



Biological hazards & Animal Health and Welfare (BIOHAW) UNIT

Scientific Network on Risk Assessment in Animal Health and Welfare

Minutes of the 20th meeting of the AHAW Network (AW topic)

**Held on 11-12 October 2022, WEB-conference
(Agreed on 31 October 2022)**

Participants

- Network Representatives of Member States (including EFTA Countries):**

Country	Name
Austria	Friedrich Schmoll
Belgium	Ester Peeters/Diederich Claire/ Bernardo Catanese
Bulgaria	Madlen Vasileva
Croatia	Tomislav Mikuš
Czech Republic	Simona Nincakova
Denmark	Else Enemark
Finland	Minna Haataja-Koskinen
France	Julie Chiron
Germany	Inga Wilk
Greece	Katerina Marinou
Hungary	Anna Halpmos
Ireland	Stephanie Ronan
Italy	Sara Rota Nodari
Malta	Gemma Pantaleo
Netherlands	Ursinus Winanda
Norway	Dean Basic
Poland	Przemyslaw Cwynar
Portugal	Maria Jorge Correia
Slovak Republic	Zuzana Hurnikova
Slovenia	Arnej Galjot
Spain	Maria Teresa Villalba
Sweden	Karin Olsson

- Other Presenters:**

Hans Spoolder, Antonio Velarde, Mette Herskin - Members of the AHAW Panel

- **Network representatives of IPA countries:**

Cüneyt Turan (Turkey); Dimitar Terzievski (North Macedonia); Luke Balerina (Albania); Aleksandar Nemet (Bosnia and Herzegovina)

- **European Commission:**

Lucie Carrouée (DG Health and Food Safety, Animal Welfare SANTE.G.5)

- **EFSA:**

BIOHAW Unit: Denise Candiani (Chair), Gizella Aboagye, Mariana Aires, Sean Ashe, Chiara Fabris, Michaela Hempen, Eliana Lima, Aikaterini Manakidou, Cristina Rojo Gimeno, Yves Van der Stede, Frank Verdonck, Marika Vitali.

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Lithuania and Montenegro.

1.1. Adoption of agenda

The agenda was adopted without changes.

1.2. Agreement of the minutes of the 19th meeting of the Network of the Animal Health and Animal Welfare (AHAW) Network held on 27 and 28 June 2022, via web

The minutes were agreed by written procedure on 15 July 2022 and published on the EFSA website.

1.3. Introduction from EFSA BIOHAW Head of Unit and Animal Welfare Team Leader

Frank Verdonck, recently appointed as BIOHAW Head of Unit, and Yves Van der Stede, Leader of the Animal Welfare Team, joined the Network meeting and introduced themselves to the Member States representatives.

2. Revision of the EU legislation on the protection of animals in the context of the Farm-to-Fork (F2F) strategy.

Lucie Carrouée, Deputy Head of Unit SANTE.G.5 - Animal Welfare, presented the ongoing activities of the European Commission (EC):

- EC proposal of a revised EU AW legislation by 2023 to align with latest scientific evidence, broaden its scope, make it easier to enforce and ensure a higher level of animal welfare. In June 20, the EC requested mandates from EFSA on pigs, broilers, laying hens, calves and transport, in June 21 an additional mandate on ducks, geese and quails focusing on cages. Some of these mandates also relate to the European Citizen Initiative (ECI) "End of Cage Age" calling for the phasing out to become effective in 2027. The Commission intends to propose to phase out and prohibit the use of such cage systems, for all the species and categories referred to in the ECI, under conditions (including the length of the transition period) to be determined based on EFSA opinions, an impact assessment and a public consultation." Mandates on slaughter were already being

addressed by EFSA and will be used as a basis for revision of Council Regulation (EC) 1099/2009.

