

**SCIENTIFIC NETWORK ON RISK ASSESSMENT IN
ANIMAL HEALTH AND WELFARE (AW topic)
Minutes of the 21st meeting**



30-31 May 2023

10:00-17:30 / 09:00-12:00

Minutes agreed on 21 June 2023

Location: EFSA - Parma/Web conference

Attendees:

- Network Participants:

Country	Name	Participation to the meeting
Austria	Claudia Schmied-Wagner	Online
Belgium	Ester Peeters/ Karlien De Paepe	Online
Bulgaria	Madlen Vasileva/ Ilian Kostov	Online
Czech Republic	Simona Nincakova/ Marie Koubkova	Physically Online
Estonia	Ulrika Tuppits/ David Arney	Physically
Finland	Taina Mikkonen	Physically
France	Virginie Michel/ Sarah Bourgine	Physically Online
Germany	Inga Wilk	Online
Greece	Katerina Marinou	Physically
Hungary	Laszlo Pallós	Online
Iceland	Póra Jóhanna Jónasdóttir	Physically
Ireland	Stephanie Ronan	Online
Italy	Sara Rota Nodari	Physically
Latvia	Rudite Berzina	Physically
Malta	Gemma Pantaleo	Online
Netherlands	Ursinus Winanda	Physically
Norway	Dean Basic/ Cecilie M Mejdell	Online
Poland	Przemyslaw Cwynar	Online
Portugal	Maria Correia/ Maria Da Conceição De Oliveira	Online
Romania	Adina Ciurea	Online
Spain	Maria Teresa Villalba/ Lorena Solar	Physically Online
Sweden	Birgitta Carlsson/ Mattias Gårdlund	Online

- Observers:
Beat Wechsler (Switzerland - online)
Berat Hoxha (Kosovo – physically); Ivan Ivanovic (Montenegro – online);
Aleksandar Nemet (Bosnia and Herzegovina - online); Dimitar Terzievski
(North Macedonia - physically); Cüneyt Turan (Türkiye - online).



- Hearing Experts:
Christoph Winckler Member of the AHAW Panel.
Elisabetta Canali Member of the AHAW Panel
- EFSA:
BIOHAW Unit: Denise Candiani (chair); Chiara Fabris (vice-chair); Gizella Aboagye; Sean Ashe; Michaela Hempen; Eliana Lima; Aikaterini Manakidou; Cristina Rojo Gimeno; Frank Verdonck.

1. Welcome and apologies for absence

The Chair welcomed the participants.
Apologies were received by Lithuania and Albania.

2. Adoption of agenda

The agenda was adopted without changes.

3. Agreement of the minutes of the 20th Network meeting held on 11-12 October 2022, via web-conference

The minutes of the 20th Network meeting had been previously agreed by written procedure on 31 October 2022 and published on the EFSA website.

4. Joint session - Update from EFSA on mandates on animal welfare

The first day of the meeting (30th of May 2023) was held as a joint session among the sNCPs network and the AHAW network (AW topics).

4.1. Presentation of EFSA's published scientific opinions

4.1.1. Scientific opinion on the welfare of calves

Christoph Winckler, member of EFSA AHAW Panel and Chair of the EFSA working group (WG) on welfare of calves, presented the relative Scientific Opinion (SO). With the EC mandate, EFSA was asked to provide a description of common husbandry systems and related welfare consequences, as well as measures to prevent or mitigate the hazards leading to them. In addition, recommendations on three specific issues were requested: welfare of calves reared for white veal (space, group housing, requirements of iron and fibre); risk of limited cow-calf contact; and animal-based



measures (ABMs) to monitor on-farm welfare in slaughterhouses. The methodology developed by EFSA to address similar requests was followed.

Fifteen highly relevant welfare consequences were identified, with respiratory disorders, inability to perform exploratory or foraging behaviour, gastroenteric disorders and group stress being the most frequent across husbandry systems.

Recommendations to improve the welfare of calves include increasing space allowance, keeping calves in stable groups from an early age, ensuring good colostrum management and increasing the amounts of milk fed to dairy calves. In addition, calves should be provided with deformable lying surfaces, water via an open surface and long-cut roughage in racks.

Regarding specific recommendations for veal systems, calves should be kept in small groups (2–7 animals) within the first week of life, provided with ~ 20 m²/calf to promote locomotor play behaviour and fed on average 1 kg neutral detergent fibre (NDF) per day (between 2 weeks and 6 months of age) to avoid rumination problems, preferably using long-cut hay.

Recommendations on cow–calf contact include keeping the calf with the dam for a minimum of 1 day post-partum. Longer contact should progressively be implemented, but research is needed to guide this implementation in practice.

The ABMs body condition, carcass condemnations, abomasal lesions, lung lesions, carcass colour and bursa swelling may be collected in slaughterhouses to monitor on-farm welfare but should be complemented with behavioural ABMs collected on farm.

Link to the SO: <https://www.efsa.europa.eu/en/efsajournal/pub/7896>

During the Questions & Answers session, the representative from Iceland asked how the new-born calves can be kept for 24 hours with the dam, since there is limited space and it is a challenge. It was clarified that they should be kept in a pen with full contact possibilities and they should be able to suckle.

