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Single Market Programme (SMP Food)

SMP-FOOD-2023-EURL-EURC-AG-IBA **Activities of the EU reference laboratories and EU** **reference centres in 2023-2024**

SUBMISSION FORM: DESCRIPTION OF THE ACTION
(Annex 1 – Description of the action (part B))

SMP-FOOD-2023-EURL-EURC-AG-IBA

**Activities of the EU reference laboratories
and EU reference centres in 2023-2024**

Applicant shall provide information on each question contained in the Form. The information filled in the Form, shall be clear, concise, consistent and complete.

For questions on the information requested in this Form, please contact: please contact: HADEA-EURL@ec.europa.eu.

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Applicant - COORDINATOR (Name of EURC)	FRENCH AGENCY FOR FOOD, ENVIRONMENTAL AND OCCUPATIONAL HEALTH & SAFETY (ANSES) (EURCAW-Poultry-SFA)
Topic	Animal Welfare
Implementation period	1/1/2023 – 31/12/2024

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1. List of abbreviations and key words

ABI	Animal-based Indicator
AI	Avian Influenza
BTSF	Better Training for Safer Food
CA	Competent Authority
CAS	Controlled Atmosphere Stunning
DG SANTE	Directorate-General for Health and Food Safety of the European Commission
DL	Deliverable
EFSA	European Food Safety Authority
EURCAW-Ruminants & Equines	European Union Reference Centre for Animal Welfare for Ruminants & Equines
EURCAW-Pigs	European Union Reference Centre for Animal Welfare for Pigs
EURCAW-Poultry-SFA	European Union Reference Centre for Animal Welfare for Poultry and other small farmed animals
MBI	Management-based Indicator
M	Month
MS	Member States of the EU
NCP	National Contact Points
NRC	National Reference Centre
RB	Reflection Board
RBI	Resource-based Indicator
SB	Supporting Body
WBS	Waterbath Stunning

2. Introduction

The consortium between ANSES (France), IRTA (Spain), ANIVET (Denmark), and IZSLER (Italy) was designated as the European Union Reference Centre for Animal Welfare for Poultry and other small farmed animals (EURCAW-Poultry-SFA, COMMISSION IMPLEMENTING DECISION (EU) 2019/1685) on 4 October 2019. EURCAW-Poultry-SFA has been created in February 2020, in the context of regulation 2017/625 about official controls (art. 95) to support the European Commission and the Member States Competent Authorities (CAs) and their Supporting Bodies (SBs), in the implementation of welfare legislation for poultry and other small-farmed animals in farms, during transportation and slaughtering. The Centre provides scientific and technical support, training and education. More information about the Centre and the consortium can be found here: <https://www.eurcaw-poultry-sfa.eu/en/minisite/sfawc/welcome-european-reference-centre-animal-welfare-poultry-and-other-small-farmed>.

The EURCAW-Poultry-SFA has five main activities (see figure 1): 1) Coordinated assistance, 2) Animal welfare indicators, methods for the assessment and methods of improvement 3) Scientific and technical studies, 4) Training courses, and 5) Dissemination of research findings and innovations. During the next two-year period (2023-2024), each activity includes two to four sub-activities (see figure 2). All partners participate in all activities.

During 2021 and 2022, the EURCAW-Poultry-SFA developed its activities related to the 3 initial priority areas: welfare of broilers on farm, welfare of laying hens housed in systems alternative to cage, assessment of the state of consciousness after stunning for poultry. In 2021, rabbit welfare on-farm, and in 2022 the welfare of turkeys were included to our priority areas and related activities were developed. In the forthcoming period, the activities of the EURCAW-Poultry-SFA will focus on the welfare of poultry and rabbits. Other small-farmed animals will be dealt with only under Activity 1 (coordinated assistance) if specific queries on these animals arise. The DG SANTE together with the EURCAW-Poultry-SFA has identified **five priority areas** to deal with in the next two-year period:

1. Broiler chickens on farm.
2. Laying hens in alternative housing systems.
3. Stunning and killing
4. Rabbits on farm, with a focus on alternative housing systems.
5. Turkeys on farm and during transport

The activities of the work programme will be targeted around these five priority areas (figure 1). The present work programme will detail the first year (2023) and give perspectives in grey about what is planned to be developed in the following year (2024).

As in the previous period, the Centre will be working for the DG SANTE and MS CAs, and their SBs (science, training, communication). ANSES is the coordinator of the Centre and IRTA deputy coordinator.

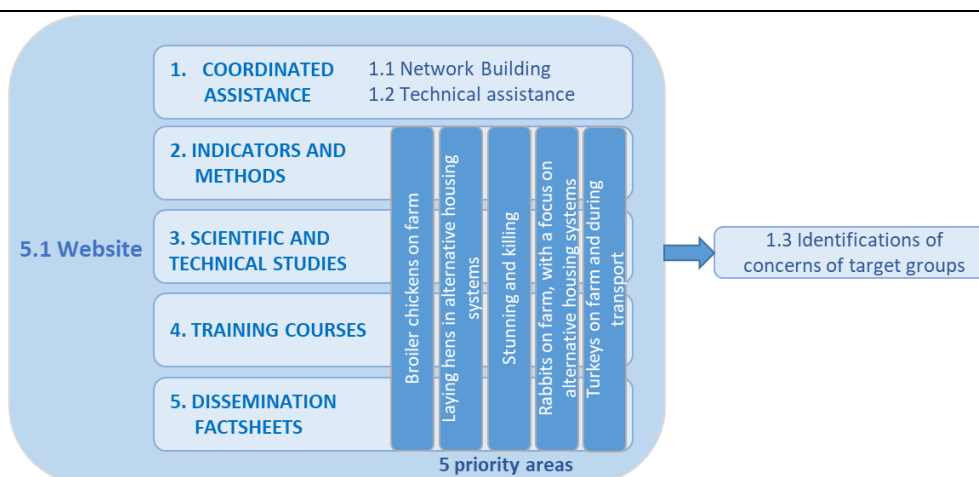
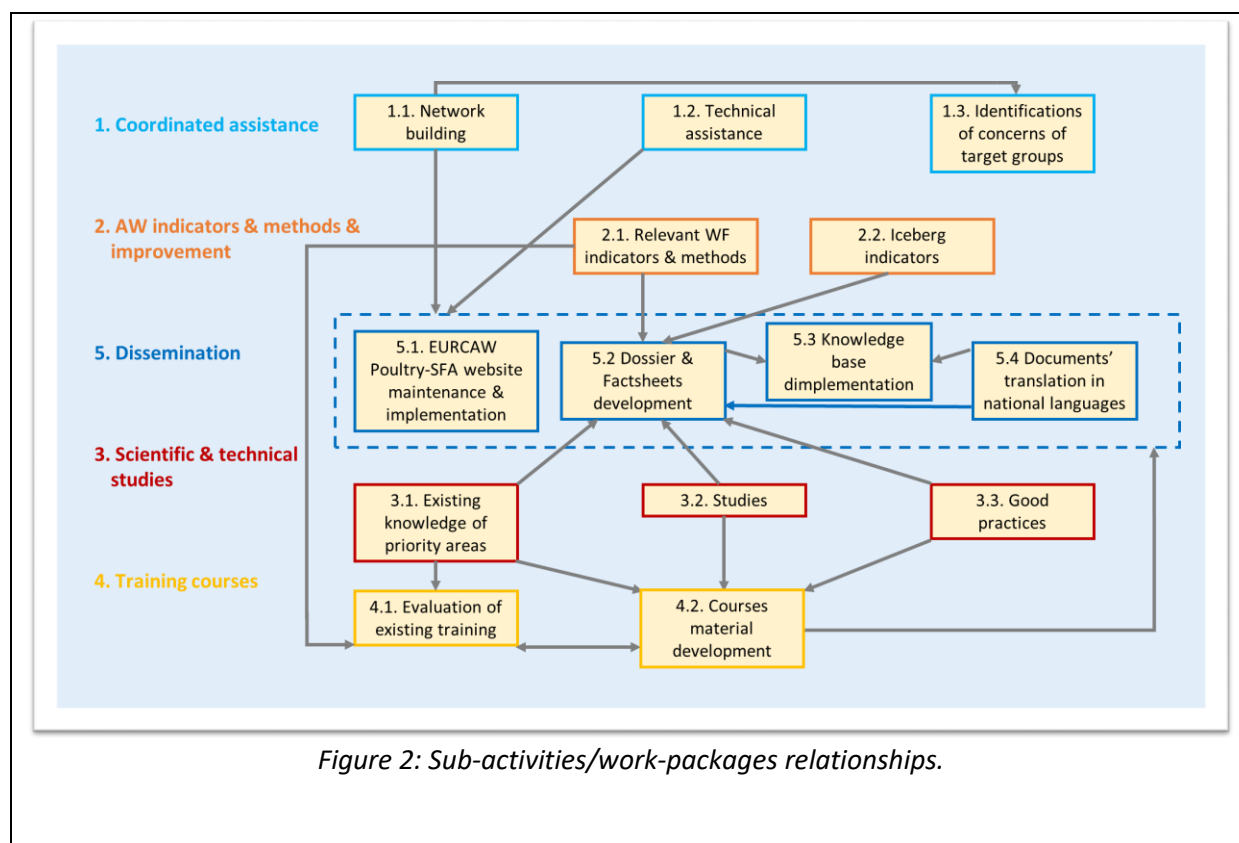


Figure 1: The Centre's organisation to address the five priority areas.

