European Commission
DG Health and Food Safety

Study on information to consumers on the stunning of animals

Framework Contract for evaluation and evaluation related services - Lot 3: Food Chain

Final Report

Submitted by:
Food Chain Evaluation Consortium (FCEC)
Civic Consulting - Agra CEAS Consulting -
Van Dijk Management Consultants - Arcadia International

Project Leader: Agra CEAS Consulting

in collaboration with Pragma s.r.l.
Study on information to consumers on the stunning of animals

Final Report

Prepared by the Food Chain Evaluation Consortium (FCEC)
Civic Consulting – Agra CEAS Consulting –
Van Dijk Management Consultants – Arcadia International

Project Leader: Agra CEAS Consulting
Project team

Agra CEAS Consulting (team leader):

Dr Dylan Bradley
John Nganga
Anne Marechal
Maria Garrone

Pragma s.r.l. (sub-contractor):

Leni Avataneo
CONTENTS

1 INTRODUCTION .............................................................................................................. 1

2 METHODOLOGY ............................................................................................................ 3
  2.1 METHODOLOGICAL ISSUES ...................................................................................... 7

3 RESULTS FROM THE CONSUMER SURVEY ................................................................. 9
  3.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS .................................................................. 9
  3.2 SPECIFIC RESULTS ..................................................................................................... 9
    3.2.1 The main meat retail channels .............................................................................. 9
    3.2.2 Factors influencing meat purchase decisions ...................................................... 10
    3.2.3 Satisfaction with clarity of information available on meat/meat products ............. 14
    3.2.4 Awareness of legislation covering pre-slaughter stunning .................................. 15
    3.2.5 Application of legislation covering pre-slaughter stunning .................................. 17
    3.2.6 Labelling of meat from stunned and unstunned animals ..................................... 19
    3.2.7 Interest in information on the protection of animals at slaughter ......................... 21
    3.2.8 Interest in information on the stunning of animals pre-slaughter ......................... 23
    3.2.9 Interest in receiving information and views on labelling ..................................... 28
    3.2.10 Interest in animal welfare protection at slaughter and information on stunning .... 31
    3.2.11 Interest in the type of information available on stunning ................................... 33
    3.2.12 Preference for communicating information on stunning ................................... 34
    3.2.13 Reasons for not wanting information on stunning ............................................. 36

4 RESULTS FROM THE STAKEHOLDER CONSULTATION .............................................. 38
  4.1 INTRODUCTION TO THE CASE STUDY COUNTRIES .................................................. 38
  4.2 REACTION TO THE CONSULTATION PAPER ................................................................. 40
  4.3 CONSUMER DEMAND FOR INFORMATION ON STUNNING ...................................... 41
    4.3.1 Consumer interest in information on stunning ................................................... 41
    4.3.2 Motivation for interest ....................................................................................... 43
    4.3.3 Interest in method of stun .................................................................................. 43
  4.4 CONSUMER UNDERSTANDING OF SLAUGHTER PRACTICES .................................... 44
  4.5 CONSEQUENCES OF INTRODUCING MANDATORY LABELLING .............................. 46
    4.5.1 Importance of labelling modalities ...................................................................... 46
    4.5.2 Scope of labelling ............................................................................................... 46
    4.5.3 Impact of labelling on demand ............................................................................ 49
    4.5.4 Impact of labelling on purchasing behaviour at retail .......................................... 50
    4.5.5 Impact on the structure of the meat supply chain ................................................. 50
    4.5.6 Impact of labelling on trade ............................................................................... 51
    4.5.7 Impact on the potential for fraud ....................................................................... 53
    4.5.8 Need for an associated information campaign .................................................... 53
  4.6 COSTS OF INTRODUCING LABELLING ..................................................................... 53
    4.6.1 Traceability costs ............................................................................................... 53
    4.6.2 Operational costs .............................................................................................. 55
    4.6.3 Further observations and information on costs .................................................... 56
  4.7 CONSUMER WILLINGNESS TO PAY FOR LABELLING ............................................. 58
ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVEC:</td>
<td>Association of Poultry Processors and Poultry Trade in the EU countries</td>
</tr>
<tr>
<td>BEUC:</td>
<td>Bureau Européen des Unions de Consommateurs</td>
</tr>
<tr>
<td>CAS:</td>
<td>Controlled Atmosphere Stunning</td>
</tr>
<tr>
<td>CATI:</td>
<td>Computer-Assisted Telephone Interview</td>
</tr>
<tr>
<td>CEN:</td>
<td>European Committee for Standardisation</td>
</tr>
<tr>
<td>CIBC:</td>
<td>International Butchers’ Confederation</td>
</tr>
<tr>
<td>CFCM:</td>
<td>Conseil Français du Culte Musulman</td>
</tr>
<tr>
<td>CLITRAVI:</td>
<td>The Liaison Centre for the Meat Processing Industry in the European Union</td>
</tr>
<tr>
<td>COMECE:</td>
<td>Commission of the Bishops’ Conferences of the European Community</td>
</tr>
<tr>
<td>COOL:</td>
<td>Country of Origin Labelling</td>
</tr>
<tr>
<td>Copa-Cogeca:</td>
<td>European Farmers, European Agri Co-operative</td>
</tr>
<tr>
<td>EC:</td>
<td>European Commission</td>
</tr>
<tr>
<td>EFSA:</td>
<td>European Food Safety Authority</td>
</tr>
<tr>
<td>EISA:</td>
<td>European Initiative for Sustainable Development in Agriculture</td>
</tr>
<tr>
<td>ERRT:</td>
<td>European Retail Round Table</td>
</tr>
<tr>
<td>EU:</td>
<td>European Union</td>
</tr>
<tr>
<td>EU-10:</td>
<td>Member State grouping comprising: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia</td>
</tr>
<tr>
<td>EU-15:</td>
<td>Member State grouping comprising: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK</td>
</tr>
<tr>
<td>FCEC:</td>
<td>Food Chain Evaluation Consortium</td>
</tr>
<tr>
<td>FVE:</td>
<td>Federation of Veterinarians of Europe</td>
</tr>
<tr>
<td>IBC:</td>
<td>International Butchers’ Confederation</td>
</tr>
<tr>
<td>IFOAM:</td>
<td>Federation of Organic Agricultural Movements</td>
</tr>
<tr>
<td>IHEU:</td>
<td>International Humanist and Ethical Union</td>
</tr>
<tr>
<td>ISCED:</td>
<td>International Standard Classification of Education</td>
</tr>
<tr>
<td>MEP:</td>
<td>Member of European Parliament</td>
</tr>
<tr>
<td>NGO:</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>UEAPME:</td>
<td>European Association of Craft, Small and Medium Sized enterprises</td>
</tr>
<tr>
<td>UECBV:</td>
<td>The European Livestock and Meat Trading Union</td>
</tr>
<tr>
<td>UNESCO:</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
</tbody>
</table>
S1. Executive summary

S1.1. Terms of reference

Recital (50) of Regulation (EU) No 1169/2011 on the provision of food information to consumers states that:

“(50) Union consumers show an increasing interest in the implementation of the Union animal welfare rules at the time of slaughter, including whether the animal was stunned before slaughter. In this respect, a study on the opportunity to provide consumers with the relevant information on the stunning of animals should be considered in the context of a future Union strategy for the protection and welfare of animals.”

This study was therefore planned in the EU strategy for the protection and welfare of animals 2012-2015\(^1\). The Food Chain Evaluation Consortium, led by Agra CEAS Consulting and with input from Pragma Research, was awarded the contract.

Regulation (EC) No 1099/2009 on the protection of animals at the time of killing became applicable from January, 2013. As a general rule, this legislation requires that animals are rendered unconscious (stunned) prior to slaughter. However, it allows slaughter without stunning for particular methods of slaughter prescribed by religious rites, provided that it takes place in a slaughterhouse. In practice, the derogation is used in the case of slaughter under the Jewish rite (for Kosher meat) and under the Muslim rite (Halal meat).

This derogation from stunning is designed to respect freedom of religion and the right to manifest religion or belief in worship, teaching, practice and observance, as enshrined in Article 10 of the Charter of Fundamental Rights of the European Union.

Concerns have been raised that, mainly for economic reasons, animals are slaughtered without pre-stunning in excessive numbers. Part of this production may be then released on the secular market where it may be purchased unwillingly by consumers, some of them possibly preferring to avoid such meat.

In the light of this potential information gap, the purpose of this study was:

1. to carry out a consumer consultation in all Member States in order to collect comprehensive, reliable data and use it to provide an analysis which indicates whether consumers want to receive information on the stunning of animals when they buy meat; and,
2. to consult stakeholders at the EU level and in selected Member States on the issue.

\(^1\) COM(2012) 6 final/2.
S1.2. Methodology

Information was gathered for this study via a literature review, exploratory semi-structured personal interviews with stakeholders and Commission staff, a Computer-Assisted Telephone Interview (CATI) survey of 13,500 purchasers of meat, 500 in each of the EU-27 Member States, a focus group with EU-level stakeholders and six Member State case studies.

The survey was carried out in July and August, 2013 and was based on the population aged over 18 which purchases beef, lamb and poultry. The results were weighted to the EU-27 population with a sampling error at a 95% level of confidence in each Member State of ±4.4% and ±1.0% for the EU-27. To facilitate analysis, an EU-15 group (comprising Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK) and an EU-10 group (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia) were created. The sampling error for both groups was ±1.4%.

A consultation document, based on the findings from the consumer survey was produced. This was provided to EU-level stakeholders and used as the basis for a facilitated consultation which took place in January, 2014. Case studies were carried out in France, Germany, Poland, Spain, Sweden and the UK in February and March, 2014.

S1.3. Conclusions

S1.3.1. Consumer interest in receiving information on stunning

Our survey asked respondents to spontaneously state the three main purchase criteria they use when buying meat. The main purchase criteria used are aspects of quality, mainly presentation and durability (66%) and price, mainly in unit terms (16%). Only 2% of meat purchases cited production method as the most important purchase criterion, 1% religious consideration and 1% general animal welfare considerations; no respondents spontaneously mentioned animal welfare at slaughter as a purchase criterion. Those who purchase meat are also generally satisfied with the information available on meat and meat products (80%, 17% “very satisfied” and 63% “satisfied”).

Stakeholders agreed with the survey findings which suggest that there is little dissatisfaction with current labelling with regard to meat and meat products and little spontaneous demand for information related to animal welfare at slaughter. However, stakeholders pointed out that this is an important issue for a small number of relatively vocal consumers.

The absence of apparent widespread demand for information as a purchase criterion does not, however, preclude the possibility that consumers expect certain standards to be adhered to for all products (as reflected to an extent by the proportion of survey respondents who believed there are laws covering slaughter, see below).

Survey respondents were also asked directly whether they would be interested in receiving information on the stunning of animals at slaughter when they buy meat. This direct enquiry elicited greater interest with 72% of respondents indicating interest to varying degrees (18% “very interested”, 27% “quite interested” and 27% “a little interested”). Consumer interest in receiving information on stunning of animals:

2 Croatia became a Member States after the contract was signed.
how authorities check the rules on the protection of animals at slaughter was investigated in the survey and this revealed that 48% of meat purchasers would look for this information compared to 40% who would not. Respondents were also asked whether meat from animals which had not been stunned should be sold using similar labelling to meat from animals which had been stunned. While 23% of respondents do not feel that this is an issue for them and 23% think that similar labelling should be used, 45% think that the labelling should be different.

Our survey suggests that there is generally lower consumer interest in this issue in the EU-10 than in the EU-15. However, within these groupings meat purchasers in different Member States have different levels of interest. Interest in labels to differentiate meat from stunned and unstunned animals is higher than the EU-27 average in Ireland, Belgium and France. Meat purchasers in Poland, Slovakia and Spain have a lower than average interest in labelling and are less likely to think that meat from stunned and unstunned animals should be differentiated via labelling.

These findings highlight the difference between spontaneously expressed purchase criteria and prompted interest in a specific issue. The current absence of direct labelling means that consumers are unable to easily use pre-slaughter stunning as a purchase decision criterion. However, this does not mean that consumers are uninterested in this issue; though there is limited consumer understanding of slaughter practices (see below). Furthermore, stakeholders feel that general consumer interest in this issue is low and that at least some of the interest shown is for reasons other than animal welfare.

Our conclusion is that for most consumers information on pre-slaughter stunning is not an important issue unless brought to their attention. However, this is an issue for a certain proportion of motivated consumers. It is by no means clear that consumers would actually act on this information if it were to be available. The level of interest differs by Member State with generally greater interest in the EU-15 compared to the EU-10.

S1.3.2. Consumer understanding of slaughter practices

Survey respondents were asked whether they think that there are laws covering the stunning of animals in their Member State. Half (49%) thought that there are laws with 18% saying that they did not think there are laws and 33% saying that they do not know. Respondents were then told that there are laws requiring the stunning of animals and were asked whether they thought that these applied to all animals slaughtered in their Member State. Less than a third (28%) believed that legislation covers all animals while 38% believed that it does not. It is not possible to draw a robust conclusion from this in terms of whether respondents have a good understanding of the legislative position because it is unclear to what extent respondents think that there are laws that are not followed or that there are legal exemptions (which is actually the case through the religious derogation).

Stakeholders were overwhelmingly of the opinion that consumers have little understanding of the slaughter process. Stakeholders believe that consumers frequently conflate religious slaughter with unstunned slaughter, a misunderstanding not helped by the presentation of this issue in the media. Stakeholders also believe that the majority of consumers are not interested in the process of slaughter, so that even where accurate information is available, this is not something that is typically sought.

Our clear conclusion is that there is little accurate consumer understanding of the slaughter process.
S1.3.3. Modalities for labelling to indicate whether animals have been stunned

Those survey respondents who had expressed interest in receiving information on whether meat was from stunned or unstunned animals (79.4%) were asked whether they would also want to know the method of stun. Almost half (47% of those expressing an interest, 37% of all meat purchasers) said that they would. Some 38% (30% of the total) said that they would only want to know whether the animal was stunned.

This is a very different finding to the perception of stakeholders who largely felt that only information on whether an animal was stunned or not was relevant to consumers. Some religious organisations took a different point of view noting that the method of stun is an important piece of information necessary to make a fully informed decision. This issue should be considered against the background of the perceived lack of consumer knowledge on slaughter methods which calls into question how consumers would use this extra information to make an informed purchase decision. Additionally, there are a number of permitted stunning methods under Regulation (EC) No 1099/2009 and no clear indication of how these compare to one another in animal welfare terms; it is the outcome that is important and all render the animal insensible to pain. It is therefore unclear how providing this additional information would help even a well-informed consumer to make a purchase decision. Finally, this finding should be placed within the context of very low levels of expressed consumer interest in general animal welfare as a purchase criteria.

If there is little expressed use of animal welfare as a purchase criterion, little understanding of the slaughter process and an inability to distinguish between different methods of stun, providing information on the different methods used would not appear to aid a consumer decision. Our conclusion here is therefore that information on the method of stun is not relevant to the vast majority of consumers in terms of providing a purchase decision criterion. However, to a minority of religious stakeholders providing information on all methods of stun would be seen as equal treatment should labelling of non-stunned meat become compulsory.

Survey respondents who had expressed interest in receiving information on whether meat was from stunned or unstunned animals were asked whether this information should be conveyed using a textual description or using a numeric code. A slight majority (53% of those expressing an interest, 42% of all meat purchasers) expressed a preference for a textual description while 33% (26% of the total) expressed a preference for a numeric code.

Stakeholders had mixed views on this topic, but the majority had a preference for a textual description to ensure that the information was actually communicated to consumers. This is also the preference expressed generally in the literature for the same reason. It was pointed out that the numeric code system used in the egg sector is relatively poorly understood and requires a textual explanation alongside in any case. An advantage of a numeric code approach is that the information would be there for those who want it, but would be less obvious to those who do not. A numeric code would also take up less space on a label and might reduce stigmatisation of those selecting meat from unstunned animals, but primarily because it would be less widely understood, which would undermine the point of having the information in the first place. It was noted that care would have to be taken in the choice of any wording used in order to ensure it is not pejorative.
Our conclusion is that, in accordance with the literature, consumers and stakeholders would prefer a non-pejorative textual explanation with wording which should have the same meaning across the EU.

Stakeholders pointed out that while introducing a label would be less complicated in the fresh meat sector (albeit not without impacts on the production chain, see below), it would be more complicated to introduce a label for further processed products and in the catering sector. However, stakeholders recognised that it is in the catering sector and amongst further processed products that any information gap exists and therefore the rationale for labelling means that these sectors should be included in any labelling requirement if this information gap is to be addressed. Some stakeholders suggested that applying mandatory labelling in the retail sector while continuing to allow voluntary labelling in other sectors would be a workable compromise.

Our conclusion is that mandatory labelling would be less complicated to introduce for fresh meat in the retail sector than for processed products or in the catering sector.

If a label were to be introduced, two options would be possible in terms of coverage (i) universal coverage, i.e. both meat from stunned and unstunned animals, or (ii) labelling of only one market segment, i.e. either stunned or unstunned. In the latter case, the general consensus amongst stakeholders was that the unstunned side of the market should be labelled as the smaller market segment and the exception to the norm. However, stakeholders recognised that this might be seen as stigmatising those selecting meat from unstunned animals and there was a desire to avoid this outcome. Stakeholders also made clear that almost all meat sold at retail will be from animals which have been stunned and that therefore this is the only label most consumers are likely to come into contact with; this calls into question the utility of a label when there is no purchase decision to make.

A universal approach to labelling would provide consistency and may help to reduce any possible stigmatisation. However, at the retail level, most consumers are unlikely to be confronted with a choice making a label somewhat redundant. A partial approach would provide consumers with sufficient information to make a choice and labelling the exception to the norm would be consistent with other labelling policy such as that applying to GM food. However, this approach carries a higher risk of stigmatising consumers of labelled meat.

Our conclusion is that labelling fresh meat from both stunned and unstunned animals would not provide consumers with more choice at retail level. Only labelling meat from unstunned animals would inform consumers who are specifically interested in this information. However such labelling would carry a high risk of stigmatising religious communities especially in the present political context and given the findings above that consumers have little understanding of the slaughter process.

S1.3.4. Costs of introducing labelling

There are two main categories of cost in common with those following the introduction of Country of Origin labelling: traceability costs (those associated with introducing the required mechanisms to keep individual products associated with a set of information through the supply chain) and operational costs (those associated with operating the system including communication to consumers). Many costs associated with traceability requirements will already have been incurred for fresh meat from
April 2015 and only additional costs beyond these are relevant here. Stakeholders did not think that any additional costs for fresh meat would be substantial. Should labelling be introduced for processed products, which are not already covered by Country of Origin labelling, costs would be incurred and could be potentially high, particularly in the event that method of stun was also indicated.

Labelling may induce changes to sourcing practices in Member States where the religious derogation is used and the creation of parallel supply chains will imply additional cost, especially in the religious markets where the overall value of carcases is expected to reduce. Slaughterhouse economics rely on high throughputs and the need to move from continuous to batch processing to ensure identity preservation implies an increase in cost per unit of output. Stakeholders did not think compliance costs would be significant. Labelling and packaging costs are not considered to be significant. Indirect costs as a result of changes in overall demand are, at this stage difficult to determine, but are expected to be short-term; these are likely to be more substantial if the method of stun is indicated. Any costs incurred would be passed on to consumers and this is expected to be more significant in the religious markets.

Our conclusion is that while introducing labelling would involve a cost, this would not be substantial for fresh meat, but would be potentially high for processed products. Costs will increase with scope and if method of stun were to be indicated; implementation modalities are therefore important. Costs would fall disproportionately on the religious markets and on the industry and consumers in those Member States which operate the religious derogation.

S1.3.5. Willingness to pay for labelling

There is very little information on willingness to pay for this specific information and the evidence available, which uses stated preference techniques, is subject to the consumer paradox. This suggests that willingness to pay for most consumers is low, which matches the expectations of stakeholders. However, as borne out by the success of certain private labelling schemes, there is greater willingness to pay for more general higher animal welfare which can, and sometimes does, include requirements to not use the religious derogation.

Our conclusion is that there is low consumer willingness to pay for information on whether animals have been stunned prior to slaughter.

S1.3.6. Consequences of introducing mandatory labelling (other than costs)

It is clear that the modalities of any labelling scheme would have bearing on the consequences and that without knowing these modalities, only general conclusions are possible.

Stakeholders did not expect any long-term impact on the meat market if stunned/unstunned labelling were to be introduced, although a short-term impact while consumers became used to the new information could not be ruled out. A greater impact would be likely if the method of stun were to be included on the label as well.

---

3 In line with the terms of reference for this project, our cost analysis is based only on the consultation of representative organisations, and is therefore qualitative. A detailed cost analysis would require further research.
Stakeholders all expect total supply of meat from unstunned animals to decrease in the event of a label being introduced in order to better match demand. However, it is possible that demand for unstunned meat within the Halal market may increase given the lack of agreement on whether pre-stunning is permitted.

Certain possible impacts on the meat supply chain were identified. There was some concern that introducing labelling would result in two meat supply chains with different values and that this would increase the risk of fraud. In this context it is noted that traceability systems would need to rely on paper-based systems with no ability to carry out checks on the product to determine whether the animal had been pre-stunned. This will only be an issue in Member States where the religious derogation is in use. It was noted that segmentation may adversely impact smaller operators through additional record keeping requirements at the retail end of the chain, and through a move towards purchasing from larger operators to avoid segmentation requirements which could limit the market opportunities for producers further up the chain.

Producers in Member States operating the derogation would be placed at a disadvantage vis-à-vis those in Member States not using the derogation and this may impact trade within the EU.

Although some stakeholders raised concerns about impact on external trade, the small size of the EU markets demanding meat from unstunned animals and the need for third countries to follow existing retailer supply codes means that substantial impacts on the EU market from trade with third countries are unlikely.

There would be some differential impact on exporters in individual Member States according to whether the derogation is in use.

