



**REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON THE REVISION OF
CHAPTER 7.5. “SLAUGHTER OF ANIMALS” AND
CHAPTER 7.6. “KILLING OF ANIMALS FOR DISEASE CONTROL PURPOSES”¹**

November–December 2021

1. Introduction

Due to the COVID-19 sanitary crisis, the OIE *ad hoc* Group on the revision of Chapter 7.5. Slaughter of animals and Chapter 7.6. Killing of animals for disease control purposes (the *ad hoc* Group) met via video conference (i.e., Zoom) between November and December 2021.

The list of participants and the Terms of Reference are presented in Annex I and Annex II, respectively.

The *ad hoc* Group was convened by the OIE Director General following the request of the OIE Terrestrial Animal Health Standards Commission (the Code Commission) to consider comments received from Members and International Organisations on the revised Chapter 7.5. Animal welfare during slaughter, that had been circulated in its February 2021 report.

2. Update on the September 2021 Code Commission meeting

The *ad hoc* Group noted the Code Commission’s support to continue its work to review Chapter 7.5 Animal welfare during slaughter according to Member comments received after the September 2021 Code Commission meeting.

3. Review of comments of a new draft Chapter 7.5. “Animal welfare during slaughter”

Comments were received from: Australia, Canada, Cameroon, China, New Zealand, Norway, Singapore, Thailand, the United Kingdom (UK), the United States of America (USA), Africa Union (AU-IBAR), the European Union (EU), the International Coalition for Animal Welfare (ICFAW)

The *ad hoc* Group considered all comments and made amendments to improve clarity and readability, where relevant. Where amendments were of an editorial nature, no explanatory text has been provided in this Report. In addition, the *ad hoc* Group did not consider comments where a rationale had not been provided, that were difficult to interpret, or were too specific in nature.

The Code Commission requested the *ad hoc* Group to consider a new way to structure the Chapter. The *ad hoc* Group discussed this request and agreed that some aspect could be improved in term of consistency but proposed no change as the current structure, ‘free-moving animals’ and ‘animals arriving in containers’, reflects the management of the slaughter process for these species. Nevertheless, the *ad hoc* Group agreed to consider adjustments after the next round of comments.

The following section of this report includes the *ad hoc* Group’s responses to the comments it considered. The revised draft Chapter 7.5. Animal welfare during slaughter, will be provided to the Code Commission for its consideration at its February 2022 meeting.

¹ Note: This report should be read in conjunction with the February 2022 report of the OIE Terrestrial Animal Health Standards Commission where the Commission’s considerations and comments are noted and the draft chapter and revised definitions annexed. The Commission’s report can be found at <http://www.oie.int/en/international-standard-setting/specialists-commissions-groups/code-commission-reports/meetings-reports/>

General comments

The *ad hoc* Group did not agree with the suggestion of a member to merge the three parts of "1. Animal welfare concerns", "3. recommendations" and "4. species-specific recommendations" of Article 7.5.12 into a new recommendation section for Articles 7.5.13 to 7.5.19 and Articles 7.5.21 to 7.5.31, as despite repetition, these groups address different animal species; merging them could confuse the readers. The *ad hoc* Group did not agree to merge 'concerns', 'recommendations' and 'species-specific recommendations'.

The *ad hoc* Group agreed in principle to the ISO TS 34700, but it would be useful to have a concrete proposal from the Member on how it can be integrated to Article 7.5.6. The *ad hoc* Group would like to ask the Code Commission for advice in this regard.

The *ad hoc* Group decided to postpone the harmonisation of the sections on free moving animal and animal arriving in containers until the next round of comments to have more time to analyse the comments.

The *ad hoc* Group did not agree with the comment regarding the division of the species arriving at the slaughterhouses. The *ad hoc* Group considers this classification to be the most practical for the main species slaughtered in this premises; Exceptions can be noted in the species-specific part of each Article.

Article 7.5.1. Introduction

The *ad hoc* Group did not agree to include the word "cultural" in the first paragraph, as they considered that it would be better to limit to well agreed perspectives such as ethics and economics. When talking about culture, it would be more difficult to agree on its meaning and achieve a consensus.

The *ad hoc* Group did not agree to add 'and meat quality' as the product quality itself includes meat quality. In meat, safety is the indispensable and indisputable minimum platform to talk about "quality", the basis of the quality concept. Therefore, it was considered redundant.

Article 7.5.2. Scope

The *ad hoc* Group amended the second paragraph of the scope of the chapter to clarify the species covered in the Chapter based on the way they arrive at the slaughterhouse.

The *ad hoc* Group agreed with the proposal to include the reference to Chapter 7.14. Killing of reptiles for their skins, meat and other products, because some of them are killed for human consumption.

The *ad hoc* Group agreed to add some wording so that this chapter can be applied to species other than those listed even if exact methods of slaughter may vary.

Article 7.5.3. Definition for the purpose of this chapter

No comments received.

Article 7.5.4. Animal welfare hazards

The *ad hoc* Group agreed to replace 'fasting' with 'feed' and 'extreme' with 'adverse', for the weather conditions to clarify *animal welfare hazards*.

When assessing the welfare of the animals, the *ad hoc* Group agreed to note that in the absence of feasible animal-based measures, resources-based and management-based measures can be used as a proxy.

Article 7.5.5. Criteria (or measures)

The *ad hoc* Group replaced the term 'outcome-based measures' with 'animal-based measure' for consistency.

The *ad hoc* Group agreed to include a new sentence to reinforce the idea that resource-based and management-based measures are also to be considered, as mentioned in the previous article.

Article 7.5.6. Management

The *ad hoc* Group agreed with the proposal to replace the word ‘enforcement’ with ‘implementation’ which reflect better the OIE mandate and texts and correspond also to the mandate of the Competent Authority.

The *ad hoc* Group agreed to move the last indent ‘operating procedures and corrective actions’ to the third place to follow the order of the *slaughterhouse/abattoir* operations.

