

European Union Reference Centre for Animal Welfare *Poultry SFA*









Reflection Board













Agenda: Friday, 26 November

08:45 Testing of communication equipment

09:00 Welcome and meeting aims (Virginie Michel- EURCAW-Poultry-SFA, and Kirsten Vornhagen - DG SANTE)

09:15 Presentation of EURCAW-Poultry-SFA (Virginie Michel – EURCAW-Poultry-SFA) Objective, Missions, Priority areas, Target bodies

09:30 The role of the reflection board (Antonio Velarde –EURCAW-Poultry-SFA)

09:45 Description of the Work Programme (Virginie Michel, Antonio Velarde, Leonardo Vinco James, Emilie Nehlig – EURCAW-Poultry-SFA)

11:00 Break

11:15 Discussion about interactions

11:45 Conclusions

12:00 Closure of the meeting



European Union Reference Centre for Animal Welfare *Poultry SFA*

Welcome and meeting aims

Virginie Michel- EURCAW-Poultry-SFA, and Kirsten Vornhagen - DG SANTE



European Union Reference Centre for Animal Welfare *Poultry SFA*

Presentation of EURCAW-Poultry-SFA

Virginie Michel- EURCAW-Poultry-SFA





European Reference Centre for Animal Welfare for Poultry and other small farmed animals



Dr Virginie Michel



EU Reference Centres for Animal Welfare

Art. 95 of 'The Official Controls Regulation':

"The Commission shall, by means of implementing acts, designate European Union reference centres for animal welfare that shall support the activities of the Commission and of the Member States"



Main Target groups and objective

• Target groups: EU Commission, Competent Authorities, National reference centres and 'supporting bodies' from MSs: science, training, communication

- Objectives: to support implementation of welfare legislation in an harmonized way through MSs
 - on farms, transportation and killing
 - poultry & other small farmed animals

ANSES

EURCAW-Poultry-SFA's team

Virginie **MICHEL**

Maryse **GUINEBRETIERE**



Frédérique MOCZ



IRTA

Aranzazu VARVARÓ

Aida **XERCAVINS**









Emilie NEHLIG

Alexandra CONTRERAS

Berta BAULIDA

Xènia MOLES













IZSLER Leonardo J. **VINCO**

Antonio **LAVAZZA**

Francesca **FUSI**





ANIS



AARHUS UNIVERSITET

Anja B. RIBER

Kaitlin WURTZ













Three Centres







Since October 2018

Since February 2020

Since May 2021



EURCAWs Main Activities

Art 96 of 'The Official Controls Regulation':

- 1. COORDINATED ASSISTANCE
- 2. ANIMAL WELFARE INDICATORS
- 3. SCIENTIFIC AND TECHNICAL STUDIES
- 4. TRAINING COURSES
- 5. DISSEMINATING RESEARCH AND INNOVATIONS

EURCAW Poultry SFA

Priority areas

- Welfare of broilers on farm.
- 2. Welfare of laying hens in alternative systems.
- 3. Assessment of welfare during electrical waterbath stunning for broilers and turkeys.
- 4. From 2021 onwards: Welfare of rabbits on farm with a special focus on alternative systems
- 5. From 2022 onwards: Welfare of turkeys.











What the Centre is and is not...

The Centre is	The Centre is not
To assist Commission and MSs	To be questionned by other institutions
Able to deliver scientific and technical advice	To do risk assessment
Able to provide information usable to define thresholds	To interpret legislation
To help implementation of legislation	



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Role of the Reflection Board

Antonio Velarde-EURCAW-Poultry-SFA



Reflection Board (RB)

Objectives:

 \rightarrow to exchange, discuss about interactions, participation and identify possible interest.