4.1.2. Scientific opinion on the welfare of dairy cows

Christoph Winckler, Chair also of the EFSA WG on the welfare of dairy cows, presented the related SO, which includes three assessments carried out based on literature reviews and complemented by expert opinion.

Assessment 1 describes the most prevalent housing systems for dairy cows in Europe: tie-stalls, cubicle housing, open-bedded systems and systems with access to an outdoor area. Per each system, the scientific opinion describes the distribution in the EU and assesses the main strengths, weaknesses and hazards potentially reducing the welfare of dairy cows.

Assessment 2 addresses five welfare consequences as requested in the mandate: locomotory disorders (including lameness), mastitis, restriction of movement and resting problems, inability to perform comfort behaviour and metabolic disorders. Per each welfare consequence, a set of animal-based measures is suggested, a detailed analysis of the prevalence in different housing systems is provided, and subsequently, a comparison of the housing systems is given. Common and specific system-related hazards as well as management-related hazards and respective preventive measures are investigated.



Assessment 3 includes an analysis of farm characteristics (e.g. milk yield, herd size) that could be used to classify the level of on-farm welfare. Five farm characteristics were identified (more than one cow per cubicle at maximum stocking density, limited space for cows, inappropriate cubicle size, high on-farm mortality and farms with less than 2 months access to pasture). If one or more of these farm characteristics are present, it is recommended to conduct an assessment of cow welfare on the farm in question using animal-based measures for specified welfare consequences.

Link to the SO: <https://www.efsa.europa.eu/en/efsajournal/pub/7993>

During the Questions & Answers session, the representative from Estonia asked what 'regular access to pasture' means. It was clarified that this means at least two months mostly in summer. It was also commented that 2 months on pasture will be more and more difficult when we face global warming and drought.

It was noted (Spain) that the SO does not include reference to the standards World Organisation for Animal Health (WOAH), however no contradiction between these and the opinion was identified. It was clarified that these standards might be useful for a future work on beef cattle.

It was reported that the minimum space requirements for Norway are 9-10 m² per dairy cow and the farms that have below 7 m² are considered poor welfare farms. In Germany this standard base is 8 m² and in Denmark is also 8 m² but for large breeds.

4.1.3. Scientific opinion on the welfare of laying hens on farm

Virginie Michel, member of EFSA AHAW Panel and Chair of the EFSA WG on the welfare of laying hens, presented the SO which focuses on the welfare of laying hens, pullets and layer breeders on farm. The most relevant husbandry systems used in Europe are described.

Eleven highly relevant welfare consequences were identified for the most common husbandry systems: bone lesions, group stress, inability to avoid unwanted sexual behaviour, inability to perform comfort behaviour, inability to perform exploratory or foraging behaviour, isolation stress, predation stress, resting problems, restriction of movement, skin disorders, and soft tissue lesions and integument damage. The welfare consequences of cage and non-cage systems for laying hens were compared. Inability to perform comfort, exploratory and foraging behaviours as well as restriction of movement are present in cage systems. Non-cage systems on the other hand, particularly those with access to covered veranda and/or outdoor range, facilitate those behaviours. Beak trimming is conducted to reduce the prevalence and severity of injurious pecking but also leads to soft tissue lesions and integument damage. Main preventive measures are cage-free systems with elevated structures, provision of substrate, pecking blocks and enrichment and genetic strategies.

The most promising ABMs to be monitored at slaughterhouse level are total mortality, plumage damage, wounds, keel bone fractures and carcass condemnations

The welfare of male chicks of the layer breed kept for meat production was also addressed and concluded that their behaviour and requirements are comparable to those of pullets.

Main recommendations include housing all birds in non-cage systems with easily accessible, elevated platforms and provision of dry and friable litter and access to a covered veranda. The recommended maximum stocking density for adult laying hens



and breeders is 4 birds/m², minimum group size of two birds and a minimum area of enclosure of at least 25m² for family groups (<30 bird) and at least 80m² for larger groups (>30 birds). It is further recommended to implement protocols to define welfare trait information to encourage progress in genetic selection, implement measures to prevent injurious pecking, rear pullets with dark brooders and reduce male aggression in layer breeders.

Link to the SO: <https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2023.7789>

Upon specific request from Network representatives, it was further explained that the recommendations for maximum stocking density for laying hen pullets provided in the SO (certainty) from 10 weeks to the end of rearing are:

- 25 pullets/m²(>50–100% certainty) from 6 to 9 weeks (until day 63 of age)
- 40 pullets/m²(>50–100% certainty) from 3 to 6 weeks (until day 42 of age)
- 100 pullets/m²(>50–100% certainty) for first 2 weeks (until day 14 of age).

4.1.4. Scientific opinion on the welfare of broilers on farm

Virginie Michel, Chair also of the EFSA WG on the welfare of broilers, presented the SO on the welfare of domestic fowl (*Gallus gallus*) related to the production of meat (broilers) and includes the keeping of day-old chicks, broiler breeders, and broiler chickens. The 10 currently used husbandry systems in the EU were described.