List of activities and sub-activities (the leader is in bracket)

- 1 COORDINATED ASSISTANCE (ANSES)
 - 1.1 Network building (ANSES)
 - 1.2 Technical assistance, query service (ANSES)
 - 1.3 Identifications of concerns of target group (ANSES)
- 2 ANIMAL WELFARE INDICATORS, METHODS FOR THE ASSESSMENT AND METHODS OF IMPROVEMENT (IZSLER)
 - 2.1 Relevant animal welfare indicators and methods used for their assessment (ANIVET)
 - 2.2 Identification of 'Iceberg' Indicators (IZSLER)
- 3 SCIENTIFIC AND TECHNICAL STUDIES (ANIVET)
 - 3.1 Reporting of scientific and technical knowledge (IRTA)
 - 3.2 Scientific and technical studies to validate indicators and methods (IZSLER)
 - 3.3 Examples of good welfare practices (ANIVET)
- 4 TRAINING COURSES (IRTA)
 - 4.1 Review of existing training activities and materials (IRTA)
 - 4.2 Development of course material for specific topics (IRTA)
- 5 DISSEMINATION OF RESEARCH FINDINGS AND INNOVATIONS (ANSES)
 - 5.1 Centre website implementation and maintenance (ANSES)
 - 5.2 Development of Topics folder and Factsheets on prioritized welfare areas (ANSES)
 - 5.3 Knowledge base implementation and maintenance (ANSES)
 - 5.4 Translation in national languages (ANSES)



3. Activities

Regulation (EU) 2017/625 - Article 96:

The European Union reference centre for animal welfare shall be responsible for the following supporting tasks insofar as they are included in the reference centres' annual or multiannual work programmes that have been established in conformity with the objectives and priorities of the relevant work programmes adopted by the Commission in accordance with Article 16 of Regulation (EU) No 2021/690:

3.1 Work Package 1 - Coordinated assistance

Article 96 (a): Providing scientific and technical expertise within the scope of their mission including, where appropriate in the form of coordinated assistance, to relevant national support networks and bodies in the area governed by the rules on the welfare requirements for animals.

Sub-activity 3.1.1 Network building (ANSES)

Introduction:

This sub-activity is dedicated to the development of coordinated assistance that the Centre provides to DG SANTE, CAs and NRCs or SBs. This will be done by continuous development of the network to

keep the end-users (DG SANTE, CAs, NRCs and SBs) informed on the missions and activities that the Centre, develops and promotes.

Objective:

The objective of this sub-activity is to consolidate and enhance networking through CAs of the EU and continue building strong collaboration with other EURCAWs, NRCs and SBs, and other welfare networks. Furthermore, the Centre will seek information and exchange knowledge with the reflection board (RB) network.

Concretely, the EURCAW-Poultry-SFA will:

- 1) Consolidate the network with CAs.
- 2) Consolidate the network with NRCs and SBs
- 3) Consolidate the network with the Reflection Board.
- 4) Continue collaborations with DG SANTE, existing EURCAWs and develop common procedures and ways of functioning among the three Centres.
- 5) Continue collaboration with existing welfare networks (e.g. WG9 Poultry welfare and management of WPSA).

Achievements so far:

The EURCAW-Poultry-SFA has developed the coordinated assistance by consolidating its network and collaboration with European Union (EU) Member State (MS) Competent Authorities (CAs), the Directorate-General for Health and Food Safety of the European Commission (DG SANTE), National Reference Centres (NRCs), Supporting Bodies (SBs) and existing EU networks.

One EU network Competent Authorities (CAs) meeting was organised each year in 2020, 2021, and 2022 to present EURCAW-Poultry-SFA's activities and discuss actual needs and future ones.

Relationships were consolidated and collaboration extended with the EURCAW-Pigs and the EURCAW-Ruminants & Equines. The first joint NRCs/SBs meeting was organized virtually on 0.5 day in 2021, by the three EURCAWs. The three EURCAWs and the five existing NRCs presented themselves, and workshops on scientific and technical issues on each species, training, and communication were conducted. A second joint meeting was organized in September 2022 (0.5 day).

In 2021, the EURCAW-Poultry-SFA Reflection Board (RB) was created. The first meeting was held remotely (0.5 day) in November 2021. The meeting was the occasion to exchange, discuss and identify possible future collaborations and interests. A second web meeting took place in November 2022 to exchange further about 2022 work, future possible work topics and further collaboration.

Close collaboration with other EURCAWs was installed since the nomination of the Centre: first with EURCAW-Pigs, and with EURCAW-Ruminants & Equines since mid-2021.

Description:

Five main tasks will be conducted:

- 1) The EURCAW-Poultry-SFA will consolidate its relationship with the **EU MSs CAs** National Contact Points (NCPs) through diffusion and exchange of information through the website, its newsletter (see activity 5), exchange about scientific and technical information (see sub-act 1.2) and an annual meeting where the progress and outcomes of the Centre will be presented. The EURCAW-Poultry-SFA will organize one annual meeting with CAs: the fourth meeting in autumn 2023 and the **fifth in autumn 2024**. The EURCAW-Poultry-SFA will consult the CA NCPs to identify topics and priorities to be addressed in the following years.

The priority will be given to organize a joint meeting with the CA representatives from each MSs in one annual meeting in order to improve exchange between MSs, increase collaboration, sharing of

experience and common views on the future in matter of welfare legislation implementation. The meetings will be alternatively virtual and physical. In agreement with other two EURCAWs, to ensure good level of participation of CA representatives (some CA are the same whatever the species, e.g. France), only one physical meeting per Centre will be organised every three years, and virtual meetings in between. The CAs will then have one physical meeting with one of the three EURCAWs each year. When physical meeting, EURCAW-Poultry-SFA will invite up to two participants, and pay for one CA designated participant, from each MS plus for one guest if his/her presentation is of interest for EU MSs (e.g. specific topic to be presented during the meeting by an expert in the topic). EFSA members and CA representatives of three non-EU countries (Switzerland, Iceland, and Norway) are welcome to participate (at their own expense in case of physical meeting). During the present period, EURCAW-Poultry-SFA will organised two virtual meeting. The next physical one will be in 2025.

The main topics of the meetings will be: 1) poultry and rabbit welfare knowledge about developments in monitoring and assessing welfare (including in the frame of possible new legislative texts), use of indicators and improvements in farm management; 2) the functioning of the relation between the EURCAW-Poultry-SFA and MSs; 3) the problems encountered in each country during welfare inspections, etc. The objective will be also to present the outcomes of the EURCAW-Poultry-SFA from the last period and to get feedback on the role of the EURCAW-Poultry-SFA and its impact. The topics identified during the discussions will serve as pillars to elaborate on the next work programme.

Additional to the annual meeting, online workshops or topic specific meetings will be organised during the year to discuss with EU MSs CAs target group about technical issues they face. Prior to the event, the delegates will be invited to submit ideas for topics to be discussed. Moreover, the result of the ranking exercise conducted during the third EU CAs network meeting (28-29 September 2022) will be the starting point to identify and propose topics to the MSs. At least one additional workshop or specific topic meeting per year (around the 6th month after last EU network meeting) will be organised remotely, specifically targeting official inspectors.

2) The EURCAW-Poultry-SFA will consolidate the network with the **existing NRCs (SE, FI, EL, FR, IT) and SBs for Animal Welfare** and will include the new ones (ES, SI) in the network.

From 2021 onwards, the three EURCAWs have agreed to jointly organise one of these meeting each year. All MSs which do not have a NRC will be invited to propose the participation of experts from SBs in their country. Two digital meetings with the NRCs for animal welfare and SBs will be organised (one in June 2023 and one in June 2024). For 2023, EURCAW-Poultry-SFA will coordinate the meeting. In 2024, EURCAW-Pigs plans to coordinate it. The agenda will include opportunities to share experiences:

- on the approach taken in different MSs to support the CAs
- regarding technical issues, e.g. main questions from the target group

The structure of each meeting will be a first part common to the three EURCAWs about relevant issues for all the Centres and then a second part will be per Centre, with the specific actors dedicated to each specific animal production.