<u>Delegates of the reflection board</u>: Association/institutions/entities are members EU Platform on Animal Welfare

- 1. Eurogroup for Animals: Maya Cygańska
- 2. Association of Poultry Processors and Poultry Trade in the EU (a.v.e.c.): Paul Lopez
- 3. European Rural Poultry Association (ERPA): Marie Lesgourgues
- 4. European agri-cooperatives (COCEGA): Gianluca Bagnara
- 5. European farmers (COPA): Gianluca Bagnara
- 6. European Forum of Farm Animal Breeders (EFFAB): Ana Granados Chapatte
- 7. Federation of Veterinarians of Europe (FVE): Wiebke Jansen



Role of the Reflection Board



- > Follow-up the activities of the EURCAW-Poultry-SFA
- Reflection on the activities
- > Support the Centre with:
 - ✓ Technical information
 - ✓ Indicators
 - ✓ Best practices
 - ✓ Trainings
- Disseminate the activities of the Centre among stakeholders
- Improve dialogue between inspectors and operators



European Union Reference Centre for Animal Welfare *Poultry SFA*

Work Programme

Virginie Michel, Antonio Velarde, Leonardo Vinco James, Emilie Nehlig EURCAW-Poultry-SFA



European Union Reference Centre for Animal Welfare *Poultry SFA*

Activity 1

COORDINATED ASSISTANCE



Reporting of activity 1.1 Network Building



Objectives:

Develop networking through CAs of the EU and continue building strong collaboration with other EURCAWs, DG SANTE G5, National Reference Centres (NRCs) and their Supporting Bodies (SBs):

- inform on the missions and activities that the Centre can provide
- → stimulate the expression of their needs.
- → improve animal welfare (AW) by providing knowledge and tools to use during official controls
- Share knowledge
- Share experience
- Share problems

Reporting of activity 1.2 Technical assistance, query service





Objectives:

- 1. To answer scientific and technical queries asked by DG SANTE and MSs.
- 2. To revise and refine the technical assistance service procedures.

The Centre offers scientific and technical assistance to CA, NRC, other SB, from the EU Member States and the EU-Commission, regarding all aspects of welfare legislation implementation.

The Centre is covering hatchery, farming, transportation and killing outside of risk assessment and risk management areas.

Reporting of sub-activity 1.2 Technical assistance, query service

List of queries answered from September 2020 to Mid-November 2021:

Q2E-Poultry-SFA-2020-001 about captive bolt;

Q2E-Poultry-SFA-2020-002 about mink cages dimension;

Q2E-Poultry-SFA-2020-003 about head-only stunning and decapitation;

Q2E-Poultry-SFA-2020-004 about traumatism assessment protocol for broilers;

Q2E-Poultry-SFA-2021-001 about outdoor access for pullets;

Q2E-Poultry-SFA-2021-004 about feeding space and usable area for pullets (ongoing).

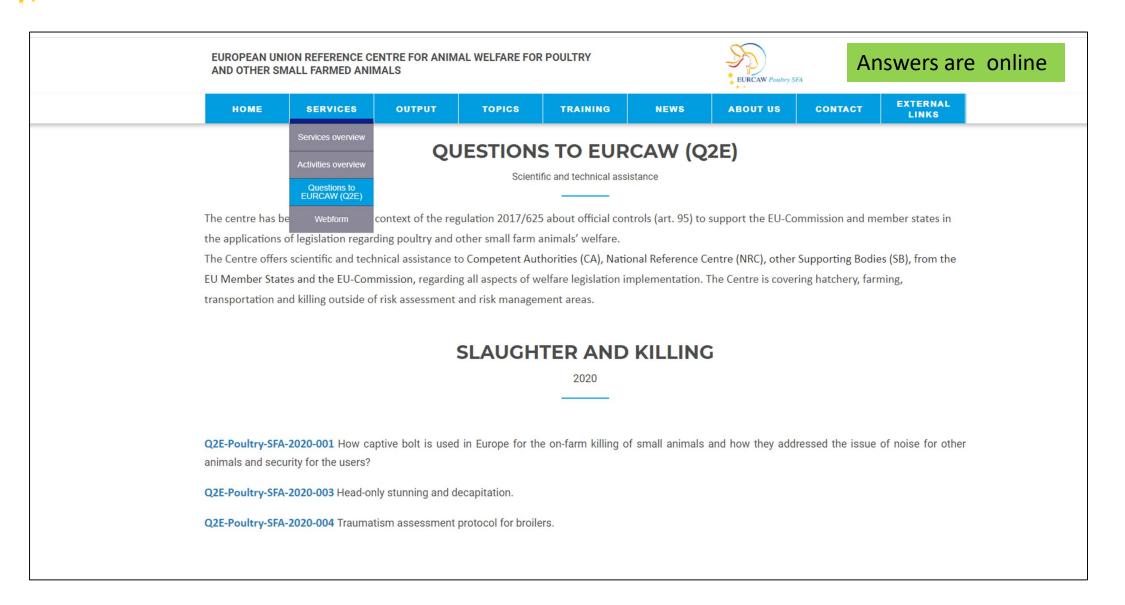
Answers available online

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The five answers already sent to the requestors are published online and accessible in the Q2E sub-page (https://www.eurcaw-poultry-sfa.eu/en/minisite/sfawc/question-eurcaw-q2e).