Overall, 19 highly relevant welfare consequences (WCs) were listed for the currently used husbandry systems and bird categories: 'bone lesions', 'cold stress', 'gastro-enteric disorders', 'group stress', 'handling stress', 'heat stress', 'isolation stress', 'inability to perform comfort behaviour', 'inability to perform exploratory or foraging behaviour', 'inability to avoid unwanted sexual behaviour', 'locomotory disorders', 'prolonged hunger', 'prolonged thirst', 'predation stress', 'restriction of movement', 'resting problems', 'sensory under- and overstimulation', 'soft tissue and integument damage' and 'umbilical disorders'. Hazards related to the different husbandry systems were identified as well as ABMs for assessing the different WCs.

Qualitative or quantitative recommendations are provided to answer specific questions on the welfare of broilers and related to genetic selection, temperature, feed and water restriction, use of cages, light, air quality and mutilations in breeders such as beak trimming, de-toeing and comb dubbing.

Recommendations to improve the welfare of broiler chickens include the provision of dry and friable litter from day 1 of the production, increase the space allowance per animal, provide a covered veranda from day 14 of the production, avoid the use of cages and mutilations in broiler breeders and relax the feed restriction. The daily weight growth should be limited to 50 g/day to prevent the need of feed restriction and encourage health and locomotion.

In addition, minimal requirements for an enclosure (e.g. stocking density, group size, provision of litter, perches and platforms, drinkers and feeders, of covered veranda and outdoor range) for keeping broiler chickens were provided.

Regarding specific recommendations on broiler chickens, chickens should be kept at a maximum stocking density of 11 kg/m² to allow the conduct of nine behaviours



and prevent the welfare consequences 'inability to perform foraging and exploratory behaviour', 'inability to perform comfort behaviour', 'locomotory disorders', 'soft tissue and integument damage'. Inside the barn, ammonia should not exceed 15 ppm.

Finally, 'total mortality including culls on-farm', 'wounds', 'carcass condemnation' and 'footpad dermatitis' were proposed as ABMs for monitoring at slaughter the welfare of broilers on-farm.

Link: <https://efsa.onlinelibrary.wiley.com/doi/full/10.2903/j.efsa.2023.7788>

During the Questions & Answers session, the representative from Norway asked about the litter that should be used and if it should be removed. It was clarified that litter for chickens should be used for day 1, the main problem is that it should be put everywhere from day 1.

The representative from Montenegro asked about the litter substrate materials that should be used for broilers. It was said that there are different types of materials and they should have the capacity to absorb manure and this include wood shavings.

The representative from Sweden asked what it means the stocking density for broilers of about 11kg/m² and 4 birds/m² from the bird welfare point of view. It was pointed out that 9 behaviours were taken into account in a behavioural space model and the model used for the calculation considered for each behavior the space needed to perform this behaviour (including inter-individual space and additional space) and the proportion of animal performing the behaviour in an improved environment.

The representative from Spain asked if 1) thinning is recommended in the scientific opinion, 2) which criteria were used to perform an EKE on the hazard of stocking density and not on other hazards and 3) if there is definition for the "cage" provided in the scientific opinion. It was clarified that thinning is not recommended and could be done only if the stocking density is far too high and there are locomotory disorders. Regarding the EKE, it gives a value to the SO, experts existing knowledge and experience is elicited through a validated methodology following the Sheffield method and thus conclusions are extrapolated that fill the gap of literature and help with the assessment. The use of EKE for some hazards and not on some others depends also on available time. Lastly, Yves Van der Stede emphasized that there is no scientific definition of cages. The SOs aimed to focus on the description of the needs of the animals in such a way that the 'enclosures/ husbandry systems' would fulfil the chicken's needs (behavioural, physiological). The discussion on the definition of cages may be difficult as many husbandry systems nowadays, although not called cages, are not fulfilling the needs of the chickens.

4.1.5. Scientific opinion on the welfare on ducks, geese and quail on farm

Antonio Velarde (member of sNCP Network, member of EFSA AHAW Panel and Chair of the EFSA working group on the welfare of ducks, geese and quail on farm) presented the relative SO. It concerns the welfare of Domestic ducks (*Anas platyrhynchos domesticus*), Muscovy ducks (*Cairina moschata domesticus*) and their hybrids (Mule ducks), Domestic geese (*Anser anser f. domesticus*) and Japanese quail



(*Coturnix japonica*) in relation to the rearing of breeders and the production of meat, foie gras (Muscovy and Mule ducks and Domestic geese) and eggs (layers of Japanese quail). The most common husbandry systems (HSs) in the EU are described for each animal species and category.

The following welfare consequences are described and assessed for each species: restriction of movement, injuries (bone lesions including fractures and dislocations, soft tissue lesions and integument damage and locomotory disorders including lameness), group stress, inability to perform comfort behaviour, inability to perform exploratory or foraging behaviour and inability to express maternal behaviour (related to pre-laying and nesting behaviours). The relevant hazards were identified for the different welfare consequences and the currently used HSs.

