CHAPTER 7.5.

ANIMAL WELFARE DURING SLAUGHTER

NorwayCategory: GeneralNorway thanks WOAH for its work in amending this chapter's article 30. We
can in general support the changes made. Yet, we do still have one additional
comment as indicated below.Supporting evidence: not relevant

[...]

Article 7.5.30.

Electrical water-bath stunning for poultry

3 <u>Recommendations</u>

Ensure an optimum combination of <u>intensity.</u> voltage and frequency <u>(for DC)</u> during electrical water-bath <u>stunning</u> practices, to maximise the effectiveness of <u>stunning</u>. <u>Lower frequencies ensure an effective stunning. Higher</u> <u>frequencies provide the lowest probability of a successful stun even at the highest intensity.</u>

Norway	Category: Change
	Proposed amended text:
	Ensure an optimum <u>The</u> combination of intensity, voltage and frequency
	(for-DC AC) during electrical water-bath stunning practices, to maximise
	the <u>should ensure</u> effective ness of stunning. Lower frequencies ensure an
	effective stunning. Higher frequencies provide the lowest probability of a
	successful stun even at the highest intensity.
	Rationale:
	Only alternating currents (AC) have a frequency. Furthermore, effective
	stunning should be achieved but can only be 'maximised' to the extent acceptable with regards to meat quality.
	Lastly, starting the sentence with 'Ensure' is inconsistent with the wording of the
	other points of this paragraph. The reference to 'electrical water bath stunning' is redundant because the entire Article is about this method.
	Supporting evidence:
	Concerning AC: EFSA 2004, <u>https://doi.org/10.2903/j.efsa.2004.45</u> , p. 50/79

⁴ Species-specific recommendations

...

For water-bath <u>stunning</u> depending on the frequency, <mark>minimum</mark> <u>recommended</u> parameters <u>intensities</u> are recommended for the following species <u>are</u>:

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- a. For frequency below 200 Hz:
 - i. 100 mA for chicken,
 - ii. 250 mA for turkeys,
 - iii. 130 mA for ducks and geese,
 - iv. 45 mA for quails.
- b. For frequency from 200 to 400 Hz:
 - i. 150 mA for chicken,
 - ii. 400 mA for turkeys.
- c. For frequency from 400-600 Hz:
 - i. 200 mA for chicken,
 - ii. 400 mA for turkeys.

Birds should receive the current for at least 4 seconds.

<u>For d</u>Đucks, geese and quails should not be stunned at frequencies higher than 200 Hz <u>will not achieve effective</u> <u>stunning and therefore are not recommended</u>. [under study].

For cChicken and turkeys <mark>should not be stunned at</mark> frequencies higher than 600 Hz <u>will not achieve effective stunning</u> <u>and therefore are not recommended</u>. <mark>funder study].</mark>

Norway	Category: General
	We strongly support the inclusion of these specific parameters.
	Rationale:
	These parameters are necessary to ensure that birds are properly stunned. It is difficult to assess an effective electrical stun as birds that are still conscious may be immobilised and incapable of showing certain responses.
	Supporting evidence:
	"Due to the complexity of multiple bird waterbath stunning (EFSA, 2004), it is very difficult to distinguish birds that are electrically immobilised but still conscious – a result of using inappropriate electrical stunning parameters – from those that are correctly rendered unconscious through use of appropriate parameters (EFSA AHAW Panel, 2012b)."
	« Electrical immobilisation of poultry would occur during waterbath stunning when the electrical parameters used for stunning do not induce immediate loss of consciousness indicating a generalised epileptiform activity in the brain (as demonstrated in laboratory studies using EEGs). When conscious birds are electrically immobilised, they will be prevented from showing signs of pain, fear, distress and welfare consequences even though they remain conscious."
	EFSA scientific opinion Slaughter of animals: poultry, p. 23 and 24. https://www.efsa.europa.eu/en/efsajournal/pub/5849

[...]