The *ad hoc* Group agreed with the importance of training and competency of the veterinarians and competent authorities staff, for example inspectors at the slaughter house, but did not agree to add a new article on this because it is not under the scope of this Chapter and corresponds to Chapter 3.1 Veterinary Services. Also Article 7.5.7 deals with this topic.

Article 7.5.7. Training and competency of personnel

The *ad hoc* Group agreed with the proposal to add ‘species-specific’ to complement the word ‘behaviours’ because it is important to note that animal handlers should understand the behavioural patterns relevant to the species they are working with due to species-specific differences.

The *ad hoc* Group modified the last part of the second paragraph to simplify it, without losing the importance to take corrective actions once issues with the shackling, stunning or bleeding operations are identified.

When considering the experience and competencies of animal handlers, the *ad hoc* Group agreed to delete the reference to ‘behaviour’ and ‘physiology’, because it could be considered too restrictive. The Group kept the need of having knowledge to identify some specific signs of animal welfare problems such as stress, fear or pain.

In the second paragraph, the *ad hoc* Group agreed to reformulate the last sentence and present the information as bulleted letter to improve clarity but decided to replace ‘effective’ with ‘ineffective’ in the first bullet.

The *ad hoc* Group did not agree with a proposal to change the structure of the second paragraph as the current wording places the focus on training for animal handlings whereas changing to the suggested, places the focus on training on use of equipment.

The *ad hoc* Group agreed to modify the last paragraph, which was deemed over prescriptive, but highlighting the importance to allow only personnel actively working in the area where animals are handled and limit the presence of visitors who may be a source of stress. The *ad hoc* Group agreed to add the risk of accident that can occur due to the presence of visitors.

Article 7.5.8. Design of premises and choice of equipment

The *ad hoc* Group considered the suggestions from Members to improve the clarity of this article and redrafted it using bullet points to identify the main physical comfort aspects that the premises should consider, including needs for sick and injured animals.

The *ad hoc* Group agreed to add a sentence in the third paragraph to highlight the importance to provide adequate light quantity and quality, for inspection but also to allow the animals to circulate easily.

Article 7.5.9. Throughput (number of animals slaughtered per hour)

The *ad hoc* Group did not agree with the proposal to delete the last part of the first paragraph as it considered it to be an important management tool to avoid negative welfare outcomes. Nevertheless, the Group modified the last sentence to clarify the point and added a reference to the experience of the personnel as necessary to determine the correct throughput.

Article 7.5.10. Maintenance and cleaning procedures

The *ad hoc* Group did not agree to add a new sentence relating to the maintenance aspect and the quality of the product because the focus of the chapter is animal welfare. Also, the *ad hoc* Group recalled that at their last *ad hoc* Group report from April-June 2021, it agreed to delete the safety of the personnel because this chapter is related specifically to animal welfare.

The *ad hoc* Group did not agree to include a special mention on the inclusion of emergency equipment as this article covers all equipment.

The *ad hoc* Group agreed to add the calibration as an important aspect to control for all equipment used. However, the *ad hoc* Group did not agree to delete 'in accordance with manufacturer's instructions' because the standards should be provided by the manufacturer.

The *ad hoc* Group did not agree to include the maintenance of transport equipment as this is out of the scope of this chapter.

In the second paragraph, the *ad hoc* Group agreed to add 'and equipment' as an important aspect that contribute to the correct handling of the animals.

Article 7.5.11. Contingency plans

The *ad hoc* Group did some minor changes, including a typo, to improve the readability of this article.

Article 7.5.12. Arrival of free-moving animals

Regarding the proposal to add animal arriving in containers, the *ad hoc* Group recalled that this section corresponds to animal that arrived on their foot.

1. Animal welfare concerns

The *ad hoc* Group agreed to add a sentence to include some important aspect to which the animals are exposed on arrival such as the noise and the vehicle vibration and motion. However, the *ad hoc* Group did not agree to reinstate the word 'thermal stress' as it considered already included in the current text.

2. Animal-based and other measurables

The *ad hoc* Group agreed to add examples of measurables when unloading the animals such as lameness and poor body condition.

In the second paragraph, the *ad hoc* Group agreed to add wording to express the need for emergency killing on arrival of the animals at the slaughterhouse and delete the word 'condemned' to reduce ambiguity.

3. Recommendations

In the last paragraph, the *ad hoc* Group agreed to add text into note the need to prioritise specific categories of animals and the care needed for lactating animals. The *ad hoc* Group agreed with the need to record and report mortalities and injuries to the *Competent Authority*.

4. Species-specific recommendations

In the first paragraph, the *ad hoc* Group agreed with the proposal to include 'shorn sheep' together with pigs as especially sensitive species to extreme temperature. The *ad hoc* Group included a new sentence at the end to highlight the importance of considering environmental conditions when planning transport to the slaughterhouse.

Article 7.5.13. Handling of free-moving animals

1. Animal welfare concerns

The *ad hoc* Group did not agree to add handling in containers or crates as this is the section corresponding to free moving animal arriving to the slaughterhouse.

The *ad hoc* Group did not agree to add traversal slats as risk as they are already mentioned (foot battens). The *ad hoc* Group agreed to add ‘or an unloading bay or dock could’ to the third sentence, ‘smell’ as an example of novel environment and ‘Poorly design facilities will increase the risk of such fear’ at the end of the paragraph.

2. Animal-based and other measurables

In letter (a) the *ad hoc* Group agreed to delete the word running as it was already considered in letter (c).

In letter (d), the *ad hoc* Group agreed to add high pitched vocalisation for pigs, as the correct vocalisation characteristic; other forms of vocalisation may not be related to stress. This change was made throughout the chapter for consistency.

In letter (e), the *ad hoc* Group added wording to cover other reasons why an animal may be unable to move.

In letter (f) and h) the *ad hoc* Group agreed to delete the word ‘frequency’ as it was considered that the excessive force or electrical prods to handle animals’ results in poor animal welfare outcomes in all circumstances.

