



Brussels, XXX
[...] (2013) XXX draft

Impact Assessment

COMMISSION STAFF WORKING DOCUMENT

Mandatory Origin Indication for Unprocessed Pig, Poultry, Sheep and Goat Meat

Table of Contents

GLOSSARY of Abbreviations and technical terms.....	3
Introduction	4
1. PROCEDURE	5
1.1. Identification.....	5
1.2. Organisation and timing	5
1.3. Public consultation, opinion of stakeholders and external expertise.....	5
1.4. Scrutiny by the Commission Impact Assessment Board.....	7
2. POLICY CONTEXT, SUBSIDIARITY AND PROBLEM DEFINITION.....	7
2.1. Policy context and subsidiarity.....	7
2.2. Voluntary origin indication	8
2.3. Organisational and institutional context.....	9
2.4. Problem definition	9
2.4.1. What is the scope of the initiative?	9
2.4.2. Who is affected?	11
2.4.3. Regulatory framework	12
3. ECONOMIC CONTEXT.....	13
3.1. Economic context of pig meat	16
3.2. Economic context of poultry meat.....	18
3.3. Economic context of sheep and goat meat	20
4. OBJECTIVES	23
4.1. General objectives	23
4.2. Specific objectives	23
5. POLICY OPTIONS.....	23
5.1. Policy option 1: Mandatory labelling of EU or third country as country of origin (the simple model)	23

5.2. Policy option 2: Mandatory labelling of country of rearing and of slaughter (the intermediate model).....	24
5.3. Policy option 3: Mandatory labelling of country of birth, rearing and slaughter (the beef model).....	25
5.4. Other options	26
6. ANALYSIS OF IMPACTS.....	26
6.1 Impacts against the fulfilment of the specific objectives	26
6.2. Economic impacts.....	27
6.2.1. Operating costs and conduct of businesses.....	27
6.2.2. Competitiveness, trade and investment flows.....	29
6.2.3. Administrative burdens on businesses	30
6.2.4. Burden on public authorities.....	31
6.2.5. Impact on SMEs and microenterprises	32
6.3. Costs and benefits for consumers and possible social impacts	32
6.4. Environmental impacts	33
7. COMPARING THE OPTIONS	34
7.1. Information to consumer	34
7.2. Additional costs for the meat supply chain	35
7.3. Impact on consumers, trade and administration	35
7.4. Impact on investment flows, environmental and social impacts.....	35
7.5. Stakeholders' views	36
7.6. Summary of comparison of options.....	36
8. MONITORING AND EVALUATION	37
ANNEX 1. Main findings of the external study.....	39
ANNEX 2. Main results of the study of the functioning of the meat market for consumers in the EU.....	68
Annex 3. Summary of the stakeholder workshop	71
Annex 4. Summary of stakeholder consultation	78

GLOSSARY OF ABBREVIATIONS AND TECHNICAL TERMS

Abbreviations

BEUC – European Consumer Organisation

BSE - bovine spongiform encephalopathy

CN – Combined nomenclature of customs codes

EUFIC - European Food Information Council

FBO – Food Business Operator

FIC – Food Information to Consumer Regulation No 1169/2011

FVO – Food and Veterinary Office of the European Commission

PDO – Protected Designation of Origin

PGI – Protected Geographical Indication

SME – Small and Medium-Sized enterprise

TBT – technical barriers to trade

TRQ – tariff rate quota

TSG – Traditional Speciality Guaranteed

WTO – World Trade Organisation

Technical terms

Minced meat: boned meat that has been minced into fragments and contains less than 1% salt.

Trimming: small pieces of meat recognised as fit for human consumption produced exclusively during trimming operations, during the boning of carcasses or the cutting up of meat.

INTRODUCTION

The primary purpose of this Impact Assessment is to prepare the Commission implementing rules laying down practical modalities for the mandatory indication of origin of unprocessed meat of pigs, poultry, sheep and goats. These modalities should provide consumers with meaningful information and at the same time not create disproportionate burdens for the meat supply chain, trade, consumers themselves and public authorities.

Regulation (EU) No. 1169/2011 of the European Parliament and of the Council on the provision of food information to consumers sets out mandatory indication of country of origin or place of provenance for unprocessed meat of the above-mentioned species, as from 13 December 2014. Considerations as to whether mandatory origin labelling should apply to the concerned types of meats are thus redundant in the context of this impact assessment.

The Commission has to adopt implementing acts by 13 December 2013 following impact assessments that shall consider the options for implementing the rules of origin labelling with respect to place of birth, rearing and slaughter of an animal. It is against this background, and considering the definitions of country of origin and place of provenance, that the different options in this impact assessment have been constructed.

Largely, the impact assessment is based on evidence from an external study carried out by LEI Wageningen University. The study examined and compared different options of implementing origin labelling, assessing the feasibility and costs of different geographical levels for expressing the provenance of the meat and considering the stages of the life of an animal. It evaluated the situation and possible impact of origin labelling on the meat supply chain, trade, consumers and administration in EU27 but also included seven case studies in different sectors and Member States.

Although the study focused on four options for the assessment of impacts, this Impact Assessment report only features three options which nevertheless reflect all the elements of the study options. The simple option (1) would be to label the origin as EU/third country according to where the animal was reared and/or slaughtered. The intermediate option (2) would feature labelling of Member State or third country of both rearing and slaughter. The last option (3) mirrors the labelling scheme already in force for beef for more than 10 years. Other possible options were not considered for deeper analysis for various reasons explained in the report.

The impact of options was analysed in comparison with the current situation, (i.e. voluntary origin labelling) to identify possible extra burdens resulting from mandatory origin labelling for the meat supply chain (farmers, traders, slaughter, cutting and packing industry), consumers and national control authorities. Possible impact on trade flows was also analysed. The analysis points out the crucial role of the meat industry, notably the cutting plants. It is there where the animals are cut up and where the difficulty to track origin really lies.

The cost on controls to be carried out by the national authorities is thought to be limited and largely temporary. This cost is the bigger the more complex is the labelling scheme.

Broadly speaking, the impact is rather marginal. The first option would appear to have almost no impact on the companies as regards extra cost. Consequently, the consumer price and farm income would not be affected. It would also have no impact on trade flows. However, the consumers might not be satisfied with the level of origin information obtained.

The other two options were found to result in additional costs which would remain however low, being the highest for the pig sector with a 2.3% increase of the wholesale price for option 3. The option 2 would result in roughly half this increase. The extra cost was found to be mainly transmitted to consumers (90%) thus the meat price would increase and to a lesser extent to farmers who would be paid less for the meat they supply. Trade flows would be affected marginally (up to 2%). As a result of higher prices, the EU citizens would consume less and thus more would need to be exported for the products in surplus (pig and poultry meat) and less sheep meat would be imported.

Option 3 is more detailed in terms of information to consumers but results in the highest costs for all actors, including the consumers themselves. Option 2 appears to be the most suitable of the three, providing consumers with meaningful information while at the same time not creating disproportionate burdens for all the actors concerned.

1. PROCEDURE

1.1. Identification

Lead DGs: DG AGRI – Agenda Planning Reference: 2013/AGRI/019

Title: Mandatory origin indication for unprocessed pig, poultry, sheep and goat meat.

1.2. Organisation and timing

The work on the Impact Assessment formally started in March 2013. The Impact Assessment Steering Group (IASG) chaired by DG AGRI met three times: on 12 March, 4 April and 25 April 2013. SG, SJ, DG SANCO, ENTR, ENV, MARKT, EMPL, TRADE and BUDG were invited to the meetings, and representatives of SG, SJ, DG SANCO, ENTR and TRADE attended and contributed to the discussions. The remarks of the members of the Steering Group were taken into account wherever possible. The minutes of the IASG meetings accompany the report.

1.3. Public consultation, opinion of stakeholders and external expertise

This impact assessment builds on a wide range of information sources as well as on intensive consultation with stakeholders and thorough exchanges among Commission services:

- A key source of evidence is an **external study** commissioned by DG AGRI in September 2012 to LEI Wageningen University as main consultant in association with IFIP (*Institut du Porc*), IRTA (*Institut de Recerca I Tecnologia Agroalimentaires*), ITAVI (*Institut Technique de l'Aviculture*), University of Göttingen and *Veteffect Consultancy and Recruiting*. The study (hereinafter 'the external study') was managed by an inter-service Steering Group with the active participation of DG ENTR, SANCO and TRADE. The main findings of the study are presented in Annex I and the full report with annexes will be published on DG AGRI public website.
- A consumer market study of meat in the European Union (SANCO/2009/B1/010) commissioned in 2012 and carried out by LEI, GFK and Capgemini Consulting. It included a consumer survey in all Member States, which among other aspects, looked at origin labelling. The main findings of the study are presented in Annex II and the full report will be published on DG SANCO website.
- A **stakeholder consultation** organised on 26 October 2012 in Brussels by AGRI's external consultant in the form of a **workshop**. Around 50 participants representing the different interests along the meat supply chain (farmers, processors, traders, retailers and consumers) expressed their concerns and expectations around the new mandatory origin labelling. The summary of the workshop is included Annex III.
- Furthermore, stakeholders have been extensively consulted in the **Advisory Groups** on "pig", "poultry", "sheep and goat meat", and "quality policy" in autumn 2012 and again in spring 2013. Participants (representatives of farmers, cooperatives, meat processors and traders, environmental NGOs and consumers) have also been invited to submit their views in writing. The summary of the stakeholder consultations is provided in Annex IV.
- The general public was not consulted as this Impact Assessment focuses on the technical modalities of implementation. It is already given that origin labelling must be mandatory and the general consumer need for labelling had already been established in the Impact Assessment for Regulation 1169/2011. Furthermore, the meat market study by SANCO referred above also looked at consumer expectations and behaviour as regards origin labelling. In addition, there were other already existing surveys and literature to adequately deal with the consumer aspect and in any case consumers' representative have been consulted within the external study and during this Impact Assessment .
- Member States authorities have been consulted in the frame of the **Committee of the Single Common Market Organisation**.
- The WTO members will be consulted on the new labelling rules via a TBT notification.
- The **Working Group on the provision of Food Information to Consumers**, composed of Member States representatives, will be consulted on the implementing rules before the formal vote in the corresponding **Standing Committee**.

1.4. Scrutiny by the Commission Impact Assessment Board

The Impact Assessment Board of the European Commission assessed a draft version of the present impact assessment and issued its positive opinion on 19 June 2013.

The recommendations of the Board are taken into account in the report in the following manner:

- a) A sub-chapter 2.2. giving an overview of existing voluntary labelling schemes has been included. The report was also elaborated as regards the traceability systems and in particular the relationship between traceability and origin labelling.
- b) When presenting the policy options in Chapter 5, the report clarifies how the options relate to existing traceability systems and possible upgrading of these systems. It also reinforces the argument that "EU/non-EU" is considered insufficient as origin by some stakeholders. A sub-paragraph on impacts on SMEs is added in Chapter 6. The description of the methodology used is elaborated in the report and an additional annex on methodology is added.
- c) The stakeholder views are brought forward more clearly and a summary of their written positions is provided in Annex 5.
- d) Furthermore, in annex 2, detailed impacts by Member States were included and a glossary of both abbreviations and technical terms has been added.

2. POLICY CONTEXT, SUBSIDIARITY AND PROBLEM DEFINITION

2.1. Policy context and subsidiarity

Article 26 of Regulation (EU) No 1169/2011 of the European Parliament and of the Council on the provision of food information to consumers provides for **mandatory** indication of country of **origin** or place of provenance for **unprocessed meat** of pigs, poultry, sheep and goats as from 13 December 2014. The obligation concerns **pre-packed fresh, chilled and frozen meat** in any form of cut and includes (unprocessed) minced meat.

The Legislator decided that the Commission had to **adopt implementing acts by 13 December 2013** following impact assessments that shall consider options for labelling the country of origin or place of provenance taking into account the specifics of the different types of meat.

Considering the above, origin labelling for the pre-packed unprocessed meats of the specified types will be regulated at EU level. However, Member States may also require the provision of origin on a mandatory basis for non-pre-packed unprocessed meat by means of national provisions following Article 44 of Regulation (EU) No 1169/2011.

Currently, mandatory origin labelling is mandatory for several products, such as **beef**, fruit and vegetables, bananas, olive oil, wine, eggs, **imported poultry meat**, honey and hops. For

beef, EU legislation requires the indication of the country of birth, rearing and slaughter on pre-packed unprocessed meat (or the indication of one origin where all three stages took place in the same country)¹. For imported pre-packed unprocessed poultry meat, country of origin must be labelled.² For pre-packed organic meat, the place of farming must be labelled as 'EU Agriculture', 'non-EU Agriculture' or 'EU/non-EU Agriculture' but this indication can be replaced or supplemented by mentioning a country (if all agricultural raw materials of the product have been farmed in that country).³

For **other types of meat** (including the ones covered by this impact assessment), origin labelling can currently be applied on a voluntary basis.

2.2. Voluntary origin indication

Labelling of origin for other meats than unprocessed beef is currently voluntary at EU level and there are a number of national or private schemes in the Member States.

The only national compulsory labelling scheme focusing exclusively on origin is known to exist in Italy. The compulsory labelling of country of origin applies on poultry meat produced and marketed in Italy and as such, does not comply with the actual status of EU law.

Apart from this, there are several examples of voluntary labelling schemes which generally cover more aspects than origin and work as quality marks. It can include origin requirements but the specifications does not necessarily include the explicit labelling of such origin.

For instance, France has a well-developed voluntary scheme "*Le Label Rouge*" for poultry. Production of poultry meat under this scheme is managed by "quality groups" which unite the major stakeholders in the production chain such as input suppliers, chicken farmers and slaughterhouse(s). The quality group is responsible for the enforcement of the product specifications (including a specification on origin requirements), as well as the organisation of production, marketing and communication. For pig meat the voluntary origin label "*Viande de Porc Française*" has been established by French authorities as a voluntary scheme mainly based on certification of French origin..

Sheep and goat meat is a high value product in many countries and part of this production is marketed under a large number of PDO, PGI and TSG quality schemes. Some of these

¹ Article 13(5) of Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97 (OJ L 204, 11.8.2000, p. 1).

² Article 5 of Commission Regulation (EC) No. 543/2008 of 16 June 2008 laying down detailed rules for the application of Council Regulation (EC) No. 1234/2007 as regards the marketing standards for poultry meat (OJ L 157, 17.6.2008, p. 46).

³ Article 24 of Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products (OJ L 189 of 20.7.2007, p. 1).

specifications require that animals must be born, raised and slaughtered in a specific country or region within a country.

Also in the pig sector there are a number of voluntary quality labels but these apply generally on processed products.

2.3. Organisational and institutional context

Basic legislation on information to consumers is an EU competence with obvious links with health and consumer protection policies as well as with the internal market policies. For its very nature, food labelling is a sensitive issue for Union citizens and has direct implications for agriculture and the food industry.

Controls on the compliance with labelling requirements by economic operators remain within the competence of national authorities.

2.4. Problem definition

According to the impact assessment that supported Regulation (EU) No 1169/2011, origin of meat appears to be a major consumer concern and the beef origin labelling has created consumer expectation also for other meats. However, for the meat supply chain, implementing origin labelling may involve additional costs which could eventually translate into increased consumer price. Complicated origin labelling rules may also have an impact on trade and add an extra burden on the Member State control authorities.

The aim of the initiative is thus to provide consumers with the mandatory origin information required by the Legislator while avoiding unnecessary burdens for the meat supply chain and the administration, unwanted impacts on consumer price and trade disruptions. In other words, the challenge is to find an optimal solution.

The present impact assessment focuses on the practical modalities of the indication of origin (country of origin or place of provenance) examining and comparing the different options to implement origin labelling. These modalities could vary from one type of meat to another, taking into account the principle of proportionality and the administrative burden for food operators and enforcement authorities. **The status quo (voluntary labelling of origin) is not an option but is used in this analysis as a benchmark.**

2.4.1. What is the scope of the initiative?

Annex XI to Regulation (EU) No 1169/2011 lays down the types of meat for which the indication of the country of origin or place of provenance is mandatory as follows:

- CN code 0203: Meat of swine, fresh, chilled or frozen;
- CN code 0204: Meat of sheep or goats, fresh, chilled or frozen;

- CN code Ex 0207: Meat of the poultry of heading 0105 (fowls of the species *Gallus domesticus*, ducks, geese, turkeys and guinea fowls), fresh, chilled or frozen.

As set out in the Regulation, the labelling obligation shall apply **to pre-packed unprocessed meat** of the types of meat concerned. "Pre-packed food" is defined in the Regulation as any single item of presentation as such to **the final consumer and to mass caterers**, consisting of a food and the packaging into which it was put before being offered for sale, whether such packaging encloses the food completely or partially, but in any event in such a way that the contents cannot be altered without opening or changing the packaging. It does not cover foods packed on the sales premises at the consumer's request or pre-packed for direct sale.

Unprocessed meat includes all fresh, chilled and frozen meat which has not been processed further than cut, minced and packed. It should be without seasoning or any other added substance. The protein structure of meat must be unchanged.

The origin indication required by Article 26 of Regulation 1169/2011 is the 'country of origin or place of provenance'.

For the definition of '**country of origin**' (also referred to as the 'customs definition'), Regulation (EU) No 1169/2011 refers to Articles 23 to 26 of Regulation (EEC) No 2913/92 (Common Customs Code). Article 23 of this Regulation defines 'country of origin' as the country where live animals were born and raised. However, according to Article 24 of regulation (EEC) No 2913/92 and Article 39 and Annex 11 of Commission Regulation (EC) No 2454/93, when more than one country is involved, **the country of origin is the country where live pigs, sheep and goats were raised for two months before slaughter. Where this cannot be respected, the meat shall be deemed to originate in the country where the animals were reared for the longest period. For poultry⁴, the country of origin is the country where the birds were born and reared or reared for at least 1 month.** 'Country' in the meaning of this Regulation is an individual EU Member State, the EU as a whole or a third country.

Place of provenance is defined in Regulation (EU) No 1169/2011 (article 2(2)(g)) **as any place where a food is indicated to come from, and that is not the 'country of origin'**. Thus, the 'country of origin or place of provenance' extends the options for origin labelling beyond the customs definition.

According to Article 9.2. of Regulation 1169/2011, the mandatory particulars including origin shall be indicated with words and numbers and additionally can be expressed by means of pictograms or symbols.

⁴ Poultry is not covered by the general rules but by the "list rules":
http://ec.europa.eu/taxation_customs/resources/documents/roo_chap_1-5_en.pdf

2.4.2. Who is affected?

- **Consumers:** consumers are the primary beneficiaries of the new rules. Indeed, research shows that for European consumers the origin of meat ranks number 4 among the information aspects they look for when they buy fresh meat, just after the price per kilogram, the price and the durability date (SANCO Meat market study). Consumers express a preference for national meat (especially in Greece, France, Poland, Austria and Sweden), they do not seem to apprehend the EU origin as a single, integrated whole, but tend to think in terms of distinct national meat origins. These results coincide with the studies carried out by BEUC⁵

However, numerous studies have revealed a ‘consumer paradox’ between consumers’ attitudes and behaviour towards origin labelling. While a majority of consumers generally respond that indication of origin is important, the purchase decisions may be different from answers given in surveys and country of origin is not a major factor in most meat purchasing decisions. Furthermore, the reading of labels is limited in time: according to EUFIC, consumers spend on average 35 seconds handling individual products. For more information on the consumer perceptions, see Annex 1.

- **Meat supply chain:** various actors in the meat supply chain (farmers, slaughterhouses, cutting plants, processing plants, trade outlets) will be affected as the new obligation will require additional effort involving extra costs and reduce competitive innovation related to the provision of information on origin. The exact effects will depend on the option finally retained. These tend to be higher in certain parts of the chain (cutting plants), for less integrated systems and for companies that procure live animals or meat from different sources. Other operators, however, see origin labelling as a genuine marketing tool.
- **Micro-enterprises** are not excluded from the scope of the Food Information Regulation; therefore the origin labelling rules will apply to them. However, given that the measures will only apply to pre-packed meat, it is anticipated that many micro-enterprises involved in the meat supply chain (butcher shops, local market sales) will not be affected.
- **Trade** with third countries may also be affected since the labelling obligation **applies to all meats sold in the Union, regardless the origin**. However, as explained above, trade with third countries is rather limited, some mandatory requirements exist already (e.g. for imported poultry) and voluntary origin labelling initiatives are common (e.g. sheep meat from New Zealand). With regard to international trade law, the WTO TBT Agreement requires measures to be non-discriminatory and not more trade-restrictive than required to achieve the legitimate objective. Labelling rules should not create unnecessary obstacles to international trade.

5

<http://www.beuc.eu/BEUCNoFrame/Docs/1/PDLCEHEBNBPAJGABCOFMEDMDPDW69DBDGY9DW3571KM/BEUC/docs/DLS/2013-00042-01-E.pdf>

- **Public authorities**, whose administrative burden would increase, in particular as regards the performance of checks and the administrative follow-up of non-compliant cases including the application of sanctions. As the experience on compulsory beef labelling showed, the division of responsibilities between the various national official bodies in charge is often complex and can pose difficulties in this domain.

2.4.3. Regulatory framework

There are clear links between existing requirements on **traceability and the new labelling requirements (Regulation 1169/2011)**. In fact, these two notions do not differentiate so much on the nature of the information but rather on its accessibility: traceability consists of information to be delivered ex-post upon request, while labelling requires the information accompanying the very good, no matter how many times it can be subdivided until it reaches the final consumer, and therefore requires much more sophisticated systems.