Specific factors such as space allowance (including minimum enclosure area and height) per bird, group size, floor quality, characteristics of nesting facilities and enrichment provided (including access to water to fulfil biological needs) were assessed in relation to the welfare consequences and recommendations on how to prevent the welfare consequences were provided in a quantitative or qualitative way.

Space allowance was assessed by a behavioural space model (similar to the one for the SO on the welfare of broilers) to ascertain the space required by the birds to perform their species-specific behaviour, categorised as stationary, dynamic, bathing, wing flapping and other comfort behaviours, and different scenarios were reported.

The minimum height of enclosure that should be provided to allow the birds to adopt their natural posture when standing and wing flapping was reported: 66 cm for Domestic ducks; 96 cm for Muscovy and Mule ducks; 127 cm for Domestic geese. In the case of Japanese quail, the minimum height of 150 cm is recommended to permit jump and flight. However, total height should allow humans to enter in the enclosure and inspect the animals.

Birds in indoor systems should be provided with solid and littered floors. The litter material should be dry and friable. In waterfowls, floor areas around water sources should ensure sufficient drainage. For waterfowls, open water sources should be provided that allow at least head dipping and preferably full body contact with open water. Easily reachable elevated structures are recommended for Muscovy ducks. In the case of quail, fine material (e.g. sand) should be provided in specific areas to allow dust bathing, as well as structures to allow resting under cover. For all birds, additional forage-related enrichment should be offered. For all the species, the use of a covered veranda is recommended when outdoor access is precluded. Information on nest area and nesting facilities were provided for all the species.

Link to the SO:

<https://efsa.onlinelibrary.wiley.com/doi/full/10.2903/j.efsa.2023.7992>

During the Questions & Answers session, the representative from Spain commented what is defined as a cage. It was explained that there is no definition of cage and the SO focuses on minimum requirements to allow the minimum behavioral needs of the birds, according with the request of the mandate.

The representative from Portugal asked why the nesting material for ducks should be manipulable, while for the quail should be friable. It was clarified that according to differences in the nesting behaviour among species, ducks need manipulable material



in order to build their nest, while for the quail should be friable since they only cover the eggs. However, more research is needed about the specific nest characteristics in quail.

4.2. Presentation of EFSA's ongoing mandates

4.2.1. Presentation of the new mandate on Diathermic Syncope for stunning cattle

EFSA provided an overview of the background and ToRs of the mandate, as well as main information on the new proposed method.

EFSA was requested by the EC to assess to what extent the scientific and technical information provided by a Business Operator gives enough evidence to allow the use of Diathermic Syncope (DTS) for stunning cattle and, in case of a favourable reply, under which conditions. In particular, EFSA will assess whether the proposed method meets the eligibility criteria of the EFSA 2018 "Guidance on the assessment criteria for applications for new or modified stunning methods regarding animal protection at the time of killing"; and whether the proposed method can provide a level of AW at least equivalent to that ensured by the existing methods in the legislation, ensuring that cattle are spared of avoidable pain, distress or suffering during killing, maintaining the loss of consciousness and sensibility until their death. The initial deadline for delivering the SO is May 2024.

According to this method, there is exposure of the brain to electromagnetic energy, generating an increase in brain temperature and a generalized epileptic form on the electroencephalogram (EEG), resulting in simple stunning or not/killing. The apparatus of the method consists of six components: DTS generator, user interface panel, waveguide system, applicator, restraint, faraday cage. It was specified that the use of diathermic syncope is currently not included in the Annex I of Council Regulation (EC) No 1099/2009 and that the proposed method concerns stunning for slaughtering cattle.

During the Questions & Answers session, it was clarified that the proposed method is both for simple stunning and killing (instantaneous death after stunning) according to the amount of energy (expressed in kj) imposed on cattle. The animals are restrained in an upright position with a head capture. The applicator that imposes the energy on the frontal bones directly above the brain can be adjusted according to the types of animals and their head variations. The duration of unconsciousness is about between 1.7 and 4 minutes and the death through exsanguination is expected to be within 4 minutes or less. The user interface panel is stationary and monitors and records each dose of energy is delivered against a specific animal. The faraday cage protects the operators in case of energy leakage. At the moment, the dossier of the applicant is under assessment for check of completeness.

4.2.2. Presentation of the new mandate on the welfare of cats & dogs breeding

EFSA presented the new mandate on welfare of cats and dogs. The mandate includes specific questions related to conditions for breeding of cats and dogs. These can be divided into 1. Housing (space, light, need to exercise, T^o-thermoneutral zone), 2.



Health related to reproduction (Reproduction timing, sexual maturity, skeletal maturity), 3. Cosmetic surgeries.

For all these topics, the EC has already done some work through a voluntary initiative of a subgroup of their Animal Welfare Platform. This group has produced a list of recommended measures, which are included in the mandate and for which EFSA has to answer an overall question: based on the scientific evidence can this recommendation be supported?

During the Questions & Answers session, it was mentioned that in Finland a new AW legislation will come into force from 2024 including requirements for cat and dog breeding (Enhancing the implementation of animal welfare legislation related to animal breeding: Part III: Problems and control criteria of dog breeding” <https://jukuri.luke.fi/handle/10024/553173>).