- Conclusions of the fitness check were also presented as well as its next steps. The fitness check aims at the evaluation of the existing animal welfare legislation which includes 5 directives (1 on the protection of animals kept for farming purposes and 4 on the protection of laying hens, broilers, pigs and calves, respectively) and 2 regulations (1 on the protection of animals during transport and the other one on the protection of animals at the time of killing). The fitness check confirmed there is a need to i. align with current science: scientific and technological developments are not fully reflected in current rules, ii. broaden the scope: sub-optimal level of welfare of animals in the EU in particular where targeted legislation is lacking, iii. make it easier to enforce differences in application and enforcement across the EU, partly due to the vagueness of certain provisions, and robust indicators for monitoring and triggering improvements in animal welfare, iv. address societal demands: increasing societal expectations and ethical concern.
- After the impact, there is also an “inception of impact assessment” on the expected impact of the envisaged changes to the legislation. Four external studies were outsourced in support of the impact assessment: transport, animal welfare labelling, welfare at the time of killing, kept animals.
- The main policy options under assessment for revision of the legislation are: i. transport: space allowances, travel times and travel conditions, live animal exports to non-EU countries, unweaned and other vulnerable animals, better monitoring and enforcement by introducing new technologies, means of transports, adapted to new technologies; ii. kept animals: five domains, phasing out of cages/stalls/crates, requirements for livestock farming (including outdoor access), space allowances, mutilations, animal welfare indicators, competence of animal handlers, imported products of animal origin. The package of legislative proposals will be ready by the end of 2023.
- Other activities are the 6 sub-group of the AW Platform (next meeting to be held on 5-6 December 2022) and some key activities on animal transport: European Parliament Committee of enquiry on animal transport (ANIT) with a report published in January 2022, an European Court of Auditors (ECA) audit on animal transport (audit report publication planned for the spring next year), the Commission Studies on animal transport of unweaned male dairy calves over long distance and unfit end-of-career dairy cows, livestock vessels tertiary legislation (implementing Act and Delegated Act on official controls aspects) and the Commission audits on sea transport and unweaned calves.

3. Update on the 2022 activities of EFSA on animal welfare in the context of the F2F strategy.

Presentations were given about the most recent activities carried out by EFSA in the field of Animal Welfare.

3.1. Recently published EFSA’s scientific opinion on welfare of pigs.

Hans Spoolder, from the Wageningen University & Research of The Netherlands, member of EFSA AHAW Panel and Chair of EFSA pig welfare working group, presented the Scientific Opinion (SO) on the welfare of pigs on farm that was adopted by the Animal Health and Animal Welfare (AHAW) Panel in June 2022 and published in August 2022. In this SO all pig categories were assessed: gilts and dry sows, farrowing and lactating sows, suckling piglets, weaners, rearing pigs and boars. However, the scientific information on the husbandry systems and the welfare consequences pertaining to boars is very limited and needs further development. The most relevant husbandry systems used in Europe are described. For each system the welfare consequences were assessed. A total of 16 welfare consequences were considered highly relevant to farmed pigs based on expert opinion combining their severity, duration and frequency of occurrence; related animal-based measures (ABMs) and hazards leading to these welfare consequences were also identified. Measures to prevent or correct the hazards and/or mitigate the welfare consequences are recommended. Recommendations are also provided on quantitative or qualitative criteria to answer specific questions on the welfare of pigs mainly in relation to tail biting and the ECI 'End the Cage Age'.

On the welfare of gilts and dry sows, the AHAW Panel concluded that the welfare consequences associated with grouping gilts and sows can be mitigated at any stage by adhering to the principles of good mixing. It is recommended how to mitigate group stress when dry sows and gilts are grouped immediately after weaning or in early pregnancy. Results of a comparative qualitative assessment suggested that long-stemmed or long-cut straw, hay or haylage is the most suitable material for nest-building. Confinement imposed prior to farrowing is detrimental to sow welfare because it restricts the sows' possibility to move around and prevents the functional performance of highly motivated nest-building behaviour.

On farrowing facilities and the welfare of farrowing and lactating sows and their piglets, the Panel concluded that with an average space for the sow of approximately 4.3 to 6.3 m² in the temporary crating systems, the same piglet survival level can be achieved as for a permanent crating system. The minimum confinement time of a sow in a temporary crating system to achieve this is 7 days after farrowing. However, the use of a temporary farrowing crate system cannot be advised as a step in a farm's transition from using farrowing crates to farrowing pens, unless the size of the temporary farrowing crate system is the same as that of the future free farrowing pen. A minimum period of six months is needed for staff and animals to adapt to housing lactating sows and their piglets in farrowing pens (as opposed to crates) before achieving stable welfare outcomes. The Panel recommends a minimum of 6.6 m² available space to the lactating sow to ensure piglet welfare (measured by live-born piglet mortality). Above 6.6 m², the behavioural freedom of sows and piglets increases, but piglet mortality does not further decrease.

On piglet mutilations, the Panel concluded that tooth reduction is a stressful procedure that, if performed incorrectly, causes short- and longer-term pain. In particular, clipping is inherently injurious. Grinding to blunt the sharp tip of the tooth does not injure sensitive tissue when correctly performed. In individual litter situations where tooth reduction can be justified, the most important measure to prevent and mitigate welfare consequences is training of staff in correct procedures. Since castration is a painful procedure, keeping

entire male pigs is a viable alternative if the welfare consequences for pen mates due to aggressiveness and mounting behaviour, are prevented or mitigated. From a welfare point of view, immunocastration has the advantages of less mounting behaviour, reduced number of skin lesions, penile injuries, and fewer locomotory disorders, although the method also has some welfare disadvantages. Tail docking should not be performed but prevented on the basis of a risk assessment analysis and with appropriate husbandry practices and management. If tail docking is performed under derogation, the following aspects minimise harm: dock at a young age, use a cautery method (instead of a cold method), and do not dock the tail close to the first caudal vertebra as it has larger impact on soft tissue, bone and nervous tissues.