Food traceability is the ability to track any food, food producing animal or substance that may be destined for human consumption through all stages of production, processing and distribution of foods in order to ensure food safety. The new labelling provisions ensure that consumers make informed choices.

Traceability system can work without being linked to origin labelling but origin labelling cannot exist without a well-functioning traceability system. General traceability, for the purpose of animal health and food safety, is compulsory and is regulated at EU level (Veterinary legislation and Food Law). The traceability system is the most detailed in the beef sector requiring individual identification of the animals and the link between each beef batch and the group of animals from which it is obtained. But sheep and goats must be identified similarly, i.e. individually by electronic means. A system of group identification and registration system applies for pigs. For poultry, there are no identification and registration rules in place. Independent traceability systems at Member State level are not known however some voluntary labelling or quality schemes includes already specific traceability requirement (including registers and private certification schemes)..

The experience on **compulsory origin labelling for beef** in force in the EU since year 2000 constitutes a significant precedent that can shed light on the case at hand. The introduction of this obligation required major changes in economic operators throughout the chain to ensure that batches of beef were of the same origin. Consequently, production lines had to be organised in order to process each batch separately without mixing beef of various origins.

In 2004, the Commission evaluated the mandatory origin labelling for beef (COM/2004/0316 final). It concluded that the measure had a significant impact on the recovery of **consumer confidence** and, subsequently, of beef consumption in the aftermath of the BSE crisis. It clearly improved transparency in the sector. The report noted as well that, according to the trade sector, compulsory beef origin labelling also led to a certain **nationalisation of trade**, particularly in the retail sector and, as a consequence, pushed distribution companies to

restrict the range of origins in an attempt to minimise the errors potentially leading to wrong labelling. However, these effects appeared to weaken over time.

The evaluation included some points of interest relevant to origin labelling:

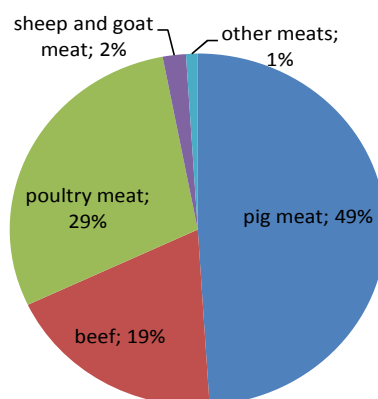
- a number of rules are difficult to apply to certain types of operators in the beef sector in all Member States. The problems mainly concern the requirements on homogeneity in batches at secondary cutting plants, traceability and labelling of off-cuts, supplies to minced beef plants and consumer information on beef products marketed in non-pre-wrapped form. FVO reports highlight particular difficulties in secondary cutting plants, which are involved in preparing retail packs, and where it may be necessary to combine meat from different batches to make up an order from a retailer or the catering sector.
- Labelling of trimmings according to the same provisions as for unprocessed cut meat is very burdensome. However, the use of trimmings in the production of minced meat is prohibited and in practice trimmings are sold to the meat processing industry, whose products such as meat preparations are sold as processed meat. Trimmings are assembled for sale by the box and the amount from a single batch of a certain origin may not be enough to make up a full box. In practice operators may not be able to make full consignments of trimmings of homogenous origin.
- Labelling in retail outlets – FVO inspections found origin labelling errors in retail outlets where beef is cut, pre-wrapped and labelled before being placed on sale. Some facilities did not have equipment to read the information on the label of the beef delivered by suppliers.

3. ECONOMIC CONTEXT

Consumers' sensitivity to origin has become a relevant issue for both companies and policy makers. Furthermore, origin branding is important for marketing purposes due to favourable connotations of specific countries or regions.

83% of the EU consumers eat meat at least two or three times a week. Labelling of origin has been mandatory for beef for a decade and with the extension of the compulsory origin labelling to pig poultry, sheep and goat meat, the bulk of unprocessed meat consumption in the Union will be covered by this obligation. Other meats (mainly horse, rabbit and game) account only for less than 1% of EU meat consumption.

Consumption of different types of meat in the EU



Source: DG AGRI

Meat supply chains in the EU can range from very simple to extremely sophisticated with a high number of market players. Apart from primary producers (livestock farmers), other main stakeholders of the chain are slaughterhouses, cutting and packing plants and retailers. Other market players include live animal and meat traders and transport companies. Although short chains exist with single operators in charge of several or all stages of the process, in the majority of the cases at least one economic operator intervenes in each phase.

Fresh, chilled and frozen meats are unprocessed products. Cutting, packaging and labelling may take place in a cutting plant attached to the slaughterhouse or in separate processing plants. It is also common that carcasses and split carcasses are labelled and delivered directly to butchers and other retail outlets.

For their very position in the chain, **slaughterhouses have a central role** to play in relation to traceability and, by securing that information flows downstream to cutting and packing units, are a key element of any origin labelling scheme. Moreover, slaughterhouses have to be registered and are regularly controlled by veterinary and other public authorities.

As in other highly fragmented sectors, intermediate operations such as cutting may be organised following several models. It is frequent that large-scale cutting plants supply a number of separate butchering/packing plants (also known as secondary cutting), the latter having for labelling purposes to rely on the information provided by these large-scale operations. In other models, primary cutting plants carry the whole operation including packing under contract, so that the goods delivered to the retailer are ready for the shelf.

Large-scale cutting operations tend to use state-of-the-art logistics and dispose of the necessary equipment to ensure accurate recording of origin information through the various stages from slaughter to packing.

Internal **traceability of meat cuts** through primary and secondary cutting plants up to the point of packaging is normally achieved through batch systems. In large-scale plants, batch details are recorded using computerised barcoding and scanning systems which enable origin information to be printed automatically on the label. In smaller units, less sophisticated systems may be used to record batch details.

The traceability of meat cuts becomes increasingly difficult as these are subsequently subdivided, first into primal cuts and then butchered into retail cuts. For this reason, the impact of mandatory origin labelling is likely to be most felt at the secondary stage of butchering, just before packing.

Regardless of their size and the sophistication of their equipment, facilities currently handling beef in the EU have in place since more than a decade a system to trace and label the origin of beef meat. In many cases, these facilities also handle pig and/or sheep meat. On the other hand, the traceability system for live bovines is more advanced than for the other species in question. Bovines are also much bigger animals and those two elements make the traceability of origin more easily feasible in the processing plants.

The **length of the supply chain** is an essential element to determine the practical difficulties and, subsequently, the additional costs deriving from the new labelling obligations. Confronted with the new requirement, a possible reaction by operators could be to simplify their supply chains. On the other hand, slaughterhouses and large-scale cutting plants that will prove more efficient in providing accurate origin information to downstream operators may find in the new obligation a competitive advantage. The same would apply for small scale slaughterhouses/cutting plants that have a very simple supply chain making it easy to provide the information.

In the **EU, meat is sold mostly pre-packed**. According to the SANCO meat market study, around 70% of EU respondents buy meat or meat products either in hypermarkets, supermarkets, convenience or discount stores where meat is generally pre-packed. 30% of respondents purchase meat in butchers, outdoor markets or directly from the farm, i.e. not pre-packed (and thus not subject to mandatory origin labelling). However, there are rather big differences by Member State: in Finland, 95% of consumers buy meat in large outlets or grocery and convenience stores while 79% of Greeks purchase their meat in butchers, markets and farms. Patterns vary as well across species: whereas poultry tends to be most often pre-packed, consumers buy pig meat almost equally in either form and for sheep the preference is for non-pre-packed.

Origin information at country level is already available on a voluntary basis for around 86% of meat sold in the EU⁶. However, that mostly applies to single cuts of meat and not re-composed products. More and more, consumption turns to products (and presentations) that

⁶ Meat Market Study, SANCO/2009/B1/010

are not made of one single animal but several, and possibly from several countries. When a carcass is cut up to pieces, the leftovers (trimmings), which can have a high value, are used in re-composed products. Minced meat is a paramount example of this. The tracking of origin in these cases can become quite problematic.

3.1. Economic context of pig meat

Annual per capita consumption of pig meat (including processed products) amounts to around 41 kg, accounting for **nearly half of total meat consumption** in the EU although important differences exist between Member States (22 kg in the UK against 68 kg in Cyprus). It is difficult to estimate the exact share of unprocessed meat over total consumption in the EU due to the diverging patterns among Member States but broadly speaking, around one third of pigmeat reaches the final consumer unprocessed.

Germany, Spain and France produce 50% of EU pig meat. Together with Poland, Denmark, Italy and Netherlands they account for 80%.

Table 1. EU supply balance of pig meat, 2012 (estimate)

EU pig meat supply balance (1 000 tonnes carcass weight equivalent)	
Gross indigenous production	22 651
Import live animals	0
Export live animals	42
Net production	22 609
Imports – meat	16
Exports – meat	2 184
Consumption	20 442
Self-sufficiency %	110%
Per capita consumption kg	40.5

Source: DG Agri (Short Term Outlook N° 5/2013)

Pig farming embraces piglet production, rearing and fattening. These three phases may take place in a single production unit but more often piglet breeding occurs in separate units and piglets are transported to specialised rearing farms.

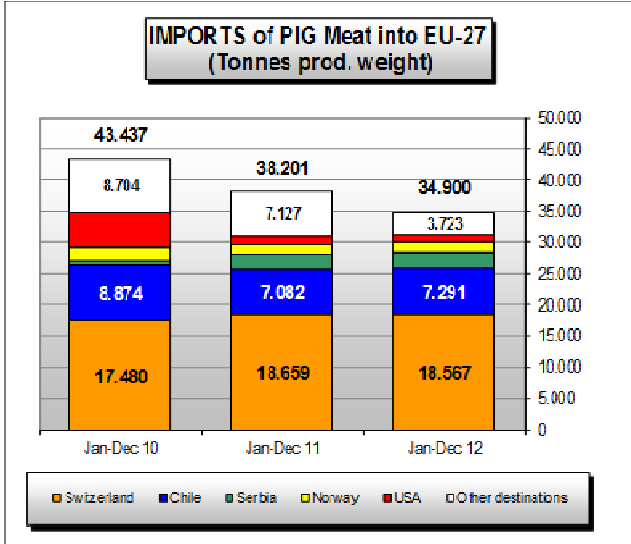
Pigs must be **identified** with the holding of birth and the last holding must be known, but information on intermediate holdings may only be available from supply chain records and is not specifically guaranteed. Complete origin information of live pigs is more likely to be readily available in vertically integrated supply chains. Indeed, in some Member States (Belgium, Spain, Poland and Romania), the pig sector has a high level of vertical integration, driven either by feed or meat companies. In others, (Denmark or France), cooperatives play an important role in the chain. In the UK, big retailers determine to a very large extent the organisation of the chain.

With an average farm size of 55 pigs (Eurostat Farm Structure Survey 2010), **production patterns differ greatly** amongst countries with a common trend towards the consolidation of production in larger units: 70% of pigs come from farms with more than 1 000 animals, the biggest of which are to be found in Ireland, Denmark and the Netherlands. On the other hand, only around 7% of the pigs are raised in farms with less than 50 pigs.

The bulk of pig meat is produced and sold at national level. However, there is a very dynamic intra-Union trade in live pigs with some 28 million animals traded every year across EU internal borders including some 15 million **piglets** (roughly 6% of the total production). Over one third of this trade originate from the Netherlands and over one quarter from Denmark. These countries are specialised on this trade due to location advantages, cost-efficient production of feed compounds, sanitary considerations and logistics. Germany is by far the largest destination of piglets from other Member States (nearly half of the total).

As for intra-EU trade in **slaughter pigs**, Germany is as well the main player in the Union, mainly due to its large-size pig meat industry and the competitiveness of its slaughter sector. Intra-EU trade in pig meat mainly concerns chilled meat and frozen meat has a lower value.

Imports of pig meat (meat, offal and live animals) from third countries are limited to around 35 000 t annually (of which 10 000 t unprocessed) – less than 0.2% of EU consumption - due to relatively high import duties and the fact that only few countries (Australia, Canada, Chile, Croatia, New Zealand, Switzerland and United States for non-heat-treated products) meet the Union sanitary standards⁷. Furthermore, some of these countries use products in pig farming that are not authorised in the Union (such as ractopamine in Canada and US).



Source: Eurostat Comext database

⁷ Commission Decision 2007/777/EC, Annex II part II

The Union is a **net exporter** of pig meat with 2.1 million tonnes (with a value of 4.6 billion EUR) and has a self-sufficiency rate of 110% with its main destinations being East Asia and Russia. The pig sector is highly dynamic with trade flows in constant adjustment following changes in market conditions.

3.2. Economic context of poultry meat

While poultry meat annual per capita consumption in the EU is almost half of that of pig meat (24 kg with nevertheless significant differences across Member States), chicken is the most commonly purchased fresh meat: 89% of consumers say that they have bought it in the past month against 76% for pig meat.

Poultry production in the Union amounts to more than 12 million tonnes, accounting for 15% of the world total. Although species such as turkey (1.8 million tonnes) and duck (0.5 million tonnes) hold a significant position in the Union poultry sector, this is largely dominated by chicken meat with a total production of 9.6 million tonnes in 2011.

The seven main producer Member States (France, Germany, UK, Italy, Poland, Spain and the Netherlands) account for more than three quarters of the total output.

Table 2. EU supply balance of poultry meat, 2012 (estimate)

EU poultry meat supply balance (1 000 tonnes carcass weight equivalent)	
Gross indigenous production	12 577
Import live animals	1
Export live animals	8
Net production	12 570
Imports – meat	824
Exports – meat	1 290
Consumption	12 105
Self-sufficiency %	104%
Per capita consumption kg	24

Source: DG Agri (Short Term Outlook N° 5/2013)

Poultry destined for meat production are grown in one farm site from day-old broilers. Information on the holding must be available at the slaughter house.

Trade in **day-old broilers** between Member States amounts to around 400 million birds. The Netherlands are the main supplier (200 million) and Germany the main recipient (150 million). Intra-EU trade for **slaughter chicken** is around 300 million birds with, again, bird coming from Belgium and the Netherlands and going to Germany. According to the 2012 Eurostat census, the total number of poultry birds in the EU was around 1.6 billion.

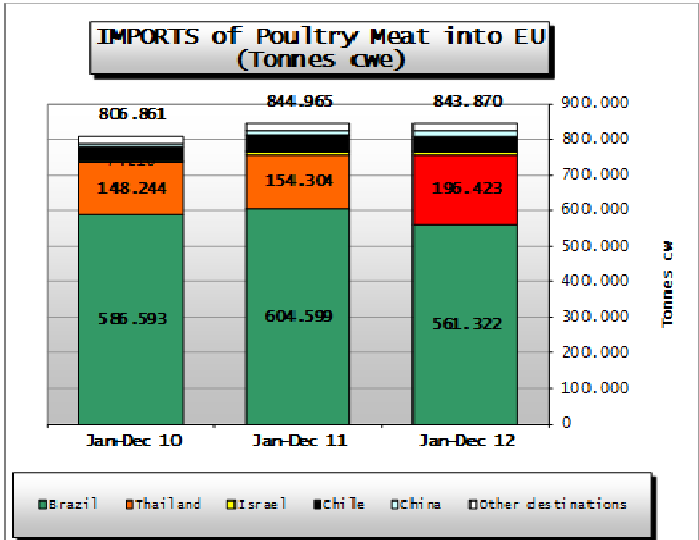
The EU poultry industry is highly specialised. Typically two transfers occur during the life of birds. After incubating and hatching, day-old broiler chicks go to broiler farms. Once they

have reached their slaughter weight, birds are then delivered to a slaughterhouse. In fact, two distinctive organisation models exist in the Union:

- Independent business that operate in an open market. In these cases, the farmer is the owner of the birds and tends to have long-term delivery contracts with the buyer/slaughterhouse.
- Vertically integrated models where several (or all) production stages are under the control of a single operator. Depending on the modalities of integration, it is common practice that the integrator provides the farmer with the day-old chicks as well as the feed and remains the owner of the birds throughout the whole process. The farmer is paid at a set rate per bird. This model is widely used in Spain, France and Italy, and to a lesser extent in Belgium, Germany and the Netherlands.
- For labelling of origin purpose, information on country where the last phase of rearing took place; is available in the slaughterhouses. In most cases, for pigs this corresponds to the fattening period, for poultry, the whole life, and for sheep the relevant rearing period.

Intra-EU trade is mainly based on fresh (chilled) poultry meat although significant quantities of frozen meat (mainly legs) are traded as well to Eastern Member States.

Although **imports** of poultry meat into the Union are normally subject to relatively high duties, substantial imports take place at a reduced duty under tariff quotas available for main suppliers, in particular Brazil and Thailand. The vast share (80%) of poultry meat imports (820 000 t) are processed and would as such be outside the scope of the mandatory origin labelling, but these products are very close to unprocessed meat (salted chicken fillet) or substitutes to breast meat (preparations such as spring rolls etc.). Imports of fresh or chilled meat from third countries amount to around 170 000 t per year (0.02% of total EU poultry meat consumption).



Source: Eurostat Comext database

Exports of poultry meat of the Union consist mainly of frozen cuts, with the Russian Federation, the Middle East, certain central African countries and Hong Kong as main destinations. In 2012, total exports of poultry products amounted to 1.4 million tonnes at a value of 2.1 billion Euros.

In summary, poultry production in the Union is highly efficient and though for the large majority of the birds, the whole production process takes place in the same Member State, there is also a significant trade of live birds between Belgium, the Netherlands and Germany.

3.3. Economic context of sheep and goat meat

Unlike pig and poultry meat where the Union is a net exporter, the EU is only 76% self-sufficient for sheep and goat meat. The annual per capita consumption across the EU is only 2.1 kg or less than 3% of the average meat intake. Moreover, flock numbers have been declining for years as the combined effect of high prices and weak demand. These trends are expected to continue in the foreseeable future.

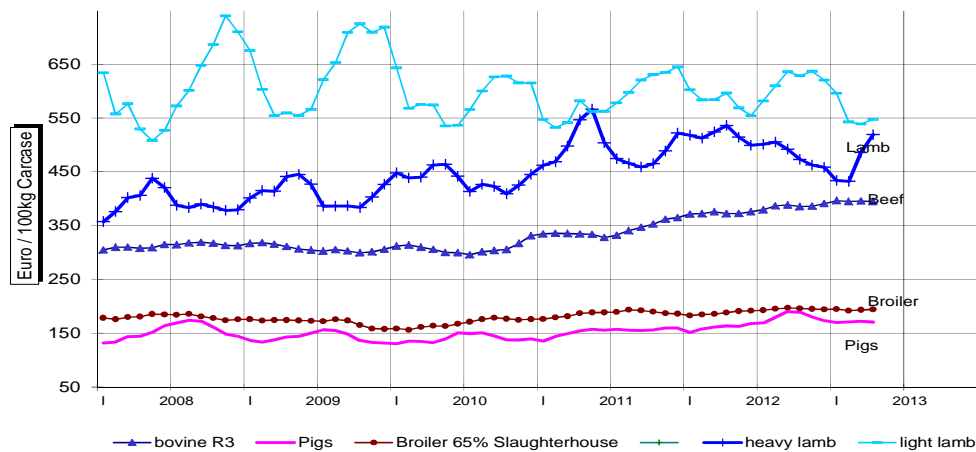
Table 3. EU supply balance of sheep and goat meat, 2012 (estimate)

EU sheep and goat meat supply balance (1 000 tonnes carcass weight equivalent)	
Gross indigenous production	938
Import live animals	0
Export live animals	27
Net production	910
Imports – meat	189
Exports – meat	25
Consumption	1 074
Self-sufficiency %	76%
Per capita consumption kg	2.3

Source: DG Agri (Short Term Outlook N° 5/2013)

In the on-going process of adjusting production to demand, prices play a key role: due to higher production costs, lamb remains a comparatively expensive meat. In this context, the origin element can have a certain trading value vis-à-vis final consumers.

EU average producer prices for different meats



Source: DG Agri

Out of the meats under the remit of this impact assessment, sheep and goat meat is the one with the strongest local dimension: production and consumption is concentrated in a very small number of EU Member States, and follows diverging patterns. In production terms, two countries (UK and Spain) account for more than half of the Union's production and combined with other significant producing Member States such as Greece, France, Ireland and Italy they produce 90% of EU's total.

As to the breakdown between sheep and goat meat, the former comprises 92%. In a few Member States goat meat holds an important position such as Cyprus (48%), Greece (32%) and Malta (15%).

Sheep and goats are individually identified⁸ by ear tags and electronic identifiers in their holding of birth. The identification code is recorded in each holding where the animal is kept during its life but the information is not traced up to the slaughterhouse as there is obligation for Member States to keep a central database where individual movements of sheep are recorded. Sheep and goats sent for slaughter within the country of birth under 12 months of age may be identified only by the flock number. Identification information for live sheep and goats is therefore available but not immediately usable in slaughterhouses for origin labelling purposes.