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Reporting of activity 1.2 Technical assistance, query service





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QUESTIONS?



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Activity 2

ANIMAL WELFARE INDICATORS, METHODS FOR THE ASSESSMENT AND METHODS OF IMPROVEMENT





2.1 Relevant animal welfare indicators

2.1.1 List of relevant welfare indicators

2.1.2 Description of the considered validated indicators among the identified ones and associated methodology

Objectives:

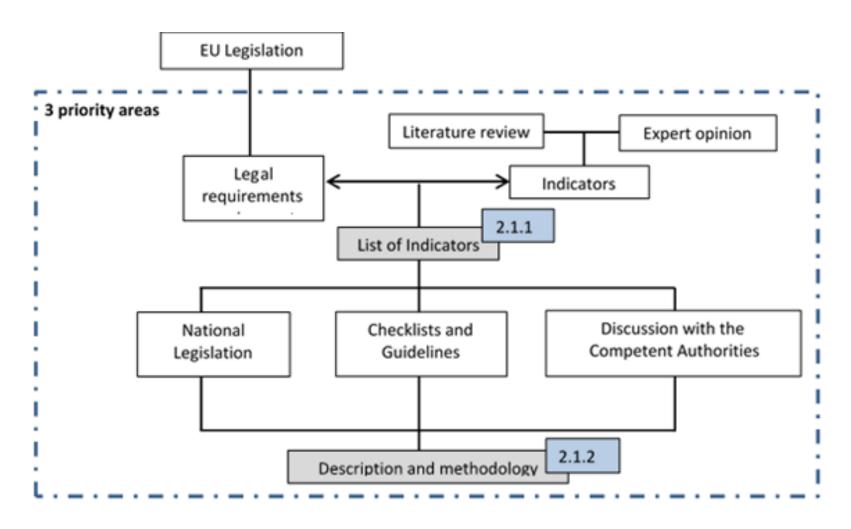
Identifying requirements of the legislation and addressing their corresponding specific indicators for each requirement:

- Animal-based indicator (ABI)
- Resource-based indicator (RBI)
- Management-based indicator (MBI)
- Method for the assessment
- Validity/Reliability/Feasibility
- Gap of knowledge



Luclfore indicators and associated mathedalogy

2.1.1 and 2.1.2. List of relevant animal welfare indicators and associated methodology





Activity 2.1 Perspective 2021-2022



2.1 Relevant specific animal welfare indicators and methods for assessment

Summary of the objectives for next period:

- Factsheets about:
 - The assessment of dust level in broiler barns.
 - The assessment of dust level in layer barns.
 - The assessment of consciousness after CAS broiler chickens.
 - The assessment of consciousness after WBS of turkeys.
- Reports on ABIs and methods for:
 - Assessment of the state of consciousness of chicken after exposure to controlled atmosphere. Including validity, reliability and feasibility of the most relevant indicators and associated methods. This report will also include gaps of knowledge.
 - Assessment of rabbit welfare. Including validity, reliability and feasibility of the most relevant indicators and associated methods. This report will also include gaps of knowledge.





2.2. Methods to improve animal welfare assessment

The aim of sub-activity 2.2 was

- To identify the requirements where the associated methods for assessing compliance are found to be difficult, problematic or non-existing (Part 1).
- To propose alternative methods of animal welfare assessment (in terms of validity, reliability and/or feasibility) for those most difficult to implement (Part 2).

This was done in relation to the three priority areas.