3) Consolidate and develop the **Reflection Board (RB)** network for EURCAW-Poultry-SFA. The RB is constituted by Poultry and small farmed animals supply chains, related professional organizations and civil society organizations from the EU Animal Welfare Platform. The RB is kept informed on the activities of the EURCAW-Poultry-SFA and might be asked to reflect on them and to support the Centre with technical information and identification of best practices. Diversity of the Board (e.g. variety in organizations and in EU MSs) is provided as much as possible. Extension of the number of members can be envisaged for 2023 and/or 2024 based on the first two years (2021-2022) success or difficulties encountered. The Centre will organize one web-meeting (one per year) and DG SANTE and other EURCAWs are welcome to take part to it as “observers”.

Short additional Ad hoc on-line meetings between EURCAW-Poultry-SFA and members of the RB will be organized if the Centre needs to gather information about Poultry and rabbit AW (e.g. mobile housing guidelines) to answer specific Q2Es.

4) Close collaboration with other **EURCAWs** (EURCAW-Pigs, EURCAW-Ruminants & Equines) is crucial to ensure efficient dissemination of scientific knowledge produced by EURCAWs and facilitate navigation within the corresponding websites for end-users, share standard procedures, or exchange about meetings organization. Those exchanges will permit to harmonise the functioning of EURCAWs as much as possible, and identify ways of collaboration and work together in the same direction. The three Centres will meet virtually 4 times per year. These meetings will take place in January, April, September and December of 2023 and 2024.

Four web-meetings per year, between EURCAW-Pigs, EURCAW-Poultry-SFA, EURCAW-Ruminants & Equines, and **DG SANTE** will be conducted. The meetings will be organized alternately by one of the three Centres. The organizing Centre will be responsible for agenda, the chairing and the minutes of the meeting. The meeting will last approximately 2 hours. The aim of these web-meetings is to exchange experience, to clarify outstanding issues, to ensure a harmonized approach of EURCAWs work and to report on progress to DG SANTE. The exact dates to be agreed with DG SANTE and other Centres will be in February, May, August and November 2023 and 2024.

Ad hoc meetings between the EURCAWs or with DG SANTE will be organized if and when necessary.

5) The Centre will participate in **other scientific and technical networks** in order to present its activities and results, to collect knowledge that can be used in the different activities of the EURCAW-Poultry-SFA. Technical questions raised in several MSs can be identified via this channel as well as scientific work areas for the centre to be used for the development of future work programmes. One day per year will be dedicated for each network.

- These networks are: The National Contact Points for Animal Welfare, coordinated by EFSA. The purpose of this network is to share information about animal welfare between MSs.
- The National contact points for Reg (EU) 1/2005 (on transport of animals), coordinated by unit F2 of DG SANTE.
- Scientific societies such as the working group IX “Poultry welfare and management” of WPSA (World Poultry Science Association), EAAP.

Expected output and timing:

- **e-annual EU network meetings** with representatives of **MSs CAs** : M24. Summary of the discussion and outcomes of the **two** e-annual EU network meetings with representatives of MSs CAs available one month after the meetings (one meeting during M10, one meeting during M22).
- **e-annual meeting with NRCs and SBs** for animal welfare in 2023: M 22. A summary of the discussions and outcomes of the **two** e-annual meetings with NRCs and SBs, for animal welfare identified in EU MSs and all EURCAWs (one meeting during M6 organized by EURCAW-Poultry-SFA, one meeting during M18 organized by EURCAW-Pigs). The two summaries will be published jointly with the other EURCAWs.
- **e-annual meetings with RB**: M24. A written summary of the discussions and outcomes of the **two** e-annual RB meetings available once month after the meetings (one meeting during M12, one meeting during M22).

- Summary report of the presence of Centre members in the meetings of the described existing networks: M24. The report will be delivered and implemented twice during the period: M12, M24.

Sub-activity 3.1.2 Technical assistance: query service (ANSES)

Introduction:

This sub-activity is dedicated to the development of coordinated assistance that the Centre provides to DG SANTE, CAs and NRCs or SBs. This will be done by consolidating the Q2E service as a scientific and technical support tool for the target bodies.

Objective:

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

Achievements so far:

The scientific and technical coordinated assistance service for the MS CAs, DG SANTE, and EU MS SBs has been proposed since 2020 and a dedicated online web form was developed in 2021. Since the beginning of the activity, 18 Q2Es were sent to the Centre and 13 were considered admissible and answered and, four additional ones are under preparation in June 2023.

Description:

The main task of this sub-activity will be to answer scientific and technical queries under the remit of the Centre. The queries will be assessed and the answers put in the adequate section on the website, so that they will be public. No information on the requestor nor on the experts will be provided, since the answer will be given in the name of the EURCAW-Poultry-SFA.

At the end of each year an internal review of the functioning of the service on the basis of the experience of the received queries will be done. Re-adjustment will be performed in order to improve efficiency. The procedures and quality scheme will be reviewed and updated when necessary, in order to facilitate the process for all concerned parties.

Interaction with other EURCAWs will ensure synergy and similar functioning when possible, to make the requesting easier for end-users.

Expected output and timing:

- List of queries/answers available on the website: M24. The list will be delivered and implemented during the period: M6, M12, M18, M24.
- Q2E quality scheme: M23. The quality scheme and internal review short report on the performance of the system (e.g. number of queries treated/queries submitted; average time for answering submissions, average time for sending the answer to the requestors). The report will be delivered and implemented twice during the period: M12, M22.

Sub-activity 3.1.3 Identification of concerns of target groups(ANSES)

Introduction:

This sub-activity is dedicated to identify and prioritize the main concerns and expectations of the target groups (CAs, NRCS, SBS, DG SANTE).

Objective:

1. To identify the priority areas of the target groups.
2. To prioritise the main concerns and expectations of the target groups.

Achievements so far:

During the previous periods, meetings were organized within the EURCAW-Poultry-SFA and identified topics were discussed with CAs, during annual meetings through ranking exercises, workshops and open discussions. The CAs had also the possibility to provide their main concerns and expectations during the annual meetings. The output was discussed with DG.

Description:

The first objective will be to identify the priority areas and target species that the Centre should work on with the DG SANTE and MSs. At the occasion of the annual CAs meetings, and meeting with NRCs/SBs, the Centre will present its outcomes and progress and will ask for feedback on topics and interests for the target groups. Needs of the target groups can also be expressed at the occasions of webinars (see sub-activity activity 4.2) and workshops (see sub-activity 3.2) and related satisfaction surveys organized during the period by the Centre. Further discussions in meetings with the DG SANTE will be organised also. The coordinator and deputy coordinator will meet on a yearly basis to work of this sub-activity to prioritize the priority areas and main concerns for the Centre to work on.

Expected output and timing:

- An overview of the target groups' main concerns and expectations (M23).

List of Indicators WP1:

- Number of technical and scientific feedback provided by the EURC based on Commission enquires
- Number of enquires requested from national support networks and bodies and competent authorities. Number and quality of replies provided by the EURC.
- Number of technical requests provided by the EURC to societies, third parties and competent authorities

3.2 Work Package 2 - Animal welfare indicators

Article 96 (b): Providing scientific and technical expertise for the development and application of the animal welfare indicators referred to in point (e) of Article 21(8);

The Article 21 (8) (e) refers to possible rules on the cases and conditions where official controls to verify compliance with animal welfare requirements may include the use of specific animal welfare indicators based on measurable performance criteria, and the design of such indicators on the basis of scientific and technical evidence.

Article 96 (c): Developing or coordinating the development of methods for the assessment of the level of welfare of animals and of methods for the improvement of the welfare of animals.

Sub-activity 3.2.1 Relevant animal welfare indicators and methods used for their assessment (ANIVET)

Introduction:

This sub-activity is dedicated to the identification, assessment, and development of indicators to assess animal welfare and verify compliance with animal welfare legal requirements. Methods for the assessment of the level of welfare regarding the corresponding indicators will also be developed in this activity. This sub-activity will focus on the relevant indicators for specific welfare issues. This sub-activity will provide reviews on the assessment of animal welfare and factsheets, developed on the basis of these reviews, related to the priority areas.

Objective:

Priority area 1 (broiler):

- To review knowledge and **develop practical documents** about Animal-based Indicators (ABIs) for **behavioural assessment** of broilers, including indicators of positive affective state.

Priority area 2 (layer/pullets):

- To develop an indicator factsheet about main indicators to assess the welfare of pullets.
- To develop practical guidelines to assess fitness for transport of end-of-lay hens, based on the review on fitness for transport of end of lay hens, in order to deliver tools immediately usable by inspectors assessing animal welfare.

