (GDFC)- Department of Animal Health and Quarantine (Türkiye).

- Hearing Experts:
  Joao Saraiva (day 2)
- European Commission:
  DG SANTE - Unit G.3.
- EFSA:
  BIOHAW: Denise Candiani (chair), Chiara Fabris (vice-chair), Sean Ashe, Beatrice Benedetti, Eleonora Caro, Giulia Cecchinato, Michaela Hempen, Eliana Lima, Aitana López, Aikaterini Manakidou, Claudia Millán, Cristina Rojo Gimeno, Yves Pascal Van der Stede, Frank Verdonck, Marika Vitali.

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Agreement of the minutes of the 23rd meeting of the AHAW Network

The minutes of the 23rd Network meeting had been previously agreed by written procedure on 15 April 2024 and published on the EFSA website on 16 April 2024.

4. Joint session AHAW Network (AW topic) and scientific NCPs Network

The first day of the meeting (02nd of April 2025) was held as a joint session among the AHAW network (AW topic) and the scientific NCPs network.

4.1. Update on the revision of EU legislation on the protection of animals

The European Commission (EC) representative from DG SANTE G.3 Unit (Animal Welfare) presented the ongoing initiatives of the EC in relation to the revision of the AW legislation.

Two legislative proposals were adopted in December 2023: i) on the protection of animals during transport and ii) on the welfare and traceability of dogs and cats.

For transport, main changes are to further limit the maximum journey times for the transport of live animals, clarify the roles and responsibilities of the different actors, as well as open norms, to have same or equivalent animal

welfare requirements for import of animals, to improve surveillance tools for export (e.g. animal welfare officer on board of vessels, certification bodies), and to implement digital tools to facilitate and simplify the enforcement of transport rules.

Regarding the state of play, no mandate yet has been received by the EU Council. The proposal is prepared by the EU Parliament but there is no consolidated view yet.

The legislative proposal on the protection of dogs and cats foresees common minimum standards for the housing, care and handling of dogs and cats that are bred or kept in breeding establishments, in pet shops and in shelters. Regarding the state of play, there is an EU Council mandate for negotiations with the European Parliament and the European Parliament's plenary vote is expected in June 2025.

Beside the legislative proposals, other updates were given related to:

- the European Citizens' Initiative (ECI) "Fur Free Europe" on the phasing out and ban of cages for fur animals, for which an EFSA scientific opinion on the welfare of fur animals is expected by June 2025 (see also item 4.7 below) and communication by the EC about the measures it intends to take is expected by March 2026;
- the intention of further modernisation of animal welfare expressed by the new Commissioner for Health and Animal Welfare;
- the vision for Agriculture and Food, which is the new framework under which the EC will continue the work on AW;
- broad stakeholder consultations in 2025.

During the Questions & Answers session, it was asked whether the revised EU legislation on transport of animals will include surveillance of live export to third countries. As a reply, it was emphasised how a better tracking of transport is expected in general by better use of digital tools. It was also asked if there are any insights on the transport proposal, and precisely whether it will regulate for environmental temperatures or for the inside truck temperatures. This will be for the co-legislator to decide.

4.2. Information on re-structure of AHAW Network and subgroups

EFSA provided an overview of the new structure of EFSA's Animal Welfare (AW) Network and its subgroups, following the EFSA Management Board decision on strengthening scientific cooperation. The AHAW Network will be split in the AH Network, with its subgroups, and the AW Network. The AW Network will operate independently but remain closely aligned with its subgroup of the scientific National Contact Points (NCPs) under Art 20 of Council Regulation (EC) 1099/2009. The objectives include sharing best practices in AW risk assessment, identifying research needs, fostering collaboration between EFSA and EU Member States (MSs), and enhancing data collection and expertise mapping. The NCPs subgroup will specifically focus on the protection of animals at the time of killing. Regular meetings and an online platform will support information exchange and coordination.

4.3. EFSA's ongoing and planned activities as follow-up of the Roadmap for action 'More Welfare'

EFSA presented its ongoing and planned activities as a follow-up to the Roadmap for action 'More Welfare'. Key initiatives include projects on welfare indicators for dairy cows, methodologies to assess positive welfare based on animal preferences, modelling heat stress during transport, harmonised welfare data collection for pigs, and welfare monitoring of broiler chickens. These activities aim to improve risk assessment methodologies and support harmonised animal welfare data collection across the EU. An upcoming grant for broiler welfare data collection will be launched in May 2025, with a pre-launch meeting scheduled for 30 April 2025.