Our conclusion is that the introduction of labelling to indicate whether an animal has been stunned or not would not have a long-term impact on demand. Should the method of stun be indicated, the impact would potentially be greater. A differential impact is expected according to whether the religious derogation is used with the industry in those Member States using the derogation placed at a disadvantage. These conclusions can only be general at this stage. Further work on impacts would be necessary based on more specific labelling modalities.

S1.3.7. Impacts on different groups

The main identified concern was that introducing labelling might result in the stigmatisation of those wishing to buy meat from unstunned animals. There is the potential for this issue to be conflated with the issue of religious slaughter and great care is needed to ensure that religious freedoms are respected. Although there is no concern that introducing labelling would reduce the availability of meat from unstunned animals for those that want it, it is possible that labelling would result in higher costs in this market segment if the value of carcasses and cuts which could not be utilised in these markets decreased. This may reduce the affordability of meat for Muslim and Jewish communities. However, without knowing the modalities of any labelling it is not possible to be more precise.

Our conclusion is that should labelling be introduced it will result in higher prices for religious groups which demand meat from unstunned animals. There will also be a risk that these religious groups become stigmatised.
S1.3.8. Existing information on the use of stunning

Stakeholders explained that there are quite a few voluntary schemes which allow consumers to be sure that meat is from animals which have not been slaughtered under the religious derogation, although the prevalence of these varies by Member State. Furthermore, in some Member States it is quite usual for retailers to insist that all their own label products are from animals which have been pre-stunned. There are also certification schemes which allow the identification of Kosher and Halal meat, although in the latter case this does not provide information on whether the animal was pre-stunned without reference to the certification standards. Stakeholders felt that it is therefore possible for motivated consumers to be sure that the fresh meat they buy at retail is from stunned animals in some Member States.

There are also some voluntary schemes which allow the motivated consumer to be sure that the meat in processed products is from stunned animals in the processed product sector, although this is far less common. Stakeholders agreed that the greatest potential information gap is in the wholesale and catering sector.

Our conclusion is that it is possible for consumers to select fresh meat from stunned animals in certain Member States. This is relatively straightforward in Member States which do not operate the religious derogation, as well as where relevant voluntary schemes are in place. In Member States which operate the derogation, but do not have voluntary schemes, it may be difficult for consumers to identify meat from stunned animals; this aspect deserves further research. There is a potential information gap across the EU for further processed products and in the catering sector.
1 Introduction

Recital (50) of Regulation (EU) No 1169/2011 on the provision of food information to consumers states that:

“(50) Union consumers show an increasing interest in the implementation of the Union animal welfare rules at the time of slaughter, including whether the animal was stunned before slaughter. In this respect, a study on the opportunity to provide consumers with the relevant information on the stunning of animals should be considered in the context of a future Union strategy for the protection and welfare of animals.”

This study was therefore planned in the EU strategy for the protection and welfare of animals 2012-2015. The Food Chain Evaluation Consortium, led by Agra CEAS Consulting and with input from Pragma Research, was awarded the contract.

Regulation (EC) No 1099/2009, on the protection of animals at the time of killing became applicable from January, 2013. As a general rule, this legislation requires that animals are rendered unconscious (stunned) prior to slaughter. However, it allows slaughter without stunning for particular methods of slaughter prescribed by religious rites, provided that it takes place in a slaughterhouse. In practice, the derogation is used in the case of slaughter under the Jewish rite (for Kosher meat) and under the Muslim rite (Halal meat).

This derogation from stunning is designed to respect freedom of religion and the right to manifest religion or belief in worship, teaching, practice and observance, as enshrined in Article 10 of the Charter of Fundamental Rights of the European Union.

Regulation (EC) No 178/2002 sets the framework for all legislation in the areas of food law. Article 8 states: “food law shall aim at the protection of the interests of consumers and shall provide a basis for consumers to make informed choices in relation to the foods they consume. It shall aim at the prevention of: (a) fraudulent or deceptive practices; (b) the adulteration of food; and, (c) any other practices which may mislead the consumer”. These aims are also reflected by Regulation (EU) No 1169/2011 on the provision of food information to consumers; both the preamble and Article 3 (which contains a reference to ethical considerations). This Regulation does not limit labelling only to food safety/consumer protection. Finally, Directive 2000/13/EC on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs states under Article 2 that labelling and methods used must not “mislead the purchaser...as to the characteristics of the foodstuff and, in particular, as to its nature, identity, properties, composition, quantity, durability, origin or provenance, method of manufacture or production”.

Concerns have been raised that, mainly for economic reasons, animals are slaughtered without pre-stunning in excessive numbers. Part of this production may be then released on the secular market where it may be purchased unwillingly by consumers, some of them possibly preferring to avoid such meat.

---

5 Some requirements relating to the layout of slaughterhouses will not apply to existing facilities until 8 December 2019.
In the light of this potential information gap, the purpose of this study was:

1. to carry out a consumer consultation in all Member States in order to collect comprehensive, reliable data and use it to provide an analysis which indicates whether consumers want to receive information on the stunning of animals when they buy meat; and,
2. to consult stakeholders at the EU level and in selected Member States on the issue.

This report details the methodology followed and presents our findings.
2 Methodology

Information was gathered for this study via a literature review, exploratory semi-structured personal interviews with stakeholders and Commission staff, a Computer-Assisted Telephone Interview (CATI) survey of 13,500 purchasers of meat, 500 in each of the EU-27 Member States\(^6\), a focus group with EU-level stakeholders and six Member State case studies. Exploratory interviews were held with the following organisations:

- Association of Poultry Processors and Poultry Trade in the EU countries (AVEC)
- Halal Food Authority (UK)
- Eurogroup for Animals
- Conseil Français du Culte Musulman (CFCM)
- The European Livestock and Meat Trading Union (UECBV)
- International Butchers’ Confederation (CIBC)
- Grand Rabbi Bruno Fiszon
- Commission of the Bishops’ Conferences of the European Community (COMECE)

In addition, BEUC was contacted but they felt that they were unable to complete an interview as this is not a subject that they have followed. CLITRAVI was contacted, but was unable to complete an exploratory interview in the timeframe requested.

The exploratory interviews and literature review were used to draft a consumer questionnaire. One key issue identified in the literature was the need to avoid prompting respondents to mitigate the risk of overstating concerns (Brook Lyndhurst, 2010; Schroder and McEachern, 2004). For practical reasons it was necessary to take both a prompted and unprompted approach. Once finalised, the survey was translated for use in each Member State and converted to CATI script. Survey operators were briefed on the questions.

A pilot survey was carried out in Italy from 9 to 12 July, 2013. This pilot revealed a number of additional answer options which were subsequently added to the pre-coded lists for the remainder of the survey (the final version of the questionnaire is presented in Appendix 1). The remainder of the survey was carried out between 22 July and 22 August 2013. Some 500 completed responses were collected in each EU Member State except Croatia (that country had not acceded to the Union when the project was commissioned). The refusal rate varied between 7% and 21% with an average for the EU-27 of 13% which is consistent with this methodology. Respondents were asked to take part in a survey concerning food habits, so those that refused to take part did so without knowing the detailed nature of the survey, or even whether it concerned meat.

The survey was based on the population aged over 18 which purchases beef, lamb and poultry. The results are therefore representative of this group, but not necessarily the EU population overall. Within this frame the sample was random meaning that it accurately reflects the structure of this group.

\(^6\) Croatia became a Member States after the contract was signed.
Based on the number of completed responses, the sampling error at a 95% level of confidence in each Member State is ±4.4%. For the sample as a whole, the larger number of responses means that the sample error is ±1.0%.

The interviewing process was smooth and no problems occurred. Respondents found the questionnaire clear, with no need for further explanations and the topic interesting.

Following completion of the survey, each Member State database was checked to verify the absence of duplicated records, the matching between the number of records and the number of completed interviews, the absence of missing fields and the correct use of codes. Data consistency was also checked through cross-variable analysis.

The sample data were weighted by the over 18 population in each Member State to reflect the over 18 population in the EU-27. This means that results from larger Member States were lifted to give them their appropriate weight at the EU-level and those from small Member States were reduced for the same reason. This is important given the dominance in population terms of a few of the larger Member States. Responses from Germany, France, Italy, the UK and, to a lesser extent, Spain and Poland will dominate the EU-27 response. Germany, France, Italy and the UK account for 54% of the EU-27 over 18 population while Spain and Poland together contribute a further 17%.

Data were analysed at both national and aggregated levels. However, bearing in mind the relatively large sampling error at the Member State level and the need to present clear results these are presented at aggregated levels: EU-27 (all EU except Croatia), EU-15 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK) and EU-10 (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia). Malta and Cyprus do not fit into either grouping, although they tend to have similar characteristics to the EU-15 (together they account for 0.25% of the EU meat purchasing population). The sampling error is ±1.4% for EU-15 and EU-10. This means that a difference of more than 2.5% between the EU-15 and EU-10 groupings is required to be confident that responses are actually different. Below these levels differences in responses are indicative only.

It is possible to analyse the data by a number of socio-demographic breakdowns and this is presented where it is statistically meaningful in Appendix 4 and summarised in section 3.2. Appendix 5 contains further and more detailed analysis which is summarised in this main report.

When investigating the places in which meat is bought it was decided to focus on retail rather than attempt to also consider catering and the food service sector. There are no data at the EU level, but the UK’s annual Family Food survey shows that 83% of meat is bought to be prepared and consumed at home with 17% bought in takeaways and restaurants (Defra, 2013). It is therefore unlikely that the main place of purchase of meat would be for consumption outside the home. Respondents were able to answer “other” if the main place that they buy meat is not from the retail/butchery sector.

A consultation document, based on the findings from the consumer survey was produced. This was provided to EU-level stakeholders and used as the basis for our consultation. The first consultation
took the form of a focus group\(^7\). This was held in Brussels on 16 January, 2014 with key stakeholder organisations selected in consultation with the Steering Group to represent the full range of interests in this debate. The focus group was “on the record” so that differences and similarities between stakeholders could be reported. The full list of organisations invited to attend is as follows. Those shown in bold were able to attend; the majority of those invited declined to take part because this issue is not something on which they hold a specific position:

- **Association of Poultry Processors and Traders (AVEC)**
- **Association of the Meat Processing Industry (CLITRAVI)**
- **Commission of the Bishops' Conferences of the European Union (COMECE)**
- **Community of Protestant Churches in Europe**
- **Conference of European Rabbis**
- **Eurocommerce**
- **Eurocoop\(^8\)**
- **Eurogroup for animals**
- **European Association for the Defense of Human Rights**
- **European Association of Craft, Small and Medium Sized enterprises (UEAPME)**
- **European Committee for Standardisation (CEN)**
- **European Consumers’ Organisation (BEUC)**
- **European Farmers, European Agri Co-operative (Copa-Cogeca)**
- **European Food Safety Authority (EFSA)**
- **European Humanist Federation**
- **European Initiative for Sustainable Development in Agriculture (EISA)**
- **European Livestock and Meat Trading Union (UECBV)**
- **European Retail Round Table (ERRT)**
- **Federation of Islamic Organisations in Europe**
- **Federation of Organic Agricultural Movements (IFOAM)**
- **Federation of Veterinarians of Europe (FVE)**
- **Food SCP round table**
- **International Butchers’ Confederation (IBC)**
- **International Humanist and Ethical Union (IHEU)**
- **The Conference of European Churches**

A facilitated discussion was carried out based around the issues addressed in the survey (see Appendix 2). It was made clear to the participants that the intention of the consultation was to gather and report stakeholder views, not to reach a consensus, nor to consider the way forward on this issue. Notes were made and circulated to allow stakeholders the opportunity to provide any amendments that they felt were necessary. The discussion is reported in detail in Appendix 6.

The exploratory interviews, literature review, consumer survey results and the findings from the EU-level consultation were used to develop an interview topic guide (Appendix 3) for use in the six case

---

\(^7\) In the event the number of participants allowed one group to be run. Had more organisations wished to contribute it would have been necessary to divide stakeholders into more than one group.

\(^8\) Unfortunately Eurocoop were finally unable to attend due to illness.
study Member States: France, Germany, Poland, Spain, Sweden and the UK. A brief overview of the case study Member States is presented in Table 2.1. While other Member States were considered for case studies, the Member States in the Table were ultimately selected due to geographical balance, the presence of suitable interlocutors and data, as well as the reasons cited in the table9.

Table 2.1: Overview of case study Member States

<table>
<thead>
<tr>
<th>Member State</th>
<th>Rationale</th>
<th>Approximate domestic religious populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>EU’s largest Jewish and Muslim populations. EU’s largest producer of beef and poultry. A new law was introduced at the beginning of 2012; under this law, slaughterhouses using religious slaughter methods (including no stunning) are required to prove that they have an order from a client for such meat. Recent recommendations in the senate for the labelling of unstunned meat.</td>
<td>Muslim: ~6,000,000 (9%) Jewish: ~500,000 (0.8%)</td>
</tr>
<tr>
<td>Germany</td>
<td>Large Muslim population. German legislation tightly controls slaughter without stunning, creating an interesting situation for religious minorities. A halal labelling scheme (Qibla) which accepts stunning is in widespread use; for example, it is estimated that 75-80% of poultry producers in Germany are certified for producing to this standard (Agra CEAS, 2012). Slaughterhouse sector is fairly concentrated.</td>
<td>Muslim: ~4,000,000 (5%) Jewish: 120,000 (0.15 %)</td>
</tr>
<tr>
<td>Poland</td>
<td>Recent national level discussions on the legitimacy of religious slaughter leading to a ban on slaughter without stunning and an attempt to lift this ban in July 2013. The subject of labelling has been mentioned during these discussions. Poland is a significant producer of poultry, including for export.</td>
<td>Muslim: 45,000(&lt;0.1%) Jewish: 3,200 (&lt;0.05%)</td>
</tr>
<tr>
<td>Spain</td>
<td>National discussions on introducing labelling for religiously slaughtered meat took place in 2010. More fragmented slaughterhouse sector.</td>
<td>Muslim: ~1,000,000 (2-3%) Jewish: 12,000 (&lt;0.05%)</td>
</tr>
<tr>
<td>Sweden</td>
<td>Religious slaughter without stunning is banned in Sweden.</td>
<td>Muslim: ~500,000 (5%) Jewish: 15,000(&lt;0.2%)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>A significant producer of sheep meat. The issue of stunning has been discussed extensively in the media and some organisations have strong positions. Large Muslim and Jewish populations.</td>
<td>Muslim: ~3,000,000 (5%) Jewish: ~300,000 (0.5%)</td>
</tr>
</tbody>
</table>


9 Bulgaria, which has a large indigenous Muslim population, and Latvia, where discussions on the subject had previously taken place were particularly closely examined as alternatives. However, initial investigations revealed major problems with identifying the necessary range of suitable interlocutors. In view of this, these Member States were not ultimately selected.
A programme of interviews was set up in each case study Member State covering stakeholders with an interest in this issue drawn from the following sectors:

- Farmers;
- Veterinarians;
- The meat industry;
- Retailers;
- Food services;
- Consumers;
- Animal welfare organisations;
- Competent Authorities;
- Religious authorities (Catholic, Protestant, Orthodox, Muslim and Jewish);
- Human rights organisations and non-religious philosophical movements (such as humanism).

In practice, as for the EU-level consultation, not all organisations wished to take part in this exercise. The consultation document was sent to those organisations interviewed in advance and interview notes were returned to interviewees for validation. In order to facilitate responses from all stakeholders it was necessary to make the case study interviews anonymous meaning that individual stakeholders are not identified in the write-up. The point of the case studies was to examine differences and similarities between different Member States rather than between stakeholders (which was addressed through our consultation focus group) and therefore it was preferable to maximise responses to provide a balanced view rather than identify stakeholders. The case studies were carried out in the following time periods:

- February, 2014: Poland, Spain and the UK.
- March, 2014: France, Germany\(^{10}\) and Sweden.

The case studies are presented as monographs in Appendix 7.

### 2.1 Methodological issues

In carrying out this study, we have identified areas where methodological improvements might be made. The key areas for improvement identified related to the survey.

Whilst the survey sample was substantial, covering 13,500 respondents across the EU, at the Member State level the sampling error was too large to allow a Member State presentation of the results without the risk of misinterpretation. For future work which requires detailed knowledge of consumer attitudes it would be advisable to either focus on certain key countries, bearing in mind that this would not allow a comprehensive EU position to be established, or allocate a larger budget to allow analysis at the Member State level.

One survey question asked respondents whether they think that there are laws covering the stunning of animals before slaughter. The intention of this question was to probe respondent understanding of slaughter methods. With hindsight this question did not yield the expected information. First, there is

\(^{10}\) Some interviews were also held in April, 2014.
no means of knowing whether respondents actually knew the answer or whether they guessed; second, respondents may have thought they knew the answer, but were in fact wrong; and, finally, knowing whether there are laws covering stunning does not mean that someone understands slaughter methods.

Another survey question asked whether respondents thought legislation covering stunning applies to all animals. The intention here was to probe awareness of the religious derogation, but with hindsight some respondents might have understood the question in terms of whether the legislation is applied rather than whether it should be applied.

Neither of these possible sources of confusion is considered serious given that stakeholders had a unanimous view that consumer understanding of slaughter methods is largely absent.
3 Results from the consumer survey

3.1 Socio-demographic characteristics

The survey collected a range of socio-demographic data so that we could investigate whether different socio-demographic characteristics resulted in different views and attitudes. Although the meat purchasing population is different from that of all EU consumers, the socio-demographic characteristics very closely matched data available from Eurostat and in Eurobarometer publications. This adds confidence that our survey results accurately reflect the views of the EU-27 population. The socio-demographic characteristics of the sample are presented in Appendix 4 where their correspondence to the wider EU-27 population is also analysed.

Differences in survey results by socio-demographic characteristics are specified in the analysis presented in section 3.2 where relevant.

3.2 Specific results

This section presents weighted average survey results for the EU-27, EU-15 and EU-10 groupings (see section 2 for an explanation of the groupings). The relative weighting of the EU-15 and EU-10 groupings is shown on each figure for clarity. Results are discussed by question (see Appendix 1 for a list). Further, more detailed, analysis is available in Appendix 5.

3.2.1 The main meat retail channels

Respondents were asked to identify the main place they buy meat or meat products. This question was not prompted with the interviewer coding the response. The responses have been further consolidated for clarity (Figure 3.1).

At the EU-27 level, 52% of meat purchasers shop mainly at large stores/multiple retailers (supermarkets, hypermarkets and discount stores). This is especially the case in the EU-15. Butchers form the next most important place in which to purchase meat and there is no difference between consumers in the EU-15 and EU-10. Consumers in EU-10 are more likely to buy meat from small stores (groceries and convenience stores) than those in EU-15 (15% cf. 3%). Outdoor markets are also more important in the EU-10 (8% cf. 3%). The “Other” category includes farmers’ markets and buying direct from farms. Again these channels are more commonly used in EU-10 Member States (5% cf. 2%).
Study on information to consumers on the stunning of animals: **Final Report**

**DG SANTE Evaluation Framework Contract Lot 3 (Food Chain)**

---

**Figure 3.1: Question 1: Which is the main place you buy meat or meat products from?**

Source: FCEC consumer survey.

For almost all socio-demographic groups the most important place of purchase is large stores/multiple retailers followed by butcher’s shops. The only exception is those identifying themselves as Muslim where half mainly buy meat from a butcher’s shop with only 40% mainly buying meat in large stores/multiple retailers.

There are nevertheless other (significant) nuances between socio-demographic groups. Younger purchasers of meat, those in work and those with higher educational achievements tend to be more likely to shop in large stores/multiple retailers. Older consumers, homemakers, retired people and those with low educational achievement are more likely to use butchers, outdoor markets and groceries and convenience stores. As might be expected from the location of larger stores, those in urban areas are most likely to buy meat in these outlets and those in rural areas most likely to use smaller shops. Those who buy only red meat are more likely to buy from a butcher’s than those buying only poultry.

### 3.2.2 Factors influencing meat purchase decisions

Respondents were asked to name up to three important factors which influence their meat purchase decision. Responses were *unprompted* with the interviewer coding the response into seven general categories, each with sub-categories (see Appendix 1). This approach allows an analysis of the main motivating factors behind meat purchase decisions as well as a detailed analysis of the alleged most important purchase criteria. In the context of this study it is important to note that spontaneous
responses allow for a more accurate assessment of the factors that really influence respondents at the point of purchase.

Figure 3.2 shows that the most important general factor influencing the purchase of meat is quality\footnote{The quality category was built up from use by/best before date, nutritional content, the type of cut, presentation and other quality-related aspects. Origin and production method were coded separately.} (the importance of this factor would increase further if it also included origin and production method (see below) as is sometimes the case). This was the first mentioned purchase criterion for two-thirds of meat purchasers in the EU-27 and is the first mentioned criterion for more than half of meat purchasers in all Member States except Finland. The second most important first purchase criterion in the EU-27 is price (16%) and the third is origin (13%).

Only 2% of meat purchasers in the EU-27 cited production method as the most important purchase criterion. 1% cited religious considerations (98% of which were either Jewish or Muslim) and less than 1% animal welfare considerations.

Quality is a more important determinant of purchase in the EU-10 Member States than in the EU-15 (75% cf. 65%) while price is slightly more important in the EU-15 (17% cf. 14%), as is origin (14% cf. 8%).

While citizens may well have concerns over animal welfare, very few meat purchasers explicitly consider animal welfare to be their main purchase criterion. For example, no responses were coded under “Stunning of animal before slaughter” or “Other animal welfare related aspect”. Just two respondents out of the total of 13,500 cited “Animal welfare at slaughter”\footnote{Some 18 respondents from 13,500 cited “Animal welfare on-farm”, 4 “Animal welfare certification” and 1 “Animal welfare during transport”.}. Some 0.9% of meat purchasers said that their main purchase criterion was outdoor reared/free range and may have been using this as a proxy for animal welfare.

Only 50 respondents provided responses which could be coded under “Slaughtering and religion”, 45 of these related to Halal slaughter.