In Norway the Norwegian Scientific Committee published an opinion on welfare of outdoors housing of dogs in 2017 and is soon publishing a report on the impact of outdoor cats on wildlife (<https://www.vkm.no/english/riskassessments/allpublications/welfareofdogskeptpermanentlyoutdoorsandusedforsleddogracing.4.2375207615dac0245aee199a.html>). A supreme court is now discussing breeding according to the Welfare Act § 25 as regards English Bulldog and Cavalier King Charles Spaniel. Moreover, the following information of Norwegian Animal Act on breeding was provided:

“Breeding shall encourage characteristics which give robust animals which function well and have good health. Reproduction, including through methods of gene technology, shall not be carried out in such a way that it:

1. changes genes in such a way that they influence the animals’ physical or mental functions in a negative way, or passes on such genes,
2. reduces the animals’ ability to practice natural behaviour, or
3. cause general ethical reactions.

Animals with a genetic constitution as cited in the second article shall not be used for subsequent breeding. The King may issue specific regulations regarding breeding of animals in conflict with the principles in this Section”.

Finally, the following information on an Icelandic AW Act, Article 19 on Breeding was made available:

“- When breeding for the different characteristics of individual species, care shall be taken always to select healthy animals. Reproduction, including artificial insemination and genetic engineering, may not take place where it can be foreseen to:

- a. alter characteristics in a way that negatively affects the health or behaviour of the animals or their offspring, or perpetuates such deficiencies;
- b. reduces the animals’ ability to exhibit natural behaviours.

- The Minister may issue a Regulation containing more detailed requirements for the breeding of individual species of animals, having regard to the principles of animal welfare.”

In Sweden, a problem exists with cats and dogs being sent to central EU to be tail docked and then back to Sweden, as tail docked pets are illegal in this MS. In Finland,



this problem is solved by forbidding tail docked cats and dogs from the shows and competitions. A report from Finland was shared: https://www.ruokavirasto.fi/globalassets/tietoa-meista/asiointi/oppaat-jal-lomakkeet/viljelijat/elainten-pito/elainten-suojelu-ja-kuljetus/jalostuksen-valvontakriteerit_koira_2020-luke.pdf

In Austria it is forbidden to import tail docked dogs.

In the Netherlands, Utrecht University set some criteria for dog breeding for the inspectors <https://open.overheid.nl/documenten/ronl-2c2841de-9f7b-46f0-ad36-746ae051dc3a/pdf>

5. Joint session - Update from EFSA on mandates on animal welfare

5.1. Extreme breeding and genetic diseases in dogs

Claire Diederich (scientific NCP Network, representative from BE-Wallonia) presented an initiative of the Walloon AW Council (W-AW C) that was carried out from February 2021 to April 2023: a working group (WG) of 9 members on extreme breeding and genetic diseases in dogs was created, in order to identify the deleterious phenotypes likely to harm AW and to suggest solutions to guarantee AW. This aim was achieved by working on 30 deleterious phenotypes, by evaluating their respective impact on AW via 21 criteria, such as pain intensity, treatment, probability/frequency of occurrence of the pathology, impact on QoL, 5 freedoms, integrity and dignity and by ranking them according to the criteria's importance. The WG identified 12 most deleterious phenotypes and the relevant recommendations were formulated, which among others are: broad communication with all the actors (vets, breeders, judges, citizens, etc) including banning the publicity with deleterious phenotypes, and coordination of actions at national and international levels.

The following questions were asked to the meeting participants to gather information about the situation in their countries: "*What are the MSs initiatives? Are there already any available results?*"

During the plenary discussion, the Netherlands highlighted the previously mentioned report about dog snout will be relevant for this issue too (<https://open.overheid.nl/documenten/ronl-2c2841de-9f7b-46f0-ad36-746ae051dc3a/pdf>). In Flanders (BE), a research project is running to list the most frequent genetic diseases per breed and relating tests. In Norway they are working on a legislation on dog breeding and in Austria (Ministry of Health) a system with an "extreme breeding commission" (scientific experts creating guidelines) and the certification of breeding dogs (tests, health certificates, etc.) via a national central unit is planned and under discussion. There is also a report from Finland (in Finnish) about of the problems related to dog breeding and means of intervention.

5.2. The killing of walking decapods: with or without stunning?

Claire Diederich reported about a question by the AW Minister to the W-AW C if Walloon's law should give specific protection to walking decapods in view of their possible sensitivity, inspired by a Swiss ordinance where there was an adaptation of the legislation regarding aquatic animals. The W-AW C recognised that walking



decapods have the capacity to feel pain, suffering and anxiety. Consequently, they must be transported and housed in a way that ensures their welfare, and their killing must be preceded by stunning. No new legislation was introduced on that, but all restaurant owners and shopkeepers were informed to raise their awareness.