During the Questions & Answers session, it was asked if the project on transport temperatures will also cover transport by vessels and it was clarified this is not foreseen in this project. Related to the project on broiler welfare, it was asked which organisations are eligible to apply for this open grant. It was explained that all EFSA Article 36 organisations can apply.

Link to the list of the Art 36 organisations: https://efsa.my.site.com/competentorganisations/s/competentorganisation/CompetentOrganisation__c/00B1v000009LqfIEAS

4.4. European Partnership on Animal Health and Welfare

EFSA presented its activities in the frame of the European Partnership on Animal Welfare.

The European Partnership Animal Health & Welfare (PAWH) will provide society with a sustainable production for both terrestrial and aquatic animals, where infectious animal diseases are prevented and controlled, antimicrobials are used prudently, and a high level of animal welfare is provided in every phase of animal's life. The PAWH includes 56 Research Performing Organizations (RPO) and 30 Funding Organizations (FO) from 24 EU and non-EU European countries. The Financing Organisation partners will contribute through external calls to further R&I actions not covered by internal activities as they require other expertise or industry participations.

The Partnership will run for at least five years but it could be extended for 7-10 years. The total budget is around 400 million with a 48% re-imbursement of the resources used.

From the first set of internal projects (2024-2026) EFSA will be involved in the following specific Sets of Activities (SoAs):

- The development of a "Knowledge platform" in the EU with the objective to collect, analyse, share and use data for the monitoring of animal welfare (SoA9).
- The development of methodologies to assess positive animal welfare (SoA13).
- The gathering of expertise and the development of methodologies to assess the sustainability of food production to include animal welfare (SoA17).

From the 2nd set of internal projects (2026-2028) EFSA will be involved in:

- The further development of the "Knowledge platform" extending its scope to new topics
- The gathering and assessment of current technologies for the real time assessment of animal welfare
- The further development of animal welfare indicators with particular emphasis on cut offs i.e. levels of animal welfare indicators (ABMs) that would initiate an intervention.

During the Questions & Answers session, the representative from Spain informed of another SoA that might be of interest for the EFSA Networks, and precisely the specific activity on protocols, indicators and technology to assess unconsciousness and death in several species, starting from poultry but also including rabbits, ruminants, pigs (including emergency killing), fish and crustaceans. Links to the partnership project and the different SoAs are reported here:

https://www.eupahw.eu/

https://www.eupahw.eu/projects/surveillance-monitoring-systems-and-risk-assessment-for-animal-health-and-welfare/knowledge-platform-in-the-eu-with-the-objective-to-collect-analyse-share-and-use-integrated-scientific-and-technical-data-on-aw

https://www.eupahw.eu/projects/procedures-methodologies-and-tools-to-analyse-animal-health-and-welfare/livestock-and-fish-welfare-at-slaughter-and-when-killing-for-e-g-disease-control-and-emergency-killing-development-of-technologies-procedures-and-or-pr

https://www.eupahw.eu/projects/procedures-methodologies-and-tools-to-analyse-animal-health-and-welfare/assessment-of-positive-welfare-defining-animal-based-measures

https://www.eupahw.eu/projects/management-and-husbandry-guidelines-on-farm-including-aquaculture-during-transport-and-at-slaughter/sustainability-aspects-of-aw-promoting-livestock-systems

4.5. Update on the EC ongoing activities inherent to the protection of animals at the time of killing

The EC representative from DG SANTE G.3 Unit (Animal Welfare) presented an update of the EC ongoing initiatives on the protection of animals at slaughter and killing.

A series of mandates on slaughter/killing was sent to EFSA leading to the publication of the Scientific opinions (in 2019, 2020, 2024 and 2025) on the welfare at slaughter of several animal species (including fish, in 2009) and on the welfare during killing for purposes other than slaughter (see also item 4.6.1 below).
EFSA was mandated to deliver also two Scientific opinions on new stunning methods: the Scientific opinion on the use of high-expansion foam for stunning and killing pigs and poultry, published in 2024, and the Scientific opinion on the use of Diathermic Syncope® for stunning cattle, which is currently under development (see also items 4.6.2 and 4.7 below).

Following the EFSA conclusions on pig stunning with high concentrations of CO_2, considered aversive and likely to be painful, the European project 'Pigstun', was funded to investigate non-aversive stunning methods for pigs and with the purpose to encourage EU pig slaughterhouses using high CO_2 concentration for stunning pigs to convert to more AW friendly systems. Four promising alternatives have been explored and tested: i) Optimised CAS process, ii) Argon Retrofit System, iii) Helium Stunning System, and iv) Improved Electric stunning process. Technical specifications of each alternative were presented in detail.
The outcomes of the project will be presented in the final event in Brussels (and online) on the 4th of April 2025, and six additional Webinars will be organized.