Among the main risk factors for tail biting are space allowance, types of flooring, air quality, health status and diet composition, while weaning age was not associated directly with tail biting in later life. The relationship between the availability of space and growth rate, lying behaviour and tail biting in rearing pigs is quantified and presented. The provision of straw, hay, silage or other loose organic substrates is more effective in reducing tail biting than enrichment materials which are suspended from a ceiling or fixed to a wall. A reduction in tail biting can be achieved in undocked pigs if they are offered 20 g per day of straw or similar substrate. However, larger quantities (e.g. up to 400 g/pig per day) are more effective.

Finally, the Panel suggests a set of ABMs to use at slaughter for monitoring on-farm welfare of cull sows (body condition, carcass condemnation, shoulder ulcers and vulva lesions) and rearing pigs (tail lesions, carcass condemnation and lung lesions).

3.2. Recently published EFSA's scientific opinion on transport of domestic birds and rabbits.

Antonio Velarde, member of EFSA AHAW Panel and Chair of EFSA working group, presented the SO on animals transported in containers focussing on transport of domestic birds and rabbits. The species and categories of domestic birds assessed were mainly chickens for meat (broilers), end-of-lay hens, and day-old chicks. The relevant stages of transport considered are preparation, loading, journey, arrival and uncrating. Welfare consequences associated with current transport practices were identified for each stage. For each welfare consequence, ABMs and hazards were identified and assessed, and both preventive and corrective or mitigative measures proposed. Recommendations on quantitative criteria to prevent or mitigate welfare consequences are provided for microclimatic conditions, space allowances and journey times for all categories of animals, where scientific evidence and expert opinion support such outcomes. For domestic birds: i. regarding space, the generic allometric equation 'space allowance (cm²) = 290 x live weight (kg^{2/3})' can be used to calculate the minimum required floor space during transport for most types of birds to adopt a sitting position and have the possibility to shuffle around; ii. regarding temperatures, the Apparent Equivalent Temperature (AET) combining dry-bulb temperature and relative humidity should be used: birds should be transported at SET value below 40; iii. the maximum journey duration including on-farm feed withdrawal should

not exceed 12 hours (10 hours in case of end-of-lay hens). For day-old chicks: regarding temperatures, the upper limit is estimated to be 35°C and the lower limit at 30°C. Day-old chicks subject to feed and water withdrawal periods longer than 48 hours will be at risk of experiencing severe prolonged hunger and thirst which is detrimental to their welfare. For rabbits: regarding space, crate heights of 35 cm and 40 cm will respectively allow slaughter rabbits (up to 3 kg) and breeding rabbits (between 4.5 kg and 6 kg) to keep their ears erect in a natural position while sitting.

3.3. Recently published EFSA's scientific opinion on transport of free-moving animals.

Mette Herskin, a member of the EFSA AHAW Panel and Chair of EFSA free-moving transport working group gave a summary of the recently published (4) SOs dealing with the welfare of cattle, small ruminants, pigs and horses during transport.

Quite a few welfare consequences were identified as being highly relevant for the welfare of livestock during transport based on severity, duration, and frequency of occurrence. These included handling stress, heat stress, injuries, motion stress, prolonged hunger, and prolonged thirst. The occurrence of each type of welfare consequence varied depending on the stage (preparation, loading, transit, unloading and journey breaks), and duration of transport.

A wide variety of hazards were identified for the different welfare consequences and transport stages. These were related to factors such as inexperienced/untrained handlers, inappropriate handling, structural deficiencies of vehicles and facilities, poor driving and road conditions, insufficient space and unfavourable microclimatic (heat) conditions in the transport vehicles.

Despite its importance, no agreed scientific definition of the concept of fitness for transport currently exists.

Severe heat stress for livestock starts at the upper critical temperature (UCT). The UCT was presented for cattle, sheep horses and pigs. Animals should be transported within their thermal comfort zone and never exposed to temperatures above the UCT during transport.

Increased space in the vehicle with reference to the current space allowance is beneficial for the animals to adjust posture and balance in response to movements of the vehicle during transport thus reducing injuries, falls and stress. This allowance should also allow the animals to rest including the space need to get up and lie down. Recommendations were given for a minimal space allowance for each of the species in question.

