Tender specifications SANCO/D2/2006/10128

Study on the stunning/killing practices in slaughterhouses and their economic, social and environmental consequences

1. BACKGROUND

The killing of animals is necessary for the production of meat. However, as part of the values of European citizens to ensure the protection of animals, EU legislation stipulates that killing will be performed so as to avoid any unnecessary suffering of the animals. Directive 93/119/EC1 provides for specific requirements within slaughterhouses in order to ensure that animals are spared any avoidable excitement, pain or suffering during movement, lairaiging, restraint, stunning, slaughter or killing.

However this Directive needs a revision as scientific and technical knowledge in this field made significant progress. In 2004 the European Food Safety Authority adopted several recommendations2 on the subject accompanied with a report on the stunning and killing methods available for the main commercial species. Furthermore, in 2005, the General Session of the World Organisation for Animal Health adopted guidelines3 on the stunning and killing for human consumption.

Possible new measures will be evaluated in the light, not only of the possible benefits for the welfare of the animals where social demand is high, but also considering the implications for other dimensions related to the slaughtering/killing activities.

However for this purpose it is necessary for the Commission to collect data on the current situation and the economic, social and possible environmental consequences of the current practices from the different stakeholders' point of view.

The purpose of the study is therefore to establish a detailed picture of the present situation of the meat sector in the EU and its main trading partners with regards to the protection of animals at the time of slaughter taking into account the main socio-economic consequences of the current practices. The data collected by the study may be used for a further impact assessment.

---

3 Terrestrial Animal Health Code (2005), Section 3.7, Appendices 3.7.5 and 3.5.6. See http://www.oie.int/eng/normes/mcode/a_summary.htm
2. **SCOPE OF THE STUDY**

The scope of the present contract is limited to the slaughtering activities carried out within slaughterhouses for the following animals: bovine animals, sheep, pigs, chickens and turkeys. Any stunning/killing (including for human consumption) taking place outside slaughterhouses as referred to in Article 2 of Directive 93/119/EC will not be part to the study. Similarly killing of animals in slaughterhouses for other purpose than human consumption is not covered by this study.

Data to be collected and analysed in the study will cover the period from 1999-2005.

The study shall cover all Member States (including the 10 new Member States before accession) and with particular emphasis on those which together represent 90% or more of the EU production in carcass weight for each species concerned.

3. **OBLIGATIONS OF THE CONTRACTOR**

3.1 General objectives of the contract

The main purpose of the present contract is to establish the economical, social and environmental consequences of the most representative stunning/killing practices in the EU.

The study will be divided in two separate parts as follows:

   a) PART 1 – Red meat (bovine animals, sheep and pigs): Study on the stunning/killing practices in slaughterhouses and their economic, social and environmental consequences.

   b) PART 2 – Poultry meat (chickens and turkeys): Study on the stunning/killing practices in slaughterhouses and their economic, social and environmental consequences.

Each part of the study shall include:

   a) A general presentation of the situation regarding the stunning/killing methods used including the economic aspects taking into account regional diversity within the EU;

   b) An in depth analysis of particular factors listed in Task 2 (such as operators' competence, equipment design, operational procedures, etc.) from the perspectives of the different stakeholders (meat industry, equipment manufacturers, farming sector, consumers, slaughterhouse workers, etc.).

   c) A summary of the main findings and conclusions of the two previous parts.

3.2 Task 0 – Planning and methodology

This task will include a written and oral presentation on the detailed planning of the study, including methodology, data sources and contacts (list of organisations to be consulted) to be used during the overall study. Annex I provides a list of potential stakeholders.

3.3 Task 1 – General presentation of the situation

This task will be divided in the following elements:
Task 1.1: Presentation of the meat sector within the EU

This task will include a presentation of the main economic figures characterising the sector and a short analysis of the current situation and evolution in the last five years (Number of slaughterhouses, meat production, average throughput, etc.). Possible evolution in the forthcoming years will be also considered in light of the reform of the Common Agriculture Policy and the recent outcomes of the WTO negotiations.

Task 1.2: Production costs in the EU

This task will include an analysis of the costs represented by that part of the slaughter chain where live animals are treated (unloading facilities, lairages, restrainers, stunning/killing operations) compared to the overall production costs of a slaughterhouse and its relationship with the price of meat for the consumer. The analysis shall take into account differences between the animal categories covered by the study and the degree of homogeneity between Member States.