Although the majority of animals are born, raised and slaughtered within the same country, there is some intra-EU **trade in live animals** (5% of total flock). In 2011, 1.5 million animals were traded **for fattening**, mainly from Romania (55%) and Hungary (20%) to Bulgaria, Italy and Greece. **Slaughter trade** involved 2.5 million animals, with the largest sellers being

⁸ Council Regulation of 17 December 2003 establishing a system for the identification and registration of ovine and caprine animals and amending Regulation (EC) No 1782/2003 and Directives 92/102/EEC and 64/432/EEC (OJ L 5, 9.1.2004, p. 8)

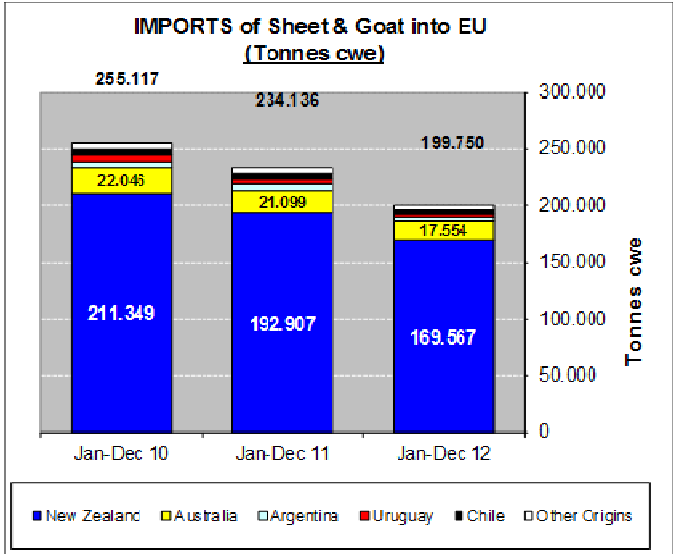
France, Romania and UK. Main buyers are Italy, Spain and Ireland. In the case of slaughter animals traded between Member States, traceability of the origin is guaranteed by the ear tag. As it is often the case in highly fragmented sectors, production patterns in the Union are diverse and can differ substantially across Member States. For instance, production can be milk, meat oriented, or mixed. Moreover, production can be more or less intensive in land use. Animals may complete their entire life cycle within the same holding or move to another Member State for fattening or slaughter.

In southern Member States (Greece, Italy and Romania) sheep farming is mostly milk-oriented with the exception of the Iberian Peninsula where meat production holds a prominent position and the market is dominated by light lambs. It is frequent in these countries that live animals are sold in local markets to traders who subsequently supply slaughterhouses domestically or in other EU Member States or third countries (e.g. from Romania to Turkey).

A different production system is predominant in northern Member States where production is mainly oriented to meat and lambs that are slaughtered at heavier weights. Trade between farms where the lambs were born to others where they are fattened and finished is more common. France is a particular case in this group as part of its production is oriented to milk.

In sheep and goat meat, France has a relatively high consumption but is only 46% self-sufficient and as such, is the main intra-EU importer. The UK and Ireland provide 70% of the intra-EU trade in sheep meat (around 200 000 t).

Imports into the Union are dominated by New Zealand (83% of total) benefiting from a zero-duty quota of nearly 230 000 tonnes but imports have declined since 2010 due to reduced availability of meat in New Zealand as a result of declining output and exports to other destinations. 95% of total sheep and goat meat imports are unprocessed. New Zealand operators (and their EU retailers) tend to indicate the NZ origin on the label as a commercial claim.



Source: Eurostat Comext database

4. OBJECTIVES

4.1. General objectives

Following the decision by the Legislator to provide the mandatory origin labelling for unprocessed fresh, chilled and frozen meat of pigs, poultry, sheep and goats, the general objective of this initiative is **to lay down the necessary implementing provisions**.

4.2. Specific objectives

The first specific objective is to ensure that consumers are provided with accurate, clear and useful information on the origin of the meats covered by this impact assessment (**meaningfulness**).

The second specific objective is that the labelling obligation does not create unnecessary burdens on the meat supply chain, trade, administration and environment (**cost-efficiency**).

The third specific objective is that the information provided to consumers is reliable and can be duly checked by competent authorities (**reliability**).

5. POLICY OPTIONS

The policy options have been constructed as a combination of the following elements:

- The **stages in the life** of an animal: birth, rearing and slaughter. These stages can be taken separately, in any combination or following the non-preferential customs origin definition (slaughter and minimum period of raising prior to slaughter);
- The **geographical level** of origin or provenance: third country/EU/Member State/region/local level.

Based on this and considering the objectives of the initiative, **three families of options** are retained for deeper analysis.

5.1. Policy option 1: Mandatory labelling of EU or third country as country of origin (the simple model)

This policy option features labelling of country of origin following the definition provided in the Customs Code. Country of origin would be labelled at the level of EU or third country under the following conditions:

- ❖ Meat from **pigs, sheep and goats reared in the EU** at least for two months before slaughter (or otherwise having the EU as the longest rearing place) would be labelled "Origin: EU";
- ❖ Meat from **poultry born and reared in the EU** or reared for at least one month in the EU, would be labelled "Origin: EU";

❖ **Imported meats and meat obtained from animals imported for slaughter** would be labelled as "Origin: [third country]".

If several cuts of meat are packed in one package as well as for minced meat and trimmings, which may contain meat from both the EU and one or several third countries, the label would read "Origin: EU and [third country or countries]".

This option does not require any upgrading of the existing animal identification and registration systems.

5.2. Policy option 2: Mandatory labelling of country of rearing and of slaughter (the intermediate model)

With a geographical framework set at a **level of Member State/third country**, this family of options also follows the **definition of country of origin** provided in the Customs Code, completing it with information on the place of slaughter where this is not part of the definition.

While the consumers appear to look mainly for the information on the place of rearing, they would also like to have as much information as possible. Furthermore, according to the results of the external study the indication of the place of slaughter does not add a significant cost for the meat processing companies. Thus, the option indicating only place of rearing was discarded.

In the majority of cases where either the whole production process from birth to slaughter occurs within the same country for poultry meat or where animals were reared for at least two months before slaughter in one country in the case of pig, sheep and goat meat, the label would read:

- "Origin: [Member State or third country of origin]"

In other cases, the label would read:

- "Reared in: [Member State or third country of rearing]". For pig, sheep and goat meat it refers to the Member State or third country where the animal has been reared the longest; for chicken it is the Member State or third country where the animal was reared for at least one month or for the longest.
- "Slaughtered in [Member State or third country of slaughter]".

These modalities would apply for any single piece of meat (or whole carcass in the case of poultry) pre-packed separately. If several cuts of the same or different types of meat are **packed in the same package or in case of minced meat/trimmings**, the label would either list the different Member States or third countries of rearing and slaughter, or where applicable, the different Member States or third countries of origin. In the case of minced

meat or trimmings the labelling of several EU Member States could be replaced by "Origin: [EU]".

For the implementation of this option, the current traceability systems would need to be upgraded in order to record the place of fattening. In general, fattening animals do not move between farms during the fattening period, which is the last period before they are slaughtered. Thus, the recording of the place of fattening can be done relatively easily at the slaughterhouse without establishing a complex traceability system. The place of slaughter is already known at the slaughterhouse and would thus create no burden other than the transmission of the information along the distribution chain to allow labelling..

5.3. Policy option 3: Mandatory labelling of country of birth, rearing and slaughter (the beef model)

This policy option mirrors the model already applicable for unprocessed beef. There are two possibilities:

- ❖ Meat from an animal **born, reared or slaughtered in more than one Member State or third country** includes on the label:
 - The Member State or third country where the animal was born;
 - Every Member State or third country where the animal was reared for at least 1 month;
 - The Member State or third country where the animal was slaughtered.
- ❖ Meat from an animal **born, reared and slaughtered within one Member State or third country** can be labelled: "[Origin: Member State or third country of origin]"

Similarly to option 2, these modalities would apply to any single piece of meat pre-packed separately. In the case of presentations with mixed origins, the same conditions as for option 2 would apply including the alternative provided for trimmings and minced meat.

In order to label the place of birth of an animal, in addition to what is required for option 2, a complex traceability system that records all movements between birth and death, is required at the level of farming and trade of live animals. This is currently available only for beef. In the case of sheep and goats, animals are identified but the movements are not registered centrally.

In principle, none of the three options interfere with the voluntary origin labelling schemes. The information given on origin on any voluntary quality label will simply have to comply in the future with the mandatory origin labelling rules. Thus, this initiative also serves to harmonise the information provided on origin to the consumer as currently the definition of "origin" in different schemes may be very different.

5.4. Other options

The two sets of factors (stage of life of animal and geographical level) allow constructing more options, but several other possibilities were discarded for the following reasons.

Mandatory labelling of **place of provenance at a level lower than a country** (e.g. Provence) was not retained for deeper analysis not least for its very high costs for implementation (requiring the establishment of new live animal and meat traceability systems) and the lack of harmonised legal definition of this geographical level across the Union. Moreover, this option could potentially mislead consumers due to confusion with quality labels (Protected Designation of Origin, Protected Geographical Indication, Traditional Speciality Guaranteed).

Mandatory labelling of **place of provenance embracing several countries or regions** in one single area (e.g. Scandinavia, the Alps) has also not be considered as a policy option due to the lack of commonly agreed definition of such regions. Furthermore, according to consumer surveys, the country of origin is the type of information consumers expect.

For products originating from third countries, the option to refer only to "**non-EU**" has also been discarded as it is considered as insufficient in terms of consumer information. In addition, due to existing trade patterns with limited imports from a low number of countries, indication of the country of origin should be feasible.

Labelling of **place of provenance only based on only birth, birth and slaughter or only slaughter** were not further examined as considered insufficiently informative for consumers. As already indicated, labelling of only rearing was also not considered as a separate option as the external study results showed that the cost of adding place of slaughter were negligible.

6. ANALYSIS OF IMPACTS

The most straightforward impacts of the new provisions on origin labelling will be economic, in particular the additional cost. It is assumed in this impact assessment that the additional cost will eventually be passed to a very large extent on to the final consumer. Trade both within the Union and with third countries will also be affected, albeit only marginally for the latter. The section below examines the possible impacts of the various options under assessment.

6.1 Impacts against the fulfilment of the specific objectives

All options under scrutiny fulfil the three specific objectives pursued with this initiative, namely providing consumers with **meaningful information** on the origin of the pig, poultry, sheep and goat meat in a **cost-efficient** and **reliable** manner.

Within the range of options at stake, option 1 is the simplest. As such, it is assumed to be the least costly and its reliability the easiest to ensure. However, the information it provides (EU/third country) may be perceived by certain consumers as too generic.

Option 2 would also provide consumers with meaningful information as it is the place of rearing that consumers seem to be most interested in. The additional cost for consumers and the burden on the supply chain, trade, and the national authorities is thought to be less than in the case of option 3.

On the opposite side, option 3 would deliver the most exhaustive information to consumers. Yet, it remains to be seen whether such level of detail is actually needed for meat from animals with short production cycles where, in the vast majority of cases, their entire life takes places within a relatively small geographical area.

6.2. Economic impacts

This section aims to present the whole range of expected economic impacts for each option. For this purpose, various types of economic impacts are assessed including effects on competitiveness, trade and investment flows, operating costs and conduct of businesses, administrative burdens and repercussions on public authorities.

The analysis of the economic impacts of different origin labelling options was made by the consultant using the CAPRI partial equilibrium model following a market analysis approach. This model has a detailed Member State level representation of the meat and livestock sectors in the EU. The partial equilibrium model is essentially a net trade model with a focus on the net trade impact between Member States and third countries. A full description of the methodology can be found in Annex 1.

6.2.1. Operating costs and conduct of businesses

For companies involved in the production and trade in pig, poultry and sheep and goat meat the new obligation would require technical adjustments in the production units and logistics and as such create additional costs.

Evidence on additional costs was gathered in the external study, where companies were asked to assess the extra cost of each option as compared to the *status quo*. Data validation was done by comparing results obtained from similar companies, and with impact results from other studies. For the analysis, a typology of companies was established and the additional cost was broken down into four categories: 0%, 0.5%, 3% and 10% (additional cost expressed as a percentage of wholesale price). The cost was thus analysed per type of company and for each option.

For option 1, the costs for EU producers were estimated to be approximately zero and a full quantitative analysis of this option was not carried out. The other options were found to result in additional costs which were weighted for production per country assuming equal structure of meat companies (large, medium, small) in all Member States. The additional cost remains low, up to 2.3% increase of the wholesale price in the pig sector for option 3. In absolute terms the additional cost for pig meat would be 54 EUR/t for option 3 and 25 EUR/t for

option 2. The cost for poultry would be less pronounced than for pig meat but similar for the two options (34 EUR/t) and the cost is the lowest for sheep/goat meat (20 and 9 EUR/t).

Table 4. Average cost impacts per labelling option and species

Meat type	Additional cost as percentage of wholesale price		
	Option 1 (Simple)	Option 2 (Intermediate)	Option 3 (Beef)
Pig	0.00%	1.5%	2.3%
Poultry	0.00%	1.02%	1.3%
Sheep/ goat	0.00%	0.30%	0.64%

Source: External study

For slaughterhouses and large-scale cutting plants with performing tracing and labelling facilities, the new obligation may represent a competitive advantage as they would not face extra costs. Very small companies usually source locally and should therefore not need to significantly change their production process to comply with the new requirements. **Medium-sized slaughterhouses and cutting plants** sourcing from different countries but not necessarily equipped with the most efficient logistics systems would thus be those facing **the highest adaptation costs**. Those Member States with substantial cross-border trade in live animals and unprocessed meat (e.g. Netherlands, Denmark, Belgium, and Luxembourg) would be more affected than others.

As far as trade in meat is concerned, **no significant impact is expected on import flows from third countries**, as explained earlier. More serious consequences are foreseen on the sourcing of meat within the EU. **Options 2 and 3 may contribute to more consumption of domestic meat and result in higher market value for local meats as compared to other Union's origins**. From this point of view, option 1 would be more neutral even if, confronted with the obligation to label "EU origin", certain operators may voluntarily opt to indicate as well the Member State of origin.

In summary, **option 1 is thought to be the the one entailing less additional costs as sourcing of meat would not be affected. Options 2 and 3 are similar in terms of likely impacts on the sourcing of meat but additional costs are estimated to be lower for the former.**

The meat industry has strongly manifested the concerns as regards the potential impacts of origin labelling on operating costs, especially the costs relating to sourcing practices and segregating origins. According to the UECBV, the total cost of adapted traceability and labelling of pig and sheep meat (excluding upgrading of animal identification systems) would be around 800 million euros for EU27.

6.2.2. Competitiveness, trade and investment flows

It is likely that meat distributors downstream in the chain would, as a first reaction, tend to reduce the number of origins for their supply. For slaughterhouses and large-scale cutting plants with performing tracing and labelling facilities, the new obligation may represent a **competitive advantage** vis-à-vis small operators. Thus, the competitiveness of SMEs could potentially be affected. Eurocommerce (an association for retail, wholesale and international trade) pointed out that apart from increased costs, detailed mandatory origin labelling would deprive companies, in particular SME's, from means to differentiate themselves from the other players.

Other stakeholders (UECBV and CLITRAVI representing meat industry) also indicated that the origin labelling has a direct impact on the competitiveness of food business operators as the more detailed the requirements, the more they have to adapt the procedures for segregating origins.

The beef labelling experience showed that the introduction of the compulsory origin labelling had as a consequence a certain nationalisation of consumption, and thus affected the Union's **domestic trade**. This trend nevertheless weakened over the years following the introduction of mandatory labelling. As origin is already labelled in many cases (e.g. for 90% of whole poultry carcasses and for 75% of pig cutlets)⁹, the nationalisation effects in the case at hand are expected to be rather limited. This would be triggered more by the industry to simplify sourcing rather than consumption-driven.

Trade impact was analysed with the partial equilibrium model CAPRI as explained above. In order to determine the impacts of origin labelling on trade, the impacts of different origin labelling options on the supply side and demand side at market level were determined and further, it was analysed how markets (consumers, producers and processors in the EU) would respond and how that would affect the (net) trade position of individual Member States with respect to the relevant meats.

The assumption of the model is that the more complex the origin labelling, the higher the price increase for consumers. Thus, as price increases, consumers would buy less meat and consequently more meat would need to be exported. **It should be noted that these results are only indicative as the model works with assumptions without encapsulating possible changes in consumer' behaviour following the introduction of mandatory labelling.**

The results show that the trade effects will be rather small for both intra-EU and the international trade. As a matter of fact, no impact could be identified for option 1 as this option was considered to create no extra cost.

⁹ Meat Market Study, SANCO/2009/B1/010

For pig meat, the impacts on the net trade position of Member States are in general less than 2% up or down from the reference level. With option 3, France would lose about 1.7%, while Germany would gain the same percentage. Polish net imports would decline by about 9%. Poland is a big producer but also a net importer and the decline in its net imports would imply that the local sector would strengthen its position in the domestic market.

The impact on poultry trade would be smaller than for pig meat as the cost increase due to mandatory origin labeling is much lower. Some countries show large percentage changes in net trade (Germany and Italy) but their absolute net trade is small. The impacts for option 2 are generally smaller than for option 3.

As regards **sheep and goats the impact on trade would be very small** relative to the impacts observed for pigs and poultry. The sector already has well-developed traceability systems, and relatively limited live trade between Member States. In general, adjustments in net trade would go up to 1.5% in case of option 3 (Greece being an exception with a -2.3% change), and for option 2 the changes remain below 1%.

As for **international trade**, the new labelling obligation would lead to no significant changes. For pig meat in the EU, as a whole, net exports would increase. The impact on poultry trade would be marginal due to a much lower cost increase from mandatory origin labeling. Imports of sheep meat would decline slightly as consumption decreases due to the price increase. On the other hand, the downward pressure on primary producer prices and the decline in domestic would require increasing exports to keep the market in balance.

Table 5. Impact of options 2 and 3 on EU net external trade

Meat type	Reference (net trade)	Option 2 (intermediate)		Option 3 (beef)	
	1 000 t	1 000 t	% change	1 000 t	% change
Pig meat	1 800	1 820	1.10%	1 836	2.00%
Poultry meat	767	772	0.60%	773	0.80%
Sheep and goat meat	-195	-195	-0.20%	-194	-0.40%

Source: External study

All in all and regardless the option finally retained it is highly unlikely that this would have any impact on **investments flows**.

6.2.3. Administrative burdens on businesses

Every option entails new obligations for companies and consequently will increase their administrative burden. Administrative costs are defined by the Commission¹⁰ for the purpose

¹⁰ Brussels, 24.1.2007. COM (2007) 23 final: "Administrative costs are defined as the costs incurred by enterprises in meeting legal obligations to provide information on their action or production to public authorities. Information is to be construed in a broad sense, i.e. including costs of reporting, monitoring and

of this impact assessment be divided into two: one-time **investments into hardware and software** and **permanent costs including increased labour** (up to one full-time worker per company) and **auditing costs** (on average two audits per year).

In terms of ranking options against this criterion, option 1 would result in minimal or no additional cost (less than 0.5%) for all Member States and types of companies, whereas options 2 and 3 would lead to a very similar administrative burden in cases where companies source only domestic animals and where the current administration systems already allow transmission of information to the public authorities (e.g. the case for many French pig and poultry companies and the Romanian sheep sector).

However, for **companies sourcing live animals from abroad, options 2 and 3 would lead to higher additional administrative costs**. For instance, according to German pig meat companies (Germany is by far the largest destination of EU cross-border trade) the total administrative cost under option 3 (adjusting hard- and software, administrative labour costs and extra auditing) would range from €25 000 to €100 000 per company per year. According to the study calculation, of the total extra cost of origin labelling, administrative cost would account for 1 to 6%.

Additional administrative costs for option 3 as reported by the Dutch poultry sector would also be substantial (€40 000 per year as an average or 10-15% of the total cost of origin labelling) mainly resulting from increased labour cost on data collection and administration.

6.2.4. Burden on public authorities

The task of controlling the compliance by operators with the new labelling requirements is with national authorities where, as the beef precedent showed (according to the findings of the external study), the internal distribution of tasks among concerned bodies does not always appear to be fitted for the purpose. Consequently, an additional effort from national authorities would be required to secure a more efficient organisation of controls. The main challenge for public authorities may not be with the realisation of individual controls themselves but with the management of the entire verification system.

The following can be concluded:

- In a *status quo* situation, the controls of labelling are only part of overall controls to verify compliance of companies. Time spent to check the country of origin cannot be separated from the other checks;
- With the new rules, most competent authorities expect an increase of control costs in the short term. However after a period of familiarisation, the additional costs would disappear and work burden will remain at the previous level as traceability systems and required databases are set up or adapted to the new rules;

assessment needed to provide the information and registration. In some cases, the information has to be transferred to public authorities. In others, it only has to be available for inspection or supply on request."

- Administrative burden will be higher with more detailed origin labelling; thus option 1 would result in the lowest cost increase on the short term and option 3 the highest;
- Given the fact that national budgets for enforcement are stable or decreasing, extra checks can be compensated by lowering the frequency of the controls.
- National competent authorities have different opinions regarding the type of cost increase: work time, staff training or staff unit costs.

Whilst the precise quantitative impact on public authorities has not been isolated, they are likely to be marginal.

6.2.5. Impact on SMEs and microentreprises

In general, the smaller enterprises will be less affected. Mandatory rules on origin labelling will apply only on prepacked meat, thus many micro-enterprises selling meat (butchers, direct sales from farms, markets) are already excluded. In some Member States, such outlets take a significant share of the market, e.g. in Greece, where more than 70% of meat is sold via such outlets.

Furthermore, the smaller slaughterhouses and cutting plants generally source locally thus origin labelling requirement would not force them to adjust the sourcing practices and therefore will not involve additional costs. The region in which SMEs could be affected is the Denmark-Benelux-Germany border area, where some cross-border trade of both live animals and meat takes place.

The difficulty to label origin is more apparent for recomposed unprocessed products, such as (not seasoned) minced meat or other products made of trimmings (skewers etc.). For such products a lighter regime could be envisaged for all types of companies.