3. Recommendations

The *ad hoc* Group agreed with the proposal to add ‘lifts’ as an alternative option for handling. The *ad hoc* Group did not agree to add a sentence at the beginning of the first paragraph regarding the design and maintenance of the ramps as it does not add any additional information to the recommendations.

In the 6th paragraph, the *ad hoc* Group did not agree to replace ‘killing’ with ‘slaughter’ as killing is the appropriate term for ‘emergency killing’. Killing is an overarching term that includes both slaughter and euthanasia.

In the 9th paragraph, the *ad hoc* Group agreed to delete the word ‘metallic’ in relation with rattles as these ones can also contain plastics beads.

The *ad hoc* Group agreed to rewrite the 10th paragraph to clarify the use of electric goads.

In the 12th paragraph, the *ad hoc* Group replaced the words ‘battery powered’ with ‘low voltage’ as that is the main condition for the power of the electric goads used. The *ad hoc* Group added ‘camelids’ and ‘ratites’ to the list of species with which these tools should not be used. The *ad hoc* Group added a sentence at the end to emphasise that the electric shock should not be repeatedly used on animals that fail to respond.

The *ad hoc* Group did not agree to include calves, kids, lambs or piglets in the list of animals that eventually could be moved manually if necessary.

4. Species-specific recommendations

The *ad hoc* Group did not accept to add text regarding handling of equids as it was considered too vague and there was no specific advice in the proposal. Also, it did not agree to add a mention to unweaned animals as it was already considered in the recommendation part.

Article 7.5.14. Lairage of free-moving animals

1. Animal welfare concerns

In letter (b), the *ad hoc* Group did not agree to add the word ‘environmental’, for consistency throughout the chapter when referring to weather conditions.

In letter (c), the *ad hoc* Group agreed to add ‘machinery, metal yards and gates’ as sources of sudden or excessive noises.

In letter (f), the *ad hoc* Group agreed to add ‘social stress’ as a consequence of mixing unfamiliar animals together. The *ad hoc* Group did not agree to add the word ‘incompatible’ as no rationale was provided to understand its meaning.

In letter (g), the *ad hoc* Group did not agree to include the word ‘feed’ as an additional example of resources and ‘discomfort, thirst and hunger’ as additional consequences that limited resources may have on animal welfare because ultimately, they all lead to aggressive behaviour.

In letter h) the *ad hoc* Group agreed to add the word ‘sharp’, as a potential harmful surfaces.

2. Animal-based and other measurables

In letter (c), the *ad hoc* Group agreed to add an example of what should be observed for excessive soiling with faeces.

In letter (e), the *ad hoc* Group agreed to remove ‘limping’ as an example of ‘illnesses’.

The *ad hoc* Group added two new measurables: ‘restlessness’ and ‘carcass bruising’.

3. Recommendations

In the second paragraph, the *ad hoc* Group agreed to reformulate the text to mention that the time before slaughter, age of animals and its physiological conditions (e.g., lactation) should be taken into consideration to provide adequate feeding. Also, the *ad hoc* Group indicated the importance of having accurate information of the duration of the transport to take appropriate actions.

The *ad hoc* Group agreed to add a paragraph about the isolation of animals in certain conditions to protect them from other animals and also to prioritise their slaughter.

4. Species-specific recommendations

The *ad hoc* Group modified the species-specific recommendations to add ‘bison’ and ‘cervids’ and their need of specific facilities at the slaughterhouse. The *ad hoc* Group did not agree to add the word ‘familiar’ in the case of pigs, as this concept applies to all species.

The *ad hoc* Group also agreed to look for scientific references to be included in the next revised version of the draft that supports the recommendation to keep the groups of pigs resting in lairage up to 15 .

Article 7.5.15. Restraint for stunning or bleeding (free-moving animals)

1. Animal welfare concerns:

The *ad hoc* Group agreed to modify the section on animal welfare concerns to improve its readability, as in the current form, the text was referring to animal-based measure rather to hazards.

2. *Animal-based and other measurables*

The *ad hoc* Group did not agree with the proposal to add ‘frequency of snorts’ in horses because it’s already considered in letter (d).

In letter (f) the *ad hoc* Group did not agree with the proposal to use ‘prods’ instead ‘goads’, for consistency.

3. *Recommendations*

The *ad hoc* Group agreed with the proposal to delete the word ‘appropriately’, as it does not add information to the recommendation.

The *ad hoc* Group did not agree with some comments regarding the level of stress incurred when using restraints that invert the animal. Based on the European Food Safety Authority (EFSA) opinion, the findings show that no significant differences were observed in terms of animal welfare outcomes between the groups of cattle that were restrained upright or rotated up to 180°. (Scientific Opinion on the welfare of cattle at slaughter. EFSA Journal 2020;18(11):6275, 107 pp. <https://doi.org/10.2903/j.efsa.2020.6275>).

The *ad hoc* Group did not agree to add a sentence regarding flooring and handling that intentionally cause the loss of balance because the sentence is not referring to a rotating box.

The *ad hoc* Group agreed to add the word ‘shadows’ as part of the distractions that animals can perceive, which could delay their entry in the restrainer.

Article 7.5.16. Stunning of free-moving animals

1. *Animal welfare concerns*

The *ad hoc* Group agreed with the possibility to re draft this article to split it in many articles each considering a method separately. However, the *ad hoc* Group agreed to look into that proposal after the next round of comments.

In the third paragraph, the *ad hoc* Group agreed to replace the word ‘avoid’ with ‘prevents’ and delete the reference to workers safety as it was considered that this is not an animal welfare concern.

The *ad hoc* Group made some changes on the three methods presented. The main changes for the mechanical stunning methods, were in relation to the risk of using the inappropriate type of cartridge power, the importance to not use non-penetrating percussive stunning in animals with thicker skulls and also the importance of restraining the animal correctly to avoid a bad shooting position. Concerning the electrical stunning method, the main amendment was to add the importance of the good contact, therefore the *ad hoc* Group included additional hazards that preventing effective electrical stunning such as electrical arcing where animals are wet, or lack of sufficient current as a result of high contact resistance caused by the animal’s wool, or by dirt stuck on the animal skin or wool. Finally, for the controlled atmosphere method, the *ad hoc* Group included CO₂ as an example of gas that can be irritants or aversive.