Task 1.3: Stunning/killing methods used in the EU

This task will describe the main stunning/killing methods used for the different animal categories and their distribution within the EU. When several stunning/killing methods are commonly used in the EU for one animal category, a short socio-economic analysis of the main advantages and disadvantages of each method will be made (except if the method is covered by task 2).

Task 1.4: Competitive position of the EU meat sector within the world

This task will include a short analysis to establish the competitiveness of the EU meat sector on the world market with an assessment of the different sub-sectors’ ‘vulnerability’, in particular focusing on price differences with major meat exporting countries and possible developments resulting from CAP reform and WTO agreements. This part should in particular analyse if price differences between third countries and the EU may be related to the existence of different stunning/killing practices.

3.4 Task 2 – In depth analysis

3.4.1 Data to be collected and nature of the analysis

This part of the study will consist in collecting data and analysing more in detail particular factors of the slaughter chain in order to evaluate their consequences on dimensions that concern the EU citizen.

For each factor to be examined, the study will define a typology based on the most representative current practices within the EU (e.g. percentage of production involved for each species covered by the study). However typologies should also take into account practices that would be potentially representing a future trend in the sector. In particular each typology should be considered in the light of the EFSA recommendations as well as the OIE guideline above mentioned. Typologies should also try to analyse the extent to which the

4 including main typologies for each method when differences in applying a method are likely to have substantial welfare and economical impacts.
practices observed mainly result from legal/administrative requirements or from market forces.

For each of the factors analysed, the study will provide a summary of the analysis under a comparative table listing for each typology considered, the positive and negative consequences, possibly with quantitative relationship, on the dimensions as referred to in 3.4.2.

3.4.2. Dimensions to be evaluated

Each factor will be evaluated under their economic, social and possibly environmental consequences. The word "consequences" used in this document should consider the perspectives of the different stakeholders (i.e. meat industry, equipment manufacturers, farmers, consumers' organisations, animal welfare organisations, trade unions of personnel working in slaughterhouses, veterinarians, etc.) and take into account the following dimensions:

- **The economic** evaluation shall take particular attention of:
  a) the consequences on the competitiveness of slaughterhouse operators taking into account production costs in detail and the possible consequences on the price of meat for the consumer;
  b) the consequences on specific regions or sectors;
  c) the budget aspects for public authorities;

- **Social** consequences to be considered shall include:
  a) meat safety and meat quality;
  b) occupational safety and qualification of slaughterhouses workers;
  c) Protection of particular social groups (e.g. religious groups);

- **Environmental** consequences shall be considered if necessary.

3.4.3 List of factors to analyse

**Task 2.1: Competence of slaughterhouse operators (parts 1 and 2)**

Article 7 of Directive 93/119/EC provides for particular competences of personnel handling animals at slaughterhouses but no mechanism is requested to implement it. This task will evaluate the current practices in relation to ensure the competence and behaviour of slaughterhouse operators dealing with live animals.

**Task 2.2: Design of restraining and stunning/killing equipments (parts 1 and 2)**

Article 6 of Directive 93/119/EC provides that equipments for restraining, stunning or killing animals shall be adequately designed but no mechanism is requested to implement it. This task will evaluate the current practices regarding the way animal welfare considerations are integrated in the development of restraining and stunning/killing equipments by the different
sectors involved (equipment manufacturers, slaughterhouse operators, competent authorities, etc).

Task 2.3: Animal welfare operational procedures (parts 1 and 2)

Directive 93/119/EC does not request slaughterhouse operators particular methods to verify that animal welfare rules are implemented in their establishments. However in the framework of their internal quality policy, some slaughterhouse operators implement procedures in order to ensure that EU animal welfare rules and related technical parameters are subject to regular monitoring and correct implementation.

This task will evaluate the current practices regarding the way animal welfare operational standards are monitored and implemented by the slaughterhouse operators themselves. Detailed elements covered in tasks 2.4 and 2.5 do not need to be included in this task.

Task 2.4: Electrical stunning or killing (part 1 - only red meat)

A number of essential requirements for electrical equipments are presently not provided by Directive 93/119/EC. Better monitoring in case of electrical stunning is particularly important as throughput is usually high and human handling limited.

This task will evaluate the current practices regarding the use of electrical stunning or killing for red meat species.

The task will in particular include collecting information on:

a) Procedures or systems for recording and verifying electrical parameters during stunning/killing operations, as well as for stunners calibration;

b) The comparative use of constant current stunners vs. constant voltage stunners.