The number and the severity of hazards that animals are exposed to during transport influence the resultant welfare consequences. The amount of time the animals are exposed to the hazards is dependent on the journey duration. Motion stress and sensory overstimulation start as soon as a vehicle starts moving and continues while the vehicle is moving potentially leading to fatigue and negative affective states such as fear and distress. Pain and/or discomfort from health conditions or injuries can be severe and will worsen over time during transport and may lead to suffering. Problems associated with lack of

resting become greater with increased journey duration and may lead to fatigue. EFSA therefore recommends that the duration of transport is kept to a minimum. Also, in an effort to support risk managers in setting a maximum journey time the onset of thirst (even when drinkers are provided), hunger and fatigue were presented.

Even when a transport vehicle is fitted with water drinkers, long journeys may result in prolonged thirst. Due to practical difficulties in feeding animals on a transport physiological changes indicative of hunger can be present. Allowing livestock a break on a stationary vehicle at the current commercial space allowance does not lead to the intended drinking, eating, and resting behaviour and thus does not mitigate the welfare consequences of the journey. Animals (apart from horses travelling in single stalls) should be unloaded to be fed watered and rested.

Welfare consequences at Control Posts (CPs) include handling stress, injuries, group stress, biosecurity risks, therefore the number of times animals stop there should be as low as possible. Groups of animals from trucks should be maintained at CPs. CPs may not fulfil their intended function. Journey breaks at CPs needs to be long enough for each animal to eat, drink and rest. Recommendations were made in relation to the minimum length of rest at control posts.

During the transport of un-weaned calves, intervals between milk meals should not exceed 12 hours, and not be less than 6 hours. After a milk meal, calves should be allowed to rest (lying) in a calm place for 3 hours to digest their meal. In order to allow calves to be loaded/unloaded and a 3-h post-meal rest, journeys should not exceed 8 h.

The recommendations made for road transport are equally applicable to cull animals (dairy cows and sows). Fitness for transport is of particular concern for this group of animals. If the cull animals are fit for transport, the journey to a slaughterhouse should be kept to a minimum, be direct and not involve any unloading and reloading at any interim premises. If these animals are not fit for transport and are without the prospect of recovery in a reasonable period of time, they should be killed on farm as soon as is possible.

3.4. Update on progress of other F2F scientific opinions (laying hens, broilers, calves, dairy cows, ducks, geese and quails).

Network representatives were given an overview and update on the F2F SOs that EFSA is producing:

Denise Candiani provided a general overview of the EC mandates received under the framework of the Farm to Fork (F2F) strategy and on their timelines. The F2F Strategy foresees a comprehensive evaluation of the current EU animal welfare legislation with the view to its possible revision and possible new legislative acts (e.g. on the protection of dairy cows, ducks, geese and quail). In preparation to that, and also in relation to the ECI 'End of the Cage Age', in June 2020 EFSA received five mandates from the EC, requesting a comprehensive and updated assessment of the scientific knowledge related to protection of calves, laying hens, pigs, broiler chickens and terrestrial animals during transport. Due to the complexity of the mandate on the protection of animals during transport (i.e. six animal categories to be considered, six group

of practices to be described and seven specific scenarios to be further assessed), EFSA has addressed it by delivering five different SOs, four on free moving animals (sheep & goats, pigs, cattle, and horses) and the fifth on animals transported in containers (poultry & rabbits). In June 2021 and July 2021 respectively, EFSA has received two additional mandates: a) on the protection of ducks, geese and quail, and b) on the protection of dairy cows. The ongoing five SOs are scheduled for adoption by the AHAW Panel in the next months: December 2022 in the case of laying hens and broiler chickens, and March 2023 for calves, dairy cows and ducks, geese & quail. The F2F mandates present a similar structure with a set of General Terms of References (ToRs) (that are similar in the case of the mandates 'on farm') and additional specific scenarios (Specific ToRs) for which the EC has identified practical difficulties or insufficient information in ensuring the welfare of animals and requested EFSA to propose detailed quantitative or qualitative preventive, corrective and/or mitigation measures.

Michaela Hempen detailed the state of art of the draft SO on the welfare of laying hens in relation to the identification of the highly relevant welfare consequences and related ABMs in the identified and described husbandry systems for laying hens, pullets and layer breeders. Mandate Specific ToRs were also presented.

Cristina Rojo Gimeno, provided a similar overview detailing the state of development of the draft opinion on the welfare of broiler chickens, on the description of the animal categories and husbandry systems, the highly relevant welfare consequences and the related ABMs. It was specified that double purpose lines, great grandparents will be addressed, but data on great grandparents and pure lines kept in cage systems are often not accessible to scientists, and that promising husbandry systems (e.g. mobile systems) have been also considered in the draft SO. Mandate specific scenarios were also presented.