The *ad hoc* Group agreed to delete the paragraph on the use of gases potentially painful to inhale as this sentence corresponds to the recommendation sections.

The *ad hoc* Group did not agree with some comments because they added too much detail regarding the three different methods presented.

2. *Animal-based and other measurables*

The *ad hoc* Group agreed to replace ‘occurs’ by ‘is confirmed’ in the first paragraph of this section as this implies the active verification of the death of the animal.

In the second paragraph, the *ad hoc* Group agreed to improve the wording to clarify the use of more than one indicator to assess the effectiveness of the stunning process.

The *ad hoc* Group did not agree with the proposal to add ‘natural’ to the blinking activity as the meaning of ‘natural’ was not clear. To emphasise the points made by some members regarding the indicator of ineffective stunning, the *ad hoc* Group added the words ‘high risk’ of ineffective stunning when some of the indicated signs in the text are present in the animal.

The *ad hoc* Group did not agree to include a new paragraph concerning the monitoring of the stunning process using gas. However, the *ad hoc* Group agreed to modify the text in the recommendation section to consider this situation in particular in the induction phase.

3. *Recommendations*

The *ad hoc* Group agreed to add the word ‘always’ to highlight the importance of stunning the animal immediately after restrained.

In letter (a) the *ad hoc* Group agreed to delete the reference to the type of the animal as all the recommendation should be appropriate for the type of animal.

In letter (b) electrical stunning, the *ad hoc* Group agreed to add two new bullet points: one on the wetting point of contact that enhance conductivity for some animals, such as sheep, and another one concerning the minimum exposure time. The *ad hoc* Group agreed to add the ‘duration of exposure’ in relation to the visual or auditory warning systems that is recommended to have in place.

In letter (c) Controlled atmosphere, the *ad hoc* Group agreed to include two new bullet points: one on the need to monitor the induction phase if possible, and another regarding the need to have a visual or auditory warning system as it was recommended for the electrical stunning method. The *ad hoc* Group also agreed to move the last bullet point to the specie specific recommendations for pigs.

4. *Species-specific recommendations*

The *ad hoc* Group agreed to include a recommendation regarding the use of non-penetrative captive bolt in animal with thick skulls. Also, the *ad hoc* Group agreed to include a new sentence about the need of increasing the amperage when high electrical frequencies are used in free-moving animals.

The *ad hoc* Group did not agree to include information regarding poultry as that recommendation should be in the section of animals arriving in containers to the *slaughterhouse /abattoir*.

The *ad hoc* Group discussed the proposal to include recommendations specific electrical parameters in the text of the chapter. The *ad hoc* Group would like to request advice from the Code Commission as this could be a delicate issue in the adoption process of the chapter. An alternative to not include this information would be to use an external source and post that information in the OIE e-resources webpage. This is relevant for the electrical stunning methods used for animals arriving in containers to the *slaughterhouse/abattoir*.

Article 7.5.17. Bleeding of free-moving animals

1. *Animal welfare concerns*

In the second paragraph, the *ad hoc* Group did not agree to add a new sentence to note that prolonged time to loss of consciousness creates animal welfare problems, as it is already mentioned in last part of the paragraph. However, it agreed to add a sentence at the end to stress that animal welfare issues are reduced by applying stunning after the neck cutting.

In the last paragraph, the *ad hoc* Group added the word ‘bled’.

2. *Animal-based and other measurables*

The *ad hoc* Group agreed to amend the third paragraph to add text, ‘after continuous and rapid blood flow’, which is in line with the recommendations a) and b).

3. Recommendations

The *ad hoc* Group agreed to include a sentence on slaughter without stunning to stress the need of clear indication of death before further procedure over the animal can be carried out.

4. Species-specific recommendations

The *ad hoc* Group agreed to do some editorial amendments to the text to improve readability.

Article 7.5.18. Slaughter of pregnant free-moving animals

1. Animal welfare concerns

The *ad hoc* Group amended the text to be in line with the most accepted science and added an additional reference to support the change. The *ad hoc* Group did not agree to add an example when the foetus could be removed from the uterus as it might be for other reasons.

2. Animal-based and other measurables

Regarding the signs of consciousness of the foetus, the *ad hoc* Group agreed to add the 'signs of breathing' as an example and added the relevant reference provided to support this addition.

3. Recommendations

The *ad hoc* Group agreed to include a reference to the Chapter 7.3. Animal transport by land, in which is mentioned that pregnant animals which would be in the final 10% of their gestation should be considered unfit to travel.

Regarding the situation in which the foetus is removed, the *ad hoc* Group agreed to delete the use of captive bolt as an example of euthanasia, as according to the available scientific information captive bolt is not appropriate for this case.

Article 7.5.19. Emergency killing of free-moving animals

1. Animal welfare concerns

The *ad hoc* Group did not agree to add other examples of animals that should be killed under emergency conditions, as it does not provide additional information and those animals should not be transported.

2. Animal-based and other measurables

The *ad hoc* Group did not agree to add more examples as they did not provide further information than the ones already in the text and recalled that the measures named are not part of an exhaustive list.

3. Recommendations

The *ad hoc* Group did not agree to add the words 'action taken' in the last paragraph of this section as it considered that the action is the 'emergency killing' itself.

Article 7.5.20. Methods, procedures or practices unacceptable on animal welfare grounds for free-moving animals

The *ad hoc* Group made minor editorial amendments and agreed to add two new examples to the list under point 1: letter (g) and (h).

The *ad hoc* Group did not agree to delete point 2 (a) mechanical clamping of the legs as the sole method of restraint, as it considered that the rationale did not contain scientific justification.

The *ad hoc* Group agreed to add ‘consciousness’ as a condition to all the unacceptable restraining practices and include the word ‘conscious’ in point 2.