Task 2.5: Poultry stunning/killing (part 2 - only for poultry)

Directive 93/119/EC does not envisage the use of gas stunning/killing for poultry and does not provide detailed requirements for the use of waterbath stunning. However technical developments have been achieved for both methods by the poultry meat industry and there is a need for a comprehensive update on these aspects. This task will evaluate the current practices regarding the poultry stunning or killing. The task will in particular include collecting information on the main technical characteristics used for gas stunning/killing and waterbath stunning. A detailed comparative quantitative costs analysis between the two methods shall also be provided, in addition to the comparison of the dimensions to be evaluated (see 3.4.2).

3.5 Task 3 – Conclusion and executive summary

This task will include a summary of the main findings and the overall conclusions based on the findings and evidence of the study. This part will not exceed 10% of the overall volume of the final document. The task should also mention if, among the various stakeholders consulted during the study, other concerns than the factors listed in the study were raised. In these cases, the contractor will shortly describe the corresponding positions of the stakeholders. The contractor will also provide an executive summary, not exceeding 1 page at the front of the final version.
4. **REPORTS AND DOCUMENTS TO BE SUBMITTED**

4.1 **General requirements**

The following requirements will separately apply for each part of the study.

Reports and power point presentations will be provided in English under electronic format compatible with Commission's software. Each deliverable will be followed with a power point presentation of not more than 45 minutes in Commission's office in Brussels.

Deliverables will be submitted to a Commission's steering group, which may ask for complementary information or propose adjustments in order to redirect the work when necessary. Deliverables must be accepted by the Commission. With work progressing and in the light of new findings, revisions of deliverables already approved may show necessary.

Deliverables shall be drafted in a concise and easily understandable language. The presentation of the texts, tables and graphs has to be clear and complete and correspond to commonly recognised standards for studies to be published.

The volume of final deliverable text will not exceed 50 pages (Times New Roman 12 or equivalent, excluding annexes). The core text has to concentrate on the assessment of the main study items. Statistical and background information should be presented in annexes.

4.2 **Timetable of the contract**

The contract will be performed within 12 months from the date of signature of the contract. The contractor is expected to start working immediately after the contract has been signed. The contract involves regular meeting in Brussels between the steering group and the contractor in accordance with the programme set up in Table 1.

Expected date to start the contract: 15 April 2006.

Deadlines of the table refer to the date of delivery by the contractor to the Commission. Oral presentation should take place in Brussels in Commission's office after each delivery within one month after the delivery.

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Deadline after signature</th>
<th>PART 1 (read meat)</th>
<th>PART 2 (poultry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick off meeting</td>
<td>1 month</td>
<td>Task 0</td>
<td></td>
</tr>
<tr>
<td>Inception report</td>
<td>3 months</td>
<td>Tasks 1.1 and parts of 1.4, final methodology, draft typology</td>
<td></td>
</tr>
<tr>
<td>Powerpoint presentation intermediate results + progress report</td>
<td>7 months</td>
<td>Tasks 1.2, 1.3, 1.4, initial results of consultation of stakeholders regarding 2.1 to 2.3, final typology</td>
<td></td>
</tr>
<tr>
<td>Draft final report</td>
<td>11 months</td>
<td>Tasks 2.1 to 2.4 and 3</td>
<td>Tasks 2.1 to 2.3, 2.5 and 3</td>
</tr>
<tr>
<td>Final report</td>
<td>12 months</td>
<td>Final document</td>
<td>Final document</td>
</tr>
</tbody>
</table>
Annex I

List of possible stakeholders or contact points to be consulted

UECBV  [www.uecbv.be/](http://www.uecbv.be/)

COPA-COGECA  [www.copa-cogeca.be/](http://www.copa-cogeca.be/)


Compassion in World Farming (CIWF)  [http://www.ciwf.org.uk/](http://www.ciwf.org.uk/)

Humane Slaughter Association (HSA)  [www.hsa.org.uk](http://www.hsa.org.uk)

Federation of Veterinarians of Europe (FVE)  [www.fve.org/](http://www.fve.org/)

Accles and Shelvoke  [www.acclesandshelvoke.co.uk/](http://www.acclesandshelvoke.co.uk/)

Karl Schermer GmbH  [www.karl-schermer.de](http://www.karl-schermer.de)

Anglia Autoflow  [www.aaflov.com](http://www.aaflov.com)

European Bureau of Shechita (Pinchas Kornfeld  kornfeld@pandora.be)

Dr. Florence Bergeaud-Blackler (Halal Slaughter)  [fbb@aofood.org](http://fbb@aofood.org)


BEUC  [www.beuc.org](http://www.beuc.org) Ms Barbara Gallani  [consumers@beuc.org](mailto:consumers@beuc.org)