Priority area 3 (stunning and killing):

- To elaborate a factsheet based on the study in 2023 (detail in act 3.2) on the assessment of consciousness after head-only electrical stunning in rabbits in order to deliver tools immediately usable at slaughter by e.g. inspectors assessing animal welfare.

Priority area 4 (rabbits):

- To elaborate factsheets (one in 2023 and **one in 2024**) on ABIs from the report on indicators of on-farm welfare of **rabbits** (2022) in order to deliver tools immediately usable on farm by inspectors assessing animal welfare.

Priority area 5 (turkeys)

- To elaborate factsheets (one in 2023 and **one in 2024**) on ABIs (from the report on indicators of on-farm welfare of **turkeys** (2022)) in order to deliver tools immediately usable on farm by inspectors assessing animal welfare.

Achievements so far:

Indicators and associated methods to verify compliance with EU legislation requirements related to the three first priority areas have been provided and gaps of knowledge identified in 2020. These gaps were listed and subdued to scientific and technical studies performed in the work programme of the following year (2021-2022) during which relative factsheets were provided. Concerning rabbits (priority area 4) a [report](#) about most relevant indicators and associated methods (including validity, reliability and feasibility) to assess rabbit welfare was elaborated. For turkeys (priority area 5), a report on main Animal Welfare Indicators and methods for assessment was also prepared.

Description:

Priority area 1 (broiler):

In 2023, the work will concern the assessment of broiler chicken welfare on-farm using behavioural indicators, including indicators of affective states (e.g. the positive ones). EFSA scientific opinion on welfare of broiler chickens (EFSA, 2023) will only briefly describe ABIs and focus only on negative affective state. The review from the Centre will give more detail about behavioural ABIs (which are very much lacking currently in the context of inspection) and their methods for assessment, including from a practical perspective. This will also include assessment of positive affective state of chicken which is considered modern technic to assess chicken welfare of farm, in complement to classical ABIs currently used. The review will also seek to explore the reliability and feasibility of the different methods, when available.

The review, developed in 2023, will be the scientific base for factsheet on the selected most relevant behavioural indicators in broiler chicken which will be developed in 2024.

Priority area 2 (layer/pullets):

Based on existing literature (EFSA report on Laying hens welfare (2023); Report for the Animal Welfare Platform about welfare of pullets, etc) the Centre will elaborate one factsheet for the main indicators that can be used on farm for assessment of pullet welfare. Indeed, actually the pullets are only covered by directive 98/58 and no specific indicator have been developed to assess their welfare, although assessment of pullets, futures layers, is a key point in order to monitor and then prevent eventual future welfare issues that may arise during the laying period.

On the other hand, the Centre will develop practical guidelines to assess fitness for transport of end-of-lay hens (if possible, on farm and at arrival on the slaughterhouse), from the review on fitness for transport of end of lay hens, in order to deliver tools immediately usable by official inspectors assessing animal welfare. The Centre will plan some farm and slaughterhouse visits to take photos in order to have visual material to illustrate the guidelines.

Priority area 3 (stunning and killing):

A factsheet will be developed in 2024 based on the study in 2023 on the assessment of consciousness after head-only electrical stunning in rabbits (see Activity 3.2). This factsheet will detail the indicators to be used to assess rabbit consciousness after head only electrical stunning.

Priority area 4 (rabbits):

Two indicator factsheets will be developed based on the reports on indicators done in 2022 on “on-farm welfare of rabbits” (2022-DL.2.1.5): one in 2023, and one in 2024.

Priority area 5 (turkeys):

Two indicator factsheets will be developed based on the report on indicators done in 2022 on “on-farm welfare of turkeys” (2022-DL.2.1.4): one in 2023, and one in 2024.

Expected output and timing:

- A review about the existing behavioural indicators, including **positive affective states** used to assess welfare in **broiler chickens** on farm: M21.
- Practical guidelines to assess **fitness for transport of end-of-lay hens**: M24.
- **7 indicator(s) factsheets on animal welfare**: M24. This includes:
A factsheet about an indicator and associated method(s) to assess welfare of **turkeys on-farm** (M4);
An indicator factsheet on **pullet** welfare (M7);

A factsheet about an indicator and associated method(s) to assess welfare of **rabbits on-farm** (M12);
 One factsheet about an indicator and associated method(s) to assess welfare of **turkeys on farm:** (M20);
 One factsheet on a selected behavioural indicator and associated method for its assessment in **broiler chickens on-farm** (M22);
 One factsheet about indicators to assess the state of consciousness in **rabbit** after electrical stunning (following the study in 2023) (M22);
 One factsheet about an indicator and associated method(s) to assess welfare of **rabbits on-farm:** (M24).

Sub-activity 3.2.2 Identification of 'Iceberg' Indicators (IZSLER)

Introduction:

This activity will be dedicated to the identification, assessment, and development of indicators to assess animal welfare and verify compliance with animal welfare legal requirements. Methods for the assessment of the level of welfare regarding the corresponding indicators will also be developed in this activity. This activity will be about the development of iceberg indicators that can be used to assess the global welfare status of a flock. This activity will provide reviews on the assessment of animal welfare and factsheets, developed on the basis of these reviews, related to the priority areas.

Objective:

Priority area 1 (broilers):

- To review the technical and scientific literature on existing methods for assessing **walking ability**, a very important ABI of welfare in broilers, and **develop a factsheet**.
- To develop "Iceberg indicators" that can be used by official inspectors **at slaughter** to obtain a quick overview on possible welfare problems related to **broiler chickens on-farm**.

Priority area 2 (laying hens):

- To develop "Iceberg indicators" that can be used by official inspectors **at slaughter** to obtain a quick overview on possible welfare problems related to **laying hens on-farm**.

Achievements so far:

A list and description of improved methods for the assessment of welfare was delivered along with a list of topics for scientific and technical studies to develop in the following work programme. A list of candidate 'Iceberg Indicators' with description of the method, validity, reliability and feasibility related to the priority areas 1, 2, 3 was elaborated. Four Factsheets of the most relevant 'Iceberg Indicators' were published: two for broiler chicken (about feather cleanliness and foot pad dermatitis) and two for laying hens (about severe feather pecking and foot lesions assessment at slaughter).

Description:

An 'Iceberg Indicator' is reflecting several welfare issues in an integrative manner, in order to enable an overview of the welfare state of a flock.

CAs and official inspectors emphasise the need for 'Iceberg Indicators'. Those indicators will help the official inspectors at slaughter to have a quick overview of possible animal welfare problems on-farm. 'Iceberg Indicators' are not strictly linked to a specific welfare issue, hazard exposition or any specific legal requirement, but might be associated with several requirements. The use of these 'Iceberg Indicators' will provide at the slaughterhouse a rapid qualitative or quantitative knowledge of the level

of welfare of the flock at farm. These 'Iceberg Indicators' will not replace a full and precise assessment of the welfare of animals but will give a rough overview, in order, for example, to target inspections. In this working programme, the assessment of animal welfare on farm will be carried out through data gathering at the slaughterhouse.

Based on the information collected in the EFSA opinions on welfare of broiler chickens and laying hens (available in early 2023) and other available scientific knowledge, the Centre will develop factsheets on iceberg indicators for assessment of on farm welfare for broiler chickens and for laying hens.

Priority area 1 (broilers):

The first task will concern the assessment of broiler chicken welfare on-farm using existing methods for assessing walking ability, with production of one review. Currently, multiple methods exist that vary in the level of observer training requirement, time required for assessing a representative sample of the flock and suitability of on-farm application. The review will also seek to explore the reliability and feasibility of the different methods, when available. The review, developed in 2023, will be the scientific base for factsheet on the most suitable methods of assessing walking ability, which will be developed in 2024.

The second task will be to develop a factsheet on additional ABIs (to what was previously developed) to assess at slaughter as iceberg indicators to have an overview of chickens welfare on farm. These indicators can be: e.g. on farm mortality, wounds, indicators used for carcass condemnation.

Priority area 2 (laying hens):

The work is there to develop potential iceberg indicators for laying hens, to have an overview of laying hens welfare on farm. These indicators can be: e.g. on farm mortality, wounds, KBD, indicators used for carcass condemnation.

Feather cleanliness for broilers and plumage damage for layers have already been developed as iceberg indicators at farm level and would only request slight adjustments to be used at slaughter. Other indicators are listed (and not detailed) in the EFSA opinions about welfare of laying hens and broiler chickens (2023) and the Centre factsheet will provide the detailed method for their assessment.

Expected output and timing:

- A review of existing methods for assessing walking ability in broiler chickens: M11.

- 3 **iceberg indicators factsheets on animal welfare**: M23. This includes:

A Factsheet about iceberg indicators at slaughter about welfare assessment of **broiler chickens on farm** (M9);

Factsheet about iceberg indicators at slaughter about welfare assessment of **laying hens on farm** (M15);

One factsheet on the most suitable existing method of **assessing walking ability in broilers on-farm** (M23).