The following questions were asked to the meeting participants to gather information about the situation in their countries: *"What is the MSs position? What are the stunning techniques, if stunning is compulsory?"*

During the plenary discussion, it was mentioned that also in Italy this issue is considered and find it difficult to give any advice, because there is limited evidence in the topic. The same applies also to the issue of killing of alien species. In the Netherlands there is a Dutch report about the fish chain including little information about crustaceans (<https://www.nvwa.nl/onderwerpen/visketen-in-beeld/documenten/dier/visserij/ika-vis/buro-advies/advies-buro-riscos-voor-mens-dier-en-natuur-in-de-visketen>

with animal welfare appendix: <https://www.nvwa.nl/onderwerpen/visketen-in-beeld/documenten/dier/visserij/ika-vis/buro-advies/bijlage-3.4.1-het-dierenwelzijn-dierenwelzijn-risicobeoordeling-van-de-vis-schaal--en-schelpdierketen>).

Finally, it was mentioned that electric stunning for lobsters is used in Sweden, Norway and the UK.

5.3. Training, tests and issuance of certificates of competence according to Articles 7 and 21 of Council Regulation (EC) 1099/2009: what is the procedure in the different MSs?

Inga Wilk (representative from DE) provided information about the procedure that is followed in Germany for issuing a Certificate of competence. The competent authority (CA) delegates the training to a separate body or entity according to Article 21 (2) of Council Regulation (EC) 1099/2009. Minimum contents are defined for the different animal species to ensure a uniform quality standard. Training program, contents and modalities of the examination are subject to approval by the CA. There is a list of approved training courses in the German manual on AW monitoring during slaughter and killing. A representative of the CAs is involved in the final examination. The training provider issues the certificate of attendance in the training as well as the successful examination (in theory and practice). The CA responsible for the slaughterhouse, after checking the documents (training and examination certificate and written declaration according to Article 21 (6)), issues the certificate of competence upon separate application by the applicant.

The following questions were asked to the meeting participants to gather information about the situation in their countries: *"i) What is the procedure for training, testing and issuance of certificates of competence in the other MSs? (implementation of Art. 21); ii) Which authorities/separate bodies/separate entities (Art. 21(2)) are responsible for issuing the certificate of competence in each MS?; iii) Is there a uniform form for the certificate of competence in the individual MS? Could we create a collection for this?; iv) Are equivalent qualifications according to Article 21 (7) recognized in the MSs, which are valid without additional official examination and issuance of a certificate of competence? If so, under which link are these published? Can we possibly generate a collection of documents or links on this?"*



During the plenary session, it was mentioned that in Greece there are dedicated schools for this subject; until 2020 these schools were public but from then onwards they are private and accredited by the Ministry of Rural Development and Food. It was reported that in Sweden these trainings are run privately. The CA issues the certificate using a standard template which written in Swedish and English. It was also discussed the validity in the EU of the certificates of competence issued in UK before the Brexit. According to a first communication from the European Commission (EC), dated 23/01/2018, UK should be out of the system for the certificates of competence. However, a subsequent EC communication from 08/09/2022 supports for the recognition in the EU of professional qualifications acquired in the UK. On this basis, it was specified that the Italian Ministry of Health recognises the certificates of competence issued by UK before the end of the transition period. Finally, it was highlighted that in Portugal these certificates are authorised by the Ministry of Agriculture and they use a standard template. In the case of UK certificates, it would be important that the training had the same the characteristics and content of one in the EU.

5.4. Genetic selection in turkeys and animal welfare

Maria Teresa Villalba (representative from ES) pointed out the importance of turkey production in Spain and reported some figures : for example, there is more production of turkey meat (225,000 TM, out of 1,791,000 TM total EU) than the production of rabbit meat in the whole EU (216,000 TM in EU – 51,000 in Spain). There are genetic lines that might have an impact on the welfare of turkeys; however, there is no species-specific legislation in the EU, and EFSA has not produced any SO on the welfare on these animals. It was highlighted that, similarly to what EFSA has produced in 2010 for broiler chickens, it would be interesting to have an assessment on the influence of genetic parameters on the welfare and the resistance to stress of commercial turkeys.

The following question was asked to the meeting participants “How many breeding farms of turkeys exist in the EU?”

During the plenary session, it was highlighted that recommendations on the welfare of turkeys have been produced by the Council of EU and that there are a few national documents on the welfare of turkeys in some EU MSs (links below). Some information about turkeys kept in NL is included in the Dutch risk assessment from 2018 and there is an underlying report by Wageningen Livestock Research in Dutch. Back then there were 41 turkey companies in the NL with approximately 800.000 animals, but they don't have any relative slaughterhouses, they are slaughtered outside NL (mainly in Germany and Poland). In Flanders (BE), the Flemish AW Council discussed the housing of turkeys and published an opinion guidance that was based on scientific research performed in Germany and discussed with producers and NGOs. In 2018, the Walloon AW Council produced an advice document about turkeys housing conditions; however, it does not include turkeys breeders as there are no farms of turkeys breeders in Wallonia (BE). The study about turkeys was done in Germany and there is a literature study about results of international papers. An opinion on the welfare of turkeys was produced in 2016 by the Norwegian Scientific Committee for Food and Environment (VKM). It was said that it would be very interesting for the Czech Republic to have a scientific opinion on turkeys, while in Finland there is a government decree on the protection of on turkeys. In Germany, there are uniform federal benchmarks for a voluntary agreement on keeping turkeys for fattening.