Gizella Aboagye presented the mandate on the protection of ducks, geese and quail. This mandate stems from ECI 'End of the Cage Age', and it refers to animals used for farming purposes only. It was specified that the process of collecting feathers and downs, transport, slaughter and the process of force-feeding for fatty liver production are not part of this request. Background and ToRs were presented. Four animal species are assessed in the draft SO: Domestic duck, Muscovy duck (and hybrids), Domestic geese and Japanese quail. These species are kept on farm for diverse purposes: breeding, production of meat (including foie gras, in the case of Muscovy ducks and Domestic geese), and production of eggs (mainly Japanese quail) and several animal categories are assessed, depending on the production purpose.

Mariana Aires presented the mandate on the protection of dairy cows. It was specified that it concerns cows which have had a calf and are kept for milk production and to pregnant heifers in the last third of gestation. The six ToRs were presented as well as an overview of prevalent husbandry systems for dairy cows in the EU Member States (relevant to ToR-1). A specific ToR of this mandate (in comparison to the others of the F2F mandates) asks EFSA to identify the herd-level variables that could be used to identify farms at risk of poor welfare and that could be used in a welfare monitoring system.

Eliana Lima provided an update on the draft SO on the welfare of calves with examples of the husbandry systems that are assessed in the SO. The presentation highlighted the ongoing Public Consultation on the sections of the draft SO containing results, conclusions and recommendations on welfare aspects of calves reared for white veal (specifically aspects related with space allowance, fibre and iron provision, and individual/group housing) and welfare aspects of limited cow-calf bond. Network representatives were invited to disseminate the call for comments and the link to the Public Consultation; deadline for submitting comments to the draft SO is 04 November 2022.

4. Feedback from 2021 AW Network meeting: The assessment of ABMs collected in slaughterhouses to monitor the level of welfare on pig farms

Marika Vitali presented the methodology, conclusions and recommendations about the specific Terms of Reference (ToR) on the monitoring of the ABMs at slaughter to assess the welfare on pig farms. This specific ToR is part of the SO on the Welfare of pigs on farm (published in August 2022). An exercise was held in 2021 with the Network Members to gather information on how these ABMs are used in practice in the various Member States. The information was used to complement the section in the SO. The following conclusions were presented:

- The most promising Animal Based Measures (ABMs) for collection at slaughterhouses to monitor the level of welfare on farm for rearing pigs are tail lesions, carcass condemnation and lung lesions, while for cull sows are body condition, carcass condemnation, shoulder ulcers and vulva lesions.
- The prevalence of the welfare consequences assessed through the ABMs collected at the slaughterhouse may underestimate the situation on farm, as it does not include the animals that die on farm. This problem may be greater for cull sows because of the high rate of on-farm mortality.
- There is great variability in the methods used to assess the various ABMs.
- Lameness is an important ABM for rearing pigs and cull sows, but was not proposed as a promising ABM for further development because:
 - i) It is difficult to distinguish if lameness measured at the slaughterhouse resulted from welfare consequences that the pigs were exposed on-farm or during the preslaughter phases.
 - ii) Lameness identified on farm should not be transported
- The Technology Readiness Level of automated monitoring of the ABMs at slaughterhouse is currently low. Methods for tail lesions and lung lesions are the most advanced.
- Unified and standardised scoring systems and protocols across different regions/countries are necessary to monitor and benchmark the welfare of cull sows and rearing pigs transnationally.

Relevant recommendations were also presented.

Lastly, it was explained that the same approach is currently applied for the SOs on the welfare of laying hens, broiler and calves, that are planned to be published at the end 2022-beginning of 2023.

5. Exchange of information session among AW Network members and plenary discussion with questions and answers – Part A (topics suggested by EFSA)

Request for information was sent to Network members prior to the meeting related to the following points (5.1 to 5.3) that were discussed orally at the meeting. The complete feedback was collected in a questionnaire that will be published in a technical report at the end of 2022 and will be distributed to the Network members.

5.1. Topic for network discussion by EFSA: Laying hens

Network representatives were asked to provide information on the following question:

- Do you have any reports about housing conditions and rearing methods for male layer chicks (“brother chicks” or “brother rooster” raised for meat production instead of killing at hatchery), a description of their behaviour and age at slaughter.

Michaela Hempen thanked the network participants for sending information on the above topic.

It was specified that in Belgium there is the “Live or Die” study in French about the future of males that are not used.

In Italy, they are going to ban the killing of male layer chicks.

It was mentioned that there is research from a private company in Dutch.

In France there is the same situation as in Italy, the killing of male layer chicks will be banned.

In Czech Republic large quantities of male layer chicks are sent to snake breeders.

In Portugal, it is an issue to ban the routine killing of young males.