3.3 Work Package 3 -Scientific and technical studies

Article 96 (d): Carrying out scientific and technical studies on the welfare of animals used for commercial or scientific purposes;

Sub-activity 3.3.1 Reporting of scientific and technical knowledge (IRTA)

Introduction:

This sub-activity deals with scientific reviews, in poultry and rabbit welfare both on farm and at slaughter to support the official inspections. This knowledge will be used for the tasks in activity 1 (specific studies to answer specific questions from CAs), activity 2 (indicators and methods) and activity 4 (training content).

Objective:

Priority area 2 (laying hens/pullets):

- To develop a review on fitness for transport of end-of-lay hens.

Priority area 3 (stunning and killing):

- To review the state of the art of the different methods for stunning rabbits at slaughter and ABIs to assess the state of consciousness after stunning.

Priority area 5 (turkeys):

- Provide a description of the main aspects of commercial turkey farming in the EU in relation to welfare on farm.
- Development of guidelines to support official inspectors in the assessment of turkey welfare on farm using the most relevant welfare indicators to assess compliance with requirements laid down in Directive 98/58 EC.

Achievements so far:

In 2020, the Centre delivered a review about the gaps of knowledge and the identification of the most critical “open norms” regarding the three priority areas (welfare of broilers on farm, welfare of laying hens housed in alternative systems and assessment of consciousness for poultry after electrical waterbath stunning). In 2021, a synthetic review about the main welfare aspects of stunning broiler by exposure to controlled atmosphere was published. Furthermore, priority area 4 (welfare of rabbits) started with the synthetic review about the main welfare aspects of rearing rabbits, with a specific focus on alternative systems. The review has been the basis of the thematic factsheet: ‘Rabbits Welfare in farm rearing systems’ in May 2022.

Description:

Priority area 2 (laying hens):

The Regulation 1/2005 requires that the fitness for transport of end of lay hens should be assessed before starting the transport and animals not fit for transport should not be transported. The Centre will review the physical conditions of the animals that might challenge their welfare in case they are transported. A questionnaire will be carried out to collect information about the current practices in the EU in terms of preparation of the end-of-lay hens for transport to the slaughterhouse and killing on farm. The questionnaire will be prepared and sent to the CAs, and afterwards a workshop will be organised during the CA meeting (2023) for the discussion of the data obtained and identification of the main welfare issues related to the different stages and different practices.

Priority area 3 (stunning and killing):

The stunning method prior to killing and how to control its efficiency play an important role from an animal welfare point of view. Thus, the main methods used to stun and kill rabbits for human consumption and their main welfare aspects will be reviewed together with the key parameters for an

effective stunning. In addition, animal-based indicators of the state of consciousness for rabbits will be gathered from literature. This will serve as a starting point to develop a scientific study in commercial slaughterhouses of rabbits, stunned with electrical device, to assess the state of consciousness after stunning and to identify the most relevant animal-based indicators of consciousness (see sub-activity 3.2).

Priority area 5 (turkeys):

- The welfare of commercial turkeys is related to various factors such as, bird hybrid, resources and management procedures. These may differ throughout the different member states. Providing a clear picture of the main features and characteristics of the farming systems used to rear turkeys throughout Europe is crucial to the development of guidelines that consider the various farming systems and to identify critical points that may need to be tackled. The Centre will describe the state of art of turkey rearing in the EU by collecting information through its network and visits to the most relevant turkey producing countries in the EU to retrieve information from the main actors involved in turkey rearing.
- In the lack of a specific norm on the welfare of turkeys on farm, the keeping of turkeys must comply with the general requirements of Directive 98/58/EC and ideally with the specific Council or Europe recommendations. In order to provide practical and more specific guidance, EURCAW will work on the development of guidelines to support official inspectors in the assessment of turkey welfare on farm, based on the most relevant animal welfare indicators used to assess compliance with requirements laid down in Directive 98/58 EC. Based on material used currently in some member states, for this specific purpose the centre will propose practical checklists and guidelines that can be adopted by those member states lacking in specific material.

Expected output and timing:

- Review about the main welfare aspects of the different stunning methods in **rabbits** (M8).

- Fitness for transport assessment for **end-of-lay hens**: M21. This includes:

Workshop on the fitness for transport of **end-of-lay hens** (M11);

Review about **fitness for transport** assessment for **end-of-lay hens** (M21).

- Turkey welfare on farm: M18. This includes:

Description of the main husbandry systems used for **turkey** farming in the EU (M11);

Guidelines on the assessment of **turkey welfare** on farm using the most relevant welfare indicators to assess compliance with requirements laid down in Directive 98/58 EC (M18).

Sub-activity 3.3.2 Scientific and technical studies to validate indicators and methods (IZSLER)

Introduction:

This sub-activity deals with the development of scientific and technical studies in poultry and rabbit welfare both on farm and at slaughter to support the official inspections. This knowledge will be used for the tasks in activity 1 (specific studies to answer specific questions from CAs), activity 2 (indicators and methods) and activity 4 (training content).

Objective:

Priority area 1 (broilers):

- Evaluation of the welfare aspects of **covered verandas** usage in **broilers chickens'** production. (Anses)
- Development and validation of a new test (latency-to-lie without water) for **assessment of walking ability** in **broiler chickens** using the Bristol scale as the reference method. This test (ABI) will be

available for inspectors to use during inspection to assess locomotory function of the broilers, which is an important element when considering broiler welfare.

- Validation of the Classyfarm prototype for broilers. The developed checklists and guidelines for their application will be made available to those member states willing to implement a similar system to perform official controls in their own country about on-farm inspection of broiler chickens welfare.
- Validation and evaluation of the reliability of two scoring methods for the assessment of the litter quality

Priority area 2 (laying hens):

- Validation of the Classyfarm prototype for laying hens. The developed checklists and guidelines for their application will be made available to those member states willing to implement a similar system to perform official controls in their own country. The guidelines will be made available for all MSs.

Priority area 3 (stunning and killing):

- Assessment of the baseline situation about the **end-of lay hens** practice regarding transport and slaughtering, including the efficiency of stunning of these animals.
- Evaluation of the welfare aspects of the use of **electrical stunning** in **rabbits** at slaughter.
- Description of the current depopulation methods and practice in **poultry** in case of Avian Influenza (AI) outbreaks.
- Inventory of the killing methods and practices used in the context of **poultry depopulation** (using the example of AI), and characterization of their 1) effectiveness in terms of unconsciousness/death induction and 2) impact on animal welfare

Achievements so far:

So far scientific studies to validate indicators and methods for welfare assessment have been done related to the priority areas 1.2 3, 5. For broilers and layers on farm draft checklists and guidelines for welfare assessment have been developed for data collection in the next Work programme. An investigation was done in an experimental facility on broiler chicken welfare assessment on farm and at slaughter on animals reared with and without enrichment. An on-field study aimed to develop methods for dust measurement in broiler and layer farms was carried out. In the field of slaughter, trials in commercial slaughter plants to test inter-observer repeatability and feasibility of indicators of consciousness in broilers and turkeys have been performed. In experimental slaughter house an experiment was conducted in order to evaluate efficiency of N2 gas mixture, in comparison to CO2 mixture, to stun and kill broiler chickens.

Description:

In this sub-activity, the Centre will carry out different studies:

Priority area 1 (broilers):

- A report will be delivered based on the results of a **scientific study** that will be taking place in experimental facilities in 2023. This study will assess the **use of covered veranda** and assess the impact on broiler welfare and how the impact of covered veranda on broiler welfare can be measured. This experiment will allow to know more about the minimum requirement concerning the covered veranda, that are actually unknown and how to assess the effect of the covered veranda on chickens' welfare.
- Existing methods of **assessing walking ability** in broilers all require a certain level of training for the observer to be able to distinguish reliably between no, minor and severe walking difficulties. One exception is the 'latency-to-lie' test, which relies on the latency for a bird to sit down, when placed in an aversive environment, i.e. a container with a few centimetres of water. No training or regular

calibration are required for the observers performing the test, as the measure is simple timing, using a stopwatch. However, the test is not feasible for on-farm use due to the necessity of bringing in containers with water of a constant temperature and the rather long time needed to perform the test on a sufficient number of birds for it to be representative of the flock. The aim of this scientific study is therefore to use the existing knowledge from the latency-to-lie test to develop a test which requires limited training, but is feasible for on-farm use (unlike the latency-to-lie test), i.e. the latency-to-lie test without water.