Part 1: procedure

- 1) We selected the legal requirements, based on experience and knowledge, were most likely to be problematic to verify compliance with during animal welfare inspections.
 - \triangleright broiler farms n = 14, laying hens in alternative systems n = 11, waterbath stunning n = 6.
- 2) CAs were asked for their opinion on whether and why the selected legislative requirements are found difficult to assess during official controls.
 - during the workshops held at the 1st EURCAW-Poultry-SFA meeting where CAs from the Member States participated
 - during 1:1 interviews where partners of EURCAW-Poultry-SFA interviewed inspectors in different Member States.





Part 1: Conclusion

• Surprisingly, the methods used for collecting data on welfare indicators posed problems CAs and inspectors for most of the legal requirements.





Part 2: Improved methods of assessment are delivered for the following legal requirements:

- 1. Gas concentrations (NH₃ and CO₂) in broiler farms.
- 2. Gas concentrations (NH $_3$ and CO $_2$) in alternative systems for laying hens.
- 3. Light intensity in broiler farms.
- 4. Light intensity in alternative systems for laying hens.
- 5. Assessment of the state of conciousness during waterbath stunning.

Find them here:

https://www.eurcaw-poultry-sfa.eu/en/minisite/sfawc/broiler-welfare https://www.eurcaw-poultry-sfa.eu/en/minisite/sfawc/laying-hen-welfare





Part 2: Improved methods of assessment will be delivered in 2021/2022 for the following legal requirements:

- 1. Dust levels in broiler farms.
- 2. Dust levels in alternative systems for laying hens.
- 3. Loss of consciousness during waterbath stunning.
- 4. Loss of consciousness during waterbath stunning in regards to appropriate sample size used during checks.
- Checks of loss of consciousness during waterbath stunning in regards to appropriate frequency of checks.





2.2 Identification of 'Iceberg' Indicators



Objective:

To provide "Iceberg Indicators" that can be used by official inspectors to obtain a quick overview on possible welfare problems related to the priority areas 1 and 2 (welfare on farm of broilers and layers), with description of **method**, **validity**, **reliability** and **feasibility**.



An **iceberg indicator** provides an overall assessment of welfare, just as the protruding tip of an iceberg signals its submerged bulk beneath the water's surface (FAWC, 2009).

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Reporting of Activity 2.2, 2020-2021



2.2 Identification of 'Iceberg' Indicators



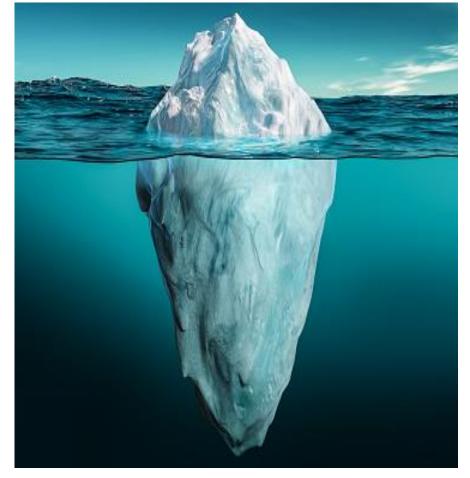
Objective:

LIST OF CANDIDATE ICEBERG INDICATORS priority areas 1 and 2.

POULTRY WELFARE ON FARM:

- 1. Mortality
- 2. Frequency of medication use
- 3. Culling rate
- 4. Growth rate
- 5. Sick birds
- 6. Injured birds
- 7. runts
- 8. Walking ability
- 9. Pecking Damages
- 10. Keel Bone Damage
- 11. Feather cleanliness
- 12. Litter quality

- 1. Mortality
- 2. Walking ability
- 3. Litter quality
- 4. Feather cleanliness
- 5. Pecking Damages
- 6. Keel Bone Damage



Ambiguous iceberg indicators: indicators that in some contexts may suggest poor welfare while the opposite conclusion could be drawn under other circumstances (FAWC, 2009).





2.2 Identification of 'Iceberg' Indicators



Objective:

LIST OF CANDIDATE ICEBERG INDICATORS priority areas 1 and 2.

Indicators	Validity	Feasibility	Reliability
Mortality	XX	XXX	XXX
Walking ability (gait score)	XXX	XX	Х
Litter quality	XXX	XXX	XX
Feather cleanliness	XXX	XX	X
Pecking Damages (three methods)	XX to XXX	X to XX	XX to XXX
Keel Bone Damage	XX	X	XX



Method: a system of application of the indicator for the assessment of animal welfare.



