



Request from DGAL (French Directorate General for Food): 13/06/19

Paper to inform considerations relating to the establishment of the Mobile-Abattoir Pilot Project Monitoring Group issued by FRCAW on 31/07/20

Opinion revised by FRCAW on 02/12/2021

Background as described by the requesting body:

Given the strong public demand for the protection of animals at slaughter, mobile abattoirs appear to offer a solution that avoids or reduces the transport of animals to the abattoir ('the abattoir comes to the farm') and allows farmers to control the conditions under which their animals are slaughtered. Mobile abattoirs are thus well-placed to take advantage of the enthusiasm expressed by a proportion of the public for short supply chains, local selling and the return of a traditional practice considered to be more natural and more beneficial for animal welfare. However, no mobile abattoir has as yet been licenced in France, meaning that it has not been possible to study how and under what conditions such facilities function and, in particular, the actual impact of these facilities on the stress experienced by animals at the moment of slaughter and on animal welfare. It is also clear that the methodology necessary for such an assessment remains to be devised, as this assessment must be carried out during routine operations and not within an experimental environment.

Request:

To identify criteria that are practicable (and are, if possible, quantifiable) to assess the stress and welfare of animals during on-farm slaughter in mobile abattoirs and to specify a method to assess the effects of such mobile-abattoir arrangements on animal welfare for the purpose of confirming/disproving the possible benefits for welfare when compared with slaughter in fixed-site abattoir facilities and following transport.

Reference:

Article 73 of French Law no. 2018-938 dated 30 October 2018

Recommendations concerning the assessment of animal stress during the Mobile-Abattoir Pilot Project

The present document is a preparatory document informing discussion for the formation of the Mobile-Abattoir Pilot Project Monitoring Group and for the creation of a Technical Specification Schedule (TSS) to be issued as part of a public tender process for the selection of one or more provider(s) charged with the assessment of the potential impact of mobile abattoirs on the stress and welfare of animals.

Working assumptions for the present document

Concepts of stress and welfare

‘Stress’ and ‘animal welfare’ (AW) refer to the physical and mental state of an animal. Whatever the method of slaughter, the handling of the animals will lead to some degree of stress; the concept of animal welfare becomes inappropriate where slaughter is carried out, and here the term ‘animal protection’ is to be preferred. In general, the desired outcome is in essence to avoid the occurrence of factors, also described as hazards, that could be a source of fear, stress or pain. This can be achieved by implementing a set of good practices relating to animal protection. The measures performed are then intended to assess whether the goals, that is, the absence of pain, fear and other forms of stress, are negatively impacted, but this is not, properly speaking, an assessment of stress or welfare. The measures can be performed on the animals (animal-based measures, or ABM, for example, slips), on the environment (for example, the design of the holding pens) or the management of the animals (for example, the equipment used for their transport). For example, a given factor (use of an electrical prod¹) will have the consequence of inducing fear and pain in the animal, measured by its vocalisations and attempts to escape. But this factor can also be measured by reference to the number and frequency of stimulations, or to their lack of appropriateness to a situation where, for example, the animal cannot move forward. Ultimately, the choice of measures will depend on scientific knowledge of the phenomena, the reliability of the measure and the feasibility of its execution but, where possible, animal-based measures are to be preferred.

Slaughter methods

Three technical slaughter systems are currently considered for use in Europe or in France:

- Fully equipped abattoir lorry
- Mobile container-slaughter unit brought to the livestock farm which is an extension of a fixed-site abattoir
- Mobile abattoir hub, potentially a light and mobile structure set up as a temporary local collection point

In what follows, ‘mobile abattoir’ will be used as a general term to designate all three systems.

The species potentially involved in this type of slaughter are bovines, ovines, porcines and poultry.

¹ electrical prod : a device delivering an electric shock

Recommendations for the Technical Specification Schedule

Recommendation 1: The providers will consider in their proposal one or more of the following species: bovines, ovines, porcines and poultry.

In the development and the implementation of a mobile abattoir, the following principles will apply:

- Compliance with the regulations
- Stress, pain or fear will be reduced in the animals at all points in the slaughter chain (from the moment of leaving the rearing pen from the pen through to death) compared with a scenario where the animals are transported to a fixed-site abattoir.
- The unit's functioning from an animal-protection perspective will be optimised by ensuring the effectiveness of the execution of procedures for stunning and anaesthetisation before bleeding.

For this reason, verification of the absence of actions or situations that might increase stress, fear or pain in the animals is recommended.

The elimination of transport in its proper sense by a vehicle from the farm to the abattoir (or, as a minimum, a very significant reduction in its duration) is a principle inherent to the theory behind the use of mobile abattoirs. In practice, it will depend on the chosen system, namely, whether the abattoir or unit visits the individual farms where the animals are located, or is set up nearby (for example, on a farm that will act as a collection hub, or on a public site close to several farms, etc.). Depending on the individual case, factors that compromise welfare will be present to varying degrees.

Recommendation 2: To inform considerations on the subject of animal transport (including loading, travel and unloading), this being one of the main animal-welfare arguments put forward by those who promote the mobile abattoir project, the provider(s) tasked with carrying out the studies must produce, on the basis of the scientific and technical evidence available, an analysis of the advantages and disadvantages of the mobile abattoir, taking into account the previous situation and the local context.