6.3. Costs and benefits for consumers and possible social impacts

It is difficult to estimate the benefits to the consumer of origin labelling in monetary terms for the purposes of cost-benefit analysis. Origin labelling of meat products may have a positive impact on purchasing if it inspires confidence in the authenticity of the product; it may have a negative impact related to perceived attributes of the product or concerning the country or area in question; or it may have no impact if origin is of not a priority for to the purchaser.

However, from the point of view of the impact of origin labelling on the price of the meat, the cost can be estimated. As the following table shows, consumers in the EU27 would lose about EUR 1.86 billion due to the increase in EU pork, poultry, sheep and goat meat prices as a result of the labelling costs if option 3 would be chosen.

Producer and consumer prices are affected differently. **Around 90% of the cost would be transmitted to consumer** and 10% to producer although with differences by sector and

country. This, in any case, is the result of a theoretical model and the actual splitting will be determined by market forces.

Table 6. Welfare impacts by options for pork, poultry and sheep and goat meats (€ billion)

	Option 2		Option 3	
	Consumer	Primary agriculture	Consumer	Primary agriculture
EU27	-1.10	-0.01	-1.86	-0.01

Source: Study calculations

The average changes in pig meat producer and consumer prices in the EU27 are about -0.4% and +0.9% respectively for option 3. Under option 2, they are lower: -0.2% and +0.5% respectively.

The average changes in poultry meat producer and consumer prices in the EU27 for option 3 equal about -0.1% and +0.4% respectively. For option 2, the changes are again lower, -0.10% and +0.30% respectively.

In the case of sheep and goat meat the average changes in EU27 producer and consumer prices amount to -0.1% and +0.5% respectively. Under option 2, the average changes are -0.1% and +0.3% respectively. From the selected Member States the change is relatively large in France driven again by the cost shock due to slaughtering of animals from abroad.

Social impacts may also include increased re-nationalism of meat consumption, possible shifts in consumption, shifts in sourcing of meat for slaughter and processing that may affect employment. All these impacts have been assessed in earlier sections.

6.4. Environmental impacts

In absolute terms, the environmental impacts of any of the options under scrutiny are considered to be **minimal**. As such, the new mandatory origin labelling would have no impact on the packaging of food and consequently all options are on equal footing in this regard.

Trimmings may be an issue of certain importance since, as explained above, mandatory labelling will apply as well to unseasoned minced meat, which often consists of trimmings. It is difficult to estimate the share of trimmings in the total quantity of unprocessed meat produced but it is important to note that for the three species of meat concerned, the relative share is much larger than for beef due to the much smaller size of the animals. There, option 1 would allow a larger flexibility to process trimmings into minced meat without the mandatory labelling of origin causing major difficulties. For options 2 and 3, if flexibility is provided on labelling of trimmings and minced meat as proposed, the result would be similar.

By providing more detailed information on the origin, consumers may favour "local food" or even actively refuse products from some other countries. This may have an impact on transport of live animals and final products. Although this impact could turn out to be for the

environment, this is difficult to assert as most of the intra-EU trade is between neighbouring countries where the distances are often shorter than inside some other Member States. This point was highlighted by the Eurogroup for Animals, an animal welfare organisation.

In conclusion, the environmental impacts of the three options under scrutiny are not that different so as to make this a relevant criterion for the final choice.

7. COMPARING THE OPTIONS

On the basis of the comparative analysis contained in the sections above it can be concluded that the impacts are generally the highest for option 3, nearly nil for option 1 and intermediate for option 2. By species, pig meat would be the most affected.

7.1. Information to consumer

- Even if all three options meet the requirements set out in Regulation 1169/2011 to inform consumers about the origin of the meat, option 1 would simply differentiate EU production from that of third countries.
- An important share of unprocessed meat sold on the EU market is already labelled voluntarily, either via a Union-wide scheme (PDO, PGI, TSG), a national scheme (Label Rouge, etc.), at the request of retailers or at an initiative of the producer/company. Such indication of origin usually refers to a Member State or a lower level (region)
- While consumers are interested in the origin of food, and especially of the meat, there is no common understanding of what "origin" means. Most often the consumers refer to the country and the place of farming as a definition of "origin".
- At the same time, there is no evidence that the origin definition based on the three stages of the animals' life (born/raised/slaughtered) would deliver more meaningful information to consumers. As the surveys show, consumers are mainly interested in the place of farming.
- Even though close to 90% of consumers want to know the origin of meat, only 40% look at this information when choosing the meat. In general, the consumers are not willing to pay a premium for origin information.
- There is no solid evidence suggesting that the new labelling rules should differ among the three meats under scrutiny. Furthermore, for the reason of clarity for consumers, it would be highly preferable if these rules did not differ.
- Even though origin information is already available on a voluntary basis for a vast share of meat sold in the EU, regulation at EU level is necessary for the sake of harmonisation to ensure clarity for consumers especially when it comes to sufficient or necessary operations that define origin (birth, rearing, slaughter).

7.2. Additional costs for the meat supply chain

The new labelling obligation will entail certain additional costs for the economic operators depending on the retained option. Those costs are relatively minor as compared to the total price of the product (up to 2.3% of the wholesale price for pig meat) and vary depending on the size and location of the company (bigger companies in exporting Member States will be able to absorb the costs more smoothly). It is expected that after the necessary adaptation period companies would manage to reduce additional unitary cost, especially as regards administrative costs.

These costs are not only incurred by the acquisition of new equipment and the reorganisation of the working lines, but also for increasing difficulties in the valorisation of trimmings, which would be a problem for options 2 and 3. Therefore, some additional flexibility would be justified on this domain. In general, the additional costs remain marginal and within this scale, close to zero for option 1, the highest for option 3 and in between for option 2.

The current identification system of traceability is substantially more advanced for sheep and goats than for pigs and poultry. Even so, the information on individual tags is not transmitted downstream the supply chain so it is not readily usable by the industry. Thus, the more complex the labelling rules, the more costly the adaption of the traceability systems will be.

7.3. Impact on consumers, trade and administration

The consumers being the recipients of more detailed origin information, they would bear around 90% of the additional cost which again would be the highest for option 3 (€1.86 billion) and less for option 2 (€1.1 billion). Option 1 has no significant consequence on consumer price.

Trade is also marginally affected. Option 3 would result in a 2% increase in the Union's net trade in pig meat and 0.8% for poultry. Net imports of sheep meat would reduce. The impact is around half the magnitude for option 2. There would also be some rearrangement of trade flows between EU Member States due to changes in consumption and sourcing practices, notably for pig meat where the intra-EU trade of live animals is quite relevant.

For competent authorities, an increase in control costs could occur in the short term and disappear after a period of familiarisation. Administrative costs and burden will be higher if the origin labelling is more detailed, thus the highest for option 3.

7.4. Impact on investment flows, environmental and social impacts

There is no sufficient evidence that any of the three possible options would present significant differences as compared to the others in terms of investment flows, environment or social impacts other than consumer welfare.

7.5. Stakeholders' views

Stakeholders' views on origin labelling for meat tend to be polarised. On the one hand, **consumers tend to be in favour of strict rules** of origin labelling. However, as scientific literature points out, they are often not aware that origin information comes at additional cost, and are not willing to pay a significant premium for such information. Furthermore, although 86% of consumers want to know the origin of the meat and origin information is often available on a voluntary basis, only 40% of consumers look at the country of origin when choosing the pre-packed meat.

The concern of the consumer representatives as well as the farmers and **animal welfare** organisations is to guarantee that consumers could make the choice based on as much information as possible in order to support local production, buy meat from animals that have not travelled long distances or for other reasons.

Farmers, particularly in net-importing countries where local demand is partly served with meat produced in other countries, also **support detailed origin labelling** seeing it as a protective tool enhancing their competitiveness on local markets.

On the other hand, **food businesses**, and in particular those operators that use as raw material meat from several origins **are generally inclined for simpler labelling requirements**. Companies sourcing the meat locally are nevertheless broadly in favour of detailed origin labelling, as so are companies that target high value markets and which often use origin labelling as a marketing instrument.

The **meat industry** (from slaughter to processing) and **retailers** have been the most critical towards the entire initiative saying that origin could be and is already labelled voluntarily if there is demand for such information. However, the consumers not interested in origin should not be forced to pay the additional cost. The concern of the industry and retail organisations was also that the beef model should not be applied for the others as it would be disproportionally burdensome and would not be meaningful given the shorter life of the animals.

An overview of the stakeholder positions can be found in Annex 4.

7.6. Summary of comparison of options

Taking into account the above-listed arguments, the following table summarising the qualitative positive and negative impacts can be drawn up:

Table 7. Summary of comparison of options

Specific objectives		Option 1	Option 2	Option 3
---------------------	--	----------	----------	----------

Meaningfulness		-	++	+++
Cost-efficiency	Cost for supply chain/ price increase	0	-	--
	Trade distortion	0	-	--
	Extra burden for administration	-	--	---
Reliability		+++	++	+

0 no impact

- limited negative impact; -- average negative impact; --- significant negative impact

+ limited positive impact; ++ average positive impact; +++ significant positive impact

In conclusion, option 1 has a marginal impact on the cost-efficiency of the various actors but it does not meet the expectations of the consumers with regard to meaningful information. Option 3 has a very positive impact in terms of information to consumers but results in the highest costs for all actors, including the consumers themselves. Option 2 appears to be the most optimal of the three options, providing consumers with meaningful information while at the same time not creating disproportionate burdens for the various actors involved.

8. MONITORING AND EVALUATION

Origin labelling could be subject to fraud. There have already been cases of fraud in relation to labelling of foodstuffs. The controls shall be carried out in accordance with the Official Controls' Regulation¹¹. Member States will be required to take the necessary measures to ensure compliance with the origin labelling requirements. The Commission controls the correct enforcement of the Member States. The monitoring would be done by the Commission and the Member States for example on the basis of reports from the Member States, NGOs and self-monitoring activities by the industry.

According to Regulation 1169/2011 the legislative instrument will be evaluated 5 years after implementation. The Commission has to submit a report to the Parliament and the Council by 13 December 2019. This report would focus on assessing the same indicators used to evaluate the impact of the possible modalities in this Impact Assessment report. In other words, the evaluation should focus on the actual cost for the meat supply chain resulting from applying the new origin labelling rules and transmission of this cost up and down the chain, i.e. to the

¹¹ Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (OJ L 165, 30.4.2004, p. 1).

farming sector and to consumers via final price. In addition, a consumer survey could be used to assess whether the information on origin provided meets consumer expectations and is clearly understandable. Finally, impact on trade flows both inside the Union and with the third countries could be assessed and the burden imposed on public authorities may be evaluated.

As explained above, origin labelling indicating the Member State of production could increase market segmentation based on the origin. This could also be assessed based on changes in trade flows and surveys designed to assess consumers' origin preferences.

The evaluation should also look at the uptake and efficiency of the national schemes in view of assessing the need for Union rules.

ANNEX 1. MAIN FINDINGS OF THE EXTERNAL STUDY ON MANDATORY ORIGIN LABELLING FOR UNPROCESSED MEAT OF PIGS, POULTRY, SHEEP AND GOATS



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR
AGRICULTURE AND RURAL DEVELOPMENT

**Study on mandatory origin labelling for
pig, poultry and sheep & goat meat**

AGRI-2012-EVAL-01

Study undertaken by:

LEI Agricultural Economics Research Institute, Wageningen UR (NL)

in association with:

- IFIP - Institut du Porc (FR)
- IRTA - Institut de Recerca I Tecnologia Agroalimentàries (ES)
- ITAVI - Institut Technique de l'Aviculture (FR)
- University of Göttingen (DE)
- VetEffect Consultancy and Recruiting (NL)

Context

Regulation (EU) No 1169/2011 on the provision of food information to consumers provides for mandatory indication of country of origin or place of provenance for unprocessed meat of pigs, poultry, sheep and goats, as from 13 December 2014.

The impact of implementing such origin labelling is assessed considering the following areas:

- Food supply chain: the economic impact on the food supply chain taking into account costs and feasibility;
- Trade: the impact on intra-EU trade and on trade with third countries for each of the meat types from the perspective of possible distortion of the global trade flows;
- Consumer behaviour: as regards different types of origin indication as well as the level of willingness to pay for additional information related to origin of meat;
- Administrative burden: the impact on the administrative burden on producers, traders and the Member States, as well as on the strengthening of the controls to ensure a proper system of origin labelling.

Labelling options to be considered

Multi-criteria mapping (MCM) methodology was employed to identify, describe and select the most promising mandatory origin labelling options.

Four labelling options were put forward for consideration in a stakeholder workshop, interviews and case studies. These options were:

Option 1:	Mandatory EU or non-EU origin labelling Meat from an animal born, reared and slaughtered inside the EU is labelled "Origin: EU"; Meat from an animal born, reared or slaughtered outside the EU is labelled "Origin: non-EU".
Option 2:	Mandatory country of origin labelling Meat from an animal born, reared or slaughtered in more than one country includes on the label: Member State or third country where the animal was born; Member State or third country where the animal was reared, and; Member State or third country where the animal was slaughtered. Meat from an animal born, reared and slaughtered wholly within one country may be labelled "Origin: Member State or third country".
Option 3:	Mandatory labelling of country of rearing Member State or third country where the animal was reared.
Option 4:	Mandatory labelling of country of rearing and of slaughter Member State or third country where the animal was reared; Member State or third country where the animal was slaughtered.

Case studies and other investigations revealed a diverse picture of the impact of origin labelling across the meat sectors, different countries, stages of the supply chain and between stakeholders.

However a number of key issues emerged and were used to inform the further work of the study:

- i) Views on origin labelling tend to be polarised one way or the other.
- ii) Consumers are generally in favour of country of origin labelling with an emphasis on where an animal was reared (alternative terms include raised, farmed, bred, fattened). It may not be the main priority when shopping, but the absence of origin information can lead to distrust in relation to unprocessed meat, which could be an accumulative effect over a series of food scares. Consumers have not expressed a preference for EU/non-EU origin labelling on the basis that it does not provide useful information. Neither have they expressed a preference for the customs definition of origin as the place of last substantial change, as this concept is not well understood. Country of origin labelling is seen as providing clear and accurate information on a meat product, which is useful for a variety of reasons. Consumers are not willing to pay for this information and do not always refer to it when shopping, but they think it should be provided as a matter of course and to omit it may raise suspicions of something to hide. However increased confidence in meat from origin labelling may benefit the livestock and meat sector in general. In particular mandatory origin labelling may help to limit damage caused by food safety crises, food scandals and other market shocks.
- iii) The greatest impact of mandatory origin labelling on food chain businesses is in terms of trade. Individual food businesses are generally for or against according to how their trade is likely to be affected. Positive and negative trade impacts have been perceived at all stages of the supply chain. Businesses targeting high value differentiated unprocessed meat products are more likely to favour origin labelling than those providing commodity unprocessed meat products, particularly when they are of mixed origin. The experience of traceability and compulsory labelling of beef suggests there can be significant trade impacts.
- iv) The length of the supply chain is an important factor. Origin information becomes more important as chain length increases, but it also becomes more difficult to obtain. One reaction to mandatory origin labelling by cutting and packing plants and retailers may be to simplify their supply chains. However the impacts of labelling are far too small to affect trends and tendencies for businesses to grow and to specialise.
- v) The impact of mandatory origin labelling should be separated from the implementation of traceability legislation. The provision of origin information along the food chain does not put additional demands on operating practices beyond those already required for traceability purposes. For example, separation or identification of cuts or batches of meat of different origin is already a requirement for traceability purposes and no further separation or information is required for origin labelling. The main difference between traceability and origin labelling information requirements concerns the accessibility of the information: traceability information is not usually required instantly and therefore more sophisticated information systems may be required to access origin information.
- vi) The degree of vertical integration in a supply chain is important, as is the size of food businesses. Large scale integrated supply chains can most easily put traceability and origin information systems in place along the whole chain. Costs are relatively higher for smaller businesses, but very small businesses sourcing locally and selling locally will face negligible cost increases.

The study has identified a number of indicators to assess the impact of mandatory origin labelling on the supply chain and trade across the EU:

Supply chain indicators

1. Chain length of live animals (number of movements between production stages)
2. Chain length of meat chain (number of movements between meat businesses)
3. Number of international movements
4. Scale of businesses (small, medium, large)
5. Traceability systems in place

6. Separation of supply chains for different origins
7. Amount of meat sold unprocessed
8. Amount of unprocessed meat sold pre-packed.
9. Market differentiation (high value products versus commodity)
10. Voluntary labelling in place
11. Inspection costs

Trade indicators

1. Self-sufficiency in meat
2. Import/export of live animals
3. Import/export of unprocessed meat products

Assessment of impact of options

Outcome of the analysis

For option 1 (EU or non-EU origin labelling) the cost impacts were estimated to be approximately zero, which made a quantitative analysis superfluous. No specific impacts are expected for consumers, since they are already effectively able to distinguish EU from non-EU meat products. As both cost-shifts and changes in willingness to pay are zero, this option is expected to have a zero impact on EU producers, consumers and trade. This holds for products of all the meat species.

Average cost impacts

The following table provides an overview of the cost shocks that have been applied in the simulation analysis. The shocks are presented as a percentage of the wholesale price. They are weighted for production per country and assume that the structure of meat companies (large, medium, small) is almost equal for all Member States.

Table 8. Average cost impacts for different labelling options and meat type

Meat type	Cost impacts as a percentage of wholesale price			
	Option 1	Option 2	Option 3	Option 4
Pork	0.00%	2.3%	1.5%	1.5%
Poultry	0.00%	1.3%	0.92%	1.02%
Sheep and goats	0.00%	0.64%	0.28%	0.30%

As the table shows there is only a slight difference between the cost impacts associated with options 3 (country of rearing) and 4 (countries of rearing and slaughter). The reason is that there are few cost implications for the slaughter stage, which represents the difference between options 3 and 4. Consequently, only option 3 has been further analysed and a separate analysis of option 4 has been omitted.

Although option 4 is likely to be preferred by consumers over option 3 as it provides more information, there was insufficient evidence to translate this into differences in willingness to pay between the options. As there is no measurable monetary impact, there is no reason for a separate analysis of option 4.

Impacts by meat type

This section presents the impacts for option 2 (country of birth, rearing and slaughter) and option 3 (country of rearing) by meat type: pork, poultry, sheep and goats. The analysis focuses on the major producing countries, comprising at least 80% of EU production.

Pig sector

The impacts on net trade in the most important pork producing Member States are presented in the table 2. The impacts on the net trade position of Member States are in most cases relatively limited. Overall EU net exports increase from the reference level: under option 2 by 2% and under option 3 by 1%.

Poland's pork trade improves as net imports decline by almost 9%. Despite being a big producer Poland is still a net importer. The decline in its net imports implies that the local pig sector strengthens its position in the domestic market. This pattern also holds for other eastern European Member States with similar characteristics.

For option 3 (country of rearing) the overall impact on net trade is about half of the impact of option 2.

For the EU as a whole net exports increase. Consumers turn out to face a price increase which is higher than the price decline faced by producers. The demand and supply response to these price changes are different, where the demand by consumers declines more than supply by the EU primary producers. As a result the net excess supply or exportable surplus increases by approximately 2 per cent in option 2 and 1 per cent in option 3.

Producer and consumer prices are affected differently. The average changes in pig meat producer and consumer prices in the EU27 are about -0.4% and +0.9% respectively for option 2. This implies that the average burden on primary producers is approximately €0.06/kg (0.4% of €1.50) and on consumers is €0.54/kg (0.9% of €6.00). Under option 3, the average changes in producer and consumer prices in the EU27 are somewhat lower: -0.2% and +0.5% respectively.

It can be calculated that on average in the EU27 about 12% of the extra costs for labelling are transmitted to the producers, while about 88% of the extra costs are transmitted to the consumer. This can be different per Member State. In France, Spain, Portugal, Ireland and the UK more than 20% of the extra costs are transmitted to the producer.

Poultry sector

The impacts on poultry trade are generally smaller than on pork. Cost increases are much lower.

Some countries show significant percentage changes in net poultry trade (notably Germany's net trade improves and Italy's worsens) but this is because their net trade positions are small in absolute or volume terms: so a small volume change looks big in percentage terms.

For option 2 at EU27 level the net exports increase by 0.8%. This is again the result of a decline in domestic demand (as a response of consumers to the higher poultry meat prices), and a less

pronounced decline in domestic production. As a result of this the exportable surplus increases, increasing EU net exports to the rest of the world.

The impacts found for option 3 are in general terms modest and smaller than for option 2. Net exports increase by 0.6%.

The average changes in poultry meat producer and consumer prices in the EU27 for option 2 equal about -0.1% and +0.4% respectively. Assuming producer and consumer prices of €1.75/kg and €5.40/kg respectively this implies that producers receive 0.2 eurocent per kg less (0.1% of €1.75), whereas consumers pay an additional 2.2 eurocents per kg (0.4% of €5.40). For option 3, the average changes in producer and consumer prices in the EU27 are again somewhat lower, namely -0.10% and +0.30% respectively. Price changes in the Netherlands are relatively large and are explained by the relative large cost shock.

It can be calculated that on average in the EU27 about 8% of the extra costs for labelling are transmitted to the producer, while about 92% of the extra costs are transmitted to the consumer.

Sheep and goat sector

As regards sheep and goats the impact on trade are very small relative to the impacts observed for pigs and poultry. In the sheep and goat sector there are already well-developed traceability systems, while also the trade in live animals (including lambs) between Member States is limited (France being an exception). The changes in net trade are in general marginal. Greece shows the greatest change with a 2.5% reduction in net imports under option 2. For option 3 the % changes are all well below 1%.