Activity 2.2 Perspective 2021-2022

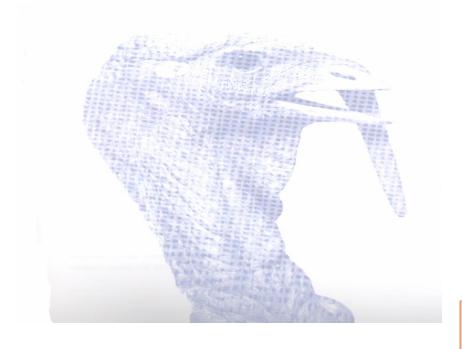


2.2 Identification of 'Iceberg' Indicators



Objective:

LIST OF CANDIDATE ICEBERG INDICATORS priority areas 1, 2 and 5 (welfare of turkeys)



Score		Description
0	~	No external signs of FPD
1	-	Swelling, redness, scales separated; necrosis < 1/8 area
2	~	Marked swelling and redness; necrosis < 1/4 area
3		Enlarged, pronounce scales; necrosis < 1/2 area; toe pads affected
4		As 3, toe pads affected; necrosis > 1/2 area;

From 1st CA meeting:

CAs need an Assessment of FPD at SL

→ Iceberg indicator work for 2022, Factsheet

QUESTIONS?



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Activity 3

SCIENTIFIC AND TECHNICAL STUDIES





2020:

3 Review reports about the gaps of knowledge and the most critical 'open norms'.

2021:

- Synthetic review about the main welfare aspects of :
 - stunning chicken by exposure to controlled atmosphere.
 - rearing rabbits, with a specific focus on alternative systems.

• Reports on:

- The study in experimental facilities to ascertain different indicators and methods for broiler chicken welfare assessment under different housing conditions.
- Test inter-observer repeatability and feasibility of indicators of consciousness in broiler chicken after WBS and the impact of electrical key parameters on stunning efficiency.
- Scientific study in commercial slaughterhouses of turkeys with waterbath.
- Scientific and technical study to fill the gap of knowledge and develop methods for dust measurement in broiler and layer farms.
- List of the identified potential demonstrators of examples of success.



Sub-activity 3.1, Perspective 2021-2022

3.1 Reviews of existing knowledge about main welfare aspects of exposure of chicken to CAS and on farm welfare of rabbits

CAS review:

- Advantages of CAS over waterbath stunning
- Results from query to CA
- Legal requirements
- List of CAS methods:
 - 1. Stunning with carbon dioxide in two phases
 - 2. Stunning with **inert gases**
 - 3. Stunning with carbon dioxide associated with inert gases
 - 4. Low atmospheric pressure stunning (LAPS)



- Neurological and physiological aspects
- Available equipments
- Positive welfare aspects
- Negative welfare aspects
- Welfare assessment

Review online (soon)





Sub-activity 3.1, Perspective 2021-2022

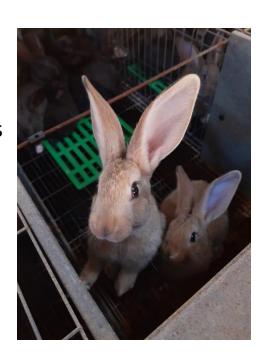
3.1 Reviews of existing knowledge about main welfare aspects of exposure of chicken to CAS and on farm welfare of rabbits

Rabbits review:

Review online early 2022

- Description of the rabbits' production, welfare issues common to all husbandry systems
- Conventional cages and their welfare aspects
- Alternative husbandry rabbits rearing systems and their welfare aspects
 - Enriched cages
 - Elevated pens
 - Floor pens
 - Outdoor systems
 - Organic systems
- Special case of bucks
- Gaps of knowledge, research perspectives and recommendations

For does, kits and growing rabbits





3.2 Scientific and technical studies to validate indicators and methods

Objectives:

 Perform, in the framework of the Centre, studies to support the development of indicators and methods for welfare assessment.