5.2. Topics for network discussion by EFSA: Broilers

Network representatives were asked to provide information on the following questions:

- Are single cages used in broiler breeders?
- If yes, what are the dimensions?
- Are collective cages used in broiler breeders?
- If yes, what are the dimensions and the distribution of resources (perches, litter)?
- Do you have a definition of slower-growing broilers?

Cristina Rojo Gimeno clarified that the above questions are in the framework of the End of Cage initiative and thanked the representatives of the countries that sent answers.

It was specified that neither single nor collective cages for broiler breeders are used in Denmark.

The representative of Austria indicated that no information was available on this and requested an email on this to liaise with the appropriate colleagues at the National Authority.

The representative from Spain said that maybe relative information on the size of cages can be obtained from the breeding industry and a technical question could be posed to the EU Reference Centre for animal welfare of poultry.

In France, the definition of slower-growing broiler for organic, it is the crossing with a slower-growing parent, listed in a Syndicate of French Poultry and Aquaculture Breeders directory, validated for red labels. And currently the indicator is an Average Daily Gain < 30 g per day, while in England it is 40 g per day.

It was stated that in Denmark there is not a clear definition, but a slower-growing broiler for the governmental Animal Welfare Label, is a broiler with 25% less average daily growth rate compared to ROSS 308 as benchmark for a fast-growing broiler. The same definition for organic broilers has a maximum daily weight gain of 38 grams/day.

Regarding Belgium, it was stated that there was no established definition for the weight gain of slower growing strains. The basic standard of stocking density for broilers is 33 kg/m². There is an "Analysis of the principle of derogation from standard broiler breeding densities: impact on animal welfare and profitability". According to this analysis, there was no effect on animal welfare when density changed from 42 kg/m² to 39, but there was an economic change.

5.3. Topics for network discussion by EFSA: Dairy cows

Network representatives were asked to provide information on herd-level variables collected in dairy cow farms by answering the following questions:

- Which dairy herd variables are currently collected in your country? Examples of such variables can be herd size, mortality, somatic cell count, type of housing, access to pasture or any other routinely collected and that could be potentially useful in a monitoring system.
- If so, per each variable could you indicate if data is collected/owned by the national authority level or by other bodies?
- What is the approximate frequency of collection?

Eliana Lima thanked the network participants that sent answers in written form prior to the meeting and during the Questions & Answers session. The answers were discussed, and network representatives were asked to provide more detail or clarifications if necessary.

In Portugal, data collected by the national veterinarian authorities include herd mortality, data on fitness for transport, and results of slaughter inspection at abattoirs (post- and ante-mortem data), in addition to data on hygiene of milk facilities and milk production. Some of these variables are used as input variables for determination of level of risk and determination of farms to be visited for control checks.

In Spain, data on mortality is also collected. More information on variables collected was submitted in the questionnaire launched by DG AGRI on ABI; Spain mentioned that more information on this would be provided over email after the meeting.

In Croatia, data on herd hygiene, health data and transport are collected to inform an annual inspection plan. Most variables relate with health, but no specific welfare measures (e.g. ABMs) are collected.

In Denmark a thorough cattle database is owned and run by the industry and contains information on milk production, reproduction, feeding efficiency, lameness levels and antimicrobial usage. Information on high Somatic Cell Count is reported to the Competent Authority (CA) and all antibiotic treatment is recorded in detail. Some of this information is accessible by the CA but not all.

In Norway, the situation is similar to what was described for Denmark; except that lameness is not recorded at farm level, but only regarding treated animals. More detailed data owned by the industry are used for farm benchmarking.

In Austria, all data is routinely collected by AMA (Agrarmarkt Austria), which is also in charge of subsidies to farms, and which collects data at least once a year. Further information is probably available at the Ministry of Agriculture. Private programmes complement these data (for instance, available space, and quality of milk), but the CA holds these data only partly.

In Italy, variables such as herd size, number of operators and space availability are collected to inform a risk-based national welfare plan. This information is owned by the CA.

In the Netherlands, data on herd size and access to pasture is collected by the government annually through an agricultural census.

In Sweden, detailed data are collected on farm but owned by private schemes and not reported to the CA.

In Germany, a program is run by the private sector ("QS", quality scheme"), which is the basis for implementation of self-monitoring schemes. Germany mentioned that more information on this would be provided over email after the meeting.

Greece mentioned that data on somatic cell count is collected but these are not owned by the CA. Holdings are only audited by regional CAs in the context of relevant hygiene legislation.

6. Exchange of information session among AW Network members and plenary discussion with questions and answers – Part B (topics suggested by Network members)

Request for information was sent by Network members prior to the meeting related to the following points (5.1 to 5.6) that were discussed orally at the meeting. The complete feedback was collected in a questionnaire that will be published in a technical report at the end of 2022, that will be distributed to the Network members.