Updates were also given in relation to the activities of the EU Platform on AW (extended for five more years) and the four EU AW Reference Centers. About the activities beyond the EU context, where the EC has been involved, it was reported that in May 2024, the World Organisation for Animal Health (WOAH) has adopted the revised standards on AW during slaughter (WOAH Terrestrial Code, Chapter 7.5) whereas the standards on 'killing of animals for disease control purposes' (Chapter 7.6) are still under revision. In this context, the EC participated to regional workshops with Eastern European countries.

The EC 2021-2025 program of audits in the EU MSs on AW on farm, during transport and at slaughter was also presented. The main issues about 'killing of animals' that were identified regarded: i) housing, ii) training, competence and certification of the staff, iii) operating procedures, iv) stunning equipment and v) keeping of records. In 2026 a new program will be carried out.
Meeting participants were informed that five fact-finding missions on fish welfare at slaughter are planned, and that two audits on the slaughter of ruminants and poultry will be carried out in 2025. The difference between 'fact finding missions' and 'audits' was explained, having the former the purpose of collecting information on the situation in a MS on a specific topic or in absence of a specific legislation. The latter (audits) are focused to check compliance with existing legislative requirements.

4.6. Recently published EFSA scientific opinions

The Scientific Opinions (SOs) recently adopted by the EFSA AHAW Panel and published on the EFSA website were presented.

4.6.1. Scientific opinions on slaughter and on-farm killing

The scientific opinion on the welfare of sheep and goats during killing for purposes other than slaughter assessed: (i) on-farm killing of individual animals (unproductive, injured or terminally ill animals) and (ii) large-scale killings (depopulation for disease control purposes and for other situations, such as environmental contamination and disaster management) outside the slaughterhouses. The killing methods that have been identified as relevant for sheep and goats include penetrative captive bolt followed by a killing method (e.g. pithing or sticking), non-penetrative captive bolt followed by a killing method and firearm with free projectile, electrical stunning, lethal injection. For electrical killing, a minimum current of 1 A applied for a

minimum of 2 seconds delivered using 50 Hz sine-wave alternating current spanning the brain and the heart simultaneously is effective in stunning and killing. Non-penetrative captive bolt applied on the midline, between the ears, with the chin tucked into the neck is a killing method for lambs and goat kids weighing up to 4.5 kg. It is a reversible stunning method for lambs and goat kids in between 4.5 and 10 kg and there is not enough information to conclude if non-penetrative captive bolt is an effective stunning method for sheep and goats of more than 10 kg.

Link to the SO: https://www.efsa.europa.eu/en/efsajournal/pub/8835

In the scientific opinion on the welfare of horses at slaughter, the whole slaughter is divided into Phase 1 (pre-stunning), covering the following processes (in chronological order): (a) arrival, (b) unloading of the animals from the vehicle, (c) lairage, (d) handling and moving to the stunning area and (e) restraint; Phase 2 (stunning) including the relevant stunning methods; and Phase 3 (bleeding) involving exsanguination following stunning. Stunning methods for horses include penetrative captive bolt and firearms. Welfare consequences that horses may experience (such as handling stress, restriction of movement and injuries) and potential hazards were identified for all the phases along with preventive and corrective measures. For arrival and unloading during phase 1, the opinion refers to a previous EFSA assessment on the welfare of *Equidae* during transport. A flowchart of ABMs to assess the state of consciousness is provided to allow monitoring during the stunning and bleeding phase at three key stages ((1) between the end of stunning and shackling, (2) during neck cutting or sticking, (3) during bleeding).

Link to the SO: https://www.efsa.europa.eu/en/efsajournal/pub/9178

The Scientific opinion on the Welfare of horses during killing for purposes other than slaughter assessed three stunning and/or killing methods: (i) penetrative captive bolt followed by killing, (ii) firearms with free projectiles and (iii) lethal injection.