The conclusion from this is that the stunning of animals prior to slaughter is not a major issue directly influencing the purchase decisions of those buying meat. Further, animal welfare concerns in general and those at slaughter specifically are not issues which exert an important influence over meat purchase decisions. However, it does not necessarily follow that these considerations are unimportant. It is possible that consumers expect a certain level of animal welfare and do not feel that this differs greatly between products meaning that it is not a point on which to differentiate purchases.

In this context it should be noted that European Commission (2005) reported that 43% of consumers in the EU-25 consider animal welfare most or some of the time when purchasing meat. Which? (2013b) reported that 68% of UK consumers consider animal welfare to be important when shopping for food. However, the use of prompted questions in both these surveys should be noted which increases the risk of over-estimation; also, the questions asked are not directly comparable to that in our survey. GfK (2012) found that 22% of EU consumers look specifically at animal welfare labelling as part of their decision (also using a prompted question), but only 5% say that this is a factor in their purchase
decision. This partially bridges the gap between citizen concerns and consumer behaviour identified here (and also recognised by, inter alia, European Commission, 2009).

![Bar chart showing the frequency of purchase criteria across EU regions]

**Figure 3.2: Question 2: When you purchase meat or meat products, what are the main factors that influence your decision? First mentioned main criterion**

Source: FCEC consumer survey.

Quality is the most frequently cited main purchase criteria in all socio-demographic groups. Beyond this, those aged between 18 and 24 are more likely to cite price as their main purchase criterion than any other group. As might be expected given this finding, students are also more likely than other groups to consider price to be the main purchase criterion. Those with low and medium educational achievement are more likely to cite price as their main purchase criterion compared to those with high educational achievement, who are more likely to cite origin.

As the frequency of meat consumption decreases, so does the frequency with which quality is cited as the most important purchase criterion. This is most noticeable for those eating meat less than once a week. Those in this group are more likely to cite origin or production method and less likely to cite price as the main drivers of their purchase decision. Origin is also more important to those purchasing only red meat. As with the previous questions, those identifying themselves as Muslims stand out from the other religious groups in that these are the only group where a substantial proportion cite slaughtering and religion as a main purchase criterion (31%).

Deeper analysis of the most important purchase criteria shows that, for the EU-27, 19% of meat purchasers cite QUALITY: Presentation, 17% QUALITY: Use by/best before, 12% QUALITY:
Nutrition and 11% QUALITY: Type of cut. Some 10% of EU-27 meat purchasers cite ORIGIN: Country/region of origin as the most important purchase criterion; 8% cite PRICE: Per kg.

Figure 3.3 shows the frequency with which the various purchase criteria are mentioned first, second and third for the EU-27. Quality criteria account for more than half of total mentions (56%) almost half (48%) of these mentions are as the main purchase criterion. In fact, quality is the most important second and third choice criterion in terms of the number of overall mentions it receives. Price is most likely to be mentioned as a second choice criterion while production method is most likely to be a third choice criterion, as is animal welfare.

Religious reasons stand out as 70% of those who mention this criterion say it is their first choice criterion. This suggests that this is a very important purchase criterion when mentioned, although it only accounts for 0.3% of the total number of mentioned criteria and is therefore not important at all to most people.

![Figure 3.3: Question 2: When you purchase meat or meat products, what are the main factors that influence your decision? EU-27, frequency of first, second and third choice selection](image)

Source: FCEC consumer survey.
3.2.3 Satisfaction with clarity of information available on meat/meat products

Respondents were asked to comment on their satisfaction with the clarity of information available on meat/meat products using a four-point scale.

Figure 3.4 shows that four-fifths (80%) of EU-27 purchasers of meat are either “very satisfied” (17%) or “satisfied” (63%). Only 15% are “not satisfied” (13%) or “very unsatisfied” (2%).

Satisfaction levels differ between EU-15 and EU-10 consumers with the former generally more satisfied than the latter. Some 19% of meat purchasers in EU-15 Member States are “very satisfied” with the clarity of information with a further 64% “satisfied”. The corresponding figures in the EU-10 Member States are 7% and 60%. There is no difference between the two groups in terms of the proportion of meat purchasers claiming to be “very unsatisfied”, but the proportion of meat purchasers in the EU-10 who are “not satisfied” exceeds the proportion feeling this way in the EU-15 (20% cf. 11%).

Figure 3.4: Question 3: How satisfied are you with the clarity of the information available on the meat/meat products you buy?

Source: FCEC consumer survey.

Levels of satisfaction with the clarity of labelling are generally high across all socio-demographic groups, albeit with some minor differences. Expressed satisfaction is slightly lower for those seeking work, those living in predominantly rural areas, those eating meat less than once a week and those buying only poultry. Orthodox Christians and Muslims are more likely to actually express
dissatisfaction with the clarity of labelling. However, in all these cases a substantial majority remain satisfied.

Average satisfaction with the clarity of information available is highest for those who buy meat in supermarkets, hypermarkets and discount stores. However, people buying meat from other retail channels (farmers’ markets and direct from producers) are more likely to say that they are “very satisfied” with the clarity of information available at purchase. This is probably because of the shorter supply chain. Meat purchasers using groceries and convenience stores are most likely to say that they are “not satisfied” with the clarity of information available to them.

There is no appreciable difference between those whose main purchase criterion is quality, price and origin in terms of overall satisfaction with the clarity of information available on meat/meat products. Meat purchasers whose main purchase criterion is origin are most likely to be “very satisfied”, followed by those citing price and then quality. There is also no difference between these groups in terms of the proportion which is unsatisfied. Those whose main purchase criterion is production method show a polarisation between “very satisfied” and “not satisfied” with the clarity of information. In this group those claiming to be “satisfied” are squeezed between these extremes.

3.2.4 Awareness of legislation covering pre-slaughter stunning

Respondents were asked whether they think that there are laws covering the stunning of animals in their country. Almost half (49%) of meat purchasers in the EU-27 said that they thought there are laws with 18% saying that they did not think so (Figure 3.5). A third (33%) of meat purchasers did not know either way. European Commission (2005) found that 57% of EU-25 citizens believe that there is legislation to promote the welfare and protection of farmed animals at slaughter. The higher positive response probably reflects the less specific nature of this question, but could also indicate a decrease in awareness over time.

Meat purchasers in the EU-15 were more likely than those in the EU-10 to believe that there are laws (51% cf. 42%), but they are also more likely to believe that there are no laws (19% cf. 13%). This apparent paradox is explained by the greater proportion of meat purchasers in the EU-10 that do not know either way (44% cf. 30%).
Figure 3.5: Question 4: Do you think there are laws covering the stunning of animals (meaning that they are made unconscious) before slaughter in <Member State>?

Source: FCEC consumer survey.

Analysis by socio-demographic characteristics reveals that uncertainty on the existence of such laws increased with age and decreased with educational achievement. Those aged between 35 and 44 were most likely to think that there are laws in place, as are those in employment. Only 41% of those with low educational achievement believed that there are laws covering pre-slaughter stunning compared to 51% of those with medium educational achievement and 57% of those with high educational achievement. A similar pattern is evident with regard to urban/rural status. Those in predominantly urban areas most likely to state that there are laws while those in predominantly rural areas are least likely to believe that this is the case. Both with respect to educational achievement and rural/urban status this is explained more by differences in uncertainty than by increasing proportions of meat purchasers who think that there are no laws.

Those eating meat daily were more likely than all other groups to think that there are laws covering the stunning of animals prior to slaughter; those eating meat less frequently were more likely to say that there are no such laws. The lowest proportion of those who thought that there are laws is amongst those buying only poultry (33%), largely as a result of almost half (47%) saying that they do not know whether there are laws or not. In contrast, half of those who buy only red meat believed that there are laws.
Finally, there is considerable variation in response by religious identity with Protestants and “others” most likely to believe that there are laws while Catholics and Orthodox Christians have the lowest proportion of people believing there are laws and the greatest proportion of uncertainty on this point.

3.2.5 Application of legislation covering pre-slaughter stunning

Having addressed the question above, interviewers informed respondents that there is legislation which requires animals to be stunned prior to slaughter. Respondents were then asked whether they thought that this legislation applies to all animals slaughtered in their country.

Figure 3.6 shows that less than a third (28%) of purchasers of meat in the EU-27 thought that legislation requiring stunning applies to all animals in their Member State while 38% thought that it does not apply to all animals. A third of meat purchasers did not know whether legislation applies to all animals.

As in the previous question there is more stated uncertainty amongst consumers in the EU-10 than in the EU-15. Almost half meat purchasers (45%) said that they do not know whether the law applies to all animals (compared to 31% in the EU-15). EU-15 meat purchasers were more likely to say that the laws do not apply to all animals slaughtered than those in the EU-10 (42% cf. 25%). Meat purchasers in the EU-10 were marginally more likely to say that the laws do apply to all animals slaughtered.

It was not possible to investigate why respondents held the belief that they do within the context of the survey, but it is likely that some are aware of exemptions for ritual slaughter while others may doubt that laws are actually enforced in their Member State. The relationship between the understanding of the existence of legislation and whether this applies to all animals is explored further below.
Figure 3.6: Question 5: Do you think this legislation requiring stunning applies to all animals slaughtered in your country?

Source: FCEC consumer survey.

Uncertainty increased with age and decreased with educational achievement. The proportion of meat purchasers which believed that legislation on pre-slaughter stunning applies to all animals decreased with age while the proportion believing that the laws do apply to all animals is less variable. A higher proportion of meat purchasers with high educational achievement correctly believed that the laws do not apply to all animals slaughtered compared to those with lower educational achievements. Students were more likely to say that the laws do not apply to all animals compared to other occupational groups. In terms of religious affiliation, Muslims and Catholics are the least likely to say that the laws on stunning do not apply to all animals slaughtered.

Around a fifth of meat purchasers in the EU-27 (21%) did not know whether there is legislation covering the pre-slaughter stunning of animals and, when told that there is legislation, did not know whether this applies to all animals slaughtered in their Member State. This is almost the same proportion as those who thought that there is legislation, but that it does not apply to all animals slaughtered (19% of EU-27 meat purchasers).

An investigation at the Member State level showed some surprising results. In Sweden, where slaughter without stunning has not been permitted since 1937 (Metcalf, 1989), a relatively low proportion of meat purchasers who thought that there is legislation covering pre-stunning thought it applied to all animals. This suggests a low level of knowledge of the ban on slaughter without stunning in this country. The proportion of meat purchasers in Poland, also a country where the
derogation is not used, who thought that there is legislation covering pre-stunning and also thought this applied to all animals was higher than average suggesting a greater level of awareness on this issue. This is also the case in Denmark. In both cases this is probably the result of the more recent debate. Meat purchasers’ perception on the use of stunning is also inaccurate in Member States where the derogation is in use. In Ireland, for example, almost three-quarters of those who thought that there is legislation covering stunning thought that this applies to all animals when in fact the derogation is used. The equivalent figure in the UK is just more than half which is especially surprising given the prominence that this issue is given in the media.

The fact that only half (49%) of meat purchasers are correct in their belief that there is legislation covering pre-slaughter stunning (see Figure 3.5) suggests a less than detailed understanding of the situation, although there will of course always be exceptions to this. It should be noted that it is not possible to know whether respondents really knew the answer to this question or simply guessed correctly. It is therefore likely that the level of awareness displayed is an over-estimation.

3.2.6 Labelling of meat from stunned and unstunned animals

Respondents were asked whether meat from animals which had not been stunned should be sold using similar labelling to other meat (i.e. where the animal had been stunned prior to slaughter). A third (32%) of EU-27 meat purchasers replied positively and 23% said that this is not an issue for them or did not know (this option was not prompted and is therefore a spontaneous response); 45% think that meat from animals which have been stunned or not stunned should not be sold using similar labelling (Figure 3.7).

Meat purchasers in the EU-15 are both more likely to say that meat from stunned and unstunned animals should be sold using similar labelling (33% cf. 29%) and that the meat should not be sold in this way (48% cf. 35%). This is not an issue for 36% of EU-10 meat purchasers compared to 19% in the EU-15. This demonstrates that this is a more important issue for consumers in the EU-15 than in the EU-10.

A correlation analysis was carried out against the percentage of Muslims in the population by Member State as a possible proxy for the likely general awareness of the practice of pre-slaughter stunning. No correlation was found. The extent to which this is considered to be an issue in individual Member States is therefore influenced by other factors.

---

13 The $R^2$ term was 0.0117 using percentage Muslim population aged over 15 based on Eurobarometer (2012) and 0.0031 using total percentage Muslim population from Pew Research Center (2011). A $R^2$ value of ±1 indicates a perfect statistical correlation; a value of 0 indicates no statistical correlation.
Figure 3.7: Question 6: Should meat from animals which are not stunned be sold using similar labelling as other meat?

Source: FCEC consumer survey.

Analysis by socio-demographic characteristics shows little deviation from the results above. A slight majority (51%) of 18-24 year olds and half of those aged between 25 and 34 think that meat from stunned and unstunned animals should not be sold using similar labelling, as do a majority of Muslims (62%) and those defining themselves as “other” (51%); exactly half of Protestants agree with this position. No other groups showed a majority in favour of using different labelling. A third (34%) of those buying only poultry said that this is not an issue for them; this is the highest proportion among all socio-demographic groups.

Meat purchasers who primarily buy their meat from outdoor markets are the most likely to feel that meat from stunned and unstunned animals should be sold using similar labelling, however, this group accounts for a relatively small share of total EU meat purchasers (4%).

There is little difference in response to whether meat from stunned and unstunned animals should be sold using similar labelling between those whose main purchase criterion is quality, price or origin. However, as one might expect, those whose main purchase criterion is production method have a different view with a higher degree of certainty of opinion and greater polarisation between those who felt that meat from stunned and unstunned animals should not be sold using similar labelling and those who felt that it should.
3.2.7 Interest in information on the protection of animals at slaughter

Respondents were asked whether they would look for information on how authorities check the rules on the protection of animals in slaughterhouses. Figure 3.8 shows that almost half (48%) of those purchasing meat in the EU-27 said they would while 40% said that they would not (11% did not know). To put this finding in context, GfK (2012) investigated the use made of point of sale information in the EU meat market and concluded that 68% of consumers use packaging labels in their purchase decision; 59% use shelf or counter labels. This suggests that a high proportion of meat purchasers who use labels would potentially seek out this information.

This result should be contrasted with the finding that general animal welfare concerns and specific concerns over stunning and animal welfare at slaughter are cited by an insignificant number of EU-27 meat purchasers when considering factors influencing their purchase decision (see section 3.2.2). This apparent contradiction reveals greater interest once a topic has been brought to the attention of the respondent.

When questioned about factors influencing purchase decisions respondents were not prompted. This means that the factors mentioned were those that spontaneously came to mind and which therefore they are most conscious of. With question 4 and 5 the respondent’s attention has been drawn to laws on stunning prior to slaughter and there will be a tendency to look for more information on how these laws are enforced. However, based on the analysis of the factors influencing purchase, it does not follow that those saying that they would look for this information would actually use the information to make a purchase decision.

There is greater consumer interest in receiving information on how authorities check the rules on protection of animals at slaughter in the EU-15 than there is in the EU-10 (50% cf. 42%), but again the proportion of meat purchasers saying that they would not look for this information is also higher (42% cf. 36%) as a result of the greater uncertainty in the EU-10 (22% cf. 9%).
Figure 3.8: Question 7: Would you look for information on how authorities check the rules on the protection of animals in slaughterhouses?

Source: FCEC consumer survey.

Analysis by socio-demographic characteristics shows very little deviation from the main result.

Consumers who mainly buy meat from supermarkets, hypermarkets and discount stores are more likely than those buying from other outlets to say that they would not look for information on how authorities check the rules on the protection of animals in slaughterhouses. Some 61% of those purchasing meat in outdoor markets say they would look for this information.

Those whose first purchase criterion is price are more likely to say that they would not look for information on how authorities check the rules on the protection of animals in slaughterhouses than those with other main purchase criteria. Quite logically, those whose primary purchase criterion is production method are the most likely to say that they would look for this information. Those whose first purchase criterion is religious slaughter are also more likely to say that they would look for information on how authorities check the rules on animal protection at slaughter. This is corroborated by GfK (2012) who found that consumers purchasing religiously slaughtered meat are more likely to look for animal welfare certifications. It is not clear if this is directly related to the issue of stunning or not.

The likelihood of meat purchasers saying that they would look for information on how authorities check the rules on the protection of animals in slaughterhouses increased with dissatisfaction with the clarity of information on meat/meat product labels. For example, almost two-thirds (62%) of those
who were “very unsatisfied” with the clarity of information on meat would look for information on how rules on the protection of animals are checked.

3.2.8 Interest in information on the stunning of animals pre-slaughter

Respondents were next asked a more specific question on whether they would be interested in receiving information on the stunning of the animal when they buy meat or meat products. Some 72% of meat purchasers in the EU-27 were interested in receiving this information to varying degrees (18% “very interested”, 27% “quite interested” and 27% “a little interested”). Considering only those who were “very interested” and “quite interested” reduces interest from 70% to 45% at the EU-27 level. A fifth (21%) did not want this information (Figure 3.9).

A higher proportion of meat purchasers said that they were “very interested” in receiving this information in the EU-15 than in the EU-10 Member States (20% cf. 9%), more also claimed to be “quite interested” (28% cf. 23%) and “a little interested” (28% cf. 21%). In contrast, a third of meat purchasers (33%) in the EU-10 Member States did not want this information compared to less than a fifth (19%) in the EU-15. Again, the proportion of meat purchasers who did not know whether they want the information or not is higher in the EU-10 at 14% compared to 5%.

Again, the way the survey was conducted needs to be borne in mind here. As discussed above, there is a difference between what consciously influences consumers’ choice and what they say they are also interested in when told about other issues. There is also potentially a difference between information that consumers desire and information on which they will make purchase decisions. It therefore does not follow from this expression of prompted demand that information on stunning made available at the point of slaughter would actually be used by consumers to inform their purchase decision.
Figure 3.9: Question 8: When purchasing meat or meat products, how interested are you in receiving information on the stunning of the animal

Source: FCEC consumer survey.

Figure 3.10 shows different attitudes towards receiving information on stunning by Member State and compares these to the EU-27 average\textsuperscript{14}. Member States where consumer attitude is significantly different from the EU average are shown in green.

The Figure is divided into four quadrants centred on the EU-27 average. No Member States feature in the top right quadrant. No Member States clearly fall in the bottom left quadrant where there would be the least strong views on this issue with little interest in either receiving or not receiving this information.

In Member States in the bottom right quadrant consumers have a stronger interest in receiving information on stunning than the average EU population. Austria is the only individual Member State which clearly falls into this group with respect to both axes. The EU-15 average also falls in this quadrant. This means that although we cannot be statistically confident that individual Member States fall into this category (apart from Austria), we can be confident that a weighted average of the EU-15 does.

\textsuperscript{14} The reader should bear in mind that the 95\% confidence interval at the Member State level is ±4.4\%. This means that a difference of 8.8\% between Member States is necessary to be 95\% confident that there is actually a difference. The 95\% confidence interval for the EU-15 is ±1.1\% and that for the EU-10 ±1.4\%.
Consumers from Member States in the top left quadrant have less interest in receiving information on stunning than the EU average. Bulgaria, Hungary, Slovakia and Poland clearly fall into this group, as does the weighted average of the EU-10.
Figure 3.10: Question 8: When purchasing meat or meat products, how interested are you in receiving information on the stunning of the animal? “very” and “quite” interested versus “not interested”

Source: FCEC consumer survey.
Analysis by socio-demographic characteristics revealed that women and those retired/aged over 65 were more likely to be interested in information on the stunning of animals compared to men and younger people. Men and younger people are more likely to state that they do not want this information. The strength of interest in receiving this information was greater for students and those in employment than it was for other occupational groups. Although overall interest in receiving this information was similar by educational achievement, the strength of interest increased with achievement. Those living in predominantly urban areas were more likely than others to want this information and those living predominantly in rural areas were less likely than others to want this information. Those in rural areas were most likely to explicitly say that they do not want this information.

Those who eat meat daily were more likely to say that they do not want this information than those eating meat less frequently. Interest in receiving this information was greatest among those eating meat several times a week or once a week. Interest in receiving information on stunning was also markedly higher among those who buy only red meat while 29% of those buying only poultry said that they do not want this information. Approximately the same proportion of Protestants and Muslims had some interest in receiving information on the stunning of animals (~80%), but the strength of interest was much greater among Muslims where 36% said that they were “very interested” in receiving this information (compared to 17%).

There was no appreciable difference in the desire or otherwise of meat purchasers to receive information on the stunning of animals between the largest meat sales outlets, supermarkets, hypermarkets and discount stores and butchers which together are the primary meat suppliers to 88% of the EU-27 population. There was slightly less interest among meat purchasers in the other groups in receiving this information, but this did not generally translate into a desire not to receive this information due to the larger proportion of meat purchasers which did not know whether they want this information or not.

The greatest interest in receiving information on the stunning of animals was expressed by those who purchase mainly according to production method. However, whilst the proportion of those whose first purchase criterion is price which said that they were “very interested” is low relative to those making purchase decisions based on origin and production methods, it is the same as those whose main criterion is quality. Those whose main purchase criterion is quality were more likely than those for whom price is paramount to say that they did not want this information. There is no difference between those whose main purchase criterion is price, origin or production method in terms of the proportion of meat purchasers not wanting to receive this information.