The EU27 is a net importer of sheep and goat meat. At EU level the net imports decline marginally by 0.4% for option 2 and 0.2% for option 3. It might be expected that increases in labelling costs would worsen the competitive position of EU meat as compared to non-EU meat and imports would increase. However, consumers reduce consumption due to the price increase and this has a negative impact on overall demand. There will be some substitution of EU produced meat by meat from non-EU origins.

For option 2 the average changes in sheep and goat meat producer and consumer prices in the EU27 amount to about -0.1% and +0.5% respectively.

Under option 3, the average changes in producer and consumer prices in the EU27 equals about 0.0% and +0.3% respectively. From the selected Member States the change in sheep and goat meat consumer prices is relatively large in France. This is explained by the relative large cost shock attached to this country (related to the slaughtering of animals from abroad).

On average in the EU27 about 9% of the extra costs are transmitted to the producer, while about 91% are transmitted to the consumer. However, depending on the structure of the market the incidence on producers and consumers can differ. Remarkably enough, in the UK about 80% of the extra costs were found to be transmitted to the producer.

Administrative burden for competent authorities

Whilst it might be expected that competent authorities incur extra costs with specific regard to carrying out controls for origin labelling, in practice the incremental cost is considered to be almost zero as traceability systems and databases are adapted to the new requirements. Control of origin labelling is part of a wider control system and time spent on this specific aspect cannot be separated from the general system of official controls.

In fact one of the intentions of Regulation (EC) No 1169/2011 is a reduction in the administrative burden for both food businesses and enforcement authorities. Whilst the precise impacts of origin labelling have not been isolated, it seems that they will be minimal.

Tables on impact analysis

The following tables provide further details on changes in net exports and producer and consumer prices for pig, poultry and sheep and goat meat as a result of the implementation of different mandatory origin labelling options in the EU. Results on options 1 and 4 are not presented in all tables for reasons that are explained in the main text.

Table 9. Impact of mandatory EU origin labelling options on net exports of pig meat

	Reference	Option 2		Option 3	
	1 000 t	1 000 t	% change	1 000 t	% change
EU27	1 800	1 836	2.00%	1 820	1.10%
Belgium	626	625	-0.20%	626	-0.10%
Denmark	1 648	1644	-0.30%	1 646	-0.10%
France	92	91	-1.70%	92	-0.90%
Germany	327	332	1.60%	332	1.50%
Italy	-701	-695	-0.90%	-697	-0.60%
Netherlands	491	490	-0.10%	491	0.00%
Poland	-113	-103	-8.90%	-110	-2.10%
Spain	571	569	-0.40%	573	0.30%
United Kingdom	-565	-564	-0.10%	-563	-0.30%

Table 10. Impact of mandatory EU origin labelling options on net exports of poultry meat

	Reference	Option 2		Option 3	
	1 000 t	1 000 t	% change	1 000 t	% change
EU27	767	773	0.80%	772	0.60%
France	223	222	-0.70%	222	-0.50%
Germany	-16	-14	-10.30%	-16	0.50%
Italy	-13	-14	8.00%	-14	6.00%
Netherlands	296	298	0.60%	297	0.40%
Poland	372	374	0.40%	375	0.70%
Spain	-39	-39	0.50%	-40	1.90%
United Kingdom	-107	-107	0.10%	-108	0.70%

Table 11. Impact of mandatory EU origin labelling options on net exports of sheep and goat meat

	Reference	Option 2		Option 3	
	1 000 t	1 000 t	% change	1 000 t	% change
EU27	-195	-194	-0.40%	-195	-0.20%
France	-121	-120	-0.50%	-120	-0.40%
Greece	-12	-11	-2.40%	-12	-0.40%
Ireland	38	38	-0.10%	38	0.00%
Italy	-57	-57	-0.30%	-57	-0.10%
Spain	17	17	0.00%	17	-0.10%
United Kingdom	-20	-20	1.20%	-20	0.60%

Table 12. Impact of mandatory EU origin labelling options on pig meat costs (Euro per tonne slaughtered weight)

	Option 1	Option 2	Option 3	Option 4
	Euro / tonne	Euro / tonne	Euro / tonne	Euro / tonne
EU27	0	42.6	25.2	25.2
Austria	0	48.4	22.8	22.8
Belgium	0	46.1	29.9	29.9
Bulgaria	0	80.0	29.6	29.6
Cyprus	0	47.1	17.4	17.4
Czech Republic	0	56.6	20.9	20.9
Denmark	0	43.3	28.1	28.1
Estonia	0	50.3	18.6	18.6
Finland	0	47.3	22.3	22.3
France	0	22.3	12.6	12.6
Germany	0	41.0	26.6	26.6

Greece	0	84.8	31.3	31.3
Hungary	0	63.4	23.4	23.4
Ireland	0	25.8	21.7	21.7
Italy	0	63.7	38.2	38.2
Latvia	0	65.2	24.1	24.1
Lithuania	0	78.7	29.1	29.1
Malta	0	78.0	28.8	28.8
Netherlands	0	56.2	36.4	36.4
Poland	0	59.7	22.0	22.0
Portugal	0	26.1	23.0	23.0
Romania	0	94.1	34.8	34.8
Slovak Republic	0	60.3	22.3	22.3
Slovenia	0	57.7	21.3	21.3
Spain	0	21.2	18.7	18.7
Sweden	0	48.3	22.8	22.8
United Kingdom	0	26.8	26.8	26.8

Table 13. Impact of mandatory EU origin labelling options 2 and 3 on producer and consumer prices of pig meat (measured in percentage changes)

	Option 2		Option 3	
	Producer price [Euro / t]	Consumer price [Euro / t]	Producer price [Euro / t]	Consumer price [Euro / t]
EU27	-0.40%	0.90%	-0.20%	0.50%
Austria	-0.40%	0.80%	-0.20%	0.40%
Belgium	-0.40%	0.80%	-0.20%	0.50%
Bulgaria	-0.80%	2.70%	-0.30%	1.00%
Cyprus	-0.60%	1.60%	-0.20%	0.60%
Czech Republic	-0.60%	2.10%	-0.20%	0.80%
Denmark	-0.40%	0.80%	-0.20%	0.50%
Estonia	-0.60%	1.80%	-0.20%	0.70%
Finland	-0.40%	0.70%	-0.20%	0.30%
France	-0.40%	0.40%	-0.20%	0.20%
Germany	-0.40%	0.90%	-0.20%	0.60%
Greece	-0.40%	1.40%	-0.20%	0.50%
Hungary	-0.60%	2.30%	-0.20%	0.80%
Ireland	-0.40%	0.40%	-0.20%	0.40%
Italy	-0.40%	1.10%	-0.20%	0.70%
Latvia	-0.60%	1.60%	-0.20%	0.60%
Lithuania	-0.60%	1.30%	-0.20%	0.50%
Malta	-0.60%	1.80%	-0.20%	0.70%
Netherlands	-0.40%	0.90%	-0.20%	0.60%
Poland	-0.60%	1.70%	-0.20%	0.60%

Portugal	-0.40%	0.50%	-0.20%	0.50%
Romania	-0.80%	2.40%	-0.30%	0.80%
Slovak Republic	-0.60%	1.50%	-0.20%	0.60%
Slovenia	-0.60%	1.70%	-0.20%	0.60%
Spain	-0.40%	0.50%	-0.20%	0.50%
Sweden	-0.40%	0.70%	-0.20%	0.30%
United Kingdom	-0.40%	0.40%	-0.20%	0.40%

Table 14. Impact of mandatory EU origin labelling options on poultry meat costs (Euro per tonne slaughtered weight)

	Option 1	Option 2	Option 3	Option 4
	Euro / tonne	Euro / tonne	Euro / tonne	Euro / tonne
EU27	0	25.7	18.3	20.4
Austria	0	46.4	39.2	43.3
Belgium	0	90.9	65.2	78.1
Bulgaria	0	43.6	43.6	48.2
Cyprus	0	86.0	86.0	95.1
Czech Republic	0	35.3	35.3	39.1
Denmark	0	29.1	29.1	32.2
Estonia	0	38.6	38.6	42.6
Finland	0	37.4	37.4	41.3
France	0	6.8	2.7	2.7
Germany	0	33.4	10.4	10.4
Greece	0	24.5	24.5	27.1
Hungary	0	47.5	47.5	52.5
Ireland	0	7.5	3.0	3.0
Italy	0	6.2	2.5	2.5
Latvia	0	30.8	30.8	34.0
Lithuania	0	32.5	32.5	35.9
Malta	0	49.5	49.5	54.7
Netherlands	0	73.1	52.5	62.8
Poland	0	41.8	41.8	46.2
Portugal	0	9.2	3.7	3.7
Romania	0	34.6	34.6	38.2
Slovak Republic	0	31.9	31.9	35.2
Slovenia	0	43.7	43.7	48.3
Spain	0	10.8	4.3	4.3
Sweden	0	32.7	32.7	36.1
United Kingdom	0	9.9	3.9	3.9

Table 15. Impact of mandatory EU origin labelling options 2 and 3 on producer and consumer prices of poultry meat (measured in percentage changes)

	Option 2		Option 3	
	Producer price [Euro / t]	Consumer price [Euro / t]	Producer price [Euro / t]	Consumer price [Euro / t]
EU27	-0.10%	0.40%	-0.10%	0.30%
Austria	-0.10%	0.90%	-0.10%	0.80%
Belgium	-0.10%	1.40%	-0.10%	1.00%
Bulgaria	-0.30%	1.90%	-0.30%	1.90%
Cyprus	-0.10%	2.00%	-0.10%	2.00%
Czech Republic	-0.10%	0.80%	-0.10%	0.80%
Denmark	-0.10%	0.50%	-0.10%	0.50%
Estonia	-0.10%	0.80%	-0.10%	0.80%
Finland	-0.10%	0.70%	-0.10%	0.70%
France	-0.10%	0.10%	-0.10%	0.00%
Germany	-0.10%	0.60%	-0.10%	0.20%
Greece	-0.10%	0.40%	-0.10%	0.40%
Hungary	-0.10%	1.20%	-0.10%	1.20%
Ireland	-0.10%	0.10%	-0.10%	0.00%
Italy	-0.10%	0.10%	-0.10%	0.00%
Latvia	-0.10%	0.50%	-0.10%	0.50%
Lithuania	-0.10%	0.50%	-0.10%	0.50%
Malta	-0.10%	1.20%	-0.10%	1.20%
Netherlands	-0.10%	1.40%	-0.10%	1.00%
Poland	-0.10%	0.90%	-0.10%	0.90%
Portugal	-0.10%	0.20%	-0.10%	0.00%
Romania	-0.30%	1.30%	-0.30%	1.30%
Slovak Republic	-0.10%	0.60%	-0.10%	0.60%
Slovenia	-0.10%	1.00%	-0.10%	1.00%
Spain	-0.10%	0.20%	-0.10%	0.10%
Sweden	-0.10%	0.60%	-0.10%	0.60%
United Kingdom	-0.10%	0.10%	-0.10%	0.00%

The consumer perception towards origin

As a result of growing competition on international markets, consumers' sensitivity to origin information has become a relevant issue for food businesses as well as policy makers. Consumers are able to choose from products of different origin, a phenomenon that has become known as the country-of-origin effect (for reviews see ([Agrawal and Kamakura, 1999] and [\[Verlegh and Steenkamp, 1999\]](#)) or region-of-origin effect [\[Van der Lans et al., 2001\]](#). Origin can be additional purchase information for consumers in addition to other cues like 'best before', nutritional information, and the name of the meat cut.

The main objective of this section is to provide a literature overview on consumer decision making with regard to country of origin labelling in the EU.

Consumer interest in origin information

Because the final purchase decision about food products is in the hands of consumers, research typically has surveyed consumers about their opinions on country of origin labelling (SANCO 2012; BEUC 2013). These studies indicate that European consumers have an interest in origin information.

Fresh meat was the most commonly mentioned food that should have origin labelling according to 69% of consumers in the EU-27 (SANCO, 2012). Also in a BEUC (the European Consumer Organisation) survey, meat is the product that comes first in consumers' desire for origin labelling.

These studies illustrate that the level of importance attached to country of origin information seems to be country-specific (e.g. Becker 1998; SANCO, 2012; BEUC, 2013). The percentage for origin appreciation varies from 83% in Sweden to 93% in Austria. In a quantitative study of 894 Dutch consumers, 88% welcomed the country of origin information on the packaging of a food product. For consumers who welcomed origin labelling this was mainly because they 'may be interested in', are 'in need of better understanding', or 'like to know where products come from'. Consumers who were negative about the state of origin labelling experienced no additional trust or confidence, or expressed disinterest (Van Haaster-de Winter and Ruissen, 2012).

However, in the EU there is an additional concept of origin, which cannot be found in the literature. This is the intra-EU trade or single market aspect based on the customs definition of country of origin as the last place of substantial change.

Food consumers (particularly of meat) have been found to be confused over the meaning of the term 'country of origin'. From a consumer perspective country of origin is the place where an animal was 'farmed' i.e. born and/or raised. Use of 'country of origin' in the customs sense of the place of last substantial change can be misleading and increases scepticism regarding the value of origin information for meat products¹².

¹² Country of Origin Labelling: A Synthesis of Research, Oxford Evidentia
<http://www.food.gov.uk/multimedia/pdfs/coolsyn.pdf>

Consumers lack the expertise or experience to assess whether a certain meat has been produced in a specific country. A policy option is to provide the information by a country of origin label. However, policy makers and marketing specialists need to be aware of the use of an origin label, how it works for consumers, and how it contributes and impacts decision making and behaviour.

Translating consumer needs for information about quality attributes into actual consumer behaviour is a complex matter (Ingenbleek et al., 2011). According to Meulenberg (2003), a behavioural scientific approach to consumers offers a more suitable basis for understanding their consumption than does microeconomic theory, in which the consumer is a rational decision maker with full knowledge and understanding of all relevant information.

In this context, Meulenberg also mentions a model that perceives the consumer as a problem solver (e.g. Engel et al 1995), which Steenkamp (1997) cites as insightful for understanding food purchase processes. The model consists of five phases: (1) need recognition; (2) information search, (3) information evaluation, (4) purchase decision and (5) post-purchase evaluation. Each of these phases is described in the following sections.

Need for recognition

In the case of meat, consumer needs for information may be wide-ranging. In addition to requiring a product to satisfy hunger, consumers may also demand products that are healthy, safe, fresh, animal friendly, and produced in their own country or another specific country. The importance of country of origin drops significantly when multiple quality attributes in the study are included (Verlegh en Steenkamp, 1999; Steptoe en Pollard, 1995; Usunier, 2006).

U.K. consumers ranked origin labelling as more important than brand labelling, but steak colour, price and fat content were most important (Roosen et al., 2003). Results of the SANCO (2012) consumer survey show that the most important factors of meat purchases for consumers are freshness (10.2% of consumers surveyed), then taste (8.7%) and hygienic conditions (8.4%), followed by price (reasonable price 8.1%, affordable price 7.9%) and then origin (produced in the home country (7.9%).

Origin labelling plays a particularly important role as a purchase motive of beef, where it is mainly associated with food safety (Shimp and Sharma, 1987; Roosen et al., 2003; Verbeke and Ward, 2006; Loureiro and Umberger, 2007).

The demand for country of origin information varies per country. A meta-analysis of international studies into origin appreciation, for example, shows that appreciation of origin labelling varies from country to country and that appreciation in Europe is generally lower than in North America and other parts of the world (Ehmke, 2006). Consumers from Greek, Estonia, Italy and Slovenia are more likely to look for country of origin information, whilst Belgian, Maltese and Dutch consumers are less likely to do so (SANCO, 2012).

In other words: consumers find origin important, but only after other wants and needs like food safety, good taste and affordable price are fulfilled first.

Geographical indication of origin

Regional designation seems to function as a summary construct for differentiated origin labelling cues. While respondents evaluated the origin labelling cues 'Made in Belgium' and 'Made in Poland' for chocolate products as significantly different, the Regional Designation 'Made in the EU' could not be significantly differentiated from either cue [\[Eberl, 2012\]](#).

The effect of the product-specific regional image on product preference is an indirect effect, through product attribute perception. The influence of the attitude towards the region appears to have both a direct and an indirect effect on product preference. The direct influence is found to be primarily based on feelings towards the region of origin that 'bypasses the purely cognitive inferential evaluation'. The indirect influence works through the product-specific regional image and product attribute perception [\[Van Ittersum, 2003\]](#).

A perception study about Dutch eggs found that consumers in Nordrhein-Westfalen in Germany preferred Dutch eggs above eggs from Southern or Eastern Germany, because Dutch eggs were perceived as regional eggs. A regional provenance is very important for German consumers, because it is related to freshness and shelf life. Freshness of eggs was in the top three buying motives of most consumers. Dutch eggs have a good image on quality and safety in the German market [\[Van Wijk et al., 2010\]](#).

Information search

The food purchase process is a routine process, during which consumers rely on prior experiences, so they collect and use new information to only a limited extent (Steenkamp 1997; Meulenberg 2003).

In their search for country of origin information, consumers may rely on various information sources. During a routine purchase process, memory is the main source of information. Through information stored in their memory consumers identify a limited number of products for consideration during the purchase process (Stern and El-Ansary 1992). To enhance what they already know, they may look for extra information, such as that contained in a label, advertising, in-store displays or product packaging.

Thus consumers are not perfectly informed, rational decision makers. They collect a very limited amount of information, and all kinds of distortions take place in their memory (e.g. Robertson and Kassarian 1991). In many studies it appears that respondents value origin labelling on the package, but when consumers were asked to choose products this did not play a decisive role for buying food. For example, country of origin is the fourth most important information aspect when purchasing meat: the priorities are use by/best before date (68%), the price per kilogram (67%), the price (67%), country of origin (48%) (SANCO, 2012).

In a survey in the Netherlands, around half of the respondents indicated they do not read origin labelling at all; they only looked for information about the best-by date, price, weight and user and storage instructions. For most respondents, the country of origin is not decisive for their choice: the country of origin is nice to know rather than a need to know factor (Van Haaster-de Winter and Ruissen, 2012).

Label

A consumer seldom buys products on the basis of a completely rational evaluation of all product attributes; instead, he or she uses cues such as labels. For the consumer a label helps lower search costs (Grønhaug and Lines, 2002). Added value results when the label stimulates unique associations in a consumer's memory. For example, a consumer may have confidence in the reputation of a certain region of origin (Acebrón and Dopico 2000; Bernués et al., 2003).

The country of origin of meat can be linked to a number of aspects of origin: the place where the animal was born, the place where the animal was reared (also referred to as raised, or farmed), the place where the animal was slaughtered, or the place of last substantial change (corresponding to the customs definition).

In the SANCO (2012) survey 54% of consumers understood the country of origin of meat as the place where the animal was farmed, while 12% understood it as the place of last substantial change. From the BEUC (2013) survey most consumers in France (62%), Poland (41%) and Sweden (49%) interpret country of origin on a fresh meat label as relating to the country where the animal was born, reared, and slaughtered. This is however not the case in Austria, where the proportion of consumers who believe that the labelled origin only refers to the country where the animal was slaughtered is higher than that of those who understand that the three life stages took place in the country (35% vs. 32%). The second reply most frequently given by French (12%), Polish (27%) and Swedish (13%) consumers is that the animal was reared and slaughtered, but not born, in the labelled country (as compared to 16% of Austrian consumers), followed by approximately 10% of consumers in these three countries who interpret that the animal was only slaughtered there.

The findings for processed meat products such as bacon, ham, sausages (which are not covered by this study) are similar: many consumers are also unclear as to the meaning of country of origin labelling. The main confusion is about whether the labelled country of origin refers to the country where the animal was produced and/or to that where the meat was further processed into the final food. Consumer perceptions in this regard vary between countries (BEUC, 2013).

French consumers consider the rearing country as the most relevant information about country of origin (Magdelaine and Legendre, 2013a). Thus although the country of origin label seems objective information, the interpretation of the label is still arbitrary by consumers because a label can evoke certain associations in the consumer's memory.

Providing information by a country of origin label can also evoke associations that are not indicated by the label. For example, country identification can evoke associations of nationalism. The SANCO survey reveals that consumers have a preference for national or local meat. This is particularly the case for Greece, France, Poland, Austria and Sweden. Only consumers of Portugal and Slovakia preferred foreign meat (SANCO, 2012).

This national preference can be emotional, in terms of national identity or pride, but also rational, as consumers may have a better knowledge of national products and processes. For instance, consumers may be more familiar with quality controls, certifications and other country-specific aspects. The presence of an emotional component is illustrated by the fact that 'produced in the EU' obtains a low score in the SANCO survey. Apparently the EU is of low emotional cue.

There is also a tendency to ethnocentrism: consumers perceive meat from their own country as safer than foreign meat (Wezemaal, 2010). Ethnocentrism not only differs per country but also within country, which is expressed in stronger or weaker preferences for products from their own country (Van Haaster-de Winter and Ruissen, 2012).

Potitive and negative information

Consumers do not comprehend all origin information. Regardless of whether they receive information about origin, the consumer may associate the country of origin with a certain quality level or food safety, but there may also be a preference for products from their own country as a way of supporting their own economy or farmers or because it means lower transport costs and thus CO₂ emissions, whereby the product is considered to be more sustainable (Van Haaster-de Winter and Ruissen, 2012).

It appears that people generally absorb information that confirms their existing opinion and reject information that does not fit (te Velde, Aarts and van Woerkum, 2002). Furthermore, people absorb negative information more easily than positive information. For example, disease outbreaks have led to consumer mistrust of foreign meat and a greater preference for domestic meat (Vukasovic, 2009).