Link to the SO: https://www.efsa.europa.eu/en/efsajournal/pub/9195

During the Questions & Answers session, the Spanish Network member requested a clarification on the definition of 'slaughter', and precisely if it also relates to the animals that are slaughtered on the farm for human consumption (e.g. because unfit for transport). It was clarified that slaughter also covers this case. The representative from Iceland asked whether, in the other countries, there are systems in place in case of accidents of animals on the road e.g. educational plan pointed to the police for efficient killing of horses or other animals in case of injury/accidents. The following information was collected: in Czech Republic brochures for Fire Brigades exist, but only for handling animals in case of accidents or in case of rescue in cases other than traffic accidents. In case of accidents, the police can kill a horse or injured cattle on the spot, but usually the police refers to the competent authority and then depending on situation (species, number, type of road, day/night, place) further cooperation is achieved with private vets or

slaughterhouse personnel. In Finland, the police is an animal protection authority (24/7). If necessary, the police can kill a horse or injured cattle on the spot or also ask for help from a local hunting club. However, there is usually no extra training for Police. The representative from Finland asked for more clarifications on the killing via lethal injection of horses. It was replied that lethal injection makes less noise and the procedure is less scary for the conspecifics that are in the same pen.

4.6.2. Scientific opinion on the use of high expansion foam for stunning and killing pigs and poultry

Nitrogen Expansion Foam System in containers (NEFS in containers) is an alternative modified stunning and killing method for on-farm killing and situations other than slaughter (e.g. depopulation) for laying hens and broiler chickens of all ages and for pigs weighing between 15 and 41 kg. With a certainty of >50%–100% NEFS ensures a level of AW at least equivalent or better to CO_2 at high concentration for pigs and to CO_2 at high concentration, especially during whole house gassing, as well as to electrical water bath for poultry. The procedures for animal handling, stunning and killing pigs and poultry are at least equivalent to those procedures involved in containerised gas methods currently prescribed in the legislation. NEFS maintains the loss of consciousness and sensibility until the death of pigs and poultry, provided that O_2 levels remain below 2% by volume throughout the entire process. The duration of exposure to anoxia (5 minutes for poultry and 7 minutes for pigs) is adequate and appropriate to kill the specified species and types of animals.

Link to the SO:
https://efsa.onlinelibrary.wiley.com/doi/full/10.2903/j.efsa.2024.8855

During the Questions & Answers session, further explanations were given regarding the weights of pigs, the size of the containers and the related recommendations.

4.7. Update on ongoing mandates on animal welfare (beef cattle, turkeys, animals kept for fur production, use of DTS for stunning cattle)

Network members were given an update by the EFSA AW team on the progress of the ongoing scientific opinions that EFSA is producing:

The EFSA staff presented the state of art of the draft SO on the welfare of beef cattle. The presentation focused on an overview of engagement activities carried out with stakeholders, and on an overview of the methodological approach taken in relation to certain hazards (restricted space, lack of enrichment and slatted flooring). The SO is planned to be adopted in June 2025.

An update overview on the state of development of the draft SO on the welfare of turkeys on farm was also provided. The presentation provided an overview of the engagement activities carried out with the stakeholders including the results of the public consultation which inputs have been used to inform the assessment and the report on the housing systems and

practices of keeping turkeys. Furthermore, the progress of EFSA experts and the panel assessing certain hazards such as poor quality of litter, lack of enrichment, concentration of CO_2 and concentration of ammonia and the selection of ABMs measured at slaughter to assess welfare of turkeys on farm was indicated. In addition, the Technical Report on the housing systems and practices of keeping turkeys has been endorsed by the EFSA AHAW Panel and will be published later in 2026. The SO is planned to be adopted by the EFSA AHAW Panel in December 2025.

An update on the SO under development on the welfare of the animals kept for fur production was presented. The presentation described the updated timeline, given a request for an extension was granted by the end of March 2025. It also mentioned the five species involved in the mandate and the current state of play of the SO, and Technical Report. A summary of the steps carried out to select the most relevant welfare consequences was provided, followed by the stakeholders' engagement plan, and figures of the number of replies from the four calls for evidence. Both the SO and Technical Report are planned to be adopted by the EFSA AHAW Panel in June 2025.

Finally, Network representatives were updated on the progress of the SO on the use of Diathermic Syncope® for stunning cattle and its dossier. This method is compared with penetrative captive bolt, head-only electrical and head-to-body electrical stunning. An expert knowledge elicitation exercise took place to estimate the prevalence, duration and severity of the exposure to stress and pain of cattle within each hazard in each of the comparable stunning methods and the final highly selected hazards for each method have been identified. A new questionnaire asking for additional data was sent to the applicant, in order for EFSA experts to finalise the conclusions. The SO is planned to be adopted by the EFSA AHAW Panel within 2025.