Those who said they were “very unsatisfied” and those “very satisfied” with the clarity of information on meat/meat product labels were most likely to say that they would be “very interested” in receiving information on the stunning of animals, with those “very unsatisfied” being most likely to be “very interested” in this information. Those who did not know whether they are satisfied or not with the clarity of information on meat labels were substantially more likely than any other group to say that they did not want to receive information on stunning (45%), although these only account for 2% of the EU-27 meat purchasing population.
Although the overall interest in receiving information on the stunning of animals prior to slaughter was similar for those who did and did not think that there are laws covering the stunning of animals prior to slaughter, the strength of this interest is greater for those that did think there is legislation (“very interested” in receiving information 23% (11% of total) cf. 20% (4% of total) and “quite interested” 33% (16% of total) cf. 24% (4% of total). Those who did not think there are laws covering pre-slaughter stunning were slightly more likely than those who did think there are laws to say that they did not want to receive information on stunning. However, those who did not know whether there are laws on stunning pre-slaughter were the most likely to not want to receive this information (31%, 10% of the total).

There is no overall difference in interest in receiving information on stunning according to whether meat purchasers felt that meat from animals which have been stunned should be sold using similar labelling to meat from animals which have not been stunned. However, the interest in receiving this information was slightly stronger amongst the group who thought that meat should be sold using similar labelling regardless of whether the animal was stunned. As would be expected, those who said that this was not an issue for them are most likely to not want information on stunning (40%, 9% of all EU-27 meat purchasers).

As interest in receiving information on stunning declined, so did the intention to look for information on how authorities check rules on the protection of animals in slaughterhouses. Some 79% of those who were “very interested” in receiving information on stunning said that they would look for this information (14% of EU-27 meat purchasers) compared to 73% of those who were “quite interested” in receiving information on stunning (20% of total) and 27% of those who were “a little interested” (7% of total). Only a fifth (20%) of those who said that they did not want information on stunning said that they would look for information on the protection of animals in slaughterhouses (4% of total).

### 3.2.9 Interest in receiving information and views on labelling

Figure 3.11 compares interest in receiving information on stunning with views on whether meat from stunned and unstunned animals should be separately identified based on responses to the two corresponding survey questions. The Figure is divided into four quadrants centred on the EU-27 average response to the two questions. Member States which clearly fall into the four quadrants are shown in green. In a total of nine Member States, the results are significantly different from the EU average. This indicates that there is a range of significantly different views between Member States.

In Member States in the top right quadrant, meat buyers are more interested in receiving information on stunning and are more likely to think that meat from stunned and unstunned animals should be differentiated via labelling. Meat buyers in Ireland, Belgium and France are all sufficiently different from the EU-27 to be confident that they fall into this quadrant.

In Member States in the bottom right quadrant, meat buyers are more interested in receiving information on stunning, but are more likely to think that meat from stunned and unstunned animals

---

15 The reader should bear in mind that the 95% confidence interval at the Member State level is ±4.4%. This means that a difference of 8.8% between member states is necessary to be confident that there is actually a difference in response. The 95% confidence interval for the EU-15 is ±1.1% and that for the EU-10 ±1.4%.
should be sold without differentiating labelling. However, it is not possible to be fully confident that any of these Member States are different to the EU-27 with respect to both axes.

In Member States in the bottom left quadrant, meat buyers are less interested in receiving information about stunning and are more likely to think that meat from stunned and unstunned animals should be sold without differentiating labelling. In other words this does not appear to be an issue which concerns them. Meat buyers in Poland, Slovakia, Spain and the EU-10 clearly fall into this quadrant.

In Member States in the top left quadrant, meat buyers are less interested in receiving information about stunning and are more likely to think that meat from stunned and unstunned animals should be differentiated via labelling. Meat buyers in Bulgaria, Hungary and Finland clearly fall into this quadrant.
Figure 3.11: Question 6: Should meat from animals which are not stunned be sold using similar labelling to other meat? EU-27, Question 8: When purchasing meat or meat products, how interested are you in receiving information on the stunning of the animal?

Source: FCEC consumer survey.
3.2.10 Interest in animal welfare protection at slaughter and information on stunning

Figure 3.12 compares interest in information on how authorities check the rules on the protection of animals in slaughterhouses with interest in receiving information on stunning. The Figure is divided into four quadrants centred on the EU-27 average. Member States which clearly fall into the four quadrants are shown in green.

The Figure is centred on the EU-27 and shows that meat purchasers in Member States in the top right quadrant are relatively interested in receiving information on stunning and are relatively likely to look for information on how authorities check rules on the protection of animals in slaughterhouses. This applies most reliably to Slovenia and Austria. The EU-15 average appears in this quadrant, but the difference from the EU-27 average is not significant.

Meat purchasers in Member States appearing in the bottom right quadrant are relatively interested in receiving information on stunning, but are relatively unlikely to look for information on how authorities check the rules on the protection of animals in slaughterhouses. The Member States here are relatively close to the EU-27 average in terms of the likelihood of looking for information on the protection of animals in slaughterhouses.

Meat purchasers in Member States in the bottom left quadrant are less interested in receiving information on stunning and are relatively unlikely to look for information on how authorities check the rules on the protection of animals in slaughterhouses. Hungary, Bulgaria and Finland are comfortably placed in this group, as is the EU-10 average, although this is close to the EU-27 average in terms of the likelihood of looking for information on the protection of animals in slaughterhouses.

Finally, meat purchasers in Member States in the top left quadrant are relatively less interested in receiving information on stunning, but are relatively likely to look for information on how authorities check the rules on the protection of animals in slaughterhouses. Poland is the only Member State which clearly falls into this group with respect to both axes.

---

16 The reader should bear in mind that the 95% confidence interval at the Member State level is ±4.4%. This means that a difference of 8.8% between member states is necessary to be confident that there is actually a difference in response. The 95% confidence interval for the EU-15 is ±1.1% and that for the EU-10 ±1.4%.
Study on information to consumers on the stunning of animals: Final Report

DG SANTE Evaluation Framework Contract Lot 3 (Food Chain)

Figure 3.12: Question 7: Would you look for information on how authorities check the rules on the protection of animals in slaughterhouses? EU-27, Question 8: When purchasing meat or meat products, how interested are you in receiving information on the stunning of the animal?

Source: FCEC consumer survey.
3.2.11 Interest in the type of information available on stunning

Those respondents who indicated that they would be interested in receiving information on stunning via labelling (79% of the total) were asked the extent of information they would like to receive. The respondent could choose between two responses. Figure 3.13 shows that almost half (47%) of those meat purchasers in the EU-27 wanting information on stunning would prefer to know **whether and how** the animal was stunned (equivalent to 37% of all meat purchasers). In contrast, 38% would prefer just to know **whether** the animal had been stunned (30% of all meat purchasers). Fifteen per cent of EU-27 meat purchasers who said that they do want information on stunning did not know which option they would prefer (12% of the total).

A higher proportion of meat purchasers in the EU-15 expressed an opinion on the nature of the information that might be communicated compared to those in the EU-10 which results in a (slightly) greater proportion of meat purchasers who want information only on whether the animal was stunned or not (38% cf. 35%) and a greater proportion of those who want to know the method used to stun as well (48% cf. 43%).

By being prompted with a set of possible choices, respondents may have felt inclined to request as much information as possible. It does not follow that consumers would necessarily use this additional information when making a purchase decision and it is also questionable whether consumers are sufficiently aware of stunning methods to make an informed decision on this basis.

![Figure 3.13: Question 9: If information were to be made available on the stunning of animals, which of the following options would you prefer? (n = 10,472)](source: FCEC consumer survey)
Analysis by socio-demographic characteristics showed some relatively minor differences including that people purchasing meat who live in urban areas were more likely than those living in other areas to want to know only whether animals have been stunned or not. The most substantial differences are in relation to religious identity where a majority of Muslims (58%) said that they would like to know only whether an animal has been stunned or not; this is the only socio-demographic group in which a majority expressed this view. A majority of the following groups would prefer to have information on the method of stunning used as well: Orthodox Christians (52%), Protestants (51%), high level of educational achievement (51%), those seeking work (57%), students (53%) and those aged 18-24 (53%). Generally, however, there was no clear majority for either approach, which is also the case at the EU-27 level.

There are some differences by sales channel, most notably between those mainly using butchers, supermarkets, hypermarkets or discount stores and those using groceries and convenience stores. Those using the latter were less likely to want to know only whether the animal was stunned or not. However, though the proportion of those wanting to know the method of stunning used was the same in all groups there is a higher proportion of people unable to state their preferred option in the small store group.

Those whose main purchase criterion is production method were more likely than other groups to want information on the method used to stun animals. In turn, those whose main purchase criterion is origin were more likely to want information on the stunning method used than those who purchase mainly on quality. Those purchasing mainly on quality were more likely to want this additional information than those shopping mainly on price.

As meat purchasers became more interested in receiving information on the stunning of animals, the more certain they were about the information they want. Almost a third (30%) of those in the EU-27 who were only “a little interested” in receiving information on the stunning of animals did not know which option they would prefer (8% of the total population). In contrast, the uncertainty for those “quite interested” and “very interested” in receiving this information is negligible. There is also a substantial increase in the proportion of meat purchasers who wanted to know the stunning method used as interest in receiving this information increased. There was no such increase in the proportion of those who simply wanted to know whether the animal was stunned or not.

3.2.12 Preference for communicating information on stunning

Respondents interested in receiving information on stunning via labelling (79% of the total) were asked how they would like this information to be communicated. A majority (53% of the group or, 42% of total population) would prefer a written description while a third (33% of the group or, 26% of total population) would prefer a numeric code (Figure 3.14). Some 14% did not know which option they would prefer (11% of total). The preference for a written description was strongest in the EU-15 compared to the EU-10 (55% cf. 47%). The preference for a numeric code was strongest in the EU-10 countries (36% cf. 32%). Only in Lithuania, Latvia, Estonia, Hungary and Slovakia did a majority of meat purchasers prefer a numeric code to a written explanation.
Figure 3.14: Question 10: If information were to be made available on the stunning of animals, how should this be done? (n = 10,472)

Source: FCEC consumer survey.

Analysis by socio-demographic characteristics shows that all specific groups contain a majority who wished to see information on stunning conveyed using words. This majority was the highest amongst students (62%) and lowest among those with a low educational achievement (50%). This might result from either a perceived ability/ inability to understand the labelling message or simply interest in information.

Those who mainly buy meat from butchers and from large stores (supermarkets, hypermarkets and discount stores) had similar views in terms of how information on stunning should be conveyed. Together these stores are the main place of purchase for 88% of EU-27 meat purchasers who want information on stunning. Meat purchasers buying meat mainly from small stores (grocery and convenience stores) were more likely to want information on stunning to be presented using a numeric code than those buying meat from other outlets and less likely to want information to be conveyed using words (these account for 3% of EU-27 meat purchasers who want information on stunning). This may reflect a generally lower interest in receiving information on stunning amongst this group (see section 3.2.8).

There is no difference in the proportion of those who wanted to see information on stunning conveyed using a numeric code according to the main purchase criterion. However, those who said that origin is their most important purchase criterion were more likely than any other group to want this information.
conveyed in words. Those whose main purchase criterion was price were least likely to want to see this information conveyed in words.

Those who were “very unsatisfied” with the clarity of information on meat labels were more likely to want to see information on stunning conveyed in words than any other group. Those who were “satisfied” with the clarity of information were more likely to want to see this information conveyed using a numeric code. Essentially those who do not find information clear prefer textual explanations as might be expected. Combining the satisfied categories together and the unsatisfied categories together shows that those generally unsatisfied with the clarity of meat labelling were more likely to want to see information on stunning conveyed using words (60%, 7% of EU-27 meat purchasers, cf. 55%, 35% of EU-27 meat purchasers).

As meat purchasers become more interested in receiving information on the stunning of animals, the level of uncertainty in terms of how they would like this information to be communicated decreases. Only 2% and 3% of those “very interested” and “quite interested” respectively did not know how they want information to be conveyed compared to 24% of those that are “a little interested” and 44% of those that did not know whether they want information on stunning or not. There was no difference between those who were “very interested” and those who were “quite interested” in terms of the proportions wanting information to be conveyed using words or a numeric code.

3.2.13 Reasons for not wanting information on stunning

Respondents who indicated that they did not want information on stunning via labelling were asked to provide a reason for holding this view (21% of the total). Respondents were not prompted and the interviewer coded the responses provided. The main rationale for not wanting this information was simply that it is unnecessary (not wanted or needed) which indicates that the information would not be used (45% of the group or 9% of the total). Beyond this, almost a quarter (23% of the group or 5% of the total) trusted the shop from which they buy their meat and therefore require no further assurance. Almost a fifth (18% of the group or 4% of the total) said that they do not like to think of animals when they buy meat (Figure 3.15).

The number of respondents (before weighting) providing other answers was too small to provide reliable analysis. Some 106 out of 3,028 felt that there is already too much information available on meat and meat product packaging. Ninety-seven believed that animals should always be stunned, so this information should not be necessary. Ninety respondents felt that conveying this information could increase the price. In all cases these numbers are equivalent to less than 1% of the total meat purchasing population. Only five respondents feel that providing this information may risk limiting freedom of religion or might stigmatise minorities.

Analysis by Member State grouping is not possible because the number of respondents who stated that they did not want information on stunning is too small. Information by groups of Member State is included in Figure 3.15 for completeness only and should not be considered fully reliable.
Figure 3.15: Question 11: If you do not want this information, what would be the main reason? (n = 3,028)

Source: FCEC consumer survey.

Analysis by socio-demographic characteristics showed that women were more likely than men to say that they do not want this information because they do not like to think about animals when they are buying meat. The retired/those over 65 were more likely than other occupational/age groups to say that they do not need this information because they trust the place from which they buy meat. Although the respondent base is too low to make a definitive comment, it is worth noting that Muslims are the only group for whom limiting freedom of religion/stigmatising religious beliefs is a reason for not wanting information on stunning to be available via labelling; Muslims are also more concerned about possible price increases than any other socio-demographic group.

Trust in the sales outlet was higher in relation to butchers than any other outlet and those who buy meat mainly from a butcher are least concerned about possible price increases. Those who shop for meat mainly in large stores (supermarkets, hypermarkets and discount stores) were the most likely to say that they do not like to think about animals when they are purchasing meat.

Those whose first purchase criterion is production method were more likely than other groups to say that they do not want information on stunning method because they trust the place from which they buy meat. Those whose first purchase criterion is origin were more likely than those citing quality or price to say that they trust the place from which they buy meat. As might be expected, those whose first purchase criterion was price were the most likely to cite possible price increases as the reason they did not want to receive information on stunning.
4 Results from the stakeholder consultation

This Chapter reports the results of the consultation with EU level stakeholders and national stakeholders in the context of our six case studies. The EU level stakeholders which took part in our focus group are set out in Section 2 and the discussion is presented in Appendix 6. The case study monographs, including the stakeholders consulted, are presented in Appendix 7.

The organisations and constituencies that stakeholders represent should be borne in mind. Industry stakeholders represent various parts of the food supply chain and as such have an interest in selling meat and meat products and capturing added value for their members. They cannot be expected to be in favour of initiatives which either increase cost which may not be capable of full transmission to consumers or may have either direct or indirect adverse impacts on overall meat sales. Animal welfare organisations have an interest in improving animal welfare and therefore can be expected to support initiatives which either explicitly improve aspects of animal welfare or at least cause consumers to consider the issue more thoroughly. Organisations which represent specific segments of society would not wish to support initiatives which have the potential to be used to stigmatise their members or the practices of their members, but on the other hand, may be supportive of initiatives which provide necessary information to their members at the point of sale. These different perspectives do tend to result in contrasting views.

4.1 Introduction to the case study countries

Slaughter without stunning has been banned in Sweden since 1937 (Metcalfe, 1989) and in Poland since January, 2013 following a series of amendments to the law in an attempt to introduce consistency between Polish and EU legislation. Slaughter without pre-stunning is also banned in Germany, although exceptions can be granted by the Länder Competent Authorities in order to meet the requirements of specific groups. Slaughter without stunning is permitted under the religious derogation in France, Spain and the UK, although the derogation is interpreted differently with Spain allowing animals to be either slaughtered without stunning or pre-stunned at parameters outside those specified in Annex 1 of Regulation (EC) No 1099/2009. The official position in the UK and France is that use of the religious derogation allows no pre-stun, but that any use of pre-stunning must conform to Annex 1 of the Regulation. In the case of France, slaughterhouses must additionally demonstrate demand for meat from animals which are not pre-stunned in order to balance supply and demand. The impact of this requirement has been a reduction in the use of no stun slaughter.

Whilst there is agreement that pre-stunning is not permitted in Shechita slaughter (leading to Kosher meat), there are different views in terms of Zabihah (leading to meat which is Halal). Muslims in Sweden widely accept the use of pre-stunning and this is also thought to be the case in Poland where the Muslim population amounts to only 45,000 (see Table 2.1) and Germany where two Halal certification schemes permit pre-stunning and one even accepts the use of Controlled Atmosphere Stunning in poultry. In all three cases Muslim and Jewish consumers who require unstunned meat

17 France, Germany, Poland, Spain, Sweden and the UK.
18 The situation in Poland is fluid with a failed attempt to allow the use of the religious derogation rejected in July 2013.
19 Ferrari and Bottoni (2010) also report bans on slaughter without stunning in Latvia and the Finnish province of Åland.
must import this. In Spain there is production of both stunned and unstunned Halal meat, although where stunning is used (mainly the poultry sector) this is generally done using parameters outside those set out in Annex 1 of Regulation (EC) No 1099/2009. There is an ongoing debate in the Muslim community in the UK about the acceptability of pre-stunning. One of the two largest Halal certification bodies permits the use of pre-slaughter stunning where the stun is reversible, while the other does not.

Under the prevailing legal framework, there is no production of meat from unstunned animals in Poland or Sweden and only minimal production in Germany.20

There is no legal obligation to record the proportion of animals slaughtered without stunning and there is therefore no comprehensive official data set. The Dialrel project investigated the prevalence of stunning in the context of religious slaughter using a spot survey in six Member States (Velarde and Cenci Goga, 2010). However, this was small-scale and not representative. In France, calculations from official reports on this subject21 and estimations provided by stakeholders suggest that between 10% and 30% of beef/veal is slaughtered without pre-stunning and 45% to 50% of sheep; the incidence of slaughter without pre-stunning is below 1% for poultry. No estimations were provided for Spain, but 25% of slaughterhouses are approved for slaughter under the derogation. These tend to be smaller establishments and some may be using pre-stunning, so 25% would represent the maximum proportion and in reality it is expected that the true proportion of animals slaughtered without stunning is substantially less. A survey of slaughterhouses undertaken by the UK’s Food Standards Agency in September 2011 revealed that 3% of cattle are slaughtered without being pre-stunned, 10% of sheep and 4% of poultry (FSA, 2012). A repeat of this survey in September 2013 showed that 2% of cattle were slaughtered without being pre-stunned, 15% of sheep and goats and 3% of poultry (FSA, 2015). This would suggest an increasing demand for unstunned sheep and goat meat, but static demand for unstunned poultry and cattle.

There is a perception amongst stakeholders that some meat from unstunned animals ends up on sale in the general market where it can be purchased by consumers who are unaware of this. This is most notably the case in France (although mitigated by the need to match supply to demand), Spain and the UK where slaughter without stunning is permitted under the derogation; the smaller quantities of meat produced from unstunned animals in Germany reduces the risk there. Despite the mandatory use of stunning, it is possible that imported meat from unstunned animals also enters the general market in Germany, Poland and Sweden (of course, this could also be the case in the other case study countries).

No EU-level stakeholders were able to quantify the volume of meat from unstunned animals that is present outside the specific religious markets, but the widespread perception is that (a) this meat does exist; and, (b) it is most likely to be found in the wholesale and catering sectors. Many retailers have supplier codes that insist all meat sold under own-branded products is from animals which are pre-stunned (see section 4.9). Stakeholders in Germany, Poland, Sweden and the UK explicitly stated

---

20 1,247 sheep were slaughtered without pre-stunning in 2012, no cattle and, although there are no data, stakeholders did not think that any poultry are slaughtered without stunning.
21 Sénat (2013); CGAAER (2011).
that it is highly unlikely that meat from unstunned animals is available through the retail sector in their Member States.

4.2 Reaction to the consultation paper

Focus group attendees and case study interviewees were invited to comment on the consultation paper presenting the findings of the consumer survey. Generally, those consulted found that the results were in agreement with previous evidence with which they were familiar and with their expectations. No stakeholder disputed the findings.

However, some stakeholders drew different conclusions from the survey results to others. Eurogroup for Animals concluded that the survey reveals a real interest in receiving information on whether animals have been pre-stunned and the method used, but UEBVC and the Conference of European Rabbis concluded that animal welfare is not a decision criterion at the point of purchase. In our opinion the lack of spontaneous interest in animal welfare at the point of purchase suggests that this is not an issue at the front of consumers’ minds.

The Federation of Islamic Organisations in Europe explained that the difference in results by EU-15 and EU-10 groupings is likely to result from different levels of political/media interest in this topic. This is very likely to be a factor in the differences observed given the difference between spontaneous and prompted interest revealed in our survey.

AVEC and Eurogroup for Animals suggested that the best way in which to convey information on stunning to consumers would be through the use of a numeric code as this would allow those consumers with an interest to make an informed choice. This was despite both organisations agreeing that the numeric codes system used to explain egg production systems is poorly understood by consumers and that stunning is a much more complicated issue (see also section 4.5).

Eurocommerce explained that retailers are able flexibly to respond to consumer demands using voluntary labelling and that voluntary approaches provide better added-value for consumers as they respond directly to expressed demand. The point was also made that retailers are free to provide information through channels other than point of sale labelling should they feel that this is necessary. In this context Eurocommerce explained that consumers spend very little time looking at labels while shopping and adding more information to labels is unlikely to form an effective means of communication. GfK (2012) noted that a third (32%) of consumers do not use packaging labels in their purchase decision.

In terms of criticisms, UECBV noted that the survey did not ask about the motivations for wanting information on pre-stunning and did not contextualise demand for information on stunning by comparing it to demand for other aspects of production such as environmental impact. AVEC pointed out that the use of survey methodologies for issues such as this has limitations in that the knowledge base of those interviewed can be questioned. This can lead to misunderstandings in terms of how questions and issues are understood, although there is no evidence to conclude that this is the case here. Eurocommerce added that in reality consumers do not use individual decision criteria to inform purchase decisions with trade-offs being made between price and perceived quality/product attributes.
With respect to all points, it needs to be borne in mind that the only feasible way robustly to understand consumer views is through a survey methodology and that, given this methodology, there are limits to the number of questions that can be asked and the depths to which investigation can be taken.