Article 7.5.21 Arrival of animals in containers

1. Animal welfare concerns

The *ad hoc* Group agreed to add ‘social disturbance, noise, vibration and motion’ as a cause of significant stress to animals during transport.

2. Animal-based and other measurables

In the first paragraph, the *ad hoc* Group agreed to add a sentence to indicate that assessing animal-based measures of the arrival of animal in containers at the slaughterhouse, is also difficult when the containers are stacked on top of each other. In the same paragraph the *ad hoc* Group agreed to add the reddening of ears in rabbit as a heat stress indicator.

In the second paragraph, the *ad hoc* Group agreed to add the ambient inside of the vehicle as an example of where to measure temperature and humidity to take corrective action if the established threshold is exceeded.

3. Recommendations

In the first paragraph, the *ad hoc* Group agreed to add a reference to the time animal should stay in the lairage area.

In the second paragraph, the *ad hoc* Group agreed to add ‘cooling systems’ and ‘heating systems’ as they can avoid the risk of animals in containers suffering from thermal stress while in the lairage area. The *ad hoc* Group agreed to include the same recommendation of Article 7.5.12 regarding the possibilities to report mortalities and injuries to the *Competent Authority*.

4. Species-specific recommendations

The *ad hoc* Group agreed to delete the first paragraph of this point as the information given is relevant for all species.

Article 7.5.22. Moving of animal in containers

1. Animal welfare concerns

The *ad hoc* Group agreed to add ‘stress’ to the consequences that animals in containers are exposed during unloading.

2. Animal-based and other measurables

In point 2(b), the *ad hoc* Group did not agree with the proposal to replace ‘facilities’ with ‘containers’ as animal can strike against other facilities and not only containers.

In point 2(d), the *ad hoc* Group agreed to add ‘limbs, feet, paws’ to the body part that can be stuck in the containers.

3. Recommendations

The *ad hoc* Group agreed to add a new sentence in the first paragraph to note the importance of preventing animals piling on one another. The *ad hoc* Group did not agree with the proposal to add a new paragraph concerning the space availability in the containers and their characteristics, as those recommendations belongs to the transport chapters.

Article 7.5.23. Lairage of animals in containers

1. Animal welfare concerns

The *ad hoc* Group agreed to add a new letter to consider the difficulty to inspect animals as a welfare concern, to be consistent with the previous article.

The *ad hoc* Group did not agree to add a new letter concerning the impact of insufficient ventilation, as it is already considered in letter 2 (b).

2. Animal-based and other measurables

The *ad hoc* Group did not agree with a proposal to add measurables, as they were considered irrelevant or not applicable for animals arriving in containers.

3. Recommendations

The *ad hoc* Group did not agree with a suggestion to add the word ‘as soon as possible’ or ‘without delay’ regarding the time that the animal should be slaughtered, as it was considered that there is not a clear recommendation and did not add new information. The *ad hoc* Group did not agree with a proposal to add a sentence regarding food safety requirement as it is considered out of the scope of the chapter.

The *ad hoc* Group agreed with the suggestion to add a new paragraph to highlight the importance of the inspections and monitoring of the containers during the lairage period and also take the necessary corrective action if signs of suffering or distress are noticed during this stage.

The *ad hoc* Group agreed to add the word ‘sudden’ in relation to the characterisation of the noise to which the animals are exposed.

Article 7.5.24. Unloading animals from containers

1. Animal welfare concerns

The *ad hoc* Group agreed with a comment that the animal welfare concerns included in this section are not just an issue for poultry, therefore it modified the text of the first and second paragraph to make it general for all animals arriving in containers.

In point 1, under ‘Other hazards, the *ad hoc* Group agreed to add a new letter concerning the handling and removal of the animal from the containers.

The *ad hoc* Group agreed to modify the previously point 1(c), now 1(d), to add a reference to the incorrect design of tipping ‘manual or mechanical’ equipment. The *ad hoc* Group agreed to move to a new point 1(e), the importance of the speed of the conveyor belt and the consequences in terms of producing piling or injuries to the animals.

3. Recommendations

In the last paragraph, the *ad hoc* Group deleted the reference concerning the specific high from which animal could be dropped or dumped on top of each other, as there is no scientific rationale to keep it.

4. Species-specific recommendations

To be consistent with the same amendment done in other articles, the *ad hoc* Group replaced the word ‘humanely’ with ‘emergency’ in relation to killing.

Article 7.5.25. restraint for stunning animal from containers

1. Animal welfare concerns

The *ad hoc* Group agreed with the suggestion to amend the first paragraph of point 1. to include handling as a source of concern, and added 'fear' as one of the consequences listed. In the same paragraph the *ad hoc* Group decided to replace the word 'equipment' with 'procedures' since it makes more sense in the context of this sentence.

In point 1(a), the *ad hoc* Group agreed to add 'air sacs' that can be compressed due to the inversion of the animal and, 'rabbits' as the inversion might also cause pain and fear to this species.

In point 1(c), the *ad hoc* Group agreed to include a new sentence to indicate that the line speed could contribute to a poor shackling and therefore animal welfare issues.

2. Animal-based and other measurables

In point 2(c), the *ad hoc* Group agreed in principle with the use of the word 'distress' to qualify the vocalisations. However, before amending the text, the *ad hoc* Group would like to get additional information on how the distress could be measured. The *ad hoc* Group agreed to delete 'poultry' to make the measurable used for other species.

The *ad hoc* Group agreed to delete point 2(e) as the content of the sentence do not correspond to the indicator.

The *ad hoc* Group did not agree to include 'respiratory distress' as a measurable as it was considered non-specific.

3. Recommendations

The *ad hoc Group* agreed to reinforce the idea that 'methods that avoid handling and inversion while conscious' should be preferred. The Group added a sentence at the beginning of this section and deleted the third and fourth paragraphs as the concept is now captured in the added sentence.

In the first paragraph, the *ad hoc* Group agreed to replace the words 'without provoking' with 'to minimise, as birds will always struggle when they are handled and restrained. It is impossible to handle them in a way that they will not try to escape.