The following links to national acts or risk assessments were shared:

Dutch risk assessment from 2018:

<https://english.nvwa.nl/documents/consumers/food/safety/documents/advice-on-the-risks-in-the-poultry-meat-supply-chain>

and underlying Dutch report by Wageningen University: [Microsoft Word - 884 - Rapportage risicoanalyse dierenwelzijn witvleesketen definitief.docx \(wur.nl\)](#)

Opinions of the Flemish AW Council:

https://assets.vlaanderen.be/image/upload/v1669231088/Opinion_-_Standards_for_the_keeping_of_turkeys_2022_yvacrk.pdf

https://assets.vlaanderen.be/image/upload/v1669231210/Opinion_guidance_-_Standards_for_the_keeping_of_turkeys_2022_izlnyw.pdf

https://www.sozialministerium.at/dam/jcr:deace235-4701-46f0-a5ec-c91e42862a52/Anforderungen%20an%20eine%20zeitgem%C3%A4%C3%9Fe%20tierschutzkonforme%20Haltung%20von%20Mastputen_fin.pdf

Advice of the Walloon AW Council: [Microsoft Word - AVISCWBEA Dindes CCL valid.doc \(wallonie.be\)](#)

Risk assessment from Norway: [Assessment of welfare risks in the current legislation for the keeping of turkeys - Vitenskapskomiteen for mat og miljø \(vkm.no\)](#)

Government decree from Finland:

<https://www.finlex.fi/fi/laki/alkup/2010/20100677>

Study from Germany:

https://www.bmel.de/SharedDocs/Downloads/DE/Tiere/Tierschutz/ZDG-Eckwerte-Haltung-Mastputen.pdf?__blob=publicationFile&v=5

5.5. Traumatic changes on joints in beef cattle as a sign of bad welfare

Simona Ninčáková (representative from CZ) provided a presentation on articular injuries in beef cattle. They are more frequent when there is a relative breed predisposition, when the system of feeding is intensive and when there is a mix of animals from different breeds. These injuries can be found in crowded pens and slippery surfaces. They can also appear when there is stress, hierarchy issues i.e. fights for dominancy, inadequate bedding and rough handling. They can be assessed through animals' overview and differences, through repeated findings from the farm (e.g. suspicious animals with long dirty matted coat, lameness, sickle hooks hocks, acute – chronic changes and other pathological changes). There is an assessment system scoring the animals from 0, where there is no swelling and some hair loss or broken hair, to 3, where there is major swelling (>2.5 cm) and may have bald area/lesion.

During the plenary session, it was clarified that this assessment is mainly for farms but also for slaughterhouses. It was mentioned that in AT they have easy welfare protocols by visual scoring of the animals. There is also a general feeling that fattening beef is underestimated. The representative from Finland agreed saying that dairy bulls raised for meat go outdoors only when taken to the slaughter truck. The representative from Italy reported that, through the Italian system "Classy Farm"



(<https://www.classyfarm.it/>) to check animal welfare, ABMs on beef cattle are being collected collect ABMs and a preliminary paper on beef carcasses is available. The representative from the Netherlands mentioned that they are working on the red meat chain, including beef cattle.

5.6. Welfare evaluation at pasture for livestock

David Arney (scientific NCP Network, representative from EE) made a presentation on the topic. In Estonia, dairy livestock at pasture is declining, but is encouraged. There is a checklist for welfare evaluation at pasture but there are concerns which may not have been addressed, such as: heat and cold stress, since heat stress can occur in any climate zone depending on the season but cold stress in cattle can be a problem mostly in the northern hemisphere; parasites, since grazing is a risk factor for exposure to gastrointestinal parasites and ectoparasites; feeding, since grazing dairy cows are at higher risk for nutritional deficits, metabolic diseases grass tetany and frothy bloat; access to clean water; diseases such as summer mastitis caused by insect-borne pathogens, disease transmission from wild animals or from neighbouring herds; predation; risks to hooves walking to milking parlour and hygiene risk if the milker is mobile.

During the plenary session, the representative from Finland mentioned that grazing animals can also suffer from stress due to fireworks and drones. The welfare quality protocol for cattle was shared (http://www.welfarequality.net/media/1088/cattle_protocol_without_veal_calves.pdf).