Case study stakeholders in France and Spain were generally unsurprised at the low unprompted mention of animal welfare as a purchase decision criterion, although French retailers proved an exception noting a high level of consumer interest in animal welfare at slaughter in 2012 when this issue was the subject of substantial national debate. Animal welfare organisations in the UK expressed some surprise at what they considered to be a low level of desire to receive information about stunning given the interest in the subject shown by MEPs, which presumably reflects MEP’s perception of public interest; some surprise was also shown in this regard by a stakeholder in Sweden. It is likely to be the case that consumer interest increases when this issue is a prominent media topic and awareness is heightened. However, the media is also likely to act as a magnifier of genuine consumer interest.

4.3 Consumer demand for information on stunning

Stakeholders discussed consumer demand for information on stunning in terms of basic interest, the motivation for this interest and the extent of interest in knowing the method of stun used.

4.3.1 Consumer interest in information on stunning

AVEC made the general point that consumers rely on the proper functioning of the entire food system and need to be assured that animal welfare is respected along the whole food supply chain, not just at slaughter (a point also made by the Conference of European Churches).

This is supported by Buller (2009) who concluded that consumers increasingly want to know that animal welfare has been suitably addressed by food providers throughout the supply chain. European Commission (2007a) reported that 58% of EU-25 consumers would like to receive more information about general farming conditions and Which? (2013b) found that 50% of UK consumers felt that they needed more information on animal welfare standards in general. This suggests a desire for information on animal welfare, although not necessarily on the specific issue of slaughter. It does not follow that this information would be used in a purchase decision.

Generally consumers have greater interest in livestock production and transportation standards than they do in slaughter conditions, although this does differ by Member State (see for example, Kjærnes, et al, 2007; IGD, 2007). Consumers may also be unwilling to engage with the details of the slaughter of livestock as there is frequently a disconnection between meat at point of sale and the animal it came from (Schroder and McEachern, 2004) based on a lack of knowledge (Kjærnes, et al, 2007).

Some stakeholders held perceptions of consumer demand for information on stunning based on their own experience or research to which they have had access. As noted above, no stakeholders could provide any evidence which contradicted the findings of our consumer survey.

The only EU-level stakeholder which presented evidence on consumer demand for information on stunning was Eurogroup for Animals. A survey carried out on behalf of one of their member
organisations in France found that, when asked, 71% of consumers wanted to know the method of stunning (31% said that this was very important and 40% said that this is somewhat important). It should be noted that other stakeholders in France, interviewed within our case study, claimed that this survey contained a degree of bias; certainly this organisation is not neutral in this debate.

IBC was not aware of any consumer interest in receiving information on stunning based on their experience, although again this stakeholder can be considered to have a vested interest in this issue. However, Buller (2010) noted that retailers across Europe have consistently rejected the idea of developing animal welfare labels because, in their opinion, animal welfare does not sell. This argument implies that if there were sufficient consumer interest in information on stunning then retailers would have reacted to this. The fact that they have not suggests little consumer interest.

Although not strictly related to demand for information on stunning at the point of sale, FVE explained that its position papers on slaughter without stunning (only available in English) were downloaded 2,884 times in 2013; by comparison, the FVE’s top priority in 2013 was antimicrobial resistance following the release of two press releases on this topic and five leaflets in 2012 (in all EU languages) which resulted in a total of 4,170 downloads in 2013. The conclusion that we draw from this is that there is an absence of objective evidence to suggest that consumers generally have a strong interest in this issue.

Stakeholders across all Member State case studies were of the opinion that consumer interest in receiving information on stunning is generally low, although this is an important issue for a small number of relatively vocal consumers. For example, those interviewed in France think that the latent interest in this issue is amplified by campaigning stakeholders; Polish stakeholders felt that interest in this issue is sensationalised by the media and interested organisations. UK stakeholders also recognised the importance of the media in prompting debate on this issue. A high proportion of stakeholders across all case study countries felt that while there is considerable interest in animal welfare in food production, this does not translate into specific interest in animal welfare at slaughter.

The Swedish Competent Authorities receive a small number of questions on the issue of pre-slaughter stunning per year. There is currently (December, 2014) an open online petition in the UK on a government-sponsored forum entitled “End non-stun slaughter to promote animal welfare”. As of 16 December, 2014, this had received 79,592 signatures. It is difficult to contextualise this, but over 170,000 signed an online petition on the same forum to prevent travel companies increasing their prices in school holidays. Again, there is an absence of evidence to suggest that consumers are generally interested in receiving information on stunning, although this is an important issue for some.

There has been a previous attempt to introduce labelling to differentiate meat from stunned and unstunned animals in Spain. The rationale for this was that unstunned meat entering the general market was misleading for consumers rather than that there was a demand for this information per se. In fact, the initiative was put forward under a real decreto, which means it does not require political discussion. There was no attempt to quantify the volumes of meat concerned; neither was there a public debate, although stakeholders were consulted. A proposal to introduce labelling was duly submitted to the Commission, but was rejected on the grounds that the proposal was not supported by

---

22 http://petitions.direct.gov.uk/petitions/64331.
23 http://petitions.direct.gov.uk/petitions/46455.
any evidence of consumer interest in this matter. Stakeholders in Spain reported little current consumer interest in this issue.

Stakeholders in all case study countries felt that price and quality attributes are more important to consumers than information on stunning. Price is especially important in Germany and to a substantial proportion of Swedish consumers. Quality and price are considered to be the main purchase criteria in Poland and Spain.

Some stakeholders in Germany, Spain and the UK felt that labelling to differentiate meat from stunned and unstunned animals is justified to inform the consumer, even if there is no specific consumer demand. The rationale behind this position is that there is a potential information gap and, this being the case, consumers should be provided with information to ensure that they are not misled. In other words, consumers have a right to know, even if they do not request to know.

Bringing together the views of EU stakeholders and those in the case study Member States, it is not possible to conclude that there is widespread consumer interest in information on stunning. However, this is an important issue for some consumers.

4.3.2 Motivation for interest

Where there is interest in receiving information on stunning, the main motivation is concerns over animal welfare. However, stakeholders in Sweden and the UK noted that some people are motivated by other concerns such as a desire to avoid Halal meat, although this represents a misunderstanding of the requirements of Halal given that in both these Member States there is some (near universal in Sweden) acceptance of pre-stunning as Halal. In fact, it is worth noting that there is considerable conflation between slaughter without stunning and Zabiha (Halal), particularly in Poland, Sweden and the UK. This reflects media reporting which in some cases may be related to the political views held by sections of the media. As a general rule, requests for information on stunning are not solely motivated by animal welfare concerns in all cases; there appears to be an association between non-animal welfare motivations for wanting information on stunning and a wider societal debate on immigration and integration.

4.3.3 Interest in method of stun

The general conclusion from our survey is that information on the method of stun is not relevant to consumers. Stakeholders in Germany and the UK explained that this is a very technical issue and that Regulation (EC) No 1099/2009 contains a number of acceptable options and there is no basis on which to differentiate between these; consumers would therefore have no additional information on which to base a purchase decision. Several stakeholders in Sweden, Spain and the UK felt that consumers do not have sufficient knowledge to make use of information on specific stunning methods; those in Sweden concluded that simply indicating whether stunning was used would meet the information need which is to know that animals did not suffer unduly at slaughter. Stakeholders in Sweden also made clear that should labelling be introduced, this should refer to pre-stunning and that the term “stunning” must mean in accordance with the parameters set out in Annex 1 of Regulation (EC) No 1099/2009 in all cases. Stakeholders in Poland pointed to the lack of demand for information as justification to only consider labelling whether animals had been stunned or not.
However, religious organisations, especially in the UK, took a different view and felt that the method of slaughter should be included on any label. The justification for this was that if the objective is to provide information to consumers, then full information should be provided. One UK stakeholder pointed out that this information would be helpful for Muslim consumers who might accept electrical stunning of poultry, but not the use of Controlled Atmosphere Stunning; this was also pointed out in Germany. However, given the debate in the UK over whether reversible stunning is permitted, it is not clear whether this would actually assist the consumer. Some animal welfare organisations accepted merit in providing the method of stun to avoid stigmatising the practices of religious minorities.

On balance, stating the method of stun, and thereby focusing on the process and not the outcome, would go beyond the need to provide information on the welfare of animals at slaughter. It is also likely to provide information which the consumer is not equipped to understand (see section 4.4).

4.4 Consumer understanding of slaughter practices

Stakeholders considered the extent to which consumers understood slaughter practices. This is relevant when considering the nature of the information which might be made available and is an important component of the consumer decision making process (Ingenbleek and Immink, 2011).

Stakeholders were not able to identify any research specifically into the extent of knowledge of slaughter practices held by consumers. However, European Commission (2007a) reports on citizen knowledge of the conditions under which animals are farmed. Some 12% of EU-25 citizens reported a lot of knowledge, 57% a little knowledge and more than a quarter (28%) no knowledge at all (although there is no way to validate these opinions). Substantial differences in knowledge by Member State exist. Miele (2010) also reported a general lack of knowledge of contemporary farming methods. This is also reflected in the Commission’s 2012-2015 animal welfare strategy (European Commission, 2012). Finally, GfK (2012) reported that 28% of EU-27 meat consumers say that they do not buy more animal welfare certified meat because they are not sufficiently well informed. European Commission (2005) noted that consumers may have some difficulty in identifying products with higher animal welfare. Half (51%) stated that they can very rarely or never identify from the label whether the production system involves higher animal welfare when they buy eggs, milk or meat. This suggests that even for an issue on which there is a reasonable amount of consumer communication there is still a knowledge gap.

The stakeholder consultation revealed that there is little expectation that consumers generally understand the slaughter process. UECBV noted that contemporary society actively tries to avoid the link between animals and food products. The Conference of European Rabbis and UECBV explicitly stated that consumers do not have enough knowledge to understand slaughter practices (see section 4.3.3). Some organisations felt that consumers who are motivated to understand slaughter practices would do so if these were explained properly. However, this is likely to be a small group.

Case study consultees confirmed a general lack of consumer understanding of slaughter practices. French stakeholders stated that many consumers would not know what stunning is and would certainly not be informed about different stunning methods. German stakeholders explained that there is a general disconnect between the cuts of meat on sale and the animals from which they are
derived. **Spanish** stakeholders felt that the only group with substantial knowledge of slaughter is vegetarians and that this knowledge is often a factor in the decision not to eat meat.

Stakeholders in **Poland** pointed out that the lack of understanding of slaughter processes can be clearly seen when this issue is debated, including amongst the organisations engaged with the debate; this is also clearly the case in the **UK**. As a result, many consumers across the EU assume incorrectly that Halal is synonymous with not stunning. Stakeholders in **Sweden** were unsure whether consumers would realise that pre-slaughter stunning is *mandatory* in Sweden. Stakeholders thought that some may assume that it just takes place and that many would assume that the situation in the rest of the EU is the same as it is in Sweden. However, our survey suggests that awareness is actually relatively low in Sweden (see section 3.2.5).

**UK** stakeholders saw no reason to suppose that Muslim and Jewish consumers have any different insight into slaughter processes, although the point was made that there is a difference of opinion within the Muslim community with regard to the acceptability of reversible stunning which suggests a slightly higher degree of knowledge.

**German** stakeholders explained that consumers do not want to understand slaughter practices and instead rely on the relevant authorities and the retailers to ensure that slaughter is carried out humanely; **French** stakeholders noted that consumers do not want to become experts in slaughter. Despite the horsemeat scandal, **UK** stakeholders felt that consumers place their trust in retailers (and local butchers) to source responsibly and to implement reasonable standards in relation to animal welfare; there is therefore no need for further assurance. This element of trust is considered to be even important for Muslim and Jewish communities, a large proportion of which rely on small-scale, specialist, butchers. **Spanish** consumer trust in local butchers is also high.

Some Competent Authorities provide the public with information on slaughter, including the use of stunning (for example, **Sweden** and **Germany** provide information on government websites; in the case of Sweden this make it very clear that stunning is mandatory). It is quite common for animal welfare organisations to provide information and this is generally considered by other stakeholders to be accurate, at least from the main animal welfare organisations, if not always objective (**Poland**). Beyond the main animal welfare organisations, stakeholders often consider information on the internet to be misleading. Retailers are somewhat reluctant to provide information on slaughter. Of the big four **UK** retailers, only Tesco has published information online, as a mere “defensive” response to the political debate which took place in early May, 2014.

**Spanish** stakeholders often considered information provided by the media to be confused. Such information is generally made available only when an issue occurs, which is likely to result in negative perceptions. Religious organisations (predominantly Muslim due to the different interpretations of Halal) communicate with consumers on slaughter, especially in **Poland** and the **UK**.

We conclude from the above that consumers across all case study Member States do not understand slaughter practices and are not generally aware of different stunning methods. The only exception to this is Muslim consumers in Member States where there is a debate over the acceptability of pre-slaughter stunning, although even here it is not clear whether greater engagement in the debate leads to better understanding. It is also likely that most consumers do not want to increase their understanding,
preferring instead to place their trust in the supply chain to follow humane practices. Information on slaughter is only available from government sources in some case study Member States; in the absence of such “official” information, the information that is available is often misleading and/or not always objective.

### 4.5 Consequences of introducing mandatory labelling

Stakeholders were asked to consider the consequences of introducing mandatory stunning labelling. The importance of labelling modalities, the scope of labelling and the possible impacts were discussed. The discussion on impacts covered demand, purchasing behaviour, the structure of the supply chain, trade, potential for fraud and whether an information campaign would be needed should labelling be introduced. These issues are discussed in the following sub-sections.

#### 4.5.1 Importance of labelling modalities

AVEC noted that the consequences of introducing labelling will be linked to the way in which labelling would be introduced and the degree of detail provided on the label.

Many stakeholders across our case studies also made the point that the consequences of introducing labelling would depend on the implementation modalities, including the products and sales channels to which labelling would apply.

In the opinion of AVEC, there are three, rather than two, categories of meat with respect to stunning. Meat from animals stunned in accordance with the parameters set out in Regulation (EC) No 1099/2009; meat from animals which have not been stunned; and, meat from animals which have been stunned, but not in accordance with the parameters under Regulation (EC) No 1099/2009. However, in practice it is likely that labelling would need to be based on the requirements of Regulation (EC) No 1099/2009 and therefore stunning would refer to the use of parameters within Annex 1. AVEC’s final category (stunned, but not in accordance with Annex 1) would therefore be defined as unstunned and labelled accordingly. Stakeholders in Sweden also drew attention to the need for this consistency in definition to avoid meat from post-stunned animals and that from animals stunned outside the Annex 1 parameters being labelled as stunned.

If labelling is to be introduced, it would be important to ensure consistency across Member States in order to facilitate a common consumer understanding and the smooth functioning of the single market.

#### 4.5.2 Scope of labelling

Stakeholders debated a number of options concerning the scope of labelling: (a) species covered; (b) whether labelling should be comprehensive or partial within species; (c) products and sectors covered; and, (d) communication method.

(a) Species covered

EU-level stakeholders discussed whether meat from all species should be covered by a labelling requirement rather than only that from animals subject to particular methods of slaughter prescribed by religious rites. Animals which are not subject to religious slaughter must always be stunned and there
is therefore no possibility of an information gap (under the assumption that this is adequately enforced). AVEC and a stakeholder in Germany felt that the exclusion of pork from any labelling scheme would provide an advantage to this sector, compared to species that would be subject to mandatory stunning labelling. This advantage would be especially noticeable in relation to poultry given the prevalence of CAS in both sectors and the negative connotations connected to this stunning method in Germany. Such an advantage could result in a shift in demand away from meats which would need to be labelled.

(b) Comprehensive or partial labelling

Stakeholder opinion was split within case study Member States on whether labelling should be applied to meat from both stunned and unstunned animals (“comprehensive” approach) or to one of those categories only (“partial” approach). Those UK stakeholders who felt that labelling should be comprehensive explained that this would better meet the objective of providing information to consumers, would ensure equity in terms of where costs fall and would reduce the risk of stigmatising religious groups. Swedish stakeholders added that a universal approach would be consistent and would avoid confusion. Some Polish stakeholders felt that universal labelling would allow the industry to develop positive messages around pre-slaughter stunning.

Most stakeholders who felt that labelling should only apply to part of the market thought that meat from unstunned animals should be labelled as the exception to the norm. A Swedish stakeholder explained that this approach would be consistent with the approach to labelling food from GMOs. Only a minority of stakeholders in France thought that labelling should only apply to meat from animals which had been stunned in order to reduce the risk of stigmatisation.

A partial labelling approach was also considered by some stakeholders to be simpler and cheaper to implement. This would certainly be the case in terms of the cost of producing labels, but the impact on traceability and identity preservation costs may be little different in practice as the status of the non-labelled segment would still need to be known. Polish stakeholders with this view felt it appropriate that any additional costs should fall on the smaller market segment, again though, this would only be the costs directly associated with the label. Some stakeholders in Sweden and the UK felt that the term “stunned” would be meaningless to consumers given that for most this would be the only term they would see on labels. A UK stakeholder argued that a partial approach would still meet the real consumer need which is to be able to avoid meat from unstunned animals if so desired.

This is an area where there is little consensus. It is unlikely that costs for the different segments would differ substantially under a comprehensive or partial approach. A comprehensive approach would reduce the risk of singling out meat produced for religious groups, but if the label only explained whether an animal was stunned or not there may still be a risk of stigmatisation. The key here is whether the objective of labelling is to provide information on the treatment of animals at slaughter or to simply allow consumers to avoid meat from unstunned animals.

(c) Products and sectors covered

Most stakeholders felt that the potential information gap is in processed products and, especially, in the catering sector. However, many expressed the opinion that labelling should only apply to fresh
meat and lightly processed products which consumers would see as fresh meat \(^{24}\). The rationale for this was generally that the complexity and costs would be far more substantial for further processed products and the catering sector (Germany). This is consistent with the general understanding of the costs of traceability investigated in the context of Country of Origin labelling (see for example European Commission, 2013a and 2013b; FCEC, 2013) and findings related to costs (section 4.6).

Despite the greater complexity and hence cost, some stakeholders felt that if there is a need for labelling at all, then this is most apparent in relation to processed products and the catering sector and that these sectors should therefore be included. However, a UK animal welfare organisation stressed that it is important to balance principle and practicality and drew parallels with the labelling of egg production systems which applies only to eggs in shell and not to egg products. A different UK stakeholder suggested that a way around imposing additional costs on these sectors would be to make labelling mandatory for fresh meat (and possibly lightly processed products) and allow the possibility for voluntary labelling beyond this; this is the approach taken in the egg sector and, at least in the UK, many catering outlets and processed products specify the use of free range eggs as a positive credence attribute.

It is clear both that the main information gap relates to processed products and the catering sector and that this is where tracing information is hardest. On balance, stakeholders take a pragmatic view under which mandatory labelling should not apply to processed products (in line with current egg products and Country of Origin labelling). That said, it might be easier to introduce mandatory stunning labelling for fresh meat in the catering sector than for processed products.

(d) Communication methods

The general view of stakeholders was that information on stunning should be communicated via text rather than a numeric system. This supports European Commission (2007a) which concluded that textual presentation has an advantage of clarity and explicitness which European Commission (2009) notes is important in label design. Those stakeholders who felt that a textual approach should be used said that this would be necessary to convey the information. Many of these stakeholders did not feel that the numeric approach to production method labelling in the egg sector was widely understood by consumers (Sweden). This point was also made at the EU level by AVEC and Eurogroup for Animals.

However here were some advocates of a numeric approach, notably in Poland and Spain (it should be recalled from the consumer survey that generally a numeric approach is more popular in the EU-10 Member States, so there are regional differences here; see section 3.2.12). Rationales for using a numeric code included the minimisation of stigmatisation of religious groups through being less pejorative at point of sale (Spain), the reduced space requirement (Poland) and the fact that the information would only be available to those who want it (UK).

A UK stakeholder explained that a numeric approach could only work if meat from stunned and unstunned animals were labelled. Such an approach would be considerably less meaningful if only meat from unstunned animals were to be labelled.

\(^{24}\) Lightly processed products such as marinated meats, roasting joints with added herbs, steaks with black pepper, etc.
No stakeholders felt that there would be any substantial difference in consequence if labelling used a numeric code rather than text, although this contradicts the view above that a numeric code might reduce the risk of stigmatisation. However, based on stakeholder comments in terms of the need for a textual label to convey information it must follow that any change in demand based on labelling would be greater where more consumers were able to understand this information.

4.5.3 Impact of labelling on demand

Very few stakeholders felt that there would be any long-term impact on overall meat sales, although some stakeholders in Germany, Poland, Spain, Sweden and the UK thought that there could be a short-term negative impact while consumers became familiar with the presence of labels. To some extent the short-term impact would depend on the quantity and nature of information made available to consumers. A stakeholder in Germany explained that a more substantial impact on overall meat demand, although again short-term, would be apparent should the method of stun be indicated. Given the low level of knowledge about slaughter methods (see section 4.4) this seems likely. Several stakeholders in Germany drew attention to the national sensitivity around Controlled Atmosphere Stunning (CAS) noting that NGOs have run anti-CAS campaigns using slogans such as “our birds are being gassed”.

Case study stakeholders across all Member States generally felt that consumers outside the religious markets would not wish to buy meat labelled as being from animals which had not been pre-stunned. A stakeholder in Sweden explained that this would be the case even for consumers not interested in this information. This conforms to the difference between spontaneous and prompted interest revealed in our survey. Another Swedish stakeholder made the point that should labelling be necessary in the catering and processed product sectors, the impact would be the same as in the retail sector, namely that consumers would generally seek to avoid meat labelled as being from an unstunned animal.