6.1. Discussion with MSs/EFSA experiences with respect to transport fitness of pigs, the Netherlands

Winanda Ursinus proposed to discuss issues related to fitness of transport in pigs, precisely grey areas from the legislation regarding transport of different categories of pigs, such as piglets, fattening pigs and sows. There is lack of practical protocols to be used by inspectors, therefore it is unclear how to deal with lame animals, hock swellings, tail wounds and outpouchings.

Network representatives were asked to provide information on the following questions:

- Do you have a risk assessment of animal welfare for transport of pigs available (in country/intra-EU as well as export to 3rd countries; animal categories: piglets, fattening pigs, sows)?
- Do you have animal welfare issues related to transport of piglets, fattening pigs, sows transports in country; intra-EU as well as export to 3rd countries?
- Do you have an assessment protocol to check fitness for travel for piglets, fattening pigs, or sows?

It was specified that in Croatia guidelines exist on a veterinarians' web page of the CA, where it is described how to check the fitness of pigs for transport. Finland and Denmark have also similar guidelines for pigs. The same is valid for Norway and France, but guides are only available in Norwegian and French languages. In Germany they have relative checklists for the drivers.

6.2. Discussion with MSs/EFSA about possibilities for EFSA Focal Point activities (e.g. workshop with MSs), the Netherlands

Winanda Ursinus proposed to set up an animal welfare network of risk assessors from Competent Authorities to improve development of data-driven, harmonized risk assessment methodologies and digital tools. A major concern is that academic research cannot always provide sufficient useful elements for risk assessment methodology nor tools from the perspective of a CA. Therefore, validation of proper welfare indicators for assessing risks at farm level, during transport or at slaughter will benefit Member States from an integral approach. She pointed out that this network will help to improve animal welfare risk assessments and thereby will support risk managers to achieve a higher positive impact on animal welfare across EU. Their aim is to share risk assessment methods with a network set-up in 2023 and continuation in 2024 – 2027.

Network representatives were asked to provide information on the following questions:

- Does your country have a project/initiative/programme to develop and improve the risk assessment methodology to be used by CA/officials for Animal Welfare? (in order to conduct risk based enforcement and not risk assessment on farm)
- If yes, please elaborate on that.
- Is your country open to join a network of risk assessors across Europe from competent authorities to improve development of data-driven, harmonized risk assessment methodologies and digital tools?

Some MSs expressed their intention to join such a network. EFSA clarified that it facilitates the exchange among MSs only in the frame of the yearly meetings organised with the Network.

6.3. End of cage and related AW problems, Italy

Sara Rota Nodari reported a summary of the online public consultation in support to the fitness check and revision of the EU animal welfare legislation. According to this public consultation, 93% of consumers consider that the maximum transitional time allowed for ending the age of cage should be 5 years for sows, laying hens, calves, rabbits, pullets, broiler breeders, layer breeders, quails, ducks, and geese, while 40% - 48% of business organisations believe that the maximum transition time allowed should be 15 years. In Italy, calves, sows for gestation and farrowing period and rabbits are kept in individual pens/cages. A new legislation makes compulsory the use of alternative systems for all new farmers of rabbits.

Network representatives were asked to provide information on the following questions:

- Which animals are still in cages in your country even if not continuously (i.e. sows at farrowing and insemination)?
- Do you foresee problems for some species with the ban of cages?

In Portugal, the same species as in Italy are kept in cages and, additionally, laying hens. In France, they have cages for sows, laying hens and rabbits. In Czech Republic, there are cages for laying hens which are under reconstruction, for sows and rabbits. In the Netherlands, meat rabbits, farrowing sows/inseminated sows and some poultry are kept in cages but not laying hens, while veal and dairy calves are kept in baby boxes. In Croatia, there are laying hens kept in enriched cages in high percentage, but alternative systems are more and more implemented by big producers.

In Belgium there is a trend for fattening rabbits in park systems and research is made to assess their feasibility. It is difficult to house them in a group, because the parents defend their small rabbits and density issues are caused. On this matter, it was added that in Italy, when their housing system is an alternative one, they keep the rabbits in a group of four to avoid the aforementioned problems.

In Denmark, some population of laying hens is still in cages, nevertheless the government would like to ban cages. And the intention from the industry and the politicians is that soon they will not have farrowing sows in crates.

In Spain, the main issue is with the rabbits. In Finland, it will be soon banned to build new cages for farrowing sows, while laying hens and fur animals are still in cages.

