ECONOMIC COMMISSION FOR EUROPE

COMMITTEE FOR TRADE, INDUSTRY AND ENTERPRISE DEVELOPMENT

Working Party on Standardization of Perishable Produce and Quality Development

Specialized Section on Standardization of Meat
10th session, 25-27 April 2001, Geneva

Item 4 (a) of the provisional agenda

Draft UN/ECE Standard for Ovine Carcases and Cuts

Transmitted by New Zealand and Australia

Note by the Secretariat: This document contains the outcome of the work at the meeting of rapporteurs in Brazil and subsequent bilateral discussions between New Zealand and Australia for the ovine specific section.
Concerning the Standardization, Marketing, and Commercial Quality of Ovine Carcases and Cuts moving in International Trade

1.1.0 Foreward
The purpose of this standard is to define and describe commercial quality and merchandising of Ovine carcases and cuts moving into international trade as fit for human consumption. It is recognized that many other requirements of food standardization and veterinary control must be complied with to market ovine meat across international borders. This standard does not attempt to prescribe those aspects which are covered elsewhere, and throughout the standard, such provisions are left to national or international legislation, or requirements of the importing country.

This standard includes photographs of carcases and selected commercial cuts to facilitate a better understanding of its provisions with a view to ensuring a wide application in international trade. The main purpose of this standard is to create an international language for Ovine meat products.

1.2.0 Scope
This standard applies to carcases and / or associated meat cuts from ovine animals, marketed as fit for human consumption, demonstrating a characteristic red colour.

1.3.0 Field of application
The purpose of this standard is to define certain aspects of quality and cutting requirements of ovine carcases and cuts intended to be sold in international trade.

The standard contains references to other international agreements, standards and codes of practice which have the objective of maintaining the quality after dispatch and of providing guidance to governments on certain aspects of food hygiene, labelling and other matters which fall outside the scope of this Standard. Codex Alimentarius Commission Standards, Guidelines, and Codes of Practice, should be consulted as the competent international reference concerning health and sanitation requirements.

1.4.0 General requirements
The following requirements are dealt with in the General Requirements Standards for meat carcases and cuts, which apply to trade in all mammalian meats:

- Provisions concerning refrigeration
- Provisions concerning condition
- Provisions for evaluating fat thickness in certain cuts
- Provisions concerning meat and fat colour and pH
- Provisions concerning origin and production history
- Provisions concerning packing, storage and transport
- Labelling information for marketing units for meat
- Authority for conformity assessment (1)
EAN.UCC codification system

Footnote: This point refers to the Accredited Certifying Authority covered in the General Requirements for individual countries.

1.4.1 Provisions concerning external fat
External fat is measured in accordance with the provisions outlined in the General Requirements. This standard provides for the codification of the ovine cuts in international trade to have external fat levels specified to the following categories.

- Peeled Denuded, surface membrane removed
- Peeled denuded
- Practically free (75% lean/seam surface removed)
- 3 mm maximum fat thickness (0-3mm) or as specified.
- 6 mm maximum fat thickness (3-8mm) or as specified.
- 13 mm maximum fat thickness (8-12mm) or as specified.
- 25 mm maximum fat thickness or as specified.

Alternatively
- Peeled Denuded, surface membrane removed
- Peeled denuded
- Practically free (75% lean/seam surface removed)
- Class 1 (0 to 5mm)
- Class 2 (5 to 10mm)
- Class 3 (10 to 15mm)
- Class 4 (15 to 20mm)
- Class 5 (20mm and over)

1.4.2 Provisions concerning meat colour and pH.
Normal lean ovine product demonstrates a characteristic red colour. Meat with a pHU above 6.0 is considered dark, firm and dry meat (DFD). pHU is measured in the M.longissimus dorsi according to ISO 2917:1974 “Meat and Meat Products”. Any other methods or conditions of pH must be defined by contractual agreement. Meat colour can be evaluated organoleptically in fresh cross section of fixed muscle using an available colour guide. This can be defined in contractual agreement.

Footnote: pHU means ultimate pH

1.4.3 Provisions concerning Origin