The Federation of Islamic Organisations in Europe stated that there is no guarantee that the use of stunning reduces the suffering of animals and that therefore introducing labelling, assuming that this results in increases in the use of stunning, would not necessarily increase animal welfare. The FVE responded that there is a higher risk of suffering without stunning. This position is corroborated by the DIALREL project (Holleben, et al, 2010).

The Federation of Islamic Organisations in Europe noted that the introduction of labelling would lead to an increased market share from unstunned animals as Muslims would seek meat which they were sure was Halal. In this context the Federation stated that pre-slaughter stunning is not permitted. However, this is not a universal view amongst Muslim populations with, for example, Muslims in Sweden accepting stunning. UK stakeholders explained that many Muslims consumers currently accept the use of pre-slaughter stunning, sometimes as a result of not enquiring too closely. In their view labelling would prompt a debate over acceptability and would lead to an increase in demand for unstunned meat (though there would be a net reduction in the use of non-stun slaughter as carcase values would decrease in the expected absence of viable non-religious markets). Stakeholders in France expect labelling to increase demand for meat from unstunned animals in the Halal sector unless there are successful information campaigns to persuade consumers that stunning is reversible and permitted. However, given the low levels of consumer knowledge of slaughter practices it is
possible that information on the purpose of stunning would increase demand for meat from stunned animals in at least some Muslim populations.

Stakeholders in Spain felt that there would be a shift in (informed) demand from unstunned meat to stunned meat and that this would reduce the supply of unstunned meat to better reflect demand. The supply of meat from unstunned animals would be expected to concentrate in those areas with higher demand, i.e. Muslim and Jewish populations (such as Catalunia and Andalucia).

Stakeholders in Germany, Poland and Sweden explained that as pre-slaughter stunning is mandatory (effectively mandatory in Germany), labelling would have no impact on the prevalence of no-stun slaughter here.

The differential impact of labelling would therefore be clearly confined to those Member States where there is a supply of meat from unstunned animals. It would also depend on the nature and success of information campaigns explaining the role stunning plays in the slaughter process.

### 4.5.4 Impact of labelling on purchasing behaviour at retail

**Eurocommerce** felt that labelling would lead to consumer confusion, not least as a result of the already complex nature of food labelling. This point was illustrated using an example of a label containing all the already mandatory information (prior to the introduction of Country of Origin labelling requirements). This corroborates the view of European Commission (2008) that consumers can feel overwhelmed by the excess of information on labelling.

Stakeholders in Poland, Sweden and the UK in particular noted the current absence of meat from unstunned animals in the retail sector, and expected this to continue if labelling were introduced. As a result, these stakeholders felt that most consumers would only ever see meat labelled as being from stunned animals (assuming that this was labelled, see section 4.5.2). Labelling would therefore have no impact on purchasing behaviour in terms of the type of meat (stunned or unstunned) that is purchased (though that does not preclude the possibility of impacts on overall levels of meat purchases – see section 4.5.3). Some stakeholders in these Member States concluded that labelling would be meaningless as a means of product differentiation as a result.

Given the general unavailability of meat from unstunned animals in the retail sector, the fact that not all consumers look at labels when making purchase decisions and the fact that not all consumers want or would use labelling on stunning it is not likely that labelling would have a substantial impact on purchasing behaviour beyond the short-term (see also section 4.5.3).

### 4.5.5 Impact on the structure of the meat supply chain

Decreases in opportunities to sell meat from unstunned animals would have impacts on the structure of the supply chain where this meat is currently sold in the general market. For example, stakeholders in France felt that there would be an increase in slaughterhouses specialising in slaughter with stunning in order to maximise returns on each carcase (see section 4.6 for the cost implications of this). This would result in two parallel supply chains. This process would be reinforced by the processing and food manufacturing elements of the meat supply chain which would want to be sure that they were not
selling meat from unstunned animals, even if these further processed products were not actually labelled.

Stakeholders in Spain also expect any introduction of labelling to result in the development of parallel specialised meat supply chains. The (smaller) no-stun supply chain would require transportation over longer distances thus increasing costs and possibly resulting in supply issues in remote regions.

On balance, there was some evidence to suggest that the impacts on smaller operators would be greater than those on larger operators (also a conclusion in relation to Country of Origin labelling; see European Commission, 2013a, for example). In addition to the aforementioned specialised supply chains, some stakeholders believed that commercial purchasers may give preference to larger, single source companies in order to avoid any problems with meat subsequently having to be segregated. This is especially likely to be the case if stunning methods are labelled. At the retailer end of the chain, it was felt that small independent retailers may face greater issues due to the additional administrative burden.

This is an area where there would be a clear difference between Member States which operate the derogation and those that do not. It is possible that operators in Member States not operating the derogation would benefit vis-à-vis those in Member States which do (see also possible differential impacts on trade below).

4.5.6 Impact of labelling on trade

There are three aspects to any impact on trade. First, the impact on meat from unstunned animals sold into the EU markets which demand this meat; second, the impact on meat from unstunned animals sold into the general market; and third, the impact on EU producers of unstunned meat exporting to third countries.

UECBV raised a concern that labelling would result in the replacement of EU production of meat from unstunned animals for those markets which demand it being replaced by imports from third countries. This stakeholder explained that unintentional knock-on effects of introducing labelling could be more important than any direct impacts. However, using the EU population of Jews and Muslims as a proxy for demand for meat from unstunned animals this is a relatively small market segment (approximately 6% (Pew Research Center, 2011, DellaPergola, 2013), but not all are observant and not all Muslims demand meat from unstunned animals). No stakeholders were able to quantify the volume of meat from unstunned animals entering the general market. While it is possible that labelling would reduce the possibility to dispose of surplus meat from unstunned animals in the general market it does not follow that all this meat would be replaced by third country imports.

The impact on trade would be different for those Member States in which there is little or no slaughter without stunning. In Germany and Sweden stakeholders noted that labelling would advantage the domestic industry because there is no (or very little in the case of Germany) production of unstunned meat and therefore no need to segregate production; this also applies in Poland. This advantage would be provided with respect to both intra and extra-EU trade.

However, stakeholders in France felt that EU producers would be disadvantaged vis-à-vis third country operators (especially in the global markets which Spanish stakeholders said are driven by...
price) which would not have to label products and would not have to segregate supply (a point also made by some stakeholders in Germany). However, this would only apply to those Member States producing meat from unstunned animals; there would be no additional traceability over Country of Origin labelling for Member States only producing meat from stunned animals.

With respect to the EU market, stakeholders in Germany, Poland and Spain explained that third country operators would also need to label products to supply the EU market if labelling were introduced via a Regulation. However, in the shell egg sector third country suppliers need only label “non-EU” rather than the production system meaning that there would be no need for further traceability or labelling if a similar approach was followed. Stakeholders in the UK pointed out that whether labelling would be required or not of third country operators, the lack of it in their domestic markets would mean that they could sell surplus unstunned meat into their domestic general market and thereby achieve a better price per carcase which would provide them with a competitive advantage.

Finally, some stakeholders in Germany took a different view and suggested that third country operators supplying Jewish and Muslim consumers, as well as non-religious markets, could be disadvantaged by any need to provide labelling in the EU market because they may need to introduce suitable traceability and labelling systems to reassure consumers. UK stakeholders added that third country suppliers to the retail sector would need to follow retailer codes which include the use of stunning in any case and therefore there would be no impact on trade, at least in the retail sector.

The potential impact on trade is difficult to disentangle. In terms of the EU market, producers in Member States which allow the use of the derogation would be subject to additional costs arising from the need to trace and label products. However, those in Member States which do not allow the use of the derogation, or where the derogation is simply not used, would not be subject to these additional costs. Third country operators supplying the EU retail sector will need to follow retailer codes and therefore will already be ensuring the suitable segregation of stunned and unstunned production.

While it is possible that labelling will make the placing of surplus meat from unstunned animals uneconomic on the EU general (non-religious) market it does not follow that this meat will be replaced by imports. Also, this market, while unquantified, is small. Finally, while there is a risk that domestic producers for the markets demanding meat from unstunned animals could lose market share to third country imports, these would still incur costs of traceability and identity preservation which would mitigate the potential cost advantage.

It is possible that EU producers would be disadvantaged on the price-sensitive global market where they compete on price with third countries not requiring identity preservation. However, this would only be the case for producers in those Member States using the derogation.

On balance, because of the small size of markets which demand meat from unstunned animals and the use of supplier codes demanding the use of stunning in the retail sector, the introduction of labelling would be unlikely to result in substantial trade impacts. However, there may be some differential impact on individual Member States according to whether the derogation is in use.
4.5.7 Impact on the potential for fraud

Stakeholders in France explained that the creation of parallel supply chains for meat from stunned and unstunned animals, with different economic values, would incentivise fraud. This point was also made by a stakeholder in the UK who pointed out that the introduction of labelling would need to be accompanied by at least elements of a control system which would not relate to a public health issue and might therefore be seen as disproportionate. The recent horsemeat scandal is a good example of what can happen when two supply chains have very different price levels and there are difficulties in verifying the status of the product. It was noted in FCEC (forthcoming) that Member State enforcement agencies have to allocate scarce resources to control and that areas where there are potential hygiene and food safety impacts are prioritised over those where there are not.

4.5.8 Need for an associated information campaign

There was a widespread view that, should mandatory stunning labelling be introduced, whatever its form, it would be necessary to plan an information campaign to educate consumers to allow them to make informed choices. Stakeholders in France explained that should labelling be introduced without such a campaign it would result in a media crisis and a further drop in consumer confidence in the meat supply chain. Stakeholders in Germany felt that consumers would simply become confused in the absence of an information campaign. Stakeholders in Sweden noted that an information campaign would need to be aimed at the industry as well as consumers.

As noted above (section 4.5.3), the form and content of an information campaign would be a factor in changes in demand.

4.6 Costs of introducing labelling

Stakeholder views on the costs of introducing labelling varied, but two main categories of potential costs were identified: traceability costs (those associated with introducing the required mechanisms to keep individual products associated with a set of information through the supply chain) and operational costs (those associated with operating the system including communication to consumers). These are addressed in sub-sections 4.6.1 and 4.6.2 below. Other potential costs and further observations are considered separately (sub-section 4.6.3). The two main categories are similar to those identified in other studies which focus on the costs of introducing labelling for meat products such as FCEC (2013) on Country of Origin Labelling (COOL) for meat as an ingredient, LEI (2013) on COOL for fresh meat, FCEC (forthcoming) on COOL for single ingredient foods and LEI (forthcoming) on mandatory COOL for unprocessed meat other than beef, pig, poultry and sheep and goat meat.

4.6.1 Traceability costs

Regulation (EC) No 178/2002 requires Food Business Operators to implement a “one step backwards / one step forwards” approach to traceability. Given that the fresh meat chain between slaughterhouse and consumer may include at least cutting plants, wholesalers and retailers (three steps)\(^ {25} \), the concept

\(^ {25} \) The number of steps is likely to be higher in the case of processed products.
of tracing information on the method of stunning goes beyond the mandatory traceability systems set up for hygiene and food safety.

However, from 1 April 2015, COOL will become mandatory for meat of swine, sheep, goats and poultry (it is already mandatory for bovine meat). For all these meat sectors, the labelling of the country of slaughter will be obligatory, ensuring a theoretical traceability from meat at point of sale to slaughter in the specific case of fresh, chilled and frozen meat cuts. This means that, in the case of fresh meat from the same species, information on whether an animal was stunned prior to slaughter could theoretically be traced together with the information required for COOL as from 1 April 2015.

This view was partially corroborated by Eurogroup for animals and in evidence from the case studies which generally indicated that adjustments to traceability systems would not be significant. It should be noted that the period of stakeholder consultation spanned the period of adoption of Regulation (EU) No 1337/2013, and hence not all stakeholders may have discussed information on stunning with the new COOL legislative framework in mind. This may account for the FVE view that current traceability systems are not sufficient to allow traceability back to the slaughterhouse and the UECBV view that the whole meat supply chain would need to be adapted to facilitate traceability systems to permit the introduction of labelling in respect of stunning.

There were some differences between Member States in terms of the ability to readily introduce traceability for fresh meat products to allow communication on stunning. Stakeholders in France and the UK felt that the necessary systems to allow traceability were largely in place (sometimes improved following the horsemeat scandal) and that the introduction of labelling, at least for fresh meat, would be relatively straightforward. However, stakeholders in Spain explained that the Spanish meat supply chain is not heavily integrated and that this makes traceability in general harder to accomplish. That said, meat supply chains will need to be capable of traceability to facilitate COOL from April 2015 in any case. Other stakeholders in Spain noted that the industry has been capable of introducing effective traceability when it is in its interest to do so, notably after the horsemeat scandal.

The situation with regard to processed products (including comingled products such as mincemeat) is, however, different. Here current traceability systems, which are in place to meet food safety and hygiene requirements, do not allow traceability to slaughter method. CLITRAVI noted that adaptations would be required to the whole supply chain to ensure segregation and identity preservation. FCEC (2013) concluded that traceability costs related to COOL for processed meat products would increase costs by between 3% and 10% depending on product. Key factors impacting the magnitude of these costs include:

- sourcing practices;
- the level of vertical integration of the chain;
- the actual features of current traceability systems; and,
- the competitive structure of the meat supply chain.

---

Given that the required adaptations to the processed meat chain to ensure traceability for the labelling of stunning would be similar in nature to those required for COOL, cost increases would likely be of a similar magnitude. That said, UK stakeholders noted that there are processed products on the market which prohibit the use of the derogation and that this demonstrates that it is possible to ensure traceability, at least in some cases (see section 4.9).

4.6.2 Operational costs

FCEC (2013) identified a wide range of potential operational costs in the case of the introduction of COOL for meat products. Those which are also relevant to information on stunning are as follows:

- adaptation of sourcing practices and potential changes in the mix of suppliers of fresh meat and meat/meat products used as ingredients;
- adaptation of production and/or marketing processes for fresh meat and meat/meat products used as ingredients;
- adaptation of production processes for the final product containing meat as an ingredient;
- adaptation of packaging and labels/labelling processes;
- adaptation of marketing practices of the final product;
- adaptation/implementation of traceability systems (see above); and,
- additional internal controls required to ensure compliance with new rules.

The consultation highlighted several of these areas to be potentially significant in the case of labelling to indicate stunning.

The main relevant additional operational cost identified was the adaptation of labelling and packaging. This was accepted by all stakeholders as an additional cost, though it was not expected to be significant. Research carried out in the UK suggests that the one-off cost of a label change is between €4,000 and €5,000 (Campden BRI, 2010).

Changes in sourcing practices were noted as a potential area of additional cost by some stakeholders. This was also corroborated by LEI (2012) which, in the context of Country of Origin labelling, noted that changes to the supply chain (sourcing, batch sizes, and middlemen) may be preferred to the adaption of traceability systems due to lower cost impacts. That said, evidence from stakeholders suggests that changes to sourcing practices would not be without costs. In France, stakeholders felt that the separation of the meat supply chain into two parallel chains to ensure identity preservation would have significant economic implications. Most stakeholders here felt that there would be an increase in meat prices in the religious markets because the price for unstunned cuts entering the general market would be reduced thus lowering the total return on carcases; this would be exacerbated by the fact that the hindquarters, which are not considered Kosher, are high value parts of the carcase (see section 4.8).

Expectations were similar in Spain, where slaughterhouses tend to serve local markets. It was expected that slaughterhouses would specialise entirely in stunned or unstunned meat, and as a result there would be a reduction in the number of slaughterhouses producing unstunned meat. Stakeholders expect this to lead to higher transport costs for unstunned meat in many areas due to the centralisation of production. This was reflected at the EU level by FVE, which noted that many slaughterhouses...
operate with and without pre-stunning according to demand at present, implying that this situation may change with the introduction of labelling.

Stakeholders in the UK pointed out that consumers in the (unstunned) religious markets already pay a premium as a result of lower slaughterhouse line speeds and this would be exacerbated if the value per carcass declined. Swedish stakeholders pointed out that there would be costs involved in switching suppliers if food manufactures had to do this to avoid meat from unstunned animals.

Stakeholders in some Member States expected changes to marketing practices as well, with major retailers likely to move away from sales of unstunned meat if labelling were to be introduced. Meat identified as being from unstunned animals would therefore only be available in niche retailers (see also section 4.8). There is, however, no evidence to suggest that there would be significant costs from such changes.

Some further costs resulting from the adaptation of traceability systems were considered to be likely (e.g. from segregation and identity preservation) though no estimates as to the extent of these were provided by stakeholders. While it is not possible to develop estimates in the absence of data, it should be borne in mind that the extension of COOL is likely to necessitate changes to supply chains anyway. Only costs associated with labelling specifically for stunning which are additional to these should be considered. That said, labelling to indicate stunning is likely to introduce further identity preservation requirements in Member States operating the derogation.

Stakeholders in France and the UK explained that the key to slaughterhouse economics is high throughput given the low margins per head. Any move away from continuous to batch processing will reduce throughput and therefore implies an increase in cost per unit of output. That said, UK stakeholders pointed out that the industry successfully operates batch processing to identity preserve organic meat, free range/outdoor reared meat, PGI designated meat, meat from stunned animals for retailer’s own-brands, etc. and the cost of batch processing and identity preservation with respect to labelling for stunning would not exceed the additional costs incurred here.

Case study stakeholders noted that there would be additional compliance costs, although many across all case study countries made the point that these would be minimal based on minimal additions to existing checks. Some Swedish stakeholders explained that the introduction of labelling would result in the transfer of responsibility for, and hence cost of, compliance checking from the retail sector, which currently ensures compliance with its supplier codes, to the Competent Authority. However, as this is only one aspect among many which are checked this is not likely to represent a significant change.

4.6.3 Further observations and information on costs

In addition to the costs identified in the categories above, some further general comments on costs were provided by stakeholders.

UECBV set out three categories of additional cost likely to result from labelling. The first was direct costs linked to implementation and enforcement which have been covered above. Two categories of additional indirect cost are as follows:
1. **Indirect costs resulting from changes in demand.** Many consumers will not want to buy meat which is labelled as unstunned and some consumers may not want to buy any meat which conveys information about slaughter. UECBV estimates the cost of these changes in demand to amount to between €210 million and €340 million per year\(^7\). However, it should be noted that other stakeholders felt that changes to demand would be short-term.

2. **Indirect costs resulting from changes in supply.** Unwillingness to either label meat as unstunned, or to buy meat labelled as unstunned, might result in the substitution of EU produced meat by meat produced in third countries. Even if third countries have to follow the same labelling requirements, they may not operate derogations from stunning in the same way which means that they may avoid some costs (such as the inability to sell unstunned meat in the non-religious market). This issue is dealt with in more detail above in section 4.5.6. In brief it does not necessarily follow that meat from third countries would displace domestically produced meat. Also, some Member States do not operate the derogation and therefore this risk relates to Member States which do and not the EU as a whole.

Stakeholders in **France** estimated the total costs associated with introducing labelling to be between €0.05 and €0.20 per kg.

Stakeholders in the case study countries did not generally think that the costs of introducing labelling to indicate whether animals have been stunned or not prior to slaughter would be significant, although it was recognised that there would be some additional cost.

Given that stunning is mandatory in **Poland** and **Sweden** (and effectively mandatory in **Germany**), stakeholders here do not anticipate substantial costs should a requirement to label be introduced. Stakeholders in **Poland** pointed out that there would be some additional traceability costs for products which involve mixed carcases (such as minced meat and further processed products) should labelling cover these, but that these would not be large. Stakeholders in **Sweden** explained that there might be difficulties in finding space on labels to convey information on stunning.

Stakeholders generally stated that any costs that did result from the introduction of labelling would be passed on to consumers, although there was some concern in **Poland** that retailers might instead seek to have these costs absorbed by the supply chain. A **Swedish** stakeholder explained that the fact that costs, although minimal, would be passed on to consumers does not provide a reason not to provide information if this is wanted.

In summary, the introduction of labelling would clearly involve some additional costs, although at least some of these will be required in the context of COOL in certain cases. The main cost which is certain to be incurred is in the production of a label and the cost of this is fairly small. Although not all stakeholders agreed, on balance, the costs of introducing labelling for fresh meat in the retail sector are not likely to be significant. Costs and changes to supply chain operation would though be more significant if labelling were to be extended to processed products. One of the main areas where consumer prices could be impacted is in the religious meat markets where the overall value of carcases is likely to decrease as opportunities to sell into other markets would be reduced (see also section 4.8).

---

\(^7\) This estimate was produced in 2009 when the proposal for Regulation (EC) No 1099/2009 was debated by the European Parliament.
4.7 Consumer willingness to pay for labelling

There has been some investigation of willingness to pay for higher animal welfare products using stated preference techniques (for example, FAWF, 2010; IGD, 2011; FAWC, 2011). This found that consumers were willing to pay for additional animal welfare, although the willingness to pay diminishes once a certain level of animal welfare is reached. Also, a range of authors have drawn attention to the difference between stated preference and actual purchasing behaviour (see for example, Carson, et al, 1996; Loureiro, et al, 2003; Murphy, et al, 2005; Vermeir and Verbeke, 2006).

There has been little research on the willingness of consumers to pay specifically in the context of providing information on stunning. However, the recent political debate which took place on this issue in May, 2014 in the UK did prompt one survey which has some relevance. The survey, carried out on behalf of The Grocer, asked 1,977 consumers whether they would pay more to avoid meat which had been religiously slaughtered. Two-thirds (68%) said that they would not pay extra while only 17% indicated that they would. Given the frequent conflation between “religiously slaughtered” and “unstunned”, it is reasonable to assume that the proportion who would pay to avoid unstunned meat would be similar to this 17%. The survey found that just over 50% of respondents were prepared to buy religiously slaughtered meat, although this group comprised 21% who would only do so if the animal had been stunned prior to slaughter and 32% who said that they did not care about slaughter method. A quarter of respondents said that they would not buy religiously slaughtered meat whether the animal had been stunned or not.