- The Centre will proceed in the **refinement of the Classyfarm system prototype**, carried out in the previous period (2020). The manuals, previously provided in English language, for the on-farm welfare assessment of broilers will be refined following on-field application, also in the light of the additional ABIs, Management-based Indicator (MBIs) and Resource-based Indicator (RBIs) and associated methods derived from the ongoing activity of the Centre in developing these additional indicators. The final goal is to propose and provide guidelines for official inspector use, and thereby support a minimum standard across EU MSs: description of standard methods, i.e., providing an explanation of respective indicators, how to record and interpret them. Application of the checklists on-farm using the developed guidelines in 10 broiler farms in 2023. The farm visits will enable the determination of the time required for the compilation of the check lists according to the guidelines providing information on the feasibility and furthermore to collect photographic material. The guidance manuals enriched with photographic reference will also represent the reference source for the development of factsheets foreseen in other sub-activities.
- A report will be delivered based on the results of a **scientific evaluation of the litter quality in broilers** performed in ANSES experimental facilities in 2022 (end of the year). The data will be analysed in 2023 and a report will be produced in 2024. Two scoring methods, Classyfarm and the Welfare Quality Protocol, will be compared with physicochemical parameters of litter samples (pH and percentage of humidity/dry material) to evaluate the validity of these visual methods of assessment. To test the inter-observer reliability of these methods, 5 to 6 assessors scored the same litter areas without intercommunication. Intra-observer reliability will also be evaluated.

Priority area 2 (laying hens):

- The Centre will proceed in the **refinement of the Classyfarm system prototype**, carried out in the previous period (Deliverable DL. 3.2.2 in 2020). The manuals, previously provided in English language, for the on-farm welfare assessment of layers will be refined following on-field application, also in the light of the additional ABIs, Management-based Indicator (MBIs) and Resource-based Indicator (RBIs) and associated methods derived from the ongoing activity of the Centre in developing these additional indicators. The final goal is to propose and provide guidelines for official inspector use, and thereby support a minimum standard across EU MSs: description of standard methods, i.e., providing an explanation of respective indicators, how to record and interpret them. The application of the checklists will be tested on-farm using the developed guidelines in 10 layer farms in 2023. The farm visits will enable the determination of the time required for the compilation of the check lists according to the guidelines providing information on the feasibility and furthermore to collect photographic material. The guidance manuals enriched with photographic reference will also represent the reference source for the development of factsheets foreseen in other sub-activities.

Priority area 3 (stunning and killing):

- **Scientific study in commercial slaughterhouses of rabbits stunned with electrical device** will be done in order to: i) assess the state of consciousness after stunning, ii) identify the most relevant indicators, iii) test the inter-observer repeatability of different animal-based indicators of consciousness and iv) study (if wide range of electrical current is practiced) the effectiveness of stunning according to the electrical parameters applied to induce immediate unconsciousness until onset of death due to bleeding. The study aims to propose a refined and validated list of animal-

based indicators for the assessment of the state of consciousness and if possible optimal key parameters of effective stunning. Visits will be done in 2023 in France, Spain and Italy and analysis will be performed in 2024.

- A workshop with members of the CA dedicated to **depopulation in poultry** will be organised to identify the most commonly used methods and procedures for depopulation **in case of Avian Influenza**, and their related critical points in terms of effectiveness and animal welfare. The Centre will also carry interview of official vets in charge of the depopulation and possibly field vets, farmers and operators implicated in depopulations with different methods, in order to retrieve additional information. From the results of this workshop and the interviews, the Centre will elaborate a preliminary internal report regrouping all identified depopulation methods and procedures. Visits of depopulation sites will furthermore be conducted in different MSs, when possible, to spot potential variations and shortcomings in previously identified procedures, and gather depopulation operators and farmers' opinions on the effectiveness of the procedures used as well as their impact on animal welfare. For each procedure, the critical points in terms of effectiveness and animal welfare consequences will be identified and take into account the size of the depopulated flock, the characteristics of the animals (e.g. species, animal category, weight) as well as the farm configuration and the housing system used. If allowed by the MS's CA, ABIs (e.g. wing flapping, loss of posture, motionless) for unconsciousness and death and measurement of some key parameters (e.g. using CO₂ sensor) will allow objectivation of method efficiency and impact on animal welfare. These visits will also give us the opportunity to 1) better understand the rationale of operators for carrying out (or not) certain steps of a depopulation procedure (i.e., to deviate from the "standardized" procedure); and to 2) highlight essential checkpoints and criteria during the depopulation procedure for the control of animal welfare and effective death. If visits are not possible in one of the MSs, data will be, if possible, directly retrieved by a national operator – who will be made aware of the purpose of the study, the questions to be asked and the measures to be taken. If deemed necessary, an EKE will also be planned to obtain the scientific opinion of depopulation experts (whose professional profiles will have to be refined in due time) to fill the gap of knowledge about efficiency and method and impact on animal welfare in different farms configurations.

Expected output and timing:

- Refined draft guidelines based on indicators identified in Activity 2 and feedback of its application on field M12: in 10 **laying hen** farms (M9) and **broiler chicken** farms (M12).
- Scientific study on the validity and reliability of two visual scoring methods of **assessment of the litter quality**: M18. A report on the scientific study will be delivered.
- Report on the scientific study in commercial slaughterhouses of **rabbits stunned with electrical device**: M21.
- Report on the development and validation of a new indicator (latency-to-lie without water) for **assessment of walking ability in broiler chickens**: M22.
- Scientific study in experimental facilities to evaluate the **impacts of covered verandas** on the welfare of **broiler chickens** on farm: M24. A report on the study will be delivered.
- **Methods and practices of poultry depopulation**: M24. This task included:

A Workshop on the **methods and practices of depopulation** used in the context of **AI** (M9);

List of the methods and practices used for depopulation in the context of **AI** with preliminary feedbacks on their effectiveness and impact on animal welfare (M12);

Report on the **main depopulation methods** used in case of **avian influenza** in **poultry** species (M20);

Guidance about the choice of a **depopulation procedure** according to the specific features (flock characteristics and building configuration) of the targeted farm (M23);

Guide for the assessment of poultry welfare and **effectiveness of death** in the frame of welfare inspection during **depopulation procedures** (M24).

Sub-activity 3.3.3 Examples of good welfare practices (ANIVET)

Introduction:

Examples of good welfare practices are gathered and reported in this sub-activity as examples of success to be potentially used in different MSs by farmers and CAs. Indeed, official inspectors are expected to have sufficient knowledge about the welfare of poultry and rabbits both on farm and at slaughter to support the quality of their official inspections. This will help them in discussion with farmers and food business operators where they need to have a good understanding about the indicators used for the official controls and the main positive and negative welfare aspects related to the systems under their inspection.

Objective:

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

Achievements so far:

The centre, through its relations with different networks, has been asking for demonstrators of good practices within different topics relevant for welfare of broilers, laying hens, turkeys and rabbits on farm as well as during slaughter. This has led to a list of 28 demonstrators of good practices for poultry, delivered ultimo 2021, and a list of three demonstrators of good practices for rabbits, delivered early 2023. New demonstrators of good practices are continuously being identified.

To validate whether the proposed demonstrators can in fact be considered good practices, visits to demonstrators of good practices in Denmark, France, Spain, Italy, Germany, Greece, Sweden and Norway have been conducted. This has so far resulted in four factsheets on good practices, ranging from mobile housing of broilers, design and layout of outdoor ranges for optimal use by layers, environmental enrichment and covered verandas for turkeys and captive bolt as a back-up stunning method during slaughter of turkeys.

Description:

Following the lists of potential demonstrators in poultry and rabbits' productions developed in 2021 and 2022 as well as new suggestions of potential demonstrators of good welfare practices, EURCAW-Poultry-SFA will contact and visit farms and initiatives in different MSs to develop factsheets on good practices (equipment, housing and/or management) for improving poultry and rabbit welfare in 2023 and 2024.

Finding demonstrators of best practices on specific topics depends on a range of unpredictable factors, i.e. the specific topics that will be covered depend on availability. However, we aim to cover the following topics:

- Design, equipment and management in relation to optimised use of covered verandas
- Best management practices in rabbits
- Best management practices of poultry with intact beak.

In addition, good practices on other topics will be covered. We will seek to identify good practices related to the topics listed below, but the specific outcome depends on the availability brought to light during our work on the sub-activity:

- Best management practices for maintaining the litter in appropriate conditions for broiler chickens
- Automatic assessment of welfare indicators at slaughter, e.g. footpad dermatitis, plumage cover and skin lesions.
- Rearing pullets in multi-tier systems
- Design of waterbath stunning entrances optimised to avoid pre-stun shocks
- Enrichment for rabbits
- Catching rabbits before transport for slaughter
- Fitness for transport
- Culling on farm/depopulation recommendation
- Alternatives to painful intervention used for identification of rabbits (e.g. tattoo of does)
- Good practices of inspections

Expected output and timing:

- **Six to eight good practices factsheets** (M21). This includes:

Two to four factsheets on good practices on the topics aimed to be covered (M12 and M21);

Four factsheets on good practices (topics not fixed, M12 and M21).