Quality information

Product attributes refer to product characteristics that can be objectively determined. The origin label is an extrinsic attribute, like brands, price, and other advertising which are product-related but not part of the physical product. Consumers often use these attributes, or a combination of attributes, as cues to assess the quality of a product (e.g. Robertson and Kassaraian, 1991).

In the case of meat, a consumer might consider physical characteristics such as its smell and freshness and the (externally labelled) origin of the product (Horne et al., 2003). Steenkamp (1986) finds that quality labels positively influence the quality perceptions about meat products, particularly when the product lacks a separate brand (see also Van Trijp et al., 1997). However the relation between quality and origin information is not always clear to consumers.

Two thirds of the respondents in the Netherlands did not know that origin labelling on products of beef was the result of EU legislation (Van Haaster-de Winter and Ruissen, 2012). This group was under the impression that producers or supermarkets did this voluntarily or that it was related to Dutch legislation. Over half of the consumers were not aware that origin labelling involved extra costs for the producer. They thought it was just a question of a little more ink and were unaware of the additional effort involved.

A country or region's reputation could also be an extrinsic attribute, especially through a 'spill over' or 'halo' effect. That is, the associations (positive or negative) a consumer holds because of other news about that country or region and which may contribute to an opinion about other attributes. The image that the consumer has of the country of origin may be based on previous experiences with the same or other products from the country, on advertisements, other forms of product information such as word of mouth advertising, TV programmes or newspaper articles (Verlegh et al., 2005). This

implies that perceived quality significantly depends on the expectations created by labels. The use of a country of origin label therefore could cue consumers' quality perceptions.

Price information

Beyond quality attributes, price influences consumers' perceptions. A higher price often indicates better quality for consumers (Monroe 2003), so for example, pork consumers prefer products with a price that they approximately expected, followed by products with prices higher than expected (Meuwissen et al. 2007). Just as some consumers use price as a cue of quality, others use quality cues to develop their price perceptions.

When considering price differences in brands due to quality differences, country of origin labelling has no significant influence on prices (Van Haaster-de Winter and Ruissen, 2012). In other words, the majority of consumers do not seem to pay more or less because they hold better or worse image regarding the quality of products originating in different countries.

From the research by Van Haaster-de Winter and Ruissen (2012), it appears that only 10% of Dutch consumers are prepared to pay extra for origin labelling on food. This low willingness among consumers to pay for country of origin labelling on food is also demonstrated in international literature (Agrawal and Kamakura, 1999; FSA, 2010). For example for pork: Sweden (5.8%), France (4.8%), Britain (4.0%), Denmark (-2.9%) (Dransfield et al., 2005).

According to respondents from the Dutch survey, among the reasons why people are unwilling to pay more for origin labelling on food are that food is already expensive enough and should not be made more expensive; they do not feel the need for it; origin labelling should be provided as an additional free service; they do not consider that origin labelling should involve extra costs; they have not asked for it (Van Haaster-de Winter and Ruissen, 2012).

When asked who should pay for the costs of labelling, Dutch consumers pointed to the producer, the government, the supermarket or the EU. Respondents did not seem to feel it logical that they or the farmers should contribute to the costs. Among the small group of Dutch consumers prepared to pay more for origin labelling are people who are generally more highly educated, who tend to buy organic products, are more concerned with food and its quality and who recognise that there are differences in products from different countries of origin.

When considering price differences in brands due to quality differences, origin labelling has no significant influence on prices. In other words, consumers do not seem to pay more or less because they hold better or worse image regarding the quality of products originating in different countries. There is no price premium or discount for brands originating in different countries, once their quality differences are taken into account [Agrawal and Kamakura, 1999]. In case of superior foods there is evidence that consumers will pay a premium in general and for assured country of origin foods in particular; however this premium is generally rather modest [FSA, 2010].

Purchase decision

A broad set of factors constitute the consumer's macro environment, which consists of economic, demographic and cultural factors such as the economic climate, the media and cultural norms and values (Steenkamp 1997).

For origin labelled products these cultural factors come together in the shopping environment. Product origin is not an isolated concept. There is a positive connection between the degree of importance a consumer places on origin as a reason to purchase a product and the degree of importance that consumer places on animal welfare, environmental friendliness, regionally-produced food, and organic products (Van Haaster-de Winter and Ruissen, 2012). From the same study it becomes clear that 70% of the consumers would purchase the same product without origin labelling. In the case of pork, origin is hardly considered a purchase motive (Ehmke, 2006).

Market segmentation based on origin labels

Retailers use origin labels to differentiate their products. Retailers could choose to offer the 'national' product only, but can also choose to add different origin products when they expect this is of added value to consumers.

Although not every consumer makes the same assessment, segmentation can occur on the basis of groups of consumers who have similar preferences. One group may prefer different options for country of origin, and be prepared to pay for it; another may be happy with less choice and satisfied with the option of only one country.

Segmentation of pork consumers in the Netherlands has shown that country of origin was not a discriminating factor between the segments. When consumers must choose among different attributes (Meuwissen et al. 2007) the results vary by segment, suggesting six unique groups: environmentalists (17%), ecologists (17%), animal friends (16%), health-concerned (18%), unpronounced subjects (20%) and economists (12%), but all segments preferred pork originating from the Netherlands and with a zero risk of Salmonella (Meuwissen et al. 2007).

Van Haaster-de Winter and Ruissen (2012) differentiate three groups of consumers based on attitude and willingness to pay. Most people (66%) are not markedly positive or negative about the statement of country of origin but are somewhere in between. The group which does not see the point of the statement of country of origin is bigger than the group which is in favour of it (21% and 14%, respectively). These two groups differ from each other in terms of values, views and behaviour.

Post-purchase evaluation

Country of origin labelling is important for marketers who seek to leverage the effects of countries favourable connotations on consumer product evaluations (Leclerc et al., 1994; Keller, 2003). Consumer satisfaction depends partly on the specific need and specific set of alternatives available (Khan et al. 2005). Such mechanisms could occur in origin labelling as well.

Consumers may experience a sense of dissatisfaction when they learn that a product has been produced in a country with low quality standards. This feeling may influence subsequent purchase

processes through associations in the consumer's memory that ultimately negatively affect consumer confidence in a certain country of origin. According to Urban (2005), this confidence increasingly plays a role in consumers' purchase processes. Consumers make decisions based on a minimal amount of new information and are susceptible to negative information, which is increasingly easy to access through new media such as the Internet. This could be provided with clear and simple information via a logo, with the possibility to use new technological support to give more details for fresh meat (Magdelaine and Legendre, 2013a).

Conclusions

Country of origin labelling is only part of the solution to offer transparency for consumers about origin of meat.

Consumers look for information whether externally or from their memory about which meat products can satisfy their requirements. In both processes, distortions occur, and instead of complete information, most consumers use associations. Consumers are making only limited efforts to inform themselves about aspects of meat and meat products; further effort could help them make more informed purchase choices.

Although a country of origin label provides complete and undistorted information on the origins of a product, consumers associate the information on the label with information obtained elsewhere in all type of sources media, advertisements etc. As such a country of origin label works more as a mechanism that attaches associations to a product, despite the aim of providing objective information. Even when consumers consider country of origin for meat important, they do not automatically choose a product from a specific country. Policy makers should therefore consider all wants and needs of consumers and not only their concerns with regard to country of origin information.

The substantial number of studies on origin labelling do not provide a clear direction on origin labelling effects and seem to be moderated by specific country circumstances and cultural habits.

Both favourable and unfavourable effects on demand and trade have been reported for countries with origin labelling. The impact of origin labelling on trade is related to the image of food products of the country-of-origin in the destination country. Country-of-origin is associated with a range of positive attributes by many consumers, including overall quality and food safety (trust in food), and is important as an information cue.

However, in the global context traceability and origin information are seen as positive and economically justifiable benefits to improve competitiveness on international markets.

This is also related to the concept of consumer ethnocentrism: that meat from the home country is perceived as safer. Origin labelling is for consumers a cognitive shortcut when evaluating products, especially when other information is scarce, and when consumers are less motivated to process available information, for example when involvement is low. However, consumers do not seem to pay more (or less) for this information because they hold better (or worse) images regarding the quality of products originating in different countries.

Methodology and tools for assessing impacts

1. Methodology and research questions

In order to determine the impacts of origin labelling on trade, two steps need to be made:

1. Identify the impacts of different origin labelling options on the supply side and demand side at market level
2. Analyse how markets, or more precisely, consumers, producers and processors in the Member States of the EU-27 are going to respond and what this will imply for the (net) trade position of EU Member States with respect to pork, poultry, and sheep & goat

Identification of impacts on the supply side and demand side at market level

As regards the identification of impacts on the supply side, information derived from the case studies on various origin labelling options is combined with information about the structure and composition of the supply chain, as well as market structure. Characteristics that are taken into account are:

- the degree of integration in farming (e.g. piglets and fattening on one farm);
- the degree of integration between different supply chain stages (e.g. vertical integration between farmer and slaughterhouse);
- the scale of production in the meat industry;
- the dependency of the industry on import flows;
- the share of existing voluntary labelling schemes.

The greater the level of integration, the easier it is to follow and label product flows through the chain with respect to their origin. The scale of production is relevant, because small scale, intermediate scale and large scale producers or processors might have different handling options to cope with labelling requirements and also the impact of fixed costs (investment costs related to labelling) per unit of output are likely to differ. It also makes a difference whether or to which degree a sector or industry depends on local sourcing or relies on imports from abroad and thus has to simultaneously handle product flows from different origins. To the extent voluntary origin labelling is already in place, making origin labelling obligatory might involve less costs than in case the origin of products is not yet accounted for at all.

The step from case study information and supply chain and market characteristics to market level cost of mandatory origin labelling is not trivial. The approach that is chosen is to use the characteristics information to classify sectors in Member States on a Lickert scale varying from 1 to 5, with a "1" indicating high costs and a "5" indicating low costs. Depending on the available information and its degree of precision, this scale could be further simplified into 4 categories (no costs, low costs, medium costs, and high costs). The average score of the criteria considered is used to indicate the expected cost increase by option and EU Member State. Estimates of what are "high costs" and "low costs" are based on the information derived from the case studies. When combined,

this information allows quantification of the cost impacts for the different sectors at Member State level.

As regards the identification of the impacts of origin labelling on the demand side, the estimate is based on an assessment of the literature and any relevant empirical information available. No separate case studies assessing consumer demand and preferences for origin labeled products in different Member States and for different options are included in this study.

Analysis of the impacts on trade

The analysis of the economic impacts of different origin labelling options on trade, consumers and producers is made using a partial equilibrium model, having sufficient detail with respect to the EU pork, poultry and sheep and goat meat sectors at Member State level (e.g. Krissoff, 2004 for a further discussion of this approach). Following the literature on mandatory origin labelling (see for example Brester et al, 2004; Ehmke et al, 2006; Chung et al, 2009) a market-analysis approach is followed, of which the main characteristics are presented in Figure 1 below:

Figure 1. Market and trade impacts of mandatory origin labelling: a simple two-country cost increase case

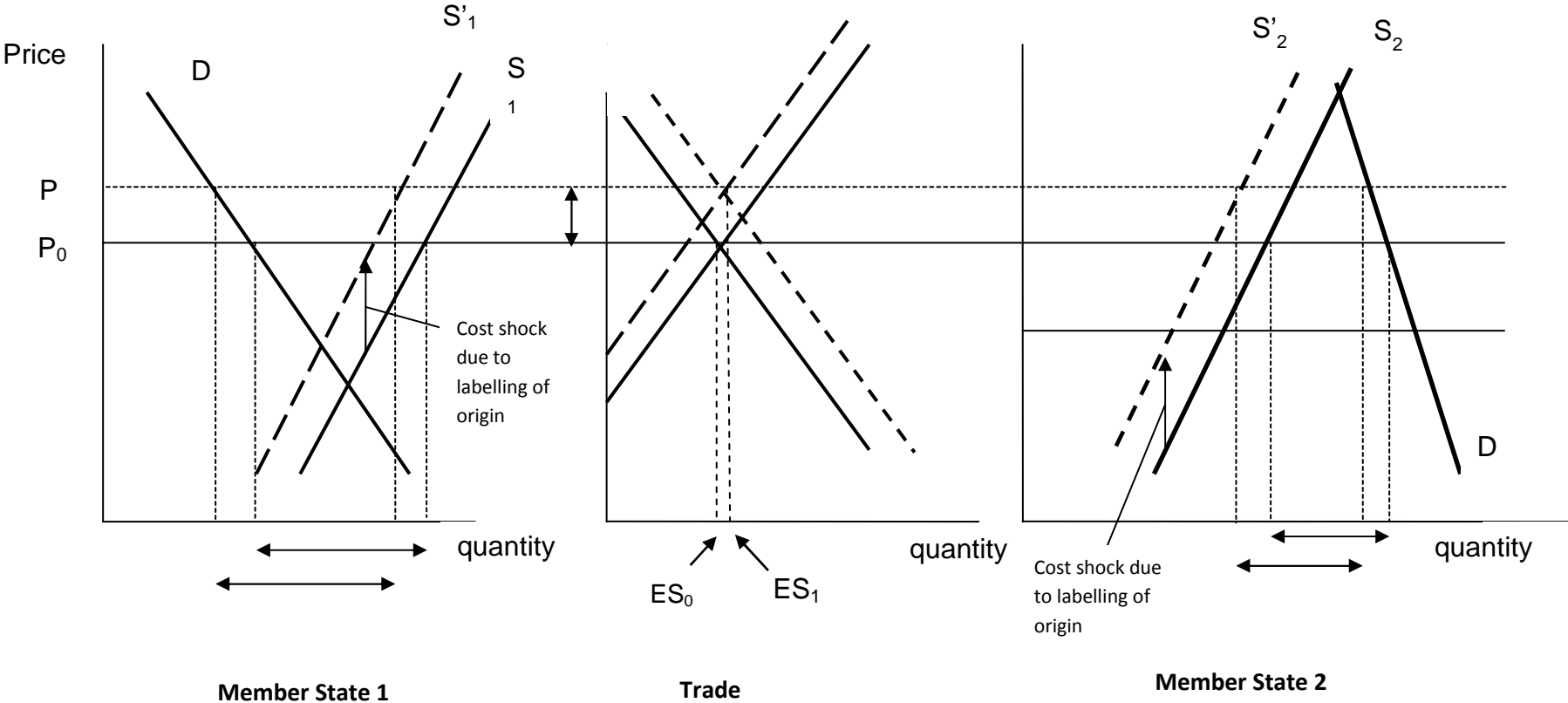


Figure 1, a demand and supply diagram including trade shows a simplified case with two countries (or Member States), one being a net exporter (mostly the left panel) and one being a net importer (mostly the right panel). The impacts on trade are presented in the middle panel. As the figure shows, in each Member State producer and consumer behaviour with respect to producing and consuming meat is represented by the associated supply and demand curves¹³. The impacts of mandatory origin labelling will depend on the impacts this mandatory labelling requirement will have on the costs of production (for convenience sake it is assumed in the figure that only impacts on the supply side have to be considered). These “cost-shift” impacts are represented by upward shifts of the supply curves in both countries (eg the upward shift from S_1 to S'_1 and S_2 to S'_2). As a consequence of the cost increases a new equilibrium will establish, which equalises total supply to total demand. As shown in the figure, this will lead to an increase in the price of meat. This price change will induce consumers to change their behaviour (reduce consumption of products which increase in price). Also producers will be impacted. They not only face an increase in the costs of production (the upward shift of the supply curve), but they also face a changed market price (inducing a movement along their supply curves).

As the figure shows, the impact on trade will depend on a number of factors, such as the magnitude of the cost shifts and the slopes of the supply and demand curves in both countries (the latter reflecting the responsiveness of producers and consumers to price changes). In the case shown by the figure, the exports (or excess supply) of Member State 1 will slightly increase (from ES_0 to ES_1), which is at the same time equivalent with the imports made by Member State 2. There is no specific reason why trade should increase, as is the case presented in the figure. The reverse would also be possible.

Differentiated impacts along the supply chain are also analysed, by distinguishing primary production, final consumer demand, and intermediate stages of the supply chain.. The intermediate stages, which might include transportation and handling, slaughtering, subsequent stages of processing, retail, etc. are represented by a margin. Note that in this case there is a wedge between the prices received by primary producers and the price paid by consumers. Increased costs of production due to origin labelling are likely to particularly affect the intermediate stages of the supply chain, where the labelling operation has to be finally applied. The increase in the “margin” due to the increased costs associated with labelling leads to a corresponding adjustment in producer and consumer prices. The primary producers face a price decline, whereas the consumers face a price increase.

The labelling of meat products with respect to origin extends the information about product characteristics to consumers. They might value this information since it could potentially enable them to make better choices with respect to consumption of various meat products. “Better” here refers to better meeting of consumers’ specific preferences leading to an increase in their welfare. In the market framework discussed above this would ‘translate’ into an upward shift of the demand curve. This upward shift then reflects the increased willingness to pay (or the premium consumers are prepared to pay for products for their preferred origin). Consumer benefits that are not leading

¹³ See the downward sloping demand curves D_1 and D_2 and the upwards sloping supply curves S_1 and S_2 .

to a change in the willingness to pay (e.g. improved trust due to better transparency) will have no impact on demand and for that reason will not lead to differences in trade patterns.

2. Simulation options

For the simulations, the main origin options are depicted at the country level. A quantitative analysis of an option will only be done if there are “significant” non-zero impacts on the cost of production and/or consumers’ expected willingness to pay.

Options will be analysed in a so-called comparative static way: a comparison of with/without mandatory origin labelling case will be made based on final market equilibrium. This implies that no direct information will be provided on the dynamic adjustment path (i.e. how the sector will move from the without-labelling market equilibrium to the with-labelling market equilibrium).

Since both on the consumer side and the producer side there could be possibilities to substitute between various meats, the simulated equilibria take into account that all mandatory labelling requirements with respect to pig meat, poultry meat and sheep and goat meat are implemented simultaneously for all products and are fully implemented by all Member States (the issue of non-compliance is not accounted for in the analysis).

3. Modelling approach on the supply side

The CAPRI partial equilibrium model is used for quantitative analysis of the impact of origin labelling on products and markets. The CAPRI model has been extensively employed in applied policy impact analyses in the EU as it provides a detailed presentation of EU agriculture and the policy measures applied to this sector. The model includes an EU-wide module for young animals and a global trade model for agricultural commodities¹⁴.

The advantage of this model is that it has a detailed Member State level representation of the meat and livestock sectors in the EU. As such it is a preferred option as compared to the equilibrium displacement modelling (EDM) approach used in Terluin et al. (2012) who analysed two scenarios of a mandatory origin labelling scheme for the Dutch dairy sector (cheese and drinking milk and flavoured dairy drinks). As a multiple market partial equilibrium model CAPRI takes into account a much broader arrange of interaction effects between markets, sectors and supply chain stages than is done by EDM models.

A choice had to be made between a computable general equilibrium (CGE) model, explaining bilateral trade flows at Member State level on the one hand and a partial equilibrium approach, allowing for a detailed representation of herd dynamics and products/goods, in particular of the animal production sectors in EU agriculture on the other hand.

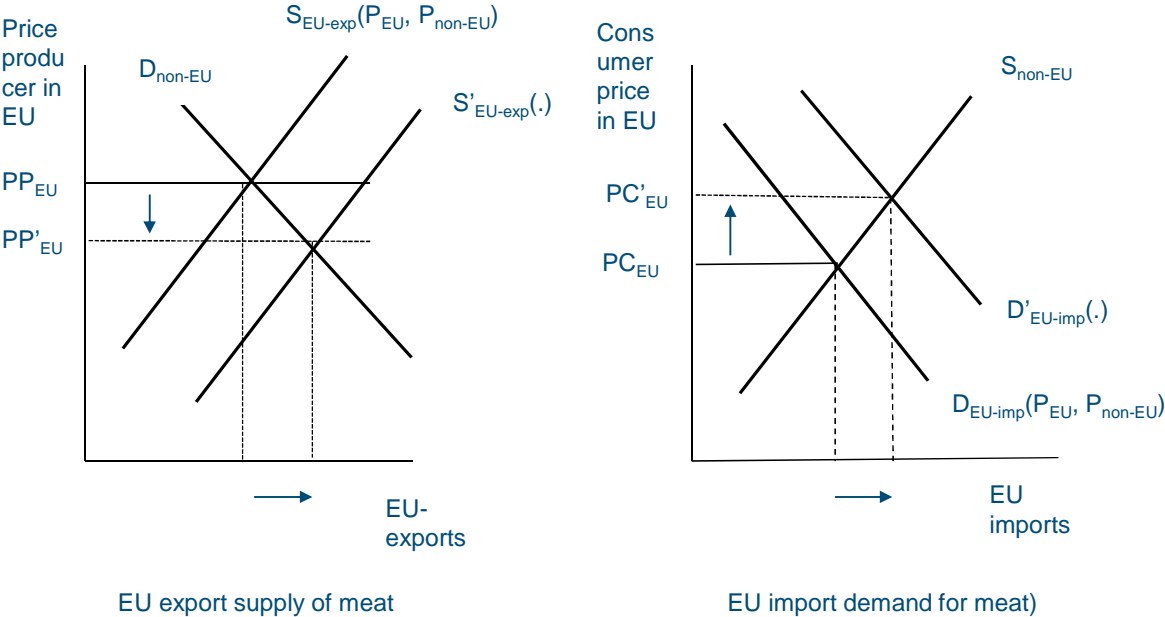
¹⁴ See the CAPRI homepage <http://www.capri-model.org/dokuwiki/doku.php?id=start> for detailed material about this model, or <http://www.ti.bund.de/en/startseite/institutes/rural-studies/research-areas/policy-impact-assessment/vti-modelling-network/capri.html> for a brief description.