As in other Articles corresponding to animal arriving in containers to the slaughterhouse, the *ad hoc* Group amended the text to make broader in terms of the type of animals that these recommendations could apply.

4. Species-specific recommendations

The *ad hoc* Group agreed to add 'head and one leg', to the parts of the body where rabbits should not be lifted.

The *ad hoc* Group agreed to include 'turkeys' in the recommendation to avoid shackling heavy birds.

The *ad hoc Group* agreed to include a new sentence to indicate that poultry should not be lifted or carried by the head, wings or one leg.

Article 7.5.26. Head only electrical stunning

1. Animal welfare concerns

In the first paragraph the *ad hoc* Group agreed to add the word 'across', being the way that the electric current needs to flow through the brain. The *ad hoc* Group replaced the word 'magnitude' with 'current', which is the correct concept.

2. *Animal-based and other measurables include*

In the first paragraph, the *ad hoc* Group replaced the word ‘occurs’ with ‘is confirmed’ as this is in relation to the effective monitoring of the method. This is consistent with the modification made in Article 7.5.16.

In the last paragraph, the *ad hoc* Group agreed to include additional signs which can also indicate signs of return to consciousness post electrical stunning.

3. *Recommendations*

The *ad hoc* Group agreed with a suggestion to include a new second paragraph to recommend that they should be wet only prior to birds’ legs being placed in them, to minimize disturbance during shackling.

In the third paragraph the *ad hoc* Group agreed to add the recommendation to immediately kill the animals in case of ineffective stunning or recovery.

The *ad hoc* Group did not agree with the suggestion to add a new sentence in relation to the use of Direct currents (DC), as there is no specific recommendation in this regard according to the scientific reference provided (EFSA, 2019. Scientific opinion on Slaughter of animals: poultry). Instead, EFSA recommends using constant current stunner, therefore the *ad hoc* Group added a sentence to reflect this recommendation.

Regarding the comment requesting to include specific electrical parameters, the *ad hoc* Group reiterated the request for advice to the Code Commission in order to include such information in other parts of the OIE publication.

Article 7.5.27. *Electrical water-bath stunning*

The *ad hoc* group agreed to modify the title of this article to focus on poultry. The new title reads ‘Electrical water-bath stunning for poultry’

1. *Animal welfare concerns*

The *ad hoc* Group agreed with the suggestion to add three new paragraphs to note the risk of experiment pre-stun shocks due to poor handling at the entry of the ramp, the bird individual resistance and the electrical parameter used.

2. *Animal-based and other measurables*

The *ad hoc* Group agreed with several suggestions to add palpebral reflex and spontaneous swallowing and head shaking as signs that indicate a high risk of ineffective stun in the last paragraph of this section.

3. *Recommendations*

In the second paragraph, the *ad hoc* Group agreed to add a recommendation regarding the actions to be taken.

The *ad hoc* Group agreed to add a new paragraph regarding the disturbance to birds during shackling and the fact that the shackles are wet to improve conductivity.

The *ad hoc* Group agreed to add a wording in the fifth paragraph in relation to the possibilities to reduce pre-stun shocks having a smooth entry to the water-bath.

The *ad hoc* Group agreed to add a new sentence at the end of the 11th paragraph to note that the electrical contact should also be between the legs and the leg shackle.

The *ad hoc* Group agreed to provide a general recommendation to look for alternative systems which do not include the animal welfare concerns associated with this stunning method.

Article 7.5.28. Mechanical stunning

In the introductory part of the use of stunning mechanical methods, the *ad hoc* Group agreed with some suggestions to specify the type of captive bolt to be used (penetrating and non-penetrating). Also, the *ad hoc* Group agreed to delete ‘percussive blow, cervical dislocation and decapitation’, in the case of use of manual blunt force, because the difficulties to perform correctly and in the case of cervical dislocation and decapitation as such methods, do not correspond to stunned/killing methods.

1. Animal welfare concerns

As in the introductory part the *ad hoc* Group specify the type of captive bolt to be used and agreed to include a reference to the possibility to miss-stun due the fact of not hitting the skull with sufficient force, therefore not being able to pass the shock wave through the brain.

The *ad hoc* Group agreed to specify that the importance of the diameter to be used correspond to the diameter of the bolt and not to other parts of the device.

The *ad hoc* Group agreed to delete the text related to the use of a percussive blow to the head, following the rationale described in the introductory part of this section

Regarding the cervical dislocation and decapitation, the *ad hoc* Group agreed to keep the text, but to indicate the concerns to use as in cervical dislocation the loss of consciousness is not immediate and also add the risk of neck crushing, which will prolong the pain the animal might experience. The *ad hoc* Group agreed that move the indications, for not using these methods, to the recommendation part.

2. Animal-based and other measurables

In this section the *ad hoc* Group agreed to focus only on penetrating and non-penetrating captive bolt and delete the percussive blow to the head, according to the discussion at the introductory part.

The *ad hoc* Group agreed to add some examples of convulsive signs, like uncontrolled muscular movements. Also, the *ad hoc* Group agreed to make the text broader, as this indication are not just to birds that arrives in containers to the slaughterhouse.

The *ad hoc* Group discussed to add three new paragraphs at the end of point 2. To be consistent to the text added in the methods regarding the effectiveness of the method and the relevant signs that could indicate an ineffective stunning.

Regarding the cervical dislocation, the *ad hoc* Group agreed to add an indication to the complete severance between the brain and the spinal cord as an indicator of death.

3. Recommendations

The *ad hoc* Group agreed with the suggestions to clarify that penetrating and non-penetrating captive bolt should only be used as backup methods, for small scale operations, on -farm slaughter or for emergency killing. To be consistent with previous amendments, the *ad hoc* Group agreed to delete the sentence related to the use of percussive blow to the head.