During the Questions & Answers session, in relation to the mandate on the welfare of beef cattle, the Dutch AW Network representative reported that the Office of Risk Assessment and Research from the Netherlands Food and Consumer Product Safety Authority published a risk assessment on the red meat supply chain in October 2024, where there is a separate chapter on welfare of beef cattle on farm. The biggest risks identified are the limited movement and change in lying behaviour of fattening bulls kept on concrete slatted floors. The document is in Dutch, but an English translation is in progress and will be available in the future (https://www.nvwa.nl/onderwerpen/vlees-en-vleesproducten/documenten/dier/dierenwelzijn/welzijn/publicaties/onderbouwing-risicobeoordeling-roodvlees--en-grofwildketen).

In relation to the mandate on the welfare of animals kept for fur production, it was asked how the most relevant welfare consequences were identified. It was explained that the selection was carried out through expert elicitation, taking into account the severity, occurrence, and duration in each species included in the mandate.

4.8. Mandate on the welfare of *Equidae*

The mandate on the welfare of *Equidae* was presented by EFSA. This European Commission mandate requests EFSA to provide scientific opinions

on the welfare of horses, donkeys, and their hybrids (mules and hinnies) to inform the revision of EU animal welfare legislation. The mandate consists of both a technical report on current husbandry practices in the EU and a scientific opinion addressing specific welfare concerns. These include: housing conditions, outdoor keeping, mutilations, healthcare, breeding practices, genetic selection, commercial blood collection, human-animal interactions, and working conditions. For each area, EFSA must identify welfare consequences, recommend suitable animal-based measures for monitoring, and provide qualitative or quantitative recommendations to prevent hazards or mitigate welfare issues.

The mandate is available at this link: https://open.efsa.europa.eu/questions/EFSA-Q-2024-00188?foodDomains=Animal%20Welfare.

During the Questions & Answers session, the AW Network representative from the Netherlands reported that the Office of Risk Assessment and Research from the Food and Consumer Product Safety Authority is also working on a risk assessment on the welfare of horses on farm for the different groups of horses, e.g. sport horses, horses used for recreational activities, breeding mares, retired horses. The outcomes of the risk assessment are expected to be ready in 2025.

In addition, the issue of water provision to horses was discussed. In Finland and Sweden, by legislation on AW requirements, horses need to have liquid water at disposal, whereas the snow is not considered sufficient. In Norway the snow is not recognised enough, as well. In Iceland, according to the 2014 regulation, water and snow are considered sufficient, whereas this is not the case for the ice.

4.9. Update on the development of the Network Team shared space

EFSA will soon implement the platforms for further communications (Share Point and Teams groups) separately for each Network subgroup. Network members will be contacted to enable their EFSA profiles.

4.10. Exchange of information

In this session, representative of both Networks proposed topics for exchange of information and plenary discussions.

4.10.1. Tail docking piglets

The Network representative from Iceland presented the issue of tail docking in piglets to gather information about how the other countries implemented the ban of tail docking. Tail docking is not allowed as a routine practice, but in the reality most piglets are still tail docked.

During the plenary discussion, the representative from Sweden clarified that tail docking is banned from 1998, and it is not considered anymore a big problem, as the provision of sufficient space and enrichment substantially decreases the risk of tail docking. In Finland, the problem still exists although it is banned for 25 years as it is difficult to control all factors influencing the occurrence of tail biting. In Estonia, the ban foresees derogations (e.g. presence of bruises on the ears, or bitten tails) for which tail docking can be practiced, strictly by a veterinarian and it should be proved that all measures to avoid it were put in place. A recent study in Italy highlighted that 15.2% of farms do not perform tail docking, 9.1% farm do it routinely, the remaining farm do it partially. In Portugal, farmers are supported to implement the preventive measures. In Ireland, a high percentage of piglets are still docked as infrastructures (e.g. fully slatted floors) still need to be improved. In Switzerland, tail docking has been banned without exception since 2008. Experience in Switzerland revealed that, in addition to enrichment, animals that are hungry show increased tail biting. Due to the way they are bred, fattening pigs are always hungry. If they are not fed *ad libitum*, or if there are not enough feeding places available, or if the mash feed is too dry, tail biting may occur.

4.10.2. Cleanliness in cattle

The Network representative from Iceland made a presentation on the issue of dirty cows that are received at the slaughterhouses. There is a practical scoring system (a 'traffic light' system with red, yellow and green cows depending on cleanliness) in place in the Northern countries for assessing AW on cattle farms through some indicators, among which the measure of cleanliness. However, still dirty cows are transported to the slaughterhouse. The other Network representatives were questioned how the situation in their countries is and if they have a system in place to follow up on cleanliness, to avoid sending dirty cows to slaughter.