Whilst the partial equilibrium model is essentially a net trade model a choice for this model implies that one accepts a main focus on the net trade impact between Member States and third countries. The detail of this model with respect to animal herds and slaughtering is however unique and not available for any alternative model. Most of the quantitative analyses in the literature follow a net trade approach.

If the general equilibrium model had been chosen, some more detail with respect to bilateral trade would have been preserved, but the level of goods aggregation for existing CGE models is so high and the lack of detail on animal herd dynamics so limiting that a lot of crucial details there would have had to be given up.

It should be noted that the CAPRI model allows for two-way trade of the EU with respect to the non-EU or rest of the world. The trade relationships of the EU with the rest of the world are modelled using the Armington approach. This approach implies that EU and non-EU meat products are considered to be heterogeneous goods. As such they can no longer be netted out as is done in the net-trade approach. As a result of this an increase in the cost of production of EU meats due to the mandatory labelling requirements will generate two separate and usually counteracting effects on the trade of the EU with non-EU countries. See Figure 3 for a brief illustration of these two impacts.

Figure 3. Impacts of EU origin labelling on EU/non-EU trade within CAPRI-modelling framework



As the impact of mandatory origin labelling will affect producer and consumer prices in a different way (see Figure 3 above) and as EU and non-EU meat products are considered to be heterogeneous goods (Thompson et al, 2005), the price decline in EU producer price due to the labelling requirement will shift the EU's export supply curve $S_{EU-exp}(P_{EU}, P_{non-EU})$ to the right (see left panel of Figure 3). If the price producers receive on the home market declines relative to the price they can get for exports, they will have a tendency to increase their supply to the foreign market. Moreover, demand in the non-EU for EU product is likely to increase if the price for this product goes down relative to non-EU price of meat. As a result of this EU exports are likely to increase (at the

primary producer level of the supply chain) and the magnitude of this increase will be a function of price and substitution elasticity of demand and supply.

As is shown in the right panel of Figure 3, the increase in the consumer price for meat in the EU relative to the price of meat from non-EU origin, will give EU consumers an incentive to substitute the domestic product for products from non-EU origin. In Figure 3 this is represented by a shift in EU import demand $D_{EU-imp}(P_{EU}, P_{non-EU})$ for meat products at consumer level. This increase in EU demand for the non-EU meat product is likely to lead to an increase in EU demand for meat products (at the consumer level of the supply chain)¹⁵. The net impact on the EU trade position can go either way¹⁶. Note that the magnitude of the change in meat imports and the change in meat exports will depend on various factors such as, the relative producer price decline, the relative consumer price increase, as well as the own-price and cross-price (or substitution) elasticity.

A post model analysis is foreseen to interpret the outcomes of the modelling analysis in the context of the actual bilateral trade data (i.e. the importance of imports as well as exports).

As regards the supply side, the impact of different mandatory origin labelling options will be analysed by appropriately shifting the supply functions, with the imposed shift depending on the various costs associated with mandatory origin labelling.

The data on the costs of mandatory origin labelling will be provided by the data collection task within the project. The costs for implementing and complying with mandatory origin labelling in the different Member States (and third countries) range from operating costs, costs for inputs and logistics to costs for tracking and tracing and identity preservation, depending on the respective labelling requirement or option considered in the project. It seems that major costs are caused by identity preservation that requires a reset of the production process in order to ensure that products are only from one specific country or place of provenance.

4. Modelling approach on the demand side

On the demand side of the partial equilibrium (PE) modelling framework, mandatory origin labelling will be depicted as demand shifts that reflect the consumers' willingness to pay (WTP) for products from specific countries (see also discussion in previous sections). Modelling mandatory origin labelling on the demand side captures the behaviour of consumers in terms of their willingness to pay for information that is considered to represent a benefit with regard to better consumer awareness. Origin labelling provides consumers with additional information to make informed choices about the food they wish to purchase and consume.

In order to model mandatory origin labelling on the demand side, the study relies on information about willingness to pay estimates in the Member States and third countries. If complete information is not available some kind of approximation and/or assumptions are necessary for the

¹⁵ In CAPRI this substitution effect is likely to be very small, and might be somewhat underestimated.

¹⁶ With respect to the trade in meat products the CAPRI model does not distinguish between meat products at different levels of the supply chain.

modelling. Only monetary signals (in contrast with non-monetary benefits) can be taken into account in the modelling analysis.

5. Collecting information on consumer attitudes and behaviour

The impact assessment¹⁷ on food labelling prepared prior to the introduction of Regulation (EU) No 1169/2011, as well as other studies have revealed a 'consumer paradox' between consumers' attitudes and behaviour towards origin labelling.

When asked, a majority of food (and particularly meat) consumers generally respond that indication of origin is important and should be included on labels. However, research shows that purchase decisions may be different from answers given in surveys and country of origin is not a major factor in most food or meat purchasing decisions.

The consumer paradox is explained by differences in consumer behaviour when responding to surveys and when actually purchasing food. When answering a survey, consumers are more likely to exhibit aspirational behaviour; whilst when purchasing they exhibit action-oriented behaviour.

This complex response of consumers to the issue of origin labelling varies according to the circumstances, their beliefs and their perceptions. These factors are well documented in literature and are undoubtedly of economic importance.

The implication of the consumer paradox is that consumer surveys alone are unlikely to provide a complete picture of consumers' attitudes and behaviour. A range of investigative techniques are required to provide reliable data for quantitative assessment of willingness to pay and for cost benefit analysis with regard to origin labelling. As there are already numerous surveys¹⁸ regarding the subject of origin labelling, no further surveys have been conducted during the study.

It is difficult to estimate the benefits to the consumer of origin labelling in monetary terms for the purposes of cost benefit analysis. Origin labelling of meat products may have a positive impact on purchasing if it inspires confidence in the authenticity of the product; it may have a negative impact related to perceived attributes of the product or concerning the country or area in question; or it may have no impact if origin is of not a priority for to the purchaser.

Added (or reduced) value from origin labelling can be measured in terms of willingness to pay extra, and product loyalty or substitution. Sales of a product can be affected in terms of both price realised and volume sold.

The study uses a number of different approaches and sources of information to make a composite assessment of willingness to pay. Wherever possible, information is based on sound evidence, supplemented by results from literature and previous consumer surveys. The approaches include:

¹⁷ Impact assessment report on general food labelling issues, 2008. Commission staff working document accompanying the proposal for a Regulation on the provision of food information to consumers. SEC(2008) 92

¹⁸ Country of Origin Labelling: A Synthesis of Research, Prepared for the UK Food Standards Agency by Oxford Evidentia, January 2010

- Information from agricultural sectors where mandatory origin labelling has already been introduced, including the beef sector and imported pre-packaged poultry meat;
- Information from Product Designation of Origin (PDO), Protected Geographical Indication (PGI) and Traditional Speciality Guaranteed (TSG) schemes (including those for other agricultural products) where a premium can be charged for perceived higher quality (taking into account that these are diverse quality schemes and have a different purpose than providing origin information);
- Information from voluntary labelling and certification schemes;
- Trade statistics with price and volume data, particularly when differences can be attributed to origin information and taking into account changes over time (e.g., market shock comparisons);
- Price and volume comparisons between indistinguishable products with and without origin labelling, and with origin labels from different countries.

The consumer study includes a literature review to identify local and pan-European studies on the preference for origin labelling with a focus on the selected countries: UK, France, Germany, Netherlands, Romania and Spain.

Following the literature review, interviews and case study meetings were held with supply chain representatives (consumer organisations, meat industry, retailers and other stakeholders), who know the specific market. Consumer behaviour in the specific market was discussed.

The meetings addressed the following subjects: knowledge at consumer level about trade flows of meat to the case country; added value of origin labelling; current buying behaviour on PDO, PDI and TSG, and quality and certification schemes in general, and more specifically on meat; food nationalism and price sensitivity of consumers in the local market with respect to food and meat products.

The approach used qualitative information and such quantitative evidence as is available to validate the literature review and give insights into consumer behaviour and willingness to pay.

Meetings with consumer representatives were limited to the case study countries and so it has been necessary to find ways to extrapolate the findings to EU level.

6. Overview of modelling approach and data requirements

The data requirements have been summarised in order to model mandatory origin labelling on the supply and demand sides, as shown in the following table. The table refers to alternative approximation options where data is unavailable.

Table 1. Data requirements for modelling mandatory origin labelling

Modelling	Data collection within the project	Alternative approximation options if data is not available
<p>Supply side: Mandatory origin labelling estimates for the Member States under review (Euro/unit)</p>	<ul style="list-style-type: none"> ▪ Cost estimates at the different stages along the supply chain ▪ Firm size and sourcing ▪ Market structure ▪ Linkage between the production stages, model coefficients and elasticities 	<ul style="list-style-type: none"> ▪ Approximation for groups of countries with similar production structures ▪ Using trade data for information on sourcing ▪ Assumptions on model structure; information is available. Market linkage information and distribution of costs within supply chain will be based on expert information.
<p>Demand side: Consumers' willingness to pay (WTP) for products from certain origins, information on origin (Euro/unit)</p>	<ul style="list-style-type: none"> ▪ WTP estimates: estimated based on expert or stakeholder information and based on estimates collected from the literature 	<ul style="list-style-type: none"> ▪ Assumption for consumer preferences and thus WTP ▪ Possibility to adjust option to derive the WTP in order to compensate for mandatory origin labelling costs

ANNEX 2. MAIN RESULTS OF THE STUDY OF THE FUNCTIONING OF THE MEAT MARKET FOR CONSUMERS IN THE EU

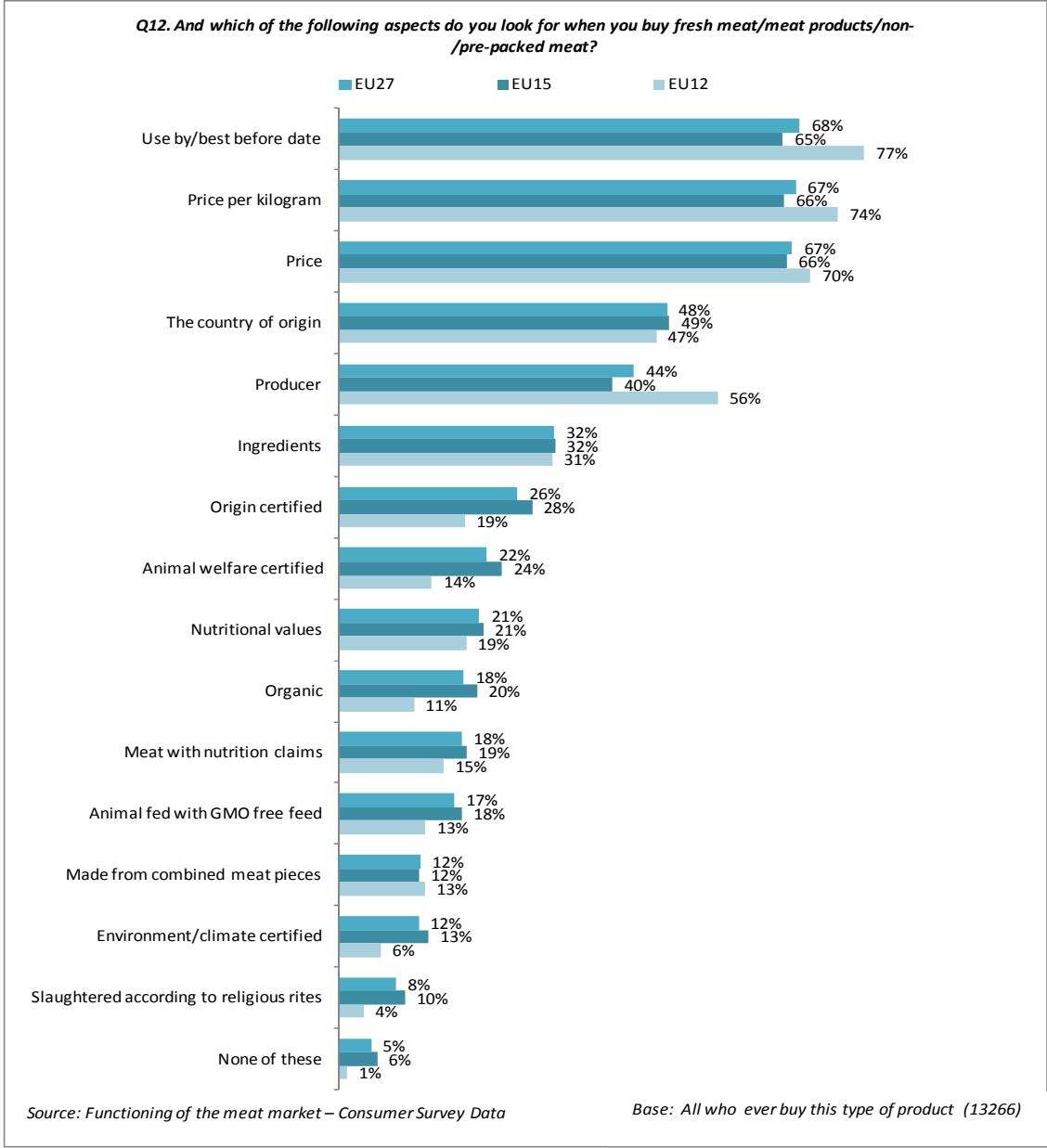
The study was launched in 2011 as a follow-up to the Consumer Scoreboard of October 2010¹⁹. The Scoreboard ranked the meat market as one of the lowest performing goods markets. The performance is measured in areas such as consumer ability to compare offers, consumer trust in retailers/producers complying with consumer protection legislation, problems experienced by consumers, consumer complaints and whether the market has lived up to what consumers want. Another important criterion is the 4% share that meat has in the household budget. This market is also highly regulated, in particular in terms of factors which could impact on consumer trust. Finally, consumer decision making around meat products is complex, given the different aspects of the decision: price, quality, trust, safety, ethical and environmental considerations. The in-depth study of the meat market was carried out to gain a better insight into the problems and provide evidence regarding consumer understanding and use of information, which could be helpful for both EU- as well as national-level policy making.

Main findings of the study

The study finds that consumers, in general, focus on a limited number of information aspects provided on meat or meat products (mainly on the durability date, the price and the country of origin – see the figure below) and their level of understanding of certain messages, for example a 'best before' date or a health claim, is rather low (36% of EU consumers indicated the right meaning of a 'best before' label and 23% knew the exact meaning of a 'low fat' claim). A mystery shopping (carried out in the frame of the study by surveyors who pretend to be consumers and whose task is to replicate consumers' experiences) revealed that information is generally available to consumers, however, to a lesser extent in butcher shops. For example, mystery shoppers could not obtain the 'use by' and 'best before' date for 63% of meat which they assessed in butchers and the price per unit could not be gathered for 33%. Also, the cues consumers use to assess the quality of meat are not always the ones that scientists indicate as relevant or are not correctly interpreted by consumers. In addition, consumers are not always aware how to safely handle meat at home to avoid contamination or how to plan their shopping or cooking to minimise food waste.

¹⁹ http://ec.europa.eu/consumers/consumer_research/editions/cms4_en.htm

Figure 1: *Aspects looked for when buying meat*



Survey results show also that the impact of meat consumption on health is important for consumers. Health was indicated by consumers as the main reason for which they would like to reduce their purchases of meat or meat products. On the other hand, only 21% of consumers look for information regarding nutritional values, e.g. fat, energy or salt content, and 18% look for nutrition claims when buying meat.

There are a number of specific meat types available in the market, such as organic, animal welfare certified or origin/quality certified. The vast majority of EU consumers indicate that they would like to buy at least one of the specific types of meat more often, which means that there is a gap between consumer intentions and their current behaviour. In general, the widest gaps can be observed for organic meat (41% of EU consumers said they would like to buy this type more often

whereas only 16% buy it now), and for environment/climate certified meat (39% intend to buy it more often and 5% buy it now). The main obstacle seems to be a too high price and insufficient choice or unavailability of a particular meat type at the retailer. The analysis of prices collected for the study shows that, indeed, organic meat is 66% more expensive than the regular one.

ANNEX 3. SUMMARY OF THE STAKEHOLDER WORKSHOP

Workshop on mandatory origin labelling for pig, poultry and sheep and goat meat - *AGRI-2012-EVAL-01*

Where: Albert Borschette Conference Center, Rooms AB/2.C and AB/4.D; Rue Froissart 36,
1040 Bruxelles, Belgium.

When: Friday, October 26, 2012, 10.00 – 17.00

Participants:

1	Frans van Dongen	PVE
2	Angelika Mrohs	CIAA/food drink europe
3	Ceterina Gubboile	FoodDrinkEurope
4	Ariane Carré	UGAL
5	David Bowles	RSPCA
6	Peter Stevenson	Eurogroup
7	François Frette	UECBV/FNICGV
8	Laure Chapart	UECBV/FNICVG
9	Rainer Weidmann	UECBV/VDF
10	Frans van Dongen	UECBV/PVE
11	Guisepe Luca Capodiecì	UECBV
12	Enrico Frabetti	CLITRAVI
13	Michael Fogden	AHDB
14	Kathy Roussel	AHDB
15	Cees Vermeeren	AVEC
16	Carmen Turcu	AVEC
17	François Saint Lager	BREIZ EUROPE
18	Christophe Hamon	BREIZ EUROPE
19	Camille Perrin	BEUC
20	Jens Karsten	EPEGA
21	Bernd Gruner	EPEGA
22	Kirsten Diessner	CIBC
23	Daniel Azevedo	COPA-Cogeca
24	Camelia Gyorffy	COPA-Cogeca
25	Christophe Derrien	COPA-Cogeca
26	Charles Boorn	COPA-Cogeca
27	Marina Valverde	Eurocommerce
28	Andrea Inchausti	Eurocommerce
29	Morten Damkjær Nielsen	Danish Agriculture & Food Council
30	Andrzej Szeremeta	IFOAM EU Group
31	Joana Silva	DEMETER
32	Chiara Tomalino	Euro Coop
33	Koert Verkerk	LTO Nederland
34	Stephen Pugh	DEFRA

	Project Organization	
35	Volkert Beekman	LEI Wageningen-UR
36	Ronald de Graaff	LEI Wageningen-UR
37	Remco Schrijver	VetEffecT
38	David Dewar	VetEffecT
39	Ave Schank	DG Agri
40	Vincent Cordonnier	DG Agri
41	Kai-Uwe Sprenger	DG Agri
42	Miguel Garcia Navarro	DG Agri
43	Carlo Pagliacci	DG Agri
44	Andreea Busa	DG Agri
45	Alexandra Nikolakopoulou	DG Agri
46	Anastassia Alvizou	DG Agri
47	Luis Carazo-Jimenes	DG Agri

Workshop Programme:

10.15 – 11.00 Plenary Session I – Introduction

- Opening – Luis Carazo-Jimenes, Head of Unit of Animal Products in DG AGRI
- Introduction to the project – Remco Schrijver
- Explanation of the workshop programme – Volkert Beekman
- Short introduction participants)

- 11.15 – 12.15 Parallel Session I – Presentation and discussion two scenarios

- Session 1: arguments for scenario 1
- Session 2: arguments against scenario 1
- Session 3: arguments for scenario 2
- Session 4: arguments against scenario 2

- 13.15 – 14.15 Continued Parallel sessions and Plenary session II - Presentation

- Finishing parallel sessions
- Plenary presentations and discussion

14.30 – 15.30 Parallel sessions II

- Session 1: Pig and poultry: strengthening scenario 1
- Session 2: Pig and poultry: strengthening scenario 2
- Session 3: Sheep and Goat: strengthening scenario 1
- Session 4: Sheep and Goat: strengthening scenario 2

15.45 – 16.45 Plenary session III – Conclusion

- Presentation results four parallel sessions
- Comparative discussion
- Overall conclusions and follow-up

The workshop is organized in two main steps:

1. Discuss and present arguments for and against scenario 1 and 2
2. Discuss and present how to strengthen scenario 1 and 2

Parallel Session I – Discuss and Present the arguments for and against two scenarios

Scenario 1: Mandatory EU or non-EU origin labelling of pig, poultry and sheep and goat meat:

- Where pig, poultry and sheep and goat meat is derived from an animal **born, bred and slaughtered** inside the EU, this meat is labelled “Origin: EU”.
- Where pig, poultry and sheep and goat meat is derived from an animal **born, bred or slaughtered** outside the EU, this meat is labelled “Origin: non-EU”.

Scenario 2: Mandatory EU Member State origin labelling for pig, poultry and sheep and goat meat:

- Where pig, poultry and sheep and goat meat is derived from an animal **born, bred and slaughtered** inside the EU, this meat is labelled with:
 - EU Member State where the animal was born;
 - EU Member State where the animal was fattened/bred; and
 - EU Member State where the animal was slaughtered.
- Where pig, poultry and sheep and goat meat is derived from an animal **born, bred or slaughtered** outside the EU, this meat is labelled “Origin: non-EU”.