Concerning the use of this methods in birds with comb, the *ad hoc* Group agreed to use the text regarding some of the recommendations for the use of percussive blow to the head to be used in this section. Therefore, it agreed to add five new paragraphs to recommend aspects related to the type of cartridge to be used, the position of the device, the management of the fatigue of the personnel, the availability of a backup method and finally to reinforce the idea that this method should not be routinely used unless in the conditions already stated and should be used mainly as a backup method.

In the part corresponding to the recommendations for rabbits, the *ad hoc* Group agreed to amend text in the second paragraph for consistency and delete the last part of the sentence regarding the cleaning and maintenance of the device and deleted the reference, as it was already mentioned in the general part of the recommendation point.

As it was discussed previously, the *ad hoc* Group agreed to delete the whole text regarding the use of percussive blow to the head for the recommendations and move some relevant parts to the section regarding poultry.

Regarding the cervical dislocation, the *ad hoc* Group amended the text to note that this method should be only used in unconscious animals. Also, the *ad hoc* Group agreed to include a new paragraph to recommend that cervical dislocation should not be undertaken with tools like plyers.

The *ad hoc* Group agreed to add a sentence to explain that decapitation should not be used since it does not render the animal immediately unconscious.

4. Species-specific recommendations

The *ad hoc* Group to be consistent with previous modifications deleted the paragraph related to the use of percussive blow in turkeys, geese and mature rabbits.

The *ad hoc* Group agreed to add a recommendation regarding the use of non-penetrating captive bolt on turkeys and geese as they may be properly stunned using this method. References to support these additions were included in the draft text.

Article 7.5.29. Controlled atmosphere stunning

The *ad hoc* Group agreed to add ‘poultry’ in the title of this Article. The *ad hoc* Group agreed that poultry is the only species in which this method has been more extensively studied. Also, the *ad hoc* Group agreed to add a sentence to include mixture of carbon dioxide with inert gases, as this has been tested. Regarding the inclusion of Low atmospheric pressure stunning (LAPS), the *ad hoc* Group agreed to include a new sentence to indicate that this method is still under evaluation for poultry and therefore not suitable yet to use in rabbits or other animal without further studies.

1. Animal welfare concerns

The *ad hoc* Group did not agree with the suggestion to add a new sentence at the beginning of this point as it was considered that it was a description of the method rather than a concern in animal welfare grounds in using this method.

The *ad hoc* Group agreed, in the first paragraph to replace ‘return to’ with ‘recovering’ as in the context of consciousness, recovering is more appropriate to consider. In the same paragraph the *ad hoc* Group agreed with the proposal to add ‘respiratory distress, pain and fear’ as animal welfare concerns if birds recover consciousness before the bleeding process.

In the third paragraph, the *ad hoc* Group agreed to add a new sentence regarding the associated hazards due to the aversive nature of the gas mixtures, low gas temperatures and humidity. Regarding another proposal on the management of any compressed gas, the *ad hoc* Group agreed with the suggestion add a new sentence, but in the recommendation section.

2. Animal-based and other measurables

The *ad hoc* Group did not agree with the suggestion to delete the second paragraph of this point, as there is no food safety reasons to justify preventing killing animals before bleeding if the bleeding is performed quickly after death. The quality of bleeding depends more on gravity rather than on the pulse of the animal when alive.

The *ad hoc* Group did not agree to add a new paragraph with signs that could indicate regaining consciousness as it was considered already included in the current text.

In the last paragraph the *ad hoc* Group agreed to include a reference to the monitoring of the gas concentration, the gas displacement rate and the rate of air removal, in case of LAPS.

3. Recommendations

In the first paragraph, the *ad hoc* Group agreed with the suggestion to add a new sentence to note the recommended actions when using any compressed gas to prevent animals experiencing thermal shock.

As in other recommendations before, the *ad hoc* Group agreed with the suggestion to add a new paragraph to include the need of having visual and auditory warning systems to alert malfunctioning of the system.

The *ad hoc* Group agreed with the proposal to replace ‘decompression’ rate with rate ‘of air removal’ as this corresponds to the most appropriate wording for the LAPS method.

Article 7.5.30. Bleeding in animals arriving in containers

1. Animal welfare concerns

In the first paragraph the *ad hoc* Group noted that the recovery of consciousness could happen using other methods, not only electric water bath stunning. Therefore, modify the text accordingly.

In the second paragraph, the *ad hoc* Group agreed to add ‘fear and distress’ as a consequence when improper stunning practices happened during the slaughter operations.

The *ad hoc* Group did not agree to add a sentence regarding the ‘bleeding without prior stunning’ practice for religious slaughtering, as this is not considered under the scope of this chapter.

2. Animal-based and other measurables

In the first paragraph, the *ad hoc* Group agreed to modify the references to some measures of return of consciousness after stunning, as these ones correspond to the ones related to free-moving animals that arrive to the slaughterhouse.

The *ad hoc* Group did not agree to add a new paragraph on neck dissection as a way to verify the correct incision of both carotid arteries as it is considered not practical in operations with important throughputs.

The *ad hoc* Group agreed to add a new paragraph to include the presence of ‘red skin’ as a commonly used measure of an ineffective bleed off.

The *ad hoc* Group agreed to delete the last paragraph of this section to avoid unnecessary repetitions as the content of this text is covered in the amendments made in the first paragraph of articles 7.5.26 and 7.5.29.

3. Recommendations

The *ad hoc* Group did not agree with the suggestion to add a reference recommending that animals should be stunned prior to bleeding.

In the first indent, the *ad hoc* Group did not agree to add the word ‘where possible’, as this is not an animal welfare consideration.

The *ad hoc* Group did not agree with some proposals of amendments for the second, third and fourth indent as the information provided did not add any new information. However, the *ad hoc* Group agreed to add a note that birds should be euthanised immediately if alive before entering the scalding equipment.

In the last paragraph of this section the *ad hoc* Group modify the text to note that if birds are unconscious, decapitation is not any more an issue. Birds will not recover consciousness. Therefore, the focus should be on assessing unconsciousness rather than not recommend decapitation. Which is the quicker way to ensure a quick death and prevent recovery.