During the plenary discussion, Sweden clarified they have a similar situation, especially regarding dairy cattle kept indoor. Also, it was noted that fitness for transport is a shared responsibility between transporters and farmers. Similar issues in assessing cleanliness exist in several countries. In Finland a guidance exists to categorize different level of cleanliness/dirtiness. In the Netherlands, contamination of cattle is assessed during inspections at primary farms and is often directly related to lying areas that are insufficiently dry and clean. It is one of the more common violations especially at farms with severe welfare issues. Farms with severe welfare issues will have more inspections. There is no 'traffic light' system implemented as competent authority. If the official veterinarian at the slaughterhouse observes a very dirty animal, he can give a notification for an on-farm inspection on AW.

4.10.3. Mobile zoos/farms and itinerant events with animals

The representative from Belgium (Region Wallonia) (scientific NCPs Network) gave a presentation on welfare issues related to mobile zoos and itinerant events. By legislation, animals can be employed in mobile facilities e.g. circuses or exhibitions. There is an increased societal demand for protection

of these animals, including birds, especially raptors, that are exposed to stress due to continuous transport and lack of specific dietary care.

During the plenary discussion, it was explained that in Sweden, private citizens cannot keep raptors, which can instead be kept only in zoos, that are therefore regularly inspected. Dogs, cats, horses can be used in zoos but not wild animals. In Italy, a new legislation exists allowing private owners to keep raptors. In Belgium (Region Flanders) a regulation exists for keeping birds of prey with some specifications e.g. space needs etc. In Finland the use of birds of prey, ostriches, predators, seals, elephants, rhinoceroses, hippopotamuses or crocodilians is not allowed in circuses or "shows".

4.10.4. Keeping of goats at farm level

The Network representative from Belgium (Region Flanders) made a presentation about welfare standards for goats kept in farms. Meeting participants were asked if they have any specific regulation and if it specifically covers i. dehorning, ii. enrichment, iii. use of male goat kids.

During the plenary discussion, the representative from the Netherlands explained that male kids have no value as they are not consumed and are mostly used for petfood production. Male kids have to stay on the farm for few weeks or go to slaughterhouse at one week of age. A risk assessment on the welfare of male dairy goat kids precises these standards:

https://www.nvwa.nl/binaries/nvwa/documenten/dier/dierenwelzijn/welzijn/publicaties/onderbouwing-risicobeoordeling-roodvlees--en-grofwildketen/onderbouwing-hoofdstuk-7-dierenwelzijn-geitenbokjes-primair-bedrijf.pdf

In Italy, there are guidelines for farmed goats, and male kids are slaughtered for human consumption at 21-30 days of age. Also in Estonia specific guidelines for keeping of goats exist, for instance specifying enrichment needs, like the need to see other conspecifics. In Finland, there are not many goat farms. Male kids are not consumed. They are dehorned at about 4 weeks of age by a vet.

4.10.5. Current scientific opinion of the Norwegian Scientific Committee 'Assessing welfare aspects of stunning and killing farmed fish'

The Network representative from Norway (scientific NCPs Network) presented the current situation in Norway in relation to stunning and killing of farmed fish, including the species that are farmed and the methods for stunning and killing fish that are allowed. According to the Norvegian legal requirements, all fish must be stunned before killing, stunning must be performed using an appropriate method which does not cause significant stress or pain to the fish and that induces immediate loss of consciousness. Fish must remain unconscious until death. The use of CO_2 and other methods blocking oxygen absorption are not allowed in Norway.

Against this background, the Norwegian Scientific Committee for Food and Environment was asked to develop a scientific opinion to:

- Assess what criteria should be used for documentation of methods, to ensure that fish are stunned and killed painlessly and with minimal stress.
- Evaluate how anatomical, physiological, and behavioural differences between fish species affect animal welfare during stunning and killing, and how this might influence the criteria for documentation.
- Summarise knowledge and risk perspectives on animal welfare concerning methods for stunning and killing which are relevant for farmed fish in Norway.

Lack of literature and differences between fish species were reprted as the main challenges for this assessment. It was also specified that the focus of the scientific opinion are farmed fish species.