Indicators of fear, pain and other forms of observable stress in the context of mobile abattoirs

To identify the indicators of the effects of the use of mobile abattoirs on stress, fear and pain in animals that could be used by the provider(s), the animals should be observed at all stages from occupation of their usual location (or of the waiting pen if the farmer has already moved them) to the end of bleeding. For each stage, the following should be considered:

- The physical features known to be factors that affect welfare (e.g., environmental conditions, equipment);
- Human actions likely to produce negative consequences for animal welfare (e.g., operators' technical knowledge, handling of the animals, etc.);
- Behaviours, or any other biochemical or physiological variables in the animals, that indicate these negative consequences for animal welfare (e.g., animal-based measures or ABM).

Recommendation 3: Taking into account the undoubtedly exploratory character of the monitoring that is feasible during the pilot project, the provider(s) must produce:

- A detailed description of the slaughter procedures to be implemented in the series of situations under observation, from the animal's usual environment or from the holding area through to death by bleeding,
- An analysis of factors that compromise welfare based on the reference literature (EFSA, GBP PA, etc.),
- A comparison with SOPs (standard operating procedures) and the adaptive measures that are planned by the slaughter operator,
- A qualitative analysis of the conformity between the planned procedures and the practices observed.

Recommendation 4: The factor analysis must cover all operations and must include, in particular:

- operations carried out while animals are awaiting slaughter (housing, lairage, management of the animals' living conditions and environment etc.)
- operations during transfer to the stunning and/or bleeding unit (route, adapted chute, etc.)
- operations carried out to introduce animals in the box where applicable
- stunning operations
- bleeding operations

If the process calls for transport by a vehicle (for example, within the farm, from a field to the mobile abattoir, or in cases where animals are collected from several farms), one or more specific assessment(s) must be carried out for these operations.

The provider(s) is/are encouraged to describe the method to be employed in carrying out these assessments.

Recommendation 5: The provider(s) will be encouraged to provide an assessment grid setting out the main measures (to cover environment, management and interaction with humans, and animal-based measures) that are to be performed, detailing the potential negative effects on animal welfare. The purpose of this grid is to serve as a starting point for the final assessments to be performed in the participating mobile abattoirs.

Recommendation 6: For the assessment of stress and animal welfare in the situations under observation, the provider(s) must, as a minimum, plan an assessment at each different stage (and as a function of the factor analysis previously carried out) taking into account the following:

- Slips and falls
- Refusals to move forward, backing and turning round
- The use of electrical prods on animals from the relevant categories
- Attempts to escape
- Vocalisations
- Signs of heat or cold stress and discomfort (where there is a prolonged wait in a holding area or in any other type of housing)

The description of the behavioural variables studied should be set out in detail, drawing on available references so that the analysis and interpretation can take current industry standards into account (see Grandin, GBP PA, Interbev & Inaporc, cf. FRCAW knowledge hub (<https://www.cnr-bea.fr/en/plateforme-de-ressources/>), EFSA report).

Following stunning and bleeding, specific protocols to ascertain the absence of signs of consciousness and signs of life must be followed based on the reference texts (EFSA, GBP PA, Cons'Igne).

The above list is not exhaustive and should be supplemented by any behavioural, biochemical or physiological variable (in animals or humans) considered to be relevant and practicable by the provider(s) in the mobile abattoirs involved in the pilot.

Recommendation 7: The provider(s) must clarify the method by which the measures and sampling principles that are subsequently to be implemented will be identified and specified. For example, the provider(s) will submit justifications for:

- the number of sampled animals in relation to the variables measured (through reference, for example, to the EFSA standards on sampling to evaluate loss of consciousness);
- the selection of situations for observation, having regard to the variability of animal categories and farms of origin;
- the conditions and/or locations in which slaughter is carried out (for example, sampling of the farms if the abattoir is to move between different sites).

Recommendation 8: In order to allow the pilot project monitoring group to gain a good grasp of the situations studied for mobile abattoirs and of the measures performed, the provider(s) should submit photographic and video materials illustrating the procedures and protocols implemented. These documents will be used internally by the monitoring group for the pilot.

Data on the a priori opinions and knowledge of the farmers and operators involved in the execution of the pilot must be collected using semi-structured interviews to be conducted at the same time as the observations and must cover all aspects of the operations in which the individual may be involved. The purpose will be to identify the number of people involved and their tasks, and to establish the opinions or knowledge (or lack thereof) that could explain possible attitudes or behaviours that may affect the stress and welfare levels of the animals.

Recommendation 9: The provider(s) will as a minimum describe in detail the method to be employed to ascertain the opinions/knowledge of the farmers and operators involved in slaughter, along with their consequences for attitudes and behaviours displayed by them during operations.

Expectations concerning the analysis of results

The results obtained must be analysed and discussed in light of current industry standards. In addition to the conclusions that may be drawn from these analyses, this work should also help participants to explore ways to improve their procedures.

Recommendation 10: The provider(s) must specify the reference documents and the method they will use to analyse and interpret the results. In particular, they must describe in detail the standards and references to be used where there is no direct comparison possible with fixed-site abattoirs.

Recommendation 11: The provider(s) must demonstrate their expertise in the analysis and assessment of animal protection and welfare at slaughter.