List of Indicators WP3:

- Number and quality of technical and scientific studies and materials developed and/or updated by the EURC AW

3.4 Work Package 4 - Training courses

Article 96 (e): conducting training courses for staff of the national scientific support networks or bodies, for staff of the competent authorities and for experts from third countries;

Article 96 (e): conducting training courses for staff of the national scientific support networks or bodies, for staff of the competent authorities and for experts from third countries;

Sub-activity 3.4.1 Review of existing training activities and materials (IRTA)

Introduction:

This sub-activity is about reviewing existing training activities and materials of official control services regarding the legal requirement under scrutiny of the Centre.

Objectives:

To collect and review existing training activities and material for:

- The assessment of turkey welfare on-farm (priority area 5)
- The assessment of the state of consciousness after electrical stunning in rabbit (priority area 3)

Achievements so far:

During 2020), a description of existing courses and materials for poultry was delivered, including information on objectives, content and training materials as well as an identification of the gaps that the Centre could possibly address in the future. In the following period, 2021-2022, priority area 3 (stunning) was supported with the publication of a report on the evaluation of existing training courses for the assessment of the state of consciousness after CAS of broiler and turkeys; and priority area 4 (rabbits) with the publication of a report on the evaluation of existing training courses for the rabbit welfare on farm.

Description:

This sub-activity will identify, collect and review the existing training courses and materials in use at EU level (e.g. BTSF), MSs (e.g. national and regional training courses) or other levels (e.g. from universities, institutes).

Specifically, EURCAW-Poultry-SFA will review:

- The assessment of turkey welfare on-farm.
- The assessment of the state of consciousness after electrical stunning in rabbit.

The revision will consist of a description of the existing courses and activities including information on objectives, content and training materials as well as an identification of the gaps that the EURCAW could possibly address in the future.

Expected output and timing:

- Two reports on the evaluation of existing training courses: M19. This includes:

One report on the turkey welfare on farm assessment (M9);

One report on the assessment of the state of consciousness after electrical stunning in rabbits at slaughter (M18).

Sub-activity 3.4.2 Development of course material for specific topics (IRTA)

Introduction:

This sub-activity is about developing contents for the training of official control services regarding the legal requirement under scrutiny of the Centre.

Objective:

- To organize webinars and training content about specific topics within the list of priority areas.

Achievements so far:

During the period 2021-2022, the Centre prepared training material for the assessment of the state of consciousness after stunning: one for broiler and another for turkeys (priority area 3). For each species, the training material consists of webinars and short training videos. The webinars of 2h are addressed to CAs and official inspectors. Furthermore, short videos are edited as training material on the website. The aim of the webinars are to:

- Review the most valid and feasible indicators of consciousness after WBS.
- Discuss the main results of the EURCAW-Poultry-SFA study on test inter-observer repeatability of the indicators of consciousness evaluated in commercial slaughterhouses.
- Discuss the impact of electrical key parameters on stunning efficiency.
- Recommend animal-based indicators (ABIs) and their methods of assessment (where and how to do the assessment, during how much time, how to do the sampling), providing video examples.

Description:

In 2021, the EURCAW-Poultry-SFA run the first webinar via TEAMS targeted to official inspectors from the Competent Authorities of the EU MSs. The topic was the assessment of consciousness after waterbath stunning of broilers chicken. The webinar was attended by 172 people (251 registered), from 23 EU Member States. In 2022 the Centre run the second webinar on the assessment of consciousness after waterbath stunning of turkeys. The webinar was attended by 72 people (85 registered), from 13 EU Member States.

Due to the success of the webinars and the positive opinion of the competent authorities, the Centre will now carry out each year two **Webinars** with audio-visual materials (4 during the two years of the WP). A standard webinar will have a duration of 90 minutes with 45 minutes of lecture and 45 minutes of discussion. The duration of the webinar might vary depending on the topic. There will be no limitation on the number of attendees. The trainings will be recorded and uploaded on the website for the official inspectors and CAs who could not attend the direct presentation and also for the general public interested in the topic (e.g. animal welfare officers, food business operators, NGOs associations).

For these topics, the Centre will prepare training material and videos to be used by the CAs and official inspectors during their daily work. For each topic, the training material will consist of webinars and short training videos.

The four webinars to be carried out during this work program will be:

- Assessment of the welfare during the **induction to unconsciousness in broilers** during exposure to CAS. The description of the indicators will be based on the outcomes of the experiments performed by the Centre in the previous years.

- Assessment of the **welfare of rabbits on farm**. The webinar will present ABIs that can be used by inspectors to assess the welfare of rabbits on farm.
- Assessment of the **welfare of turkeys on farm**. The webinar will present ABIs and general guidance that can be used by inspectors to assess the welfare of turkeys on farm under the frame of directive 98/58.
- Assessment of the state of consciousness after **electrical stunning in rabbits**. The webinar will present the outcome of the study carried out in the previous year.

Expected output and timing:

- Online webinar - AW broilers: M5. One online webinar about the assessment of the welfare during the induction **to unconsciousness in broilers during exposure to CAS**. The webinar will take place in May. Maximum publication online of video content in August 2023.
- Online webinar - AW rabbits on-farm: M11. One online webinar about the assessment of **welfare in rabbits on-farm** using the most relevant animal-based indicators. The webinar will take place in November 2023. Maximum publication online of video content in February 2024.
- Online webinar - AW turkeys: M18. One online webinar about the assessment of **welfare in turkeys on-farm** using the most relevant animal-based indicators. The webinar will take place in June 2024. Maximum publication online of video content in September 2024.
- Online webinar - AW rabbits: M23. Online webinar about the assessment of the state of consciousness **after electrical stunning in rabbits**. The webinar will take place in November 2023. Maximum publication online of video content in February 2025.

List of Indicators WP4:

- Number of training and collaboration activities with national support networks and bodies and competent authorities

3.5 Work Package 5 - Disseminating research and innovations

Article 96(d): disseminating research findings and technical innovations and collaborating with Union research bodies in the fields within the scope of their mission.

Sub-activity 3.5.1 Centre website implementation and maintenance (ANSES)

Introduction:

This sub-activity is dedicated to the dissemination via the Centre's website and its newsletter of the Centre outputs and the innovation in the domain of poultry and small farmed animals' welfare.

Objective:

- To implement and develop further the existing website with actual and relevant information on poultry and rabbits welfare enforcement, with particular focus on the five priority areas, which enables sharing of information among the target groups.
- To set up a dissemination framework (i.e. leaflets, newsletters, and query section) based on the needs of the target groups.

Achievements so far:

In mid-July 2021, EURCAW-Poultry-SFA succeeded in publishing its website (which was created in 2020). The website contains information on the centre, how to contact the centre, Q2E webform, answers to Q2Es, information on poultry and rabbits welfare, and newsletters.

During 2021-2022, a common PowerPoint (PPT) template dedicated to the 3 EURCAWs presentation, general icons, and common document identifiers were developed in collaboration with the other Centres.

The EURCAW-Poultry-SFA dissemination framework (leaflet, Q2E alert, newsletters and infographic) was developed and put in place. Three newsletters were sent and published online.

A collaboration with professionals led to the production of the Centre's presentation stop-motion video and another one about the evaluation of consciousness at the slaughterhouse after WBS in broilers for training purposes.

Description:

Information on poultry and rabbit welfare assessment from the Centre should be easily available from the website. This includes welfare indicators developed in activity 2, scientific knowledge developed in activity 3, training activities proposed in activity 4 and factsheets and dossiers developed in activities 2&3. In addition, to bridge the gaps between researcher outcomes and target groups' needs, network exchanges through news and newsletters will be carried out.

The website will be updated and developed to structure this information fulfilling target groups expectations. The Centre will work with the two other EURCAWs on the development and functioning of the three websites for disseminating purposes in order that the use is easy for targeted bodies.

The website will ensure contacts to and from Centre. It should contain:

- Information on the Centre
- List of indicators, factsheets, dossiers, audio-visual materials, training, education materials and newsletters

- Information on the key topic areas.
- Answers to queries
- Promotion of best practices farms, slaughterhouses

To build a common dissemination approach strategy with the 2 other EURCAWs, several meetings will be conducted along 2023 and 2024 with the two other EURCAWs communication teams.

The newsletters will be sent via email to registered members, DG SANTE and CA NCP, and published online on our website.

Newsletter 1 - month 5
Newsletter 2 - month 9
Newsletter 3 - month 12
Newsletter 4 - month 16
Newsletter 5 - month 21
Newsletter 6 - month 24

Expected output and timing:

Newsletters 1, 2, 3, 4, 5, 6 (M 24)

Sub-activity 3.5.2 Development of Topics folder and Factsheets on prioritized welfare areas (IRTA)

Introduction:

This sub-activity is dedicated to the dissemination via the Centre's website and its newsletter of the Centre outputs and the innovation in the domain of poultry and small farmed animals' welfare.