During the plenary discussion, there was large interest on the methods for assessing unconsciousness in fish (e.g., by EEG, brain-checks, visual responses or posture) and on the stunning methods. It was recognised that not all stunning methods work for all fish species. Electrical parameters exist for electrical stunning of a few fish species, whereas in many countries mechanical percussion is the method considered as the best option.
In a German project the use of captive bolt in sturgeon, arapaima and catfish is being evaluated. A survey on fish stunning and killing methods and indicators of unconsciousness was carried out in Italy and published in 2023 (https://www.frontiersin.org/journals/veterinary-science/articles/10.3389/fvets.2023.1253151/full)

4.10.6. Fish farming and methods of common fish slaughter

The Network representative from Czech Republic made a presentation on the issue of fish farming and methods of common fish slaughter. In Czech Republic most fish are harvested from freshwater ponds, while smaller quantities are produced in specialized farming facilities (mainly for trout) or are caught in dams. The most common fish species include carp, rainbow trout, and brook trout.
Traditionally, fish are harvested from ponds in the autumn through a process that involves catching, sorting, crowding, and removing the fish from the water to sell them directly on-site. During the winter, large Christmas markets drive high demand, leading to increased fish harvesting. These fish are kept in tanks until they are manually killed and sold. Many customers enjoy eating freshly prepared fish at the markets.There is also year-round fish production to supply markets and supermarkets in all seasons, and to produce processed fish products. For this, after being caught the fish are transported to one of the ten fish slaughterhouses located in Czech Republic. The national legislation foresees that fish are kept in tanks before slaughter, are stunned with mechanical percussion or electrically in water with sufficient current and duration and using an alternating current of 230 V, and are bled by severing the gill arches or the spinal cord and blood vessels by cutting immediately behind the head. Official inspections are performed to check AW standards mainly during fish harvesting, at the fish markets and at the slaughterhouses; however, there are few specific welfare indicators applied to fish, but considered difficult to assess.

Information was asked to meeting participants about the situation in their countries on what methods are used to slaughter, and particularly bleed fish in their countries and if they have in place effective AW indicators for monitoring fish slaughtering.

During the plenary discussion, it was highlighted that electrical stunning is a very common method in the EU for fish stunning and that indicators of fish unconsciousness and death exist (see also point 4.10.5 above). In vessels and on the spots, fish is generally stunned/killed with mechanical percussion and by trained personnel.
In the Netherlands, stunning is used to a limited extent and there are national legislative provisions only for electrical stunning of eel prior to killing. A risk assessment on the fish supply chain was also produced in 2022: it was concluded that there is a lack of feasible and practical methods and resources to kill/slaughter both wild-caught fish and farmed fish in an animal welfare-friendly manner. Links to the Dutch risk assessment: https://www.nvwa.nl/onderwerpen/visketen-in-beeld and https://english.nvwa.nl/documents/consumers/food/safety/documents/advice-of-the-office-for-risk-assessment--research-on-the-risks-to-humans-animals-and-nature-in-the-fish-supply-chain.

4.10.7. High percentage of food pad dermatitis in broiler chickens

The Network representative from Czech Republic introduced the issue of managing high percentages of foot pad dermatitis (FPD) in broiler chickens. In Czech Republic, the incidence of FPD is assessed at the slaughterhouse by sampling 100 claws. A score is given to each claw: score 1 for mild lesions and score 2 for severe lesions. The total number of 1-scores is multiplied by 0.5, while the 2-scores are multiplied by 2. Their sum represents the FPD score; a score of 81 or higher is considered unsatisfactory and reported to the competent veterinary unit for further evaluation at the farm level. Official farm inspections take place at the end of the broiler fattening cycle, before the birds are caught and transported to the slaughterhouse. These inspections assess farming conditions and review results from previous controls. Compliance with AW requirements is checked, and in cases of non-compliance, farmers receive recommendations for improvement. Based on data analysis from 2023, in Czechia the incidence of severe FPD in broiler chickens was found to increase with stocking density, reaching up to 100% in flocks with a stocking density above 39 kg/m² and up to 42 kg/m².
Meeting participants were asked to report on the measures that Competent Authorities and farmers apply in their countries to prevent and/or correct severe FPD cases, including follow-up actions in the case of repeated non-compliances.

During the plenary discussion, the representative from Sweden explained that, if at the slaughterhouse a flock is assessed with severe FPD, the farm is inspected. In the farms where the FPD problem is repeated, the farmer is obliged to reduce the stocking density. This is a way to incentive the farmers to take actions and improve the farming conditions, in particular, in relation to the litter humidity, ventilation, levels of ammonia and feeding. In Switzerland the use of dry litter is considered the main FPD preventive