Article 7.5.31. *Emergency killing on animals arriving in containers*

2. *Animal-based and other measurables*

The *ad hoc* Group agreed to add a new paragraph to indicate ‘clinical signs’ of serious illness or being in a state of extreme weakness as measurables to take the decision to emergency kill the animals.

Article 7.5.32. *Methods, procedures or practices unacceptable on animal welfare grounds for animal arriving in containers.*

The *ad hoc* Group, like in the section on ‘free-moving animals, agreed with some editorial suggestions and added a new letter 1(e) to include dragging animal by any body part’ as an unacceptable practice for handling the animals. Also, the *ad hoc* Group agreed to add a letter 2(e) to include ‘neck crushing’ as an unacceptable restraining practice.

In point 2(c), the *ad hoc* Group agreed to delete the second part of the sentence, as it was considered not essential.

4. **Review of comments on the Glossary definitions related to Chapter 7.5. Animal welfare during slaughter**

The *ad hoc* Group revised the Glossary definitions related to Chapter 7.5. Animal welfare during slaughter. The revised version of the definitions is presented in the Code Commission’s February 2022 report.

Comments were received from: Argentina (Spanish version), Australia, Canada, New Caledonia, Norway, Singapore, Switzerland, the United Kingdom, the United States of America (USA), the European Union (EU).

During this series of meetings, the *ad hoc* Group considered the comments submitted for the September 2020 Code Commission Report and prepared an updated version of the revised definitions. The *ad hoc* Group made amendments to improve clarity and readability, where relevant. Where amendments were of an editorial nature, no explanatory text has been provided. In addition, the *ad hoc* Group did not consider comments where a rationale had not been provided, that were difficult to interpret, or were too specific in nature.

Death

The *ad hoc* Group did not agree to reinstate the definition of death as it is considered tautological. Death is the absence of life, but it does not help concretely on a slaughter line or on a killing programme to eradicate diseases.

The *ad hoc* Group considered the question regarding the definition of killing and noted that this one will be also reviewed once the work on Chapter 7.6 starts.

Distress

The *ad hoc* Group agreed to include editorial changes and noted comments for the Spanish version of the revised definition and agreed to align it to the English one.

The *ad hoc* Group partially agreed to add, in the definition, the possibility that animals could also not express any physiological or behavioural signs.

Euthanasia

The *ad hoc* Group did not agree to add the notion of a veterinary act as this will be dependent on the national legislation of each country.

The *ad hoc* Group did not agree to add the word ‘humanely’ as it was considered unnecessary and redundant.

Pain

The *ad hoc* Group agreed with the proposal to include language which differentiates acute and chronic pain.

Slaughter

The *ad hoc* Group did not agree with the proposal to delete the last part of the definition to indicate that the term should be used primarily for human consumption, as the objective is to consistently use the same terminology around the world and at the same time limits this operation to human consumption purposes.

Stunning

The *ad hoc* Group agreed with the proposal to delete the word “rapid”, as it does not bring any added value to this definition. It agreed with the rationale provided as it is not relevant for all stunning methods and in particular for controlled atmosphere method and also the speed in the loss of consciousness is not of importance if the stunning method is not efficient enough and causes pain and suffering.

The *ad hoc* Group agreed to add ‘for the purpose of killing’ to distinguish with ‘anaesthesia’.

The *ad hoc* Group did not agree to include ‘when performed properly’ as the recommendation is to perform it properly.

The *ad hoc* Group did not agree to add the words ‘as appropriate to the method’, as it did not add any new information to the proposed text and also implies a kind of assessment.

Suffering

The *ad hoc* Group agreed to delete the word ‘essential’ as there will be a need to define that term too.

The *ad hoc* Group did not agree with the proposal to delete this definition as it considered that it is an important term to be defined in the Terrestrial Code, even if it could be found in a dictionary. The Group agreed that different dictionaries could have different definitions, with not necessary the same objectives that the Code pursues.

The *ad hoc* Group agreed to revise the definition of suffering in line with the one of pain since the two concepts are linked.

6. Next steps

The *ad hoc* Group agreed to continue their work on Chapter 7.5. and to start the development of a revised version of Chapter 7.6. Killing of animal for disease control purposes, pending feedback from the Code Commission’s February 2022 meeting.

.../Annexes

**MEETING OF THE OIE AD HOC GROUP ON THE REVISION OF
CHAPTER 7.5. SLAUGHTER OF ANIMALS AND
CHAPTER 7.6. KILLING OF ANIMALS FOR DISEASE CONTROL PURPOSES**

November–December 2021

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**OIE AD HOC GROUP ON THE REVISION OF
CHAPTER 7.5. “SLAUGHTER OF ANIMALS” AND
CHAPTER 7.6. “KILLING OF ANIMALS FOR DISEASE CONTROL PURPOSES”**

November–December 2021

Terms of Reference

Purpose

The *ad hoc* Group to consider comments received on the revised Chapter 7.5, Slaughter of animal (Animal welfare during slaughter), circulated in the Code Commission’s September 2020 report, and to amend the text as appropriate.

Specific issues to be addressed

- Consider comments received.

Actions to deliver

Ad hoc Group members to:

- Review and comment all working documents ahead of the virtual meetings
- Attend all the virtual meetings on agreed dates
- Review the revised draft chapter and the related definitions and confirm reflects decisions made.

Considerations

- Consider the previous version of the draft chapter circulated for comments in the Code Commission’s September 2020 report;
- Consider scientific evidence relevant to the content of the chapter (scientific references must be provided and included in the draft text);
- Be familiar with the structure of the *Terrestrial Code* and the use of glossary definitions.

Expectations

Ad hoc Group members should:

- Contribute to discussions
- Contribute to drafting text.

Annex II (contd)

Deliverables

- 1) a report describing the *ad hoc* Group's responses to comments including a rationale for each of the proposed responses;
- 2) an amended draft chapter and related Glossary definitions taking into consideration comments received.

Report

The *ad hoc* Group finalises its report and revised draft chapter by December 2021 for the Commission's consideration at its February 2022 meeting.