In Ireland there are three recent papers on dairy cow welfare at pasture:

[Assessing dairy cow welfare during the grazing and housing periods on spring-calving, pasture-based dairy farms - PubMed \(nih.gov\)](#)

[Lameness prevalence and management practices on Irish pasture-based dairy farms - PubMed \(nih.gov\)](#)

[Cow- and herd-level risk factors for lameness in partly housed pasture-based dairy cows - ScienceDirect](#)

5.7. Avian Influenza: methods for depopulation (collaboration EURCAW and French NRC)

Virginie Michel (representative from FR) presented an initiative, conducted at EU and National level and in the frame of EURCAW-Poultry-SFA and French Reference centre for AW, about the different methods of depopulation conducted in practice and their impact on the welfare in the EU poultry. The objectives were to create an inventory of the depopulation methods used in the different MSs in the EU, the investigation of the effects of the depopulation methods on AW and their assessment of effectiveness in terms of death induction. The final goal is to make recommendations on the types of on-farm killing methods to adopt, in order to conduct the most effective and humane depopulation. Guidelines for the inspection of poultry during depopulation with the integration of any best-practices identified in all MS will also be produced. The materials and methods that are used are: a questionnaire with general questions mostly for the CAs and a questionnaire with specific questions for field operators; a workshop for experts of each MS affected by Avian Influenza that will be held on 30 June 2023 addressing the main efficacy and welfare-related issues expressed in the questionnaire; online interviews in order to confront the standard operating



procedures with the reality on the ground; 3-5 on-farm visits/method and potentially expert knowledge elicitation with a view to obtain the opinion of scientific experts in depopulation and poultry welfare on specific practices and their impact on poultry welfare.

During the plenary session, it was emphasized that 15 different depopulation methods have been identified and 13 MSs have answered so far, therefore the contribution of the rest MSs was asked. The representatives from Poland and the Netherlands expressed their interest.

5.8. Practical scoring tool to assess animal welfare by ABMs for official control

Thora Johanna Jonasdottir (representative from IS) presented a practical scoring system in place in the Northern countries for AW by using animal-based welfare measures for official controls on farms, but also at slaughterhouses to identify farms at risk regarding AW. The tool is used for fast screening, to further perform risk based controls on farms and put the focus where it is most needed. It also helps the inspectors to take a decision if the condition of the herd is in compliance with the legislation. The protocol is based on the concept of the five freedoms and the Welfare Quality protocols. The 4 main animal-based indicators are: cleanliness, body condition score (pins and hooks angular; tails, shoulders etc), lesions and injuries, lameness. The scoring is performed through a traffic light system, where red is unacceptable, yellow needs attention and green is in compliance. The inspector must evaluate the severity and number of animals to decide an appropriate follow up action. The protocol was first developed for cattle and tested in the field and then for pig and sheep, which are now being tested in practice by inspectors.

During the plenary session, it was clarified that the threshold for the ABMs can be individualised according to the country. Improvement has not been seen yet through the classification. The data is taken from different locations in order to have a representative sampling. For body condition scoring, a footnote is made when animals are in a milking period. If all appropriate corrective measures have been taken and still the score is red, then yellow is put and a follow-up is needed. The farmers engagement was good and liked the system, as they could easily understand how the inspectors will give the scores. The system is going to be implemented in poultry as well. Finally, the representative from Ireland mentioned that they have a recent publication on lameness control in dairy cows for farmers, based on a scientific paper about herd risk factors [Reducing-Lameness-in-Irish-Dairy-Herds.pdf](#) (teagasc.ie)

6. Joint session - Introduction to the exercise on ABMs at slaughter for beef cattle and turkeys

In preparation for Day 2 of the meeting, EFSA introduced the exercises on ABMs at slaughter for monitoring on-farm welfare.

The approach is the same followed for the exercises that the AHAW and the scientific NCPs Networks have carried out in 2021 on the welfare of pigs, calves, broiler chickens and laying hens.



This year, the AHAW Network will run the exercise on beef cattle and the scientific NCPs will focus on turkeys: the exercises are intended as preparatory work for future mandates on the welfare of these animal species.

The overall purpose of the exercise is to select the most promising and feasible ABMs from the practical experience of Network members, to propose to the future WGs for further assessment, and to guarantee consistency among the Farm-to-Fork SOs.

Each exercise is composed by three parts: i) prior to the meeting, the members of the Networks were invited to compile a questionnaire with information on the ABMs used at slaughterhouses in *ante-* and *post-mortem* to monitor the on-farm welfare in their countries; ii) at the meeting, main results from the questionnaires will be presented and discussed: meeting participants will have the opportunity to discuss the data submitted, clarify specific issues, and provide additional information on the topic; finally, iii) real-time polls on specific questions related to scoring systems, easiness of use and selection of ABMs will be organised, and the results will be discussed in a plenary session.

7. Exercise “Assessment of ABMs at slaughterhouses to monitor the on-farm welfare of beef cattle”

The second part of the meeting (Day 2 - 31st of May 2023, AM) was dedicated to the use of ABMs collected in slaughterhouses to monitor the animal welfare in the farms of turkeys.

A separate report will be published on EFSA’s website with details on the exercise, including the results. The outcomes of the exercise will be taken into consideration by EFSA WG experts as basis for their scientific assessment, when addressing the coming mandate on the protection of beef cattle.

8. Any Other Business

Network members were asked to provide any additional information from their countries that could be useful in relation to the topics discussed during the meeting under points 4.2 and 5.

Regarding the exercise on the use of ABMs at slaughter to monitor on-farm welfare Network members will provide further clarifications and information on the specific questions of the questionnaire, with particular focus on existing automation tools for the assessment of the ABMs at the slaughterhouses.

9. Next meeting

Next meeting will be held in 2024 (date to be fixed).