measure. In the Netherlands FPD at the slaughterhouse is checked by camera-systems. In case of severe FPD the farmer receives a notification letter and should put in place all the appropriate actions to solve the situation, otherwise a fine is issued. In Iceland, the Icelandic Food and Veterinary Authority is responsible for the assessment of chickens with walking injuries following an assessment protocol similar to the one in Czechia. Reports of the results are sent to the farmer when the total FPD score at the slaughterhouse is above 40. With scores between 41 and 80, and in the case of repeated issues, the stocking density is reduced by 2 kg/m^2. When the total FPD score is above 81, the stocking density must be reduced by 3 kg/m^2. However, according to this system, the stocking density can only be limited to 25 kg/m^2. If the FPD score is still above 40 points after that limit is reached, the provisions of Chapter X of the Animal Welfare Act No. 55/2013 apply. In Denmark sanctions and reduction of the farm stocking density are foreseen for very severe cases; in this MS sanctions are also escalated. In Greece, the farm has its own identification code, under which various locations/houses where animals are kept are registered. For severe cases, sanctions are given to each house under the same farm identification code; in the case of repeated non-compliances, the farmer can lose the farm identification code. In Spain, inspectors perform official controls in the farms in the case of FPD problems assessed at the slaughterhouse; guidelines for monitoring at the slaughterhouse the welfare conditions of broilers in the farm have been produced (https://www.aesan.gob.es/AECOSAN/docs/documentos/seguridad_alimentaria/gestion_riesgos/Procedimiento_deteccion_post_mortem_bienestar_pollos_engorde.pdf).

Meeting participants were also informed that the EURCAW-Poultry-SFA has developed a factsheet of FPD in broiler chickens specifying also preventive recommendations (https://zenodo.org/records/7427121).

4.10.8. Personnel carrying out depopulation

The Network representative from Italy made a presentation on the issue of training of the personnel carrying out depopulation activities. For example, in 2024, African Swine Fever outbreaks involved millions of pigs and wild boars. Depopulation was carried out using a variety of methods, including CO_2, also in combination with electricity, penetrative captive bolt, nitrogen, etc. In such situations involving high numbers of animals, the personnel must act quickly and under critical conditions. The competence of the personnel carrying out these activities in emergency situations could be seen as a critical point.
Meeting participants were invited to discuss the possible solutions to this issue, which include *ad-hoc* trainings and issuing of a specific certificate of competence for these operators, and the presence of a 'AW officer' during the depopulation activities, meaning a specifically qualified person to coordinate and follow up the implementation of the AW operating procedures.

During the plenary discussion, it was reported that in Czech Republic specific training on depopulation activities related to avian influenza outbreaks are organised periodically for official veterinarians. Practical trainings are also

organised involving personnel of the Army. Meeting participants also discussed the need of having specific and detailed contingency plans, even in the case of natural disasters. In Sweden, contingency plans have been produced for any kind and level of disasters.

Meeting participants were also informed that the EURCAW-Poultry-SFA has produced a guidance on the selection of the depopulation procedure according to the specific features of the targeted farm, and suggestions for assessment methods of poultry welfare during depopulation procedures (https://sitesv2.anses.fr/en/minisite/sfawc/depopulation-methods).

5. Exchange of information on the welfare of aquatic animals

The second part of the meeting (Day 2 – 03rd of April 2025 AM) was dedicated to the welfare of aquatic animals with a presentation for exchange of information on the welfare of crustaceans and a session dedicated to the feedback from a survey on fish husbandry systems.

5.1. Welfare of crustaceans

The Network representative from Italy made a presentations about welfare of crustaceans. It is well recognized that crustaceans are sentient beings. Despite other animals, they are alive animals that are considered food. The other Network representatives were asked if they have any regulation in their countries for protection of crustaceans.
During the plenary discussion, it was reported that in Norway the Animal Welfare Act also applies to crustaceans, but there are unresolved issues about transport. In Sweden, crustaceans are also covered by the general Animal Welfare Law but details related to stunning methods are not specified.

5.2. Survey on fish husbandry systems in the EU

The feedback of a survey, distributed to all Network members, on fish husbandry systems common in use in the Member States was presented. A separate report will be published on EFSA's website with details on the outcomes of the survey.

6. Any Other Business

EFSA presented the process for the submission of proposals for tailor-made activities (TMA) under the AW Network and the Network of scientific NCPs for Article 20 of Regulation (EC) 1099/2009. EFSA encouraged EU MSs to contact their Focal Points for support in developing proposals and highlighted examples of possible activities. More information can be retrieved from the following links:

https://www.efsa.europa.eu/en/infographics/focal-point-network (infographic on TMA),

https://www.efsa.europa.eu/en/partnersnetworks/eumembers (contact information of EFSA's Focal Points).

7. Next meeting

Next meeting date to be fixed.