The general perception among stakeholders across all case studies is that consumers would not be willing to pay to receive information on whether animals had been stunned prior to slaughter. This perception is broadly in line with The Grocer survey findings. This is especially the case if it is considered that this survey was carried out at the height of a vociferous political debate on the issue, and if the consumer paradox is borne in mind under which citizens say they will pay for something only to not do so in practice (see, for example, Verbeke, 2012). Stakeholders in Sweden point out that stated consumer preference for higher animal welfare products is undermined by increases in the consumption of (cheaper) lower animal welfare imported meat. It is also paradoxical that stakeholders are convinced that consumers will not purchase meat from unstunned animals, but are not prepared to pay to avoid this.

As well as the consumer paradox, this discrepancy between stated preference and willingness to pay is comparable to the so-called protest-bid responses in contingent valuation methodology literature (see for example Halstead, et al (1992)). In this context the consumer feels that they have a right to know certain information and should not be asked to pay for this because they consider the information to be a kind of a public good.

In practice, should labelling be introduced, consumers would have little choice but to pay any (small) additional costs given that meat from unstunned animals is unlikely to be generally available; stakeholders in Poland felt that consumers would probably not link small price increases to the provision of additional information in any case.

Stakeholders in France and Spain explained that a minority of consumers are willing to pay extra for higher animal welfare products, although stakeholders in Germany felt that this willingness to pay is
in relation to broader higher animal welfare rather than in relation to specific issues. Stakeholders in Sweden felt that consumers will pay for higher animal welfare products when they clearly understand what they are paying for and agree with the rationale for this; a point also made in France and demonstrated in the UK through increased sales of Freedom Food products and free range eggs.

Stakeholders in France and Spain suggested that if meat prices were to increase following any introduction of labelling, there would be some shift in demand towards cheaper forms of protein, i.e. from beef to poultry. In this context the issue of which species are included within any labelling scope takes on greater importance (see section 4.5.2). Finally, in considering willingness to pay, Which? (2013a) found that food prices are second only to energy and fuel prices in terms of economic issues that most worry people, at least in the UK. This is also likely to be the case elsewhere and this backdrop will influence both willingness and ability to pay.

4.8 Impacts on different groups

The majority of stakeholders at the EU level and within the case study Member States felt that labelling would have a differential impact on Jewish and Muslim groups.

The Conference of European Rabbis and the Federation of Islamic Organisations in Europe made the point that a consequence of labelling would inevitably be the stigmatisation of Jews and Muslims; other stakeholders generally accepted that this would be a risk. This was also the greatest concern raised by case study stakeholders, even though the labelling would not relate directly to the use of the religious derogation. This risk was considered greater if labelling were only to be applied to meat from unstunned animals (UK). Some stakeholders in Germany expressed concern that labelling would be exploited by anti-Muslim and anti-Jewish groups and noted that the German term “Schaechtfleisch” has negative connotations. They added that these groups would seek to associate Halal with unstunned meat. One stakeholder in Germany felt that the local butchers which sell meat from unstunned animals could be perceived negatively should labelling be introduced. The use of a numeric code to communicate the information was thought less likely to result in stigmatisation. Some stakeholders in Sweden raised the concern that labelling would fuel the anti-immigration agenda, although the point was also made that most Halal meat in Sweden is stunned and therefore meat labelled as unstunned would be uncommon.

Stakeholders in France felt that the attitude of the media would be key in determining whether labelling resulted in stigmatisation or not. Some stakeholders in Spain felt that there is a risk that consumers would come to understand Halal and Kosher meat as cruel without actually understanding the methods used or, in the case of Halal, whether pre-stunning had been used. Spanish stakeholders also raised the concern that a discussion on this issue could have broader repercussions in terms of attitudes towards immigration and religion. Stakeholders in Poland felt that there had been hostility to religious minorities during the debate surrounding the ban on the use of the religious derogation and expressed concern that labelling would reopen this debate. However, not all stakeholders shared the view that labelling would lead to stigmatisation of religious minorities with some in Poland saying that there would be no stigmatisation if all meat were to be labelled; stakeholders in the UK agreed that the risk of stigmatisation would be reduced if this were the case. The overwhelming view remains that the introduction of labelling would be divisive.
The Conference of European Rabbis explained that the requirements for Kosher go beyond the meat being fit for human consumption and up to two out of three red meat carcases can ultimately be rejected depending on the strictness of the rabbinical authorities\(^28\) (the hindquarters are also not considered to be Kosher (Barclay, 2012)). The Federation of Islamic Organisations in Europe confirmed that this is also the case for Halal meat, but here the rejection rate is around one-fifth. This rejected meat, being perfectly fit for human consumption, enters the non-Kosher/non-Halal market where it attracts a price. Under a labelling system this meat may no longer attract the same price and this would increase the cost on the Kosher and Halal sectors. This is a far less significant issue in the poultry sector. One implication of a labelling regime is therefore increased costs for Jewish and Muslim populations. This point was also made in Germany and Spain in relation to Kosher meat.

A key consideration in relation to the cost burden is whether labelling would cover all meat or just that from unstunned animals. In the former case stakeholders expect the cost burden of traceability and identity preservation to be shared, but in the latter case this cost is expected to fall disproportionally on meat from unstunned animals, thus increasing the cost burden outlined above. That said, there would still be a need to ensure that the unlabelled segment was not misleading for consumers. Stakeholders in Poland and Sweden noted that given the mandatory use of stunning here, additional costs would not fall on the domestic industries unless labelling was to apply to all meat (in this case the overall cost would be reduced to the cost of labelling because there would be no implication for traceability beyond that necessary for Country of Origin labelling). Two stakeholders in Sweden felt that labelling could provide an advantage to Swedish producers vis-à-vis those in Member States using the religious derogation (see also section 4.5.6).

The risk of stigmatisation is bigger in those Member States where slaughter without stunning is practiced (France, Spain and the UK). As was also noted above, a UK stakeholder explained that the hindquarters are not considered to be Kosher and that the introduction of labelling would reduce the overall economic value of carcases used to produce Kosher meat. Although the likely cost impact of this was not stated, it was pointed out that in Israel, the hindquarters are porged\(^29\) for economic reasons and that this could also be done in the EU should this be more cost effective than selling the meat to be labelled as unstunned. It should also be borne in mind that the hindquarters could also enter the Halal market which again would mitigate any impact on cost.

Further cost implications could follow if labelling resulted in an increase in the use of non-stun in the Halal market as a result of the slower line speed that this necessitates. A UK stakeholder noted that this could have implications for the affordability of meat in this market segment. This was also raised as a concern in France where stakeholders felt that meat consumption in this group would decline as a result. Stakeholders in Spain expressed concern that any increase in price in religious markets would increase the risk of illegal slaughter which carries with it implications for animal welfare and public health.

Some stakeholders in the UK made the point that introducing labelling could cause a degree of confusion for Muslim consumers given the lack of agreement in terms of whether stunning is

\(^{28}\) Rejections are for a range of reasons including historic pathologies which have no bearing on the fitness of the animal for human consumption. The rejection rate in France is around 50%, in Poland it is around 30%. The hindquarters are also rejected by Jews in Europe, although not in Israel (see EFSA, 2012).

\(^{29}\) The cutting away of forbidden fat and veins from Kosher meat (Zivotofsky, 2010).
permitted. However, no stakeholders felt that labelling would have any impact on the availability of Halal or Kosher meat.

It is clear that the introduction of labelling could have a differential impact on religious groups. This could range from stigmatisation, although this could be mitigated to some extent by implementation modalities, to additional costs.

4.9 Existing information on the use of pre-slaughter stunning

Eurocommerce and Eurogroup for Animals highlighted a number of existing voluntary schemes across the EU which do not allow the use of the derogation provided in Regulation (EC) No 1099/2009 for slaughter without stunning. They also noted that many retailer supplier codes also preclude the use of the derogation, even though this is rarely and not obviously communicated to consumers.

Stakeholders in the case study countries drew attention to a number of ways in which consumers currently have access to information on whether meat is from animals stunned before slaughter, although many made the point that this is not always widely appreciated. For example, in Poland and Sweden, where pre-stunning is mandatory, consumers only need to select domestically produced meat. In the case of Sweden this selection is facilitated by the widespread labelling of Swedish meat and the use of the “Svenskt Kött” label.

Stakeholders in the UK provided a long list of labels under which the use of the derogation is not permitted (as part of broader animal welfare requirements). This includes retailer own-brands as well as a range of quality assurance schemes. The Freedom Food scheme even specifies the method of stun to be used, although, in common with the other labels and logos, this information can only be found with some effort on the part of the consumer. Logos under which meat must be from pre-stunned animals are also present on the German and Polish markets where it is also the case that retailers own label meat is from stunned animals. Most communication on stunning in France is business-to-business rather than business-to-consumer. For example, some slaughterhouses guarantee that all meat derives from pre-stunned animals. The retailer Carrefour precludes the use of the derogation for its private quality label “Charte Qualité Carrefour”. Additionally, Hilbrands (2009) reports on the use of labelling to identify Halal meat from animals stunned before slaughter in the Netherlands.

No schemes precluding the use of the derogation were identified in Spain, nor was it possible to confirm whether retailers exclude the use of the derogation in their own-brand lines, although this absence of evidence does not preclude this.

The Conference of European Rabbis explained that there are Kosher brands such as “A Votre Service” which indicates by definition that meat is from animals which have been slaughtered under the derogation31. However, most Kosher meat is bought through specialist butchers throughout the EU and is not labelled on pack. The Federation of Islamic Organisations in Europe noted that there are also Halal brands, but here it does not automatically follow that this meat is from animals which have

30 Swedish meat.
31 There is also a Halal certification scheme called “A Votre Service” operating in France: http://www.halal-avs.com/
not been stunned. There are several Halal certification bodies in the UK and, although the two main organisations take a different view on the acceptability of stunning, as long as the consumer understands this, it is possible to know whether meat sold under these logos will be from stunned or unstunned animals. This is also the case in Germany.

Stakeholders in Sweden and the UK in particular noted that the main information gap on this topic is in relation to the catering sector. The issue here tends to be around imported meat where the operator simply does not know whether meat is from pre-stunned animals; it is not a question of operators knowingly selling meat from unstunned animals.

The point was made in the UK that institutional caterers serving Halal meat (schools, hospitals, prisons, etc.) ensure that meat is from pre-stunned animals, as do multi-national Food Business Operators who serve Halal food where demand justifies this (this is also the case in France and probably throughout the EU, although this could not be confirmed). It is not considered likely that it is widely known that institutional caterers serve (stunned) Halal meat as this is not a topic on which businesses are comfortable communicating.

There is also a potential information gap with respect to processed products, although stakeholders in the UK pointed out that there are examples of Freedom Food and Red Tractor Assurance labelled ready meals (which preclude the use of the derogation).
5 Conclusions

This study was carried out by means of a consumer survey in the EU-27 and a consultation with stakeholders at the EU level as well as case studies in France, Germany, Poland, Spain, Sweden and the UK, chosen to represent a diversity of situations across the EU. A number of questions were investigated around the issue of providing consumers with information on whether meat is from animals which have been stunned prior to slaughter. This conclusion draws together our findings, including those of a methodological nature.

5.1 Consumer interest in receiving information on stunning

No relevant literature on consumer interest on receiving information specifically on stunning at slaughter was identified and stakeholders confirmed that the survey carried out as part of this study was unique as far as they were aware.

Our survey asked respondents to spontaneously state the three main purchase criteria they use when buying meat. The main purchase criteria used are aspects of quality, mainly presentation and durability (66%) and price, mainly in unit terms (16%). Only 2% of meat purchases cited production method as the most important purchase criterion, 1% religious consideration and 1% general animal welfare considerations; no respondents spontaneously mentioned animal welfare at slaughter as a purchase criterion. Those who purchase meat are also generally satisfied with the information available on meat and meat products (80%, 17% “very satisfied” and 63% “satisfied”).

Stakeholders at the EU level and within the case study countries agreed with the survey findings which suggest that there is little dissatisfaction with current labelling with regard to meat and meat products and little spontaneous demand for information related to animal welfare at slaughter. However, stakeholders pointed out that this is an important issue for a small number of relatively vocal consumers.

The absence of apparent widespread demand for information as a purchase criterion does not, however, preclude the possibility that consumers expect certain standards to be adhered to for all products (as reflected to an extent by the proportion of survey respondents who believed there are laws covering slaughter, see below).

Survey respondents were also asked directly whether they would be interested in receiving information on the stunning of animals at slaughter when they buy meat. This direct enquiry elicited greater interest with 72% of respondents indicating interest to varying degrees (18% “very interested”, 27% “quite interested” and 27% “a little interested”). Consumer interest in receiving information on how authorities check the rules on the protection of animals at slaughter was investigated in the survey and this revealed that 48% of meat purchasers would look for this information compared to 40% who would not. Respondents were also asked whether meat from animals which had not been stunned should be sold using similar labelling to meat from animals which had been stunned. While 23% of respondents do not feel that this is an issue for them and 23% think that similar labelling should be used, 45% think that the labelling should be different.
Our survey suggests that there is generally lower consumer interest in this issue in the EU-10 than in the EU-15. However, within these groupings meat purchasers in different Member States have different levels of interest. Interest in labels to differentiate meat from stunned and unstunned animals is higher than the EU-27 average in Ireland, Belgium and France. Meat purchasers in Poland, Slovakia and Spain have a lower than average interest in labelling and are less likely to think that meat from stunned and unstunned animals should be differentiated via labelling.

These findings highlight the difference between spontaneously expressed purchase criteria and prompted interest in a specific issue. The current absence of direct labelling means that consumers are unable to easily use pre-slaughter stunning as a purchase decision criterion. However, this does not mean that consumers are uninterested in this issue; though there is limited consumer understanding of slaughter practices (see below). Furthermore, stakeholders feel that general consumer interest in this issue is low and that at least some of the interest shown is for reasons other than animal welfare.

Our conclusion is that for most consumers information on pre-slaughter stunning is not an important issue unless brought to their attention. However, this is an issue for a certain proportion of motivated consumers. It is by no means clear that consumers would actually act on this information if it were to be available. The level of interest differs by Member State with generally greater interest in the EU-15 compared to the EU-10.

5.2 Consumer understanding of slaughter practices

Survey respondents were asked whether they think that there are laws covering the stunning of animals in their Member State. Half (49%) thought that there are laws with 18% saying that they did not think there are laws and 33% saying that they do not know. Respondents were then told that there are laws requiring the stunning of animals and were asked whether they thought that these applied to all animals slaughtered in their Member State. Less than a third (28%) believed that legislation covers all animals while 38% believed that it does not. It is not possible to draw a robust conclusion from this in terms of whether respondents have a good understanding of the legislative position because it is unclear to what extent respondents think that there are laws that are not followed or that there are legal exemptions (which is actually the case through the religious derogation).

Stakeholders were overwhelmingly of the opinion that consumers have little understanding of the slaughter process. Stakeholders believe that consumers frequently conflate religious slaughter with unstunned slaughter, a misunderstanding not helped by the presentation of this issue in the media. Stakeholders also believe that the majority of consumers are not interested in the process of slaughter, so that even where accurate information is available, this is not something that is typically sought.

Our clear conclusion is that there is little accurate consumer understanding of the slaughter process.

5.3 Modalities for labelling to indicate whether animals have been stunned

Those survey respondents who had expressed interest in receiving information on whether meat was from stunned or unstunned animals (79.4%) were asked whether they would also want to know the method of stun. Almost half (47% of those expressing an interest, 37% of all meat purchasers) said
that they would. Some 38% (30% of the total) said that they would only want to know whether the animal was stunned.

This is a very different finding to the perception of stakeholders who largely felt that only information on whether an animal was stunned or not was relevant to consumers. Some religious organisations took a different point of view noting that the method of stun is an important piece of information necessary to make a fully informed decision. This issue should be considered against the background of the perceived lack of consumer knowledge on slaughter methods which calls into question how consumers would use this extra information to make an informed purchase decision. Additionally, there are a number of permitted stunning methods under Regulation (EC) No 1099/2009 and no clear indication of how these compare to one another in animal welfare terms; it is the outcome that is important and all render the animal insensible to pain. It is therefore unclear how providing this additional information would help even a well-informed consumer to make a purchase decision. Finally, this finding should be placed within the context of very low levels of expressed consumer interest in general animal welfare as a purchase criteria.

**If there is little expressed use of animal welfare as a purchase criterion, little understanding of the slaughter process and an inability to distinguish between different methods of stun, providing information on the different methods used would not appear to aid a consumer decision. Our conclusion here is therefore that information on the method of stun is not relevant to the vast majority of consumers in terms of providing a purchase decision criterion. However, to a minority of religious stakeholders providing information on all methods of stun would be seen as equal treatment should labelling of non-stunned meat become compulsory.**

Survey respondents who had expressed interest in receiving information on whether meat was from stunned or unstunned animals were asked whether this information should be conveyed using a textual description or using a numeric code. A slight majority (53% of those expressing an interest, 42% of all meat purchasers) expressed a preference for a textual description while 33% (26% of the total) expressed a preference for a numeric code.

Stakeholders had mixed views on this topic, but the majority had a preference for a textual description to ensure that the information was actually communicated to consumers. This is also the preference expressed generally in the literature for the same reason. It was pointed out that the numeric code system used in the egg sector is relatively poorly understood and requires a textual explanation alongside in any case. An advantage of a numeric code approach is that the information would be there for those who want it, but would be less obvious to those who do not. A numeric code would also take up less space on a label and might reduce stigmatisation of those selecting meat from unstunned animals, but primarily because it would be less widely understood, which would undermine the point of having the information in the first place. It was noted that care would have to be taken in the choice of any wording used in order to ensure it is not pejorative.

**Our conclusion is that, in accordance with the literature, consumers and stakeholders would prefer a non-pejorative textual explanation with wording which should have the same meaning across the EU.**
Stakeholders pointed out that while introducing a label would be less complicated in the fresh meat sector (albeit not without impacts on the production chain, see below), it would be more complicated to introduce a label for further processed products and in the catering sector. However, stakeholders recognised that it is in the catering sector and amongst further processed products that any information gap exists and therefore the rationale for labelling means that these sectors should be included in any labelling requirement if this information gap is to be addressed. Some stakeholders suggested that applying mandatory labelling in the retail sector while continuing to allow voluntary labelling in other sectors, as is the case today, would be a workable compromise.

Our conclusion is that mandatory labelling would be less complicated to introduce for fresh meat in the retail sector than for processed products or in the catering sector.

If a label were to be introduced, two options would be possible in terms of coverage (i) universal coverage, i.e. both meat from stunned and unstunned animals, or (ii) labelling of only one market segment, i.e. either stunned or unstunned. In the latter case, the general consensus amongst stakeholders was that the unstunned side of the market should be labelled as the smaller market segment and the exception to the norm. However, stakeholders recognised that this might be seen as stigmatising those selecting meat from unstunned animals and there was a desire to avoid this outcome. Stakeholders also made clear that almost all meat sold at retail will be from animals which have been stunned and that therefore this is the only label most consumers are likely to come into contact with; this calls into question the utility of a label when there is no purchase decision to make.

A universal approach to labelling would provide consistency and may help to reduce any possible stigmatisation. However, at the retail level, most consumers are unlikely to be confronted with a choice making a label somewhat redundant. A partial approach would provide consumers with sufficient information to make a choice and labelling the exception to the norm would be consistent with other labelling policy such as that applying to GM food. However, this approach carries a higher risk of stigmatising consumers of labelled meat.

Our conclusion is that labelling fresh meat from both stunned and unstunned animals would not provide consumers with more choice at retail level. Only labelling meat from unstunned animals would inform consumers who are specifically interested in this information. However such labelling would carry a high risk of stigmatising religious communities especially in the present political context and given the findings above that consumers have little understanding of the slaughter process.

5.4 Costs of introducing labelling

There are two main categories of cost in common with those following the introduction of Country of Origin labelling: traceability costs (those associated with introducing the required mechanisms to keep individual products associated with a set of information through the supply chain) and operational costs (those associated with operating the system including communication to consumers). Many costs associated with traceability requirements will already have been incurred for fresh meat from April 2015 and only additional costs beyond these are relevant here. Stakeholders did not think that any additional costs for fresh meat would be substantial. Should labelling be introduced for processed
products, which are not already covered by Country of Origin labelling, costs would be incurred and could be potentially high, particularly in the event that method of stun was also indicated.

Labelling may induce changes to sourcing practices in Member States where the religious derogation is used and the creation of parallel supply chains will imply additional cost, especially in the religious markets where the overall value of carcases is expected to reduce. Slaughterhouse economics rely on high throughputs and the need to move from continuous to batch processing to ensure identity preservation implies an increase in cost per unit of output. Stakeholders did not think compliance costs would be significant. Labelling and packaging costs are not considered to be significant.

Indirect costs as a result of changes in overall demand are, at this stage difficult to determine, but are expected to be short-term; these are likely to be more substantial if the method of stun is indicated. Any costs incurred would be passed on to consumers and this is expected to be more significant in the religious markets.

Our conclusion is that while introducing labelling would involve a cost, this would not be substantial for fresh meat, but would be potentially high for processed product\(^{32}\). Costs will increase with scope and if method of stun were to be indicated; implementation modalities are therefore important. Costs would fall disproportionately on the religious markets and on the industry and consumers in those Member States which operate the religious derogation.

5.5 Willingness to pay for labelling

There is very little information on willingness to pay for this specific information and the evidence available, which uses stated preference techniques, is subject to the consumer paradox. This suggests that willingness to pay for most consumers is low, which matches the expectations of stakeholders. However, as borne out by the success of certain private labelling schemes, there is greater willingness to pay for more general higher animal welfare which can, and sometimes does, include requirements to not use the religious derogation.

Our conclusion is that there is low consumer willingness to pay for information on whether animals have been stunned prior to slaughter.

5.6 Consequences of introducing mandatory labelling (other than costs)

It is clear that the modalities of any labelling scheme would have bearing on the consequences and that without knowing these modalities, only general conclusions are possible.