The first step in the workshop is to discuss in four parallel sessions the arguments for and against the two scenarios:

- Session 1: arguments *for* scenario 1
- Session 2: arguments *against* scenario 1
- Session 3: arguments *for* scenario 2
- Session 4: arguments *against* scenario 2

Plenary presentation and discussion of the results of the first four parallel sessions:

Session 1: arguments for scenario 1

Discussion in session 1 results in three categories of arguments for scenario 1 :

1. Community cohesion
 - Compliance with the single market (art.2 of the treaty & ECJ caselaw)
 - Promotion of the EU standards: Animal Welfare; Environment; Food safety; Social
 - Same level playing field between EU and third countries
 - More defensible/WTO rules
2. Socio-economic advantages
 - Economic advantage (economies of scale and scope)
 - Simplification: implementation, enforcement and control; day-to-day handling simpler and less sophisticated traceability; applies for all species
 - Cost reduced compared to the other scenario
 - Consumer price increases under the other scenario
3. Consistency and redundancy aspects
 - Nice to have but consumer demand is low for detailed origin labelling = EU labelling should be enough
 - More flexible: member state can add info on voluntary basis (only those wanting national origin labelling pay for the cost involved. It is an option to evaluate if mandatory procedures can be

incorporated into legislation when stakeholders want to use more detailed labelling, to avoid misleading labelling as today can occur.

- Consistency with phase 2 "meat as ingredient for meat products"

The participants of this session pointed out the argument 'compliance with the single market' as the most important argument for scenario 1.

Session 2: arguments against scenario 1

(is this what the MS and MEP wanted?- not consistent with regulation where countries are MS)

- Inconsistency- different rules for beef and pig/poultry/etc
- Does the consumer want EU – Non EU? Does EU mean anything to consumer? (eurobarometer and French study → more detailed labelling allegedly requested by EU consumer)
- Does not give any real information such as on animal welfare (but animal welfare labelling is purpose of other studies)
- Does not allow regional labelling
- Not consistent with EU strategy on other issues which are promoting local/regional products?
- Will it lead to confusing voluntary regional labelling for instance where meat is born, processed, slaughtered?
- Economics debate: is there a difference in cost towards MS/regional labelling (no consensus)

Session 3: arguments for scenario 2

Discussion in session 3 results in the following arguments for scenario 2:

- Stimulates competition
 - Consumer expectations on the basis of beef labelling
 - Similar systems for all meats
 - Farmex expectations = same story
 - Small food processors fear extra costs
 - Might add to reduces long animal transport
 - European Council wants MS and not EU/non-EU labelling
 - Honesty/transparency about origin/chain
 - Supports sustainability
1. Scenario 2 meets expectations of consumers, farmers, small/local food processors and European politicians.
 2. Scenario 2 is honest/transparent/consistent about origin and further processing
 3. Implementation of scenario 2 seems feasible

Session 4: arguments against scenario 2

Discussion in session 4 results in three categories of arguments against scenario 2:

1. Complexity
 - Scenario 2 => complex tracability.
 - A lot of batches (x30),
 - Cost, Productivity,
 - Time, Space left,
 - Tracability Errors
 - Stock control at all stages, for all size of stakeholders
 - Negative experience on beef experience
 - Less compliance enforcement
 - Mixed species fresh meat packs
2. Logistics
 - Planning for publicity/promotion inside or outside retail points, packaging supplying
 - Internal trade

- Marketing use origin on voluntary basis (not for all the production)
3. Prices
- Consumer preference for domestic consumption
 - Less flexibility
 - Wrong impression to consumers: country origin is not quality difference
 - Valorization of trimming, of end of batches
 - Third trade competitors

Parallel session II – Discuss and present how to strengthen the two scenarios

The second step in the workshop is to discuss and present how to strengthen the two scenarios for pig and poultry and for sheep and goat:

- Session 1: how to strengthen scenario 1 for Pig and Poultry
- Session 2: how to strengthen scenario 1 for Sheep and Goat
- Session 3: how to strengthen scenario 2 for Pig and Poultry
- Session 4: how to strengthen scenario 2 for Sheep and Goat

Session 1: strengthening scenario 1 for Pig and Poultry

- EU guidelines for voluntary country of origin labelling
- Improving awareness of the benefits of the common market

Session 2: strengthening scenario 1 for Sheep and Goat

Sheep:

- Shortage of sheep meat on the planet: EU /nonEU is the only realistic origin labelling option
- preparation of promotion materials for sheep meat consumption happens months before actual origin of animals is known; EU- NON-EU is max..
- Applying beef scenario for sheep means in France 30 times more batches to control and administer: avoidance of extra administrative costs Flexibility :
- Authorized « member state labeling » on voluntary basis only if B,R,S are in the same country, see above, . It is an option to evaluate if mandatory procedures can be incorporated into legislation when stakeholders want to use more detailed labelling, to avoid misleading labelling as today can occur
- Then authorized to replace UE?
- Don't label BRS²⁰ if they are from different countries, just label « UE »
- Same simple rules for minced meat, trimmings, ... « UE / nonUE»
- What about imported raw material cuts in UE : « UE » or « non UE » ?
- Actually stakeholders label « NZ » and promote this origin. Importers should be able to prove BRS. If not BRS in NZ -> »non UE »

Goat:

- Small production of meat, often old milk goats, mostly exported
- Young goat meat : often slaughtered in where rabbits are slaughtered, see for logistics there

Session 3: strengthening scenario 2 for Pig and poultry

Possibilities to achieve lower costs of logistics:

- Exclude day-old chicks
- Exclude piglets

²⁰ BRS=Born, Reared, Slaughtered to describe 3 life stages

- Exclude place-of-birth

Place-of-slaughter might suffice:

- not much transport in poultry

Flexibility but consistency:

- place of rearing perhaps most interesting for consumers

About pigs: consider excluding place-of-birth

About poultry: consider focusing on place-of-rearing

NB: hardly live imports from outside EU and labelling country of origin is wrong means to illustrate discomfort due to transport distance because countries greatly vary in size. Intra-country transport can be much greater distance than between-country transport

Session 4: strengthening scenario 2 for Sheep and Goat

Discussion in session 4 about how to strengthen scenario 2 for sheep and goat resulted in 7 points to present:

1. Difficult to make progress and agree
2. Mainly arguments for and against
3. Producers favour born/reared/slaughter with place of farming (born + reared a priority)
4. Retailers don't like the word slaughter. The UK system of farmed (born + reared) works well.
But possible customs issue to exclude slaughter
5. The goat market is different
6. Sheep and goat labelling should be easier as sheep typically are born and raised in one country. Also electronic ID means information is available at slaughter.
7. A view point is that it is better to have harmonisation of the rules for pigs, poultry and sheep & goats at EU level.

Plenary session III - Conclusion

In the plenary session it was questioned whether EU regulation 1169/2011 did allow for the option of EU or Non-EU labelling because it mentioned countries. However, the Commission representatives clearly confirmed that the labelling option EU and Non-EU was not ruled out by the regulation, and that it could be part of the study.

Concerning the labelling of the successive life phases of animals: birth, rearing and slaughter, some participants stated that the word slaughtered would not be appropriate to be mentioned on labels as the consumers are reluctant to know such information. The alternative wording suggested was: place of substantial transformation. However, the discussion on the phases of the life of an animal to be considered in the possible labelling schemes remained rather general but it was concluded that the study will look further into this aspect.

The cutting plant was discussed as very important chain in the labelling, where different labelling regulations would have significant effects. This was explained because cutting plants would need to transfer all such labelling information to suppliers and retailers. The need to separate different batches based on different origin of birth, rearing or slaughter might cause significant additional costs. The participants stressed that the cutting plant is the key point also for the study to assess the costs of different ways of origin labelling.

Labelling mentioning of the Member State/ third country of origin was considered very important by the Eurogroup for animals, as it would be the reason for serious discomfort for the animals, when

transported from one country to another. However, other participants disagreed, arguing that transport from, as example, the Netherlands to Germany was less stressful than transport from south to northern Italy and the information would thus not indicate the actual distance of travel. It was also argued that the origin labelling is not an appropriate measure to address animal welfare issues.

A publication of a new study by EuroCOOP on consumer behaviour on labelling opinion was accounted. This report could be useful for the current study as well. The impact of information on the label on consumers behaviour and the willingness to pay was not part of the study but should also be questioned, because what consumers reply in questionnaires, may differ from their actual purchase behaviour. Certain retailers have an assumed quality profile for consumers, who easily take that for granted.

Impressions from the workshop

The impression of the main issues discussed:

Scenario 1:

- Main supportive argument:
 - Lowest logistics costs
- Main supportive stakeholders:
 - Large meat processing and trading companies
 - North-west Europe
 - DG AGRI
- Main negative arguments:
 - Less info for consumers
 - If not supported by mandatory procedures for voluntary country and/regional labelling than misleading labelling is not prevented
 - Not consistent with EU beef labelling system

Scenario 2:

- Main supportive argument:
 - Highest consumer transparency
- Main supportive stakeholders:
 - Farmers, consumers and small meat processing and trading companies
 - South-east Europe
 - DG SANCO
- Main negative arguments:
 - High administrative costs for slaughterhouses, processors, and retailers
 - Similar Beef labelling system has negative annotation hence adoption and implementation risks
 - WTO implications unsure

About Consistency:

- Apply same policy option to pig, poultry, sheep and goat meat
- Align this policy option with beef policy, taking into account that beef-“light” labelling option should also be explored due to negative annotation.
- Scenario 1- might also be an option, i.e. apply scenario 1 also in beef policy

ANNEX 4. SUMMARY OF STAKEHOLDER CONSULTATION

1. Advisory Groups

The stakeholder consultations were carried out in the framework of Advisory Groups for Quality Policy, Pig Meat, Poultry Meat and Sheep and Goat Meat. The meetings took place respectively on 19.02, 26.03, 30.04 and 15.05. The Advisory Groups are comprised of stakeholders representing farmers, industry, trade, consumers, animal welfare and environment organisations.

Ahead of the meetings devoted for the different meats, all members of the Committee were sent an information document explaining the background of the initiative, the process of the Impact Assessment, listing the three policy options and outlining initial impacts as emerged from the preliminary results of the external study.

The Commission summarised the information already sent in advance, and asked for written contributions as regards the preference of option substantiated by analysis of possible impacts accompanied with relevant data.

From the discussions during the meetings, the following emerged:

COPA-Cogeca (farmers) manifested the preference for the most detailed option (the beef model) which would give more benefits for the farmers. However, the cost of implementing the system should be distributed evenly along the supply chain.

AVEC (poultry processors and traders) prefers the simple option, where indication of the place of farming in EU/non-EU would be mandatory but labelling of Member State/third country could be done on a voluntary basis.

Eurogroup (animal welfare) is in favour of the detailed option which would allow consumers caring for animal welfare to evaluate the distance animals have travelled.

EPEGA (poultry, egg and game) strongly supports the simple option. The complicated regulation would encourage fraud and the recent food scandal would not be solved with detailed origin labelling rules. Furthermore, the common market would be jeopardised.

The main points highlighted were:

- *If the most detailed option is chosen, it has to be applied correctly, i.e. efficient control and monitoring is very important to avoid fraud.*
- *The Commission was asked to ensure consistency between origin labelling for unprocessed meat and meat used as ingredient. Many stakeholders called for extending mandatory origin labelling also to processed products which naturally would involve imported processed meat.*
- *Marketing standards for poultrymeat include a reference to origin labelling (obligation for imported unprocessed meat) and in the proposal of the sCMO there is reference to the place of farming. All these provisions should be consistent.*

- *WTO-compatibility of the new labelling rules should be ensured.*

2. Summary of written positions submitted by stakeholders

Copa-Gogeca – European Farmers and European Agri-Cooperatives

Pigmeat: Copa-Gogeca does not have a common position

Poultry, sheep and goat meat:

1. It is of the foremost importance that consumers are adequately informed of the “place of farming” of food products, considering the fact that this information does not necessarily coincide with the “origin” of the product, as defined by EU legislation.

- the concept of “place of provenance” has to be regarded as the “place of farming” of the animal, as referred to in the Proposal for a Regulation amending Council Regulation (EC) No 1234/2007 as regards marketing standards.

- The indication of “place of farming” should be compulsory, meaning that the choice between using “country of origin” labelling or “place of provenance” labelling should not be left at the decision of the operator marketing the product. This information could be indicated as a single place, when it coincides with the “indication of the country of origin” (see below)

All the three stages in the life of the animal (born/reared or fattened/slaughtered) should be indicated on the label if these are different, as follows:

- born in [name of the Member State/ name of third country]
- reared/fattened in [name of the Member State / name of third country]
- slaughtered in [name of the Member State / name of third country]

or

If the three stages in the life of the animal (born/reared or fattened/slaughtered) are the same, the country of origin should be sufficient: origin: [name of the Member State / name of third country]

Equivalent rules should apply to imports.

2. The Concept “Place of farming” shall be defined at the level of the country, including for imports. The information on region/province/area could be also provided, on a voluntary basis as additional information

3. The way the information is conveyed to the consumer should be transparent enough but also simple and easy to understand.

A joint statement of the UECBV (European Association for Feed and Meat) and CLITRAVI (Liaison Centre for the EU Meat Processing Industry)

1. Mandatory indication of country of origin or place of provenance for unprocessed meat of pigs, poultry, sheep & goats

The EU meat sector:

- Acknowledges the sensitivities around the imposition of origin labelling requirements on meats but it rejects disproportionate rules that cannot in practice be met by operators;
- Urges a clear distinction between measures to ensure traceability and those to ensure authenticity;
- Opposes strongly the extension of the beef model to other meats;
- Recommends: A mandatory indication of the origin, defined as place of:
 - Rearing with a minimum period of two months **and**
 - Slaughtering;
- Flexibility with regard to the size of the place. The food business operator (FBO) should have the choice between two options:
 - Either EU / NON EU
 - Or MEMBER STATE / COUNTRY.

The choice of the FBO will depend on different factors, amongst them:

- Commercial specifications,
- The requirements for the final consumer,
- The complexity of labelling particular items such as minced meat and trimmings.

2. Derogations from the mandatory indication of country of origin or place of provenance

Taking into account:

- The operational circumstances during the meat processing (such as cutting and grinding via knives, grinders, choppers, and cutting boards) routinely resulting in meat trimmings,
- The significant cost increases and difficulties associated with the segregation of those trimmings on the basis of detailed origin features,
- The wish to avoid any hindrance to smooth and efficient procedures related to food production management (ground for prevention of food wastage),

Minced meat and meat preparations derived from trimmings (such as fresh hamburgers and sausages) should be in any case exempted by the EU mandatory origin labelling requirement. Starting from the safety and high quality pre-requisite characterising the EU production system where high standards for traceability and hygiene are the basis, this derogation should be granted for technical reasons.

FoodDrinkEurope – European Food and Drinks Industry

In view of the three options presented as part of the Commission Impact Assessment on the mandatory origin/provenance indication for pigmeat, poultry, sheep and goat, FoodDrinkEurope strongly favours option 1 (mandatory EU or non-EU labelling, the "simple model") as the most feasible way forward.

UGAL – Trade Association for independent EU retailers

HDE – German Retail Association

The German retail sector believes that it is crucial to design the mandatory origin labelling scheme in the simplest and least bureaucratic way possible. At the same time it is important to grant business operators the highest degree of flexibility for voluntary labelling.

IBC – International Butcher's Confederation

The IBC is of the opinion that origin labelling on foods should remain voluntary as origin labelling is not part of indispensable consumer information. It would only generate unnecessary red tape and costs, for both food business operators and consumers, with no perspective of any additional benefit for consumers.

However, if mandatory origin labelling for meat is introduced, the following must be fulfilled:

A simple and flexible scheme providing information on the origin must be developed, which takes into consideration consumer expectations as well as the FBOs interests and which also takes account of the specific characteristics of the various meat types.

Labelling should only refer to fresh prepacked meat, in accordance with the CN-codes of Regulation (EC) Nr. 1214/2007 - (CN-codes 0201 - beef, 0203 - pork, 0204 - sheep/goat, 0207 - poultry).

Indication of the origin should only refer to the fattening and the slaughter of the animal.

No indication of business numbers on the label (slaughterhouse or cutting plant numbers); indications referring to origin must be separated from indications referring to traceability.

The FBO must have the choice between the following options as regards the indication of the origin (depending on the market situation or consumer choices):

- EU
- Member State
- region
- farmer XY
- handcrafted slaughter in the (own) business XY or similar

EuroCommerce – Association for retail, wholesale and international trade interests

EuroCommerce strongly supports mandatory EU or non-EU origin labelling (option 1 of Impact Assessment, also called the “simple model”):

- meat from an animal reared (during a period to be fixed) before slaughter inside the EU is labelled “Origin: EU”;
- imported meats and meat obtained from imported animals for slaughter are labelled as "Origin: non-EU".

This option would provide consumers with meaningful and appropriate information, as all meat originating from the EU has to comply with the same safety and welfare standards. In fact, the introduction of more detailed origin labelling could potentially disrupt the EU internal market. Research suggests that some consumers could actively boycott products from certain Member States.

It allows for greater flexibility of sourcing within the EU. It would be possible for operators to work with multiple suppliers to meet changes in supply or consumer demand.

This option gives the opportunity to explicitly name the country of origin on a voluntary basis. It will allow food business operators, where feasible, to address those cases where consumers attach a particular value to the origin of the foods they purchase. Making indication of country or region compulsory would deprive companies, in particular SME's, of an important means to set themselves apart from the other players.

Retailers know from the daily contact with consumers that their interest in origin relates to the place where the animal has been farmed. This view came across strongly in some of the consumer research conducted in several MS²¹. Information on birth, slaughter or even cutting is of minor interest for consumers.

²¹ UK Food Standards Agency - 2010

Given that the only reason for requiring mandatory origin labelling is to keep the consumer informed, we should provide them with information which is relevant to them, the place of farming or rearing.

The arguments that are being presented by some stakeholders in support of the other options, to require labelling of the place where the animal was slaughtered, are animal welfare-related. We strongly feel that they have to be discussed in the framework of the animal welfare discussions.

ERPA - European Rural Poultry Association

ERPA considers that an origin labelling “Member State or third country where the animal was reared and slaughtered” (option 2 b) is the best option for poultry. This mandatory indication should be on non-processed meat and on processed product including 20% or more of poultry ingredients or when poultry is in the denomination of the processed product. There should be a good coherence of position between mandatory origin labeling on meat and the “place of farming” as defined in the quality package. The indication “reared and slaughtered in ... + country” would be adapted for the 2 indications.

Lantbrukarnas Riksförbund – Federation of Swedish Farmers

Based on the discussion in the Advisory Group on Pigmeat on April 30th the Federation of Swedish Farmers, LRF, wishes to leave the following contribution.

LRF would like to see a mandatory labelling on pigmeat. The labelling should be made on member state level and it should include the following steps: born, reared, slaughtered and processed.

Many Swedish consumers are interested in the origin of the food they eat; meat in particular. When consumers ask for the origin of food, they are interested in information given on the country level, not whether it is made in the EU or not.

LRF thinks that consumers are entitled to this information so that they can make an active decision on what to buy.

Unaitalia – National Union of Italian Egg and Poultry Producers

A common position signed by Italian member in Copa-Cogeca and Unaitalia an association representing more than 90% of Italian poultry production is in favour of the so called “beef model” meaning the mandatory labelling of “born, reared and slaughtered”.

Eurogroup for Animals – European animal welfare organisation

Eurogroup for Animals welcomes the provision in Regulation 1169/2011 on the provision of food information to consumers that extends compulsory country of origin labelling to meat from pigs, sheep, goats and poultry.

Eurogroup for Animals urges the Commission in making implementing regulations to be consistent with the law on beef and veal and to provide that, in the case of meat from pigs, sheep, goats and poultry, the country of origin may be given as a single place only where the animals have been born, reared and slaughtered in the same country. In other cases each of the different countries of birth, rearing and slaughter must be identified. This will provide clear information to consumers and allow them, if they wish, to avoid meat from animals that have been transported on a long journey for either fattening or slaughter.

The Commission has argued that the requirement in Regulation 1169/2011 to identify the country of origin could be satisfied by simply stating the meat to be 'EU' or 'non-EU'. In our view this approach would be contrary to the intention of the Parliament and the Council throughout the discussions on country of origin labelling of certain meat. It was always clear that what was being discussed was identification of the Member State of origin not merely identification as to whether the meat originated in the EU or outside the EU.

EMN – European Meat Network (letter to Commissioners Ciolos and Borg) on behalf of the companies: Danish Crown, Dawn Meats Group, ElPozo, HK Ruokatalo, Inalca Spa, Westfleisch and Sokolow.

Firstly, the functioning of the Single Market is important to take into account. It is one of the fundamental pillars of the EU and should therefore not be jeopardized. A report from the Commission (COM(2004)316 final) concluded that Community beef labelling legislation has led to a degree of renationalisation of trade in beef.

Secondly, there are also significant costs and inflexibility associated with the introduction of a comprehensive and mandatory country of origin labelling scheme which again would damage the competitiveness of the European food sector in a global trade context and most likely lead to increased consumer prices.

Finally, as the mislabelling of beef case has shown, detailed country of origin labeling cannot prevent fraud, and there appears to be a greater risk to put in question the European Union's credibility, rather than to identify criminal behavior of a very few operators.

In conclusion, EMN asks for EU/Non-EU labelling for fresh meat and to refrain from recommending introduction of a mandatory country of origin labelling for processed meat products.

MEPs Keith Taylor and Jean Lambert (letter to Commissioners Ciolos and Borg)

Following the recent horsemeat scandal the MEPs express their concerns regarding the lack of clear information provided to consumers on how their meat is produced.

They urge the Commissioners to propose a labelling scheme requiring all meat and dairy, including that farmed intensively - to be labelled as to farming method.