 Address identified negative welfare aspects, in order to provide technical solutions to improve animal welfare

Enable answering specific CAs queries



Two experimental studies







The broilers experiment

-To conclude-

- ☐ Started a work on methods of assessments (linked to Activity 2), notably litter assessment
- ☐ Improved knowledge on fast-growing broilers' welfare in enriched environment: positive effects without negative impacts!



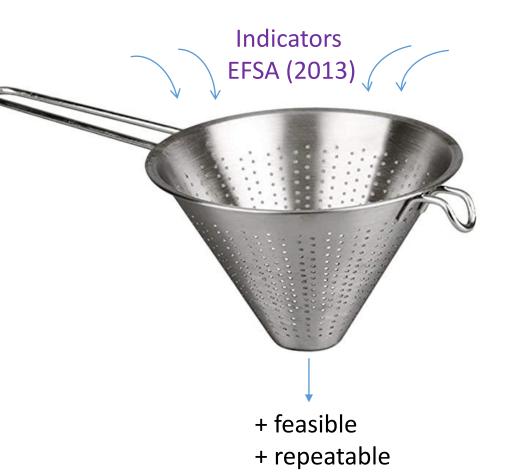




3.2.2. Study on test inter-observer repeatability and feasibility of consciousness in broiler chicken after waterbath stunning and the impact of electrical key parameters on stunning efficiency

Objectives:

- 1. Assess the inter-observer repeatability of the most feasible animal-based indicators (ABIs)
- 2. Elucidate the correlation among the outcomes of consciousness of the ABIs.
- 3. Compare the effectiveness of stunning according to different combinations of waterbath electrical key parameters (frequency and current) used in different commercial slaughterhouses.

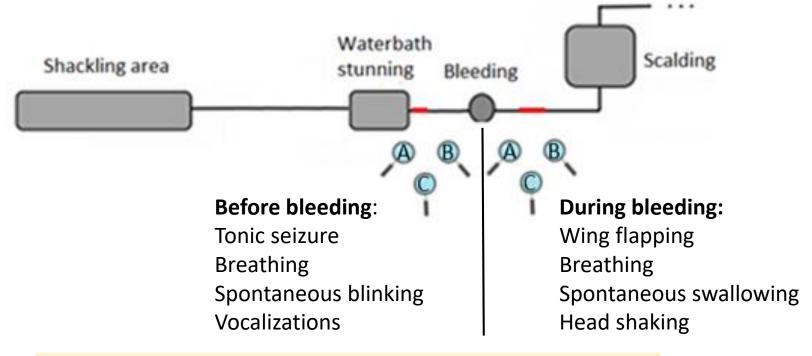




3.2.2. Study on test inter-observer repeatability and feasibility of consciousness in broiler chicken after waterbath stunning and the impact of electrical key parameters on stunning efficiency







- n = 5,241 broilers
- 19 batches of 6 ≠ slaughterhouses
- 11 ≠ key electrical parameters applied in waterbath
- 2 main broiler producer countries in the UE-27.



3.2.2. Study on test inter-observer repeatability and feasibility of consciousness in broiler chicken after waterbath stunning and the impact of electrical key parameters on stunning efficiency



Output and main conclusions:

- 1. Refined and validated ABIs with good level of repeatability that can be used for the assessment of the state of consciousness in commercial slaughterhouses:
 - > Before bleeding: breathing, wing flapping and vocalizations
 - > After bleeding: breathing, wing flapping and head shaking
- 2. Recommendations on methodology for the assessment of the state of consciousness
- 3. Effectiveness of stunning according to different combinations of waterbath electrical key parameters (frequency and current)
 - Combinations that strongly failed at inducing or maintaining the state of consciousness were found when applying high frequencies (approx > 600 Hz).



Sub-activity 3.2, Perspective 2021-2022

3.2 Scientific and technical studies to validate indicators and methods

- > Scientific study in the experimental slaughterhouse to assess the welfare of alternative gas mixture to CO2 in two phases of broiler chicken with CAS:
- assess the welfare during the induction phase
- ii) assess the state of consciousness,
- iii) identify the most relevant indicators for assessing the state of consciousness, and
- iv) assess the impact of the CAS key parameters on stunning efficiency. The gas mixture to be assessed are N2 in combination with either 10%, 20%, and 30% CO2. In case the review identifies other gas candidates, they can be considered in the study.
- If required, the Centre will carry out studies addressed to answer specific queries of the CAs.