Objective:

- To develop a set of 'Indicator Factsheets' for welfare inspections purposes.
- To develop 'Topic/Dossiers' including a set of 'Thematic Factsheets' that will provide a quick and easy overview about current knowledge on key areas of poultry and rabbit welfare.

Achievements so far:

During 2021 and 2022, the EURCAW-Poultry-SFA entrusted the development of the 'factsheets' template' from the same designer used by EURCAW-Pigs for their own factsheets. Two colour-coded templates were produced: one for poultry and one for rabbits. Multiple icons were developed to illustrate efficiently the factsheets. Fifteen factsheets were developed during this period.

In 2021 and 2022, several 'topics/dossiers' sub-pages were developed within the website dedicated to the Centre's output on: Q2Es, priority areas (topics), training, good practices, news, translation, about the EURCAW-Poultry-SFA; and external links.

Description:

The Indicator Factsheets will be based on the results of sub-activity 2.1, 2.2, 3.1, 3.2, and 3.3 (on priority areas) and contain a short and straightforward description of the method to use the described indicator, including more detailed information (e.g. origin, bibliography, relevant articles, information on their validity, feasibility and reliability).

The 'Topics/Dossiers' sub-pages: 1) Broiler welfare, 2) Laying hen welfare, 3) Stunning, 4) Rabbit on-farm welfare, 5) Turkey welfare, will be developed over time. Scientific output arising from the Centre regarding the five priority areas will be published in those dedicated sub-pages, continuously over time, during the period.

Each topic/dossier will contain documents, audio-visual supports, and other elements related to the specific topic like e.g.:

- Good practices on farm and in the context of welfare assessments, identified in sub-activity 3.3 (e.g. best practices Factsheets)
- Any relevant training materials identified in Sub-activity 4.1, 4.2 and 4.3 (e.g. Training Factsheets) also placed in the sub-page 'Training' (see expected outputs in activity 4)
- Practical examples (e.g. audio-visual supports, Factsheets)
- Indicator/'Iceberg' Indicator Factsheets, also published in the sub-pages 'Indicator factsheets' (see expected outputs in activity 2)
- Thematic Factsheets

The Thematic Factsheets will be based on the results of sub-activity 2.1, 2.2, 3.1, 3.2, and 3.3 (on prioritized welfare areas).

Expected output and timing:

- Deliverables of Activities 2, 3, 4, and 5.4 publication: M24.

Deliverables of Activities 2, 3, 4, and 5.4 will be published online 3 months after each DL's deadline. E.g. If DL XX is scheduled for M7, it will be published online during M10.

Sub-activity 3.5.3 Knowledge base implementation and maintenance (ANSES)

Introduction:

This sub-activity is dedicated to the implementation and maintenance of the Centre's Knowledge base to enhance dissemination of the Center's output.

Objective:

- To make available external documents (e.g. bibliography, reports, technical and review papers...) related to the activity of the Centre and relevant to the CAs and SBs.
- To make available Centre's deliveries related to the five activities of the Centre and relevant to the CAs and SBs.

Achievements so far:

The EURCAW-Poultry-SFA knowledge base is based on a Zenodo open-access repository, and has been created in 2022: [the EURCAW-Poultry-SFA Zenodo Community](#). The community is curated by the Centre and dedicated to the Centre's output production related to the Centre's five activities.

A search engine permits search outputs published in the EURCAW-Poultry-SFA knowledge base via a type of file, and keywords. Moreover, the search results can be sorted out by most viewed, best match, most recent, publication date, conference session, journal, and version. All public deliverables from 2020, 2021 and 2022 were published in this open access repository. Each document published has a DOI. A link to the EURCAW-Poultry-SFA's repository is available on the Centre's website in the 'Knowledge base' sub-page created in 2022.

Description:

Public documents produced by the Centre (factsheets, report, review, training, newsletters) during 2023-2024 will be published on the repository. External documents related to Centre's activities that are relevant to CAs and target bodies (Scientific article, grey literature) will be linked to relevant document. The knowledge base will be updated continuously when new documents will be published online. The documents published in the knowledge base will be arising from the output of the work performed in Activities 2, 3 and 4. A brief description and key words will be available for each document.

The types of documents that will be made available are:

- Link to scientific and technical papers
- Link to relevant press publication
- EURCAW-Poultry-SFA documents/DLs

Expected output and timing:

- An informative knowledge base fulfilling the needs for disseminating research findings and innovations: M24. Relevant new knowledge will be published and the knowledge base will be continuously in a 'work in progress' status.

Sub-activity 3.5.4 Translation in national languages (IRTA)

Introduction:

This sub-activity is dedicated to the translation of the Center's output in national languages.

Objective:

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

Achievements so far:

The Centre website's content is published in English. The Centre does not have the capacity for the translation of the material in all national languages. but, to facilitate diffusion of information from EU level to MSs level, the Centre initiated in 2022, translation into four languages corresponding to countries among the main producers of poultry and rabbits in Europe: France, Italy, Germany and Spain. In 2022, a web page 'translation' was created and published online with four sub-pages, one per languages, where translated factsheets were published.

Description:

The Centre will, during 2023 and 2024, translate eight factsheets produced in 2022, and eight factsheets produced during 2022-2023 into four languages: French, Italian, German and Spanish. The Centre will also translate in Polish eleven factsheets (produced in 2021 and 2022) during 2023, and eight factsheets (produced in 2022 and 2023) during 2024. A 'Polish' sub-pages will be created in the 'translation' section in 2023. The translated factsheets will be published online in the corresponding sub-pages.

The German translations will be done in collaboration with EURCAW-Pigs.

In the knowledge base, all translated versions will be available next to the English original version (all having the same DOI).

EURCAW-Poultry-SFA will support the CAs or the corresponding NRC and SBs of each MSs if they want to translate at their own cost the factsheets produced by the Centre in their national languages. These

national language Factsheets will be on the website of the national CAs/NRCs. A link to these national websites will be made available on the Centre's webpage with a disclaimer specifying that the translation does not arise from the Centre: "EURCAW-Poultry-SFA cannot verify the accuracy of the translation, and for the correct wording the English original should be consulted". Other type of documents produced by MSs and translated by MSs will be present via specific links on the website (with a disclaimer specifying that the translated content does not arise from the Centre), redirecting users to the national websites of CAs/NRCs where documents will be accessible.

The documents that can be translated are:

- Factsheets
- Best practices summary
- Training summary

Factsheets translated:

Factsheet 1 - Environmental enrichment and winter garden in a turkey barn (in DE, ES, FR, IT, PL)

Factsheet 2 - Mobile housing, broiler chicken (in DE, ES, FR, IT, PL)

Factsheet 3 - Severe feather pecking, laying hens (in DE, ES, FR, IT, PL)

Factsheet 4 - On farm assessment of feather cleanliness, broiler chicken (in DE, ES, FR, IT, PL)

Factsheet 5 - How to assess the state of consciousness in turkeys (waterbath stunning)) (in DE, ES, FR, IT, PL)

Factsheet 6 - Assessing dust levels in layer barns (in DE, ES, FR, IT, PL).

Factsheet 7- Food pad dermatitis (FPD) in broiler chicken (in DE, ES, FR, IT, PL).

Factsheet 8- The assessment of foot lesions at slaughter in laying hens (in DE, ES, FR, IT, PL).

Factsheet 9- a factsheet about an indicator and associated method(s) to assess welfare of turkeys on-farm (in DE, ES, FR, IT, PL).

Factsheet 10- an indicator factsheet on pullet welfare (in DE, ES, FR, IT, PL).

Factsheet 11- a factsheet about an indicator and associated method(s) to assess welfare of rabbits on-farm (in DE, ES, FR, IT, PL).

Factsheet 12- Factsheet about iceberg indicators at slaughter about welfare assessment of broiler chickens on farm (in DE, ES, FR, IT, PL).

Factsheets 13 and 14- factsheets on best practices on the topics aimed to be covered (in DE, ES, FR, IT, PL).

Factsheets 15 and 16- factsheets on best practices (topics not fixed) (in DE, ES, FR, IT, PL).

- 3 Factsheets will be translated in Polish:

- [How to assess the state of consciousness in broilers](#)
- [How to assess gas concentrations in broiler farms?](#)
- [How to assess gas concentrations in laying farms?](#)

Expected output and timing:

16 Factsheets translated into 5 languages (M 24)

3 other factsheets translated into Polish (M24)

Remarks

Partners co-financing was displayed for information in the budget Excel file. This display is not exhaustive.