6.4. Tied cows, Italy

Sara Rota Nodari made a presentation about tied cows in Italy. 30-40% of cows are tied in Italy. She presented the advantages and disadvantages of this method of keeping cows, both from health and animal welfare point of view. For the pros, there appear to be less hoof issues and leg injuries, good human-animal relationship and absence of prolonged hunger, while for the cons there are increased diseases of various kinds such as mastitis, dystocia, abomasal displacements and vulvar discharge and also no freedom of movement, no comfort at lying, no grooming no expression of natural behavior, more behavioral stereotypes, increased physiological stress measures and more negative emotional state.

Network representatives were asked to provide information on the following questions:

- Do you still have tied cows in your country and how big is this reality?
- How do you check the welfare of these animals?

In France, the situation is same like in Italy. In Norway, currently more than 50% of dairy farms have tie-stalls, but these farms have far less than 50% of the total population of the animals. It is not legal to build new tie-barns and all tie-barns will be phased out by 2034.

A third of Finnish dairy cows - approximately 50% of dairy farms, small ones - are kept tied, but animals are obligated to graze an/or use paddocks for at least 2 months during summertime. In the new law, this will be added up to 3 months.

Tied cows exist in Southern Germany in smaller farms. According to a current legal decision, they should be allowed to move out for at least 2 hours per day. In the Netherlands, there is a percentage of 5% of tied cows in winter and a small percentage of tied dairy cows on smaller farms. In Denmark, they have dairy tied cattle in small farms but only until 2027. According to a political decision, there is going to be a ban against tie stalls for beef cattle too.

It was reported that in Czech Republic, tied cows are in smaller farms. They are traditionally tied in closed systems and then between the milking system are freed.

The representative from Spain commented that the animal welfare consequences of keeping animals in cages will be the same for the tied animals. A definition of cage is needed.

6.5. AW of grass-fed animals, Italy

Sara Rota Nodari presented an Italian survey reporting that 27% of the consumers agreed that animal feed used in beef and lamb farming contributes to deforestation (AHDB/YouGov May 2021). This is likely to result in demands for more traceability in the supply chain and that feed comes from more sustainable sources, such as grass. Moreover, the driver for buying premium beef for 29% of consumers is to be from grass fed animals. However, grass fed animals are more exposed to parasites, infections and predators, can have low nutrition and energy due to poor quality of grass and are more prone to lameness. 100% grass fed animals is a very small reality.

Network representatives were asked to provide information on the following questions:

- Do you have any herd-level variable currently collected in your country? Examples of such variables can be herd size, mortality, somatic cell count, type of housing, access to pasture or any other you routinely collected and that could be potentially useful in a monitoring system.
- If so, per each variable could you indicate if data is collected/owned by the national authority level?
- Could you please indicate the approximate frequency of collection?

It was specified by Italy that when the animals are outdoors and graze, they are in a perfect animal welfare state, but the quality of grass is not monitored.

In Denmark, the animals cannot be entirely on grass due to the adverse climate. In Croatia, they have grass fed small ruminants. They face major animal welfare problems such as hoof diseases and poor nourishment, since animals are not fed additionally. In small islands, there are also discussions on their water requirements.

It was reported that in France, they have grass fed animals. In Czech Republic, they have grass fed sheep and beef. There are some animal health and welfare risks, such as parasitism, hoof problems and watering of the animals, while the animals are in danger of wolves as well. Inspection of these farmers is more than needed.

6.6. AW labels present in the different countries, Italy

Sara Rota Nodari presented their National Animal Welfare Quality System: SQNBA, decreed in August 2022, which provides a label according to the Classyfarm system by an independent certification body. The certification is obtained when the meat ingredient is >75%. Currently, the only EU-wide obligatory system of labelling relating to animal welfare exists for eggs. This label defines different production methods (cages, free-range, barn, etc.) and is based on the EU legislation. EU organic production rules on livestock include respect for animal welfare.

There could be three animal welfare labelling options:

1. Regulating animal welfare claims, where general principles and specific rules on specific claims are applied.
2. An EU animal welfare label, limited to cage/non-cage systems, either on a voluntary or a mandatory basis.
3. An EU animal welfare label, with key welfare criteria, covering all animal species and all phases of the animal's lifecycle: farm practices, transport and slaughter. Species-specific standards, on a single or multi-tier voluntary basis, or on a multi-tier mandatory basis.

Network representatives were asked to provide information on the following questions:

- Do you have national AW labels (single-tier or multi-tier) in your country?

- If yes, who does check them?

In Denmark there is a governmental AW label for pigs, broilers, dairy cows and beef cattle. Organic production is controlled by governmental certified people. In Croatia, there are no AW labels, they are in the process of trying to develop them. In Czech Republic, there is no labelling.

It was mentioned that the Netherlands has the Better Life Label of the Dutch Society for the Protection of Animals (SPA). In France, they have an AW label only for broilers.

7. Wrap-up and Closure of AHAW (AW) Network meeting

Next meeting will be held in 2023 (date to be fixed).