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Sub-activity 3.3, Perspective 2021-2022

3.3 Examples of good welfare practices

Objectives:

1. To identify farms, slaughterhouses, premises, equipment, systems and management practices demonstrating best practices for the welfare of poultry and rabbits.

Description:

The reference centre will identify, contact and when possible (with Covid-19 context) visit ongoing projects, farms and initiatives in different MSs to identify examples of success within the four priority areas. The selection will be based on identification of equipment, housing and/or management practices improving animal welfare. Thus, the following will be identified:

- 1. Demonstrator farms for broilers that show high animal welfare standards.
- 2. Demonstrator farms for laying hens kept in alternative systems that show high animal welfare standards.
- 3. Waterbath equipment and alternative stunning systems for broilers and turkeys that ensures high animal welfare standards.
- 4. Alternative systems for rearing of rabbits ensuring high animal welfare standards.
- 5. Demonstrator farms for turkeys showing high welfare standards

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Sub-activity 3.3, Perspective 2021-2022

3.3 Examples of good welfare practices

Procedure

- Farms and slaughterhouses showing best practices related to animal welfare are searched for and identified (2021).
- Selected best practices will be visited by one or two members of the consortium (2022).
- The knowledge gained during the visits will be used for the final decision on which demonstrators can be approved as examples of best practices (2022).
- The end product will be factsheets about 4 demonstrators as examples of good practices (one per priority area; 2022).



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QUESTIONS?



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Activity 4

TRAINING COURSES



Reporting of activity 4, 20-21



4.1.1 Review of existing courses and materials for poultry

2020 report online soon

BTSF training material:

Title/topic	Year	Num. of editions	Country
Animal welfare in poultry production (laying hens and	2011-2012	2	Italy
chickens kept for meat production)	2013-2014	4	Italy (2) and UK (2)
Animal welfare in broiler production	2015-2016	2	Italy
Animal welfare in laying hen production	2015-2016	2	UK
Animal welfare in poultry production (chickens kept for meat production)	2018-2019	3	Sweden (1) The Netherlands (2)
Animal welfare at poultry slaughter	2011 2013-2014 2016	1 2 1	Spain Spain and Italy Spain
Animal welfare at poultry slaughter (advanced level)	2018	1	Germany
Animal welfare at slaughter and in killing for disease	2012	1	Spain
control	2014	2	Spain and Italy
	2015	1	Italy

National training material:

Title/topic	Year	Num. of editions	Location
Poultry Welfare	2014	1	Spain
Protection of farmed animals. Poultry meat production	2015	1	Spain
Training course for veterinarian evaluators and trainers (II.ZZ.SS. network): risk assessment applied to well-being and biosecurity through the use of the Classyfarm checklists. Specific module for poultry farming	2019	1	Italy
Animal protection in slaughterhouses for poultry and rabbits and associated official controls	2020	1	France









Material were reviewed in order to **score** at which extend the **indicators** for the assessment of the requirements of the legislation were covered in the lectures

0 = "not covered". No evidence to be mentioned in any lecture

1 = "partially covered". Mentioned but without evidence of detailed description of the methodology (i.e., found in text).

2 = "well covered". Evidence of detailed description of the methodology and assessment



Reporting of activity 4, 20-21



4.1.1 Review of existing courses and materials for poultry

Main conclusions:

2020 report online soon

- 1. Not all the indicators described in D2.1.1. are covered in the training material assessed.
 - Broiler's welfare assessment on farm: 3 out of the 25 ABIs not covered.
 - Laying hens: 10 out of the 14 ABIs not covered
 - State of consciousness after waterbath stunning: 5 out of 16 ABIs not covered.
- 2. Sometimes, specific indicators for welfare assessment were addressed in certain editions of BTSF that were removed in the following ones probably due to different lecturers per BTSF edition. In this sense, it could be pertinent to catch up some past lectures for future editions.
- 3. Sometimes training from Member States offer a description of certain indicators that where not addressed in BTSF.
- 4. BTSF training material assessment clearly reflects how the welfare assessment have evolved in the last decade in the UE. In this sense, welfare used to be only evaluated by RBIs and MBIs and along the editions, ABIs were gaining ground.





4.1 Review of existing training activities and materials

2022 Objectives:

Collect and review existing training courses and materials in use at BTSF, MSs or other levels, specifically for:

- Assessment of the state of consciousness after CAS in broilers and turkeys
- Assessment of rabbit welfare on-farm







4.2 Set standards for training activities

Objectives:

To provide the MSs good quality standards for the performance of training activities on poultry welfare.

Output: Report about some minimum standards for training courses on animal welfare assessment useful during official controls on:

- Broiler farms (2021)
- Alternative systems for laying hens (2021)
- WBS of broilers and turkeys (2022)

Report online early 2022



4.3 Develop course material for specific topics



Webinars and audio-visual material on training:

- Assessment of consciousness after WBS of broiler chicken.
- Assessment of dust level in broiler barns. (2022)
- Assessment of dust level in layer barns. (2022)
- Assessment of consciousness after WBS of turkey. (2022)



Already done

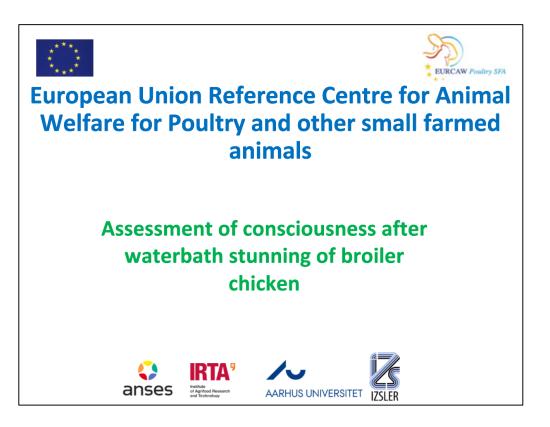




4.3 Develop course material for specific topics

21/10/21 Webinar: Assessment of consciousness after waterbath stunning of broiler chicken

- Nº of people registered: **253**
- Nº of attendees: 183
- Summary of the discussion



QUESTIONS?



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Activity 5

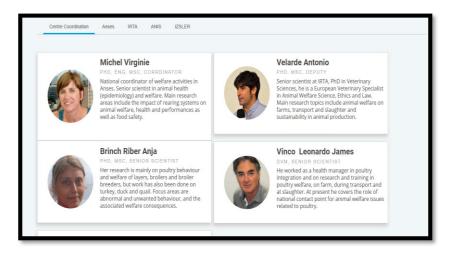
DISSEMINATION OF RESEARCH FINDINGS AND INNOVATIONS



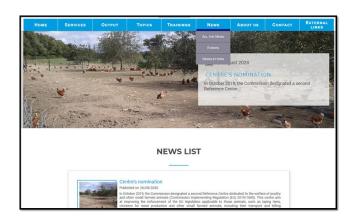
Reporting of activity 5, 2021

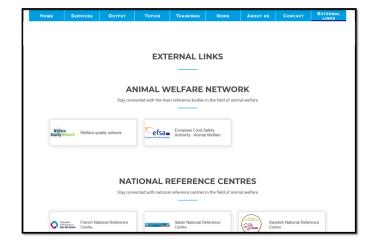


- **5.1** Maintenance and implementation of the Centre website
- → https://www.eurcaw-poultry-sfa.eu











5.1 Maintenance and implementation of the Centre website

Objectives:

- 1. To implement and develop the existing website with actual and relevant information on poultry and rabbits and welfare enforcement, with particular focus on the four priority areas, which enables sharing of information among the target groups.
- 2. To set up a dissemination framework (i.e. leaflets, newsletters, and query section) based on the needs of the target groups.
- Continue to publish centre documents online,
- > Send newsletter to target people



Activity 5.4, Perspective -2022

5.4 Translation of the documents on the Centre website in national languages

Objectives:

To support CAs for the translation of Factsheets, into national languages of MSs.

The documents that can be translated are:

- Factsheets
- Best practices summary
- Training summary



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QUESTIONS?



15 min break!





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Discussion about interactions



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Conclusions

Virginie Michel-EURCAW-Poultry-SFA



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Closure of the day





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Thank you! See you soon!

