Stakeholders did not expect any long-term impact on the meat market if stunned/unstunned labelling were to be introduced, although a short-term impact while consumers became used to the new information could not be ruled out. A greater impact would be likely if the method of stun were to be included on the label as well.

---

\(^{32}\) In line with the terms of reference for this project, our cost analysis is based only on the consultation of representative organisations, and is therefore qualitative. A detailed cost analysis would require further research.
Stakeholders all expect total supply of meat from unstunned animals to decrease in the event of a label being introduced in order to better match demand. However, it is possible that demand for unstunned meat within the Halal market may increase given the lack of agreement on whether pre-stunning is permitted.

Certain possible impacts on the meat supply chain were identified. There was some concern that introducing labelling would result in two meat supply chains with different values and that this would increase the risk of fraud. In this context it is noted that traceability systems would need to rely on paper-based systems with no ability to carry out checks on the product to determine whether the animal had been pre-stunned. This will only be an issue in Member States where the religious derogation is in use. It was noted that segmentation may adversely impact smaller operators through additional record keeping requirements at the retail end of the chain, and through a move towards purchasing from larger operators to avoid segmentation requirements which could limit the market opportunities for producers further up the chain.

Producers in Member States operating the derogation would be placed at a disadvantage vis-à-vis those in Member States not using the derogation and this may impact trade within the EU.

Although some stakeholders raised concerns about impact on external trade, the small size of the EU markets demanding meat from unstunned animals and the need for third countries to follow existing retailer supply codes means that substantial impacts on the EU market from trade with third countries are unlikely.

There would be some differential impact on exporters in individual Member States according to whether the derogation is in use.

*Our conclusion is that the introduction of labelling to indicate whether an animal has been stunned or not would not have a long-term impact on demand. Should the method of stun be indicated, the impact would potentially be greater. A differential impact is expected according to whether the religious derogation is used with the industry in those Member States using the derogation placed at a disadvantage. These conclusions can only be general at this stage. Further work on impacts would be necessary based on more specific labelling modalities.*

### 5.7 Impacts on different groups

The main identified concern was that introducing labelling might result in the stigmatisation of those wishing to buy meat from unstunned animals. There is the potential for this issue to be conflated with the issue of religious slaughter and great care is needed to ensure that religious freedoms are respected. Although there is no concern that introducing labelling would reduce the availability of meat from unstunned animals for those that want it, it is possible that labelling would result in higher costs in this market segment if the value of carcases and cuts which could not be utilised in these markets decreased. This may reduce the affordability of meat for Muslim and Jewish communities. However, without knowing the modalities of any labelling it is not possible to be more precise.

*Our conclusion is that should labelling be introduced it will result in higher prices for religious groups which demand meat from unstunned animals. There will also be a risk that these religious groups become stigmatised.*
5.8 Existing information on the use of stunning

Stakeholders explained that there are quite a few voluntary schemes which allow consumers to be sure that meat is from animals which have not been slaughtered under the religious derogation, although the prevalence of these varies by Member State. Furthermore, in some Member States it is quite usual for retailers to insist that all their own label products are from animals which have been pre-stunned. There are also certification schemes which allow the identification of Kosher and Halal meat, although in the latter case this does not provide information on whether the animal was pre-stunned without reference to the certification standards. Stakeholders felt that it is therefore possible for motivated consumers to be sure that the fresh meat they buy at retail is from stunned animals in some Member States.

There are also some voluntary schemes which allow the motivated consumer to be sure that the meat in processed products is from stunned animals in the processed product sector, although this is far less common. Stakeholders agreed that the greatest potential information gap is in the wholesale and catering sector.

*Our conclusion is that it is possible for consumers to select fresh meat from stunned animals in certain Member States. This is relatively straightforward in Member States which do not operate the religious derogation, as well as where relevant voluntary schemes are in place. In Member States which operate the derogation, but do not have voluntary schemes, it may be difficult for consumers to identify meat from stunned animals; this aspect deserves further research. There is a potential information gap across the EU for further processed products and in the catering sector.*
6 References


European Commission (2005) Attitudes of consumers towards the welfare of farmed animals. Special Eurobarometer 229 / Wave 63.2 – TNS Opinion & Social.


FCEC (2013) Study on the application of rules on voluntary origin labelling of foods and on the mandatory indication of country of origin or place of provenance of meat used as an ingredient. Final Report - Assessment B: Study on the application of rules on mandatory indication of
country of origin or place of provenance of meat used as an ingredient (MCOOL). Food Chain Evaluation Consortium (FCEC), project leader Agra CEAS Consulting. Brussels, 10 July 2013 (rev.).

**FCEC** (forthcoming) Study on the mandatory indication of country of origin or place of provenance of unprocessed foods, single ingredient products and ingredients that represent more than 50% of a food. Final Report. Food Chain Evaluation Consortium (FCEC), project leader Agra CEAS Consulting. Brussels, 10 September 2014.


The Grocer (2014) Halal meat: shoppers won't pay more to avoid it. 18 May 2014.

The Grocer (2014) Poultry producers welcome delay to rule change on stunning. 22 May 2014.


Appendix 1: Final survey questionnaire

Screening question

S.1 Do you buy any of the following types of meat (or products produced from these meat types):

1. Beef
2. Lamb
3. Poultry
4. None of these → END OF INTERVIEW

S.2 How often do you eat meat (beef, lamb or poultry)?

1. Once a day
2. Several times per week but not every day
3. Once a week
4. Less than once a week
5. Never

Main questions

1. Which is the main place you buy meat or meat products from? (Do not prompt, code one response)

   1. Supermarket
   2. Hypermarket
   3. Discount store
   4. Grocery
   5. Convenience store
   6. Butcher
   7. Outdoor market
   8. Directly from a farm
   9. Farmers markets
  10. Online
  11. Other

2. When you purchase meat or meat products, what are the three main factors that influence your decision? (unprompted, pre-coded; record 1st, 2nd, 3rd;)

A: Quality

1. Use by/best before date
2. Nutritional content (e.g. fat content, level of meat content)
3. The type of cut (e.g. breast meat, leg meat, etc.)
4. Presentation: packaging, visual aspects of the meat
5. Other quality-related aspects

B: Price

1. Price per kg
2. Overall price
3. Price compared to other meats/cuts
4. Special price offers
5. Other price-related aspect

C: Origin

1. Country/region of origin
2. Producer
3. Other origin-related aspects

D: Production method or specific claims

1. Outdoor or free range
2. Traditionally produced/processed
3. Specific feed regime (e.g. organic, corn fed, grass fed, GM-free, etc.)
4. Certified production methods
5. Other production-method aspect

E: Slaughtered in accordance with religious rites

1. Halal
2. Kosher
3. Other religious rite-related aspect

F: Animal welfare

1. Animal welfare on-farm
2. Animal welfare during transport
3. Animal welfare at slaughter
4. Stunning of animal before slaughter
5. Animal welfare certification
6. Other animal welfare-related aspect

G: Other aspects

1. Convenience (e.g. off the bone, ready cooked, ready to cook, etc.)
2. Size of the portion
3. Other (specify)
4. No other factor (only for second/third response)

3. How satisfied are you with the clarity of the information available on the meat/meat products you buy?

1. Very satisfied
2. Satisfied
3. Not satisfied
4. Very unsatisfied
5. Don’t know
4. Do you think there are laws covering the stunning of animals (meaning that they are made unconscious) before slaughter in <Member State>?

1. Yes
2. No
3. Don’t know

**Explanation:** There is legislation which requires animals to be stunned before slaughter.

5. Do you think this legislation requiring stunning applies to all animals slaughtered in your country?

1. Yes
2. No
3. Don’t know

**Explanation:** Legislation allows slaughter without stunning in line with religious rites if it takes place in a slaughterhouse. This is to respect freedom of religion because some religions have a longstanding requirement to use particular methods of slaughter which may not allow the stunning methods used in slaughterhouses.

6. Should meat from animals which are not stunned be sold using similar labelling as other meat?

1. Yes
2. No
3. (Do not read) It’s not an issue for me/don’t know

7. Would you look for information on how authorities check the rules on the protection of animals in slaughterhouses?

1. Yes
2. No
3. Don’t know

8. When purchasing meat or meat products, how interested are you in receiving information on the stunning of the animal?

1. Very interested in receiving this information
2. Quite interested in receiving this information
3. A little interested in receiving this information
4. (do not read) I do not want this information □ Skip to Q11
5. Do not know

9. If information were to be made available on the stunning of animals, which of the following options would you prefer (choose one)?

1. To know whether the animal was stunned or not.
2. To know whether the animal was stunned or not and an indication of the stunning method used.
3. (Do not read) Do not know
10. If information were to be made available on the stunning of animals, how should this be done (choose one)?

1. Words to explain whether or how the animal was stunned prior to slaughter?
2. A numeric code saying whether the animal was stunned or not and/or, if stunned, in which way?
3. (Do not read) Do not know
4. Go to background information

11. If you do not want this information, what would be the main reason? (Do not prompt, only one answer)

1. I do not want or need this information
2. It could increase the price
3. I trust my butcher/shop where I buy meat
4. Animals should always be slaughtered after being stunned
5. This may risk limiting freedom of religion or stigmatise minorities
6. I do not like to think of the animals when I buy meat
7. There is already too much information on meat or meat products
8. Other, please specify

Background information

12. Member State (coded)

13. How old are you?

[ ] [ ] (RECORD AGE IN YEARS, min.18)
99 Refused

14. Gender

1. Male
2. Female

15. What is the highest level of education (general or vocational) you have successfully completed (usually by obtaining a certificate or diploma)? (Eurobarometer, based on International Standard Classification of Education (ISCED97).

National list

1. No formal education, cannot read or write (ISCED 0)
2. Nursery school (ISCED 0)
3. Infant / junior school, basic adult literacy (ISCED 1)
4. Lower secondary school – age less than 14 (ISCED 2)
5. Upper secondary school – (GCSE / SCE. youth training / NTMA, A-level, Highers, NVQ / SVQ level 3) (ISCED 3)
6. Higher education access courses (ISCED 4)
7. Undergraduate degree, master's degree (ISCED 5A)
8. HND / HNC / Nursing degree, PG diplomas, NVQ, SVQ levels 4-5 (ISCED 5B)
9. Doctorate (ISCED 6)
10. Refusal

<table>
<thead>
<tr>
<th>15.A EDUCATIONAL LEVEL: 3-LEVEL INDEX – RECODED VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low educational attainment (coded ISCED 0-2)</td>
</tr>
<tr>
<td>2. Medium educational attainment (coded ISCED 3 and 4)</td>
</tr>
<tr>
<td>3. High educational attainment (coded ISCED 5 and 6)</td>
</tr>
<tr>
<td>4. Refusal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Which is your current occupational status?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In full-time occupation</td>
</tr>
<tr>
<td>2. In part-time occupation</td>
</tr>
<tr>
<td>3. Unemployed / Seeking work</td>
</tr>
<tr>
<td>4. Homemaker</td>
</tr>
<tr>
<td>5. Retired</td>
</tr>
<tr>
<td>6. Student</td>
</tr>
<tr>
<td>7. Other non-working status</td>
</tr>
<tr>
<td>8. Refusal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. Do you feel like you belong to a particular religion? If yes, which one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Catholic</td>
</tr>
<tr>
<td>2. Protestant</td>
</tr>
<tr>
<td>3. Orthodox</td>
</tr>
<tr>
<td>4. Jewish</td>
</tr>
<tr>
<td>5. Muslim</td>
</tr>
<tr>
<td>6. Buddhist</td>
</tr>
<tr>
<td>7. Other</td>
</tr>
<tr>
<td>8. Non-believer\Agnostic</td>
</tr>
<tr>
<td>9. Refusal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18. Apart from weddings or funerals, about how often do you attend religious services? (Eurobarometer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. More than once a week</td>
</tr>
<tr>
<td>2. Once a week</td>
</tr>
<tr>
<td>3. About once a month</td>
</tr>
<tr>
<td>4. About each 2 or 3 month</td>
</tr>
<tr>
<td>5. Only on special holy days</td>
</tr>
<tr>
<td>6. About once a year</td>
</tr>
<tr>
<td>7. Less often</td>
</tr>
<tr>
<td>8. Never</td>
</tr>
<tr>
<td>9. Refusal</td>
</tr>
</tbody>
</table>

| 19. RECORD BY NUT 3                                                                          |
1. Predominantly urban
2. Intermediate
3. Predominantly rural

20. NUT 1 (varies by country)
Appendix 2: Consultation discussion questions

1. **Consumer demand for information on stunning**
   - Do the findings from this survey fit with your understanding of consumer views on this issue?

2. **Consumer understanding of slaughter practices**
   - Do you think that consumers have sufficient knowledge about stunning practices to understand descriptions of stunning methods used?

3. **Consequences of introducing labelling on stunning**
   - What do you think would be the consequences of introducing labelling on the stunning of animals in terms of meat and meat product consumption?
   - What would be the consequences in terms of the prevalence of pre-slaughter stunning? Would you expect labelling to increase the use of stunning or decrease it?

4. **Costs and willingness to pay**
   - What changes to processes would be necessary for Food Business Operators?
   - What would be the costs of introducing such labelling for Food Business Operators?
   - What would be the costs for competent authorities in ensuring that the labelling was accurate?
   - To what extent would you expect consumers to be willing to pay for information on stunning?

5. **Differential impacts**
   - Would the impact be different for fresh meat and meat products?
   - Would you expect any impact on cross-border trade within the EU?
   - Would different groups be affected in different ways from the use of labelling on stunning?
   - To what extent would you consider that providing this information could cause stigmatisation of certain groups?
   - What consequences would there be for access to Halal and Kosher meat for Muslim and Jewish populations?

6. **Existing information on pre-slaughter stunning**
   - What voluntary schemes are you aware of which cover whether pre-slaughter stunning is used and do these clearly convey information about the use, or otherwise, of stunning to consumers (these may or may not be related to religious rites)?
   - What schemes and standards are you aware of which make pre-slaughter stunning mandatory?
Appendix 3: Case study interview topic guide

The questions used in the case study interviews are set out below. These were accompanied by a guidance document which provided the interviewers with a background to the study and detailed notes on the sort of issues to probe when following the guide. The interviews were conducted in three parts. First, general reaction to the consultation paper; second, general Member State background relevant to this issue; and, third, an investigation of specific topics within the national context.

A. General reaction to the consultation paper
1) What are your general comments on the consultation paper?
2) How does this fit with your understanding of the national position?
3) Are you aware of any work carried out in your Member State which either confirms or contradicts the findings here?

B. Member State background
4) How is the religious derogation used?
5) What is the acceptance of meat from pre-stunned animals amongst religious communities?
6) What is the availability of meat from unstunned animals?
7) Are there data on the proportion of animals slaughtered without stunning and what is the market for this meat?
8) Is this issue considered to be a significant one?

C. Specific topics

Consumer demand for information on stunning
9) What level of real demand is there for labelling on stunning in your Member State?
10) What are the motivations for any demand?
11) How does the level of interest in stunning compare to interest in other issues in the food chain?
12) What information on stunning would be relevant for consumers?
13) What is the level of media/political interest in this topic and how has this been changing?
14) Is information on stunning necessary given that stunning is a legal requirement?

Consumer understanding of slaughter practices
15) To what extent are consumers aware of and understand the slaughter process?
16) Where do consumers get information/knowledge on slaughter from?
17) Do consumers have sufficient knowledge about specific stunning practices to understand descriptions of methods used?
18) Would consumers be able to weigh animal welfare concerns against economic considerations?

Consequences of introducing labelling on stunning
19) What would be the consequences of introducing labelling on stunning on meat and meat product consumption?
20) What would be the consequence of introducing labelling on stunning in terms of the prevalence of pre-slaughter stunning?
21) Would there be any difference in impact as a result of using a numeric code or a textual explanation?
22) What differences might be expected if labelling (i) applied to all meat, i.e. labelled stunned or unstunned; (ii) only non-stunned meat, i.e. meat which has been stunned carried no label; (iii) only unstunned meat, i.e. meat which has been stunned carried no label?
23) Would you expect any impact on external trade? Would Third Countries have to use the same labelling?

**Costs and willingness to pay**

24) To what extent do slaughterhouses currently specialise in stunning or non-stunning?
25) What changes would be necessary for Food Business Operators along the supply chain?
26) What magnitude of costs would be incurred from introducing these changes?
27) Would there be any additional costs directly caused by labelling?
28) Would there be any indirect costs from changes in demand and/or changes in trade?
29) What would be the costs for Competent Authorities in checking compliance?
30) Who would ultimately bear these costs?
31) To what extent would consumers be willing to pay?

**Impacts on different groups**

32) Which groups of consumers would bear the costs?
33) Would the impact be different for fresh meat and meat products?
34) To what extent would providing this information cause stigmatisation of certain groups?
35) What consequences would there be for access to Halal and Kosher meat?

**Existing information on pre-slaughter stunning**

36) What voluntary schemes are you aware of which require pre-slaughter stunning?
37) What voluntary schemes are you aware of which specify that stunning must not be used?
38) To what extent do Food Business Operator Corporate, Social Responsibility (CSR) requirements cover pre-slaughter stunning?
Appendix 4: Survey socio-demographic characteristics

A range of socio-demographic characteristics were collected in our survey to allow analysis of sub-groups where this is meaningful. This section presents these characteristics weighted to represent the EU-27 population.

Almost two-thirds (64.6%) of meat purchasers are female. Figure A4.1 presents the age profile of respondents and shows that the size of the 35-44, 45-54 and 55-64 age groups is broadly equivalent with a higher percentage of respondents in the 65 and over age group and a smaller proportion in the 18/24 age group. The reader should recall that our target population is those who purchase meat, so a small 18-24 age group should be expected.

![Age Profile Chart]

**Figure A4.1: Age profile**

Source: FCEC consumer survey.
Occupational status is presented in Figure A4.2. Some 44% of meat purchasers are in full-time occupation and around a quarter (26%) are retired.

The group that refused to state their occupational status is too small to be used reliably in further analysis (82 respondents); the same also applies to the “other non-working” group (112 respondents)

Figure A4.2: Occupational status

Source: FCEC consumer survey.

---

33 These numbers refer to the sample and are therefore unweighted. Data in the figures are weighted.
Respondents were asked to state the highest level of education that they had successfully completed and the responses were recoded into three categories using the UNESCO International Standard Classification of Education (ISCED)\textsuperscript{34}. Almost half (48\%) of EU-27 meat purchasers are classed as having medium educational achievement, while more than one-fifth are classed as having high educational achievement (Figure A4.3). The sample compares well to the EU-27 population where 28\% of those aged between 18 and 74 have low educational achievement, 47\% medium and 25\% high educational achievement\textsuperscript{35}. Those with high educational achievement are very slightly over represented by our survey, as are those with low educational achievement.

Where education is used to further analyse responses those that refused to provide an answer have been excluded because the group is too small to produce statistically reliable results (99 responses).

\textbf{Figure A4.3: Educational achievement}

Source: FCEC consumer survey.

\textsuperscript{34} This was developed to facilitate comparisons of education statistics and indicators across countries on the basis of uniform and internationally agreed definitions. Low educational achievement is equivalent to leaving school at or before 16, medium to completing high school (18) and high to degree level or above.

\textsuperscript{35} Eurostat: Population by educational attainment level, sex and age.
The majority of people (63%) who purchase meat eat it several times a week (Figure A4.4). Almost equal proportions of meat purchasers eat meat daily and once a week.

Those who never eat meat are excluded from further analysis because the number of respondents (14) is too small to provide statistically reliable inference.

**Figure A4.4: Frequency of meat consumption**

Source: FCEC consumer survey.
Religious affiliation closely matches Eurobaromer (2012)\(^{36}\). Figure A4.5 shows that almost half (48%) of meat purchasers in the EU-27 are Catholic with the other major Christian faiths accounting for a further 22% (14% Protestant and 8% Orthodox). Non-believers/agnostics account for 15%. Our survey suggests that 1.6% of EU-27 meat purchasers are Muslim and 0.1% Jewish. In both cases these are within our ±1% confidence interval of the Muslim (2%) and Jewish (0%) populations given by Eurobarometer (2012) which was concerned with the 15+ population.

Where religious affiliation is used in further analysis it is not possible to provide analysis for the Jewish and Buddhist groups because the base is too small (11 and 6 respectively).

![Figure A4.5: Religious affiliation](image)

Source: FCEC consumer survey.

\(^{36}\) Eurobarometer (2012) shows 48% Catholic, 12% Protestant, 8% Orthodox and non-believers/agnostics, 16%. All other classifications, plus those who answered “don’t know” account for 14%, the same proportion as “other” and “refusal to answer” in our survey.
Some 40% of the EU-27 meat purchasing population is located in predominantly urban areas with 24% in predominantly rural areas. The remainder is located in intermediate areas. This is very similar to the breakdown provided by Eurostat where 42% of people live in predominantly urban areas, 22% in predominantly rural areas and 35% in intermediate areas.

Figure A4.6: Eurostat urban rural typology (recoded from NUTS 3)

Source: FCEC consumer survey.
Respondents were asked whether they bought beef, lamb and/or poultry. Figure A4.7 shows that most respondents buy at least poultry (89%), three-quarters (75%) buy at least beef and 44% buy at least lamb. A third (33%) of survey respondents purchase all three meats. Some 17% of respondents buy only poultry with 32% buying poultry and beef, but not lamb.

The number of respondents buying only lamb (135) is too small to allow independent investigation. However, it is possible to distinguish between those buying only poultry and those buying only red meat (11.4%).

Figure A4.7: Meat purchase patterns of respondents

Source: FCEC consumer survey.
Appendix 5: Further analysis of the consumer survey

This appendix is contained in a separate document.
Appendix 6: EU level consultation on providing information to consumers on the stunning of animals

This appendix is contained in a separate document.
Appendix 7: Case study monographs

This appendix is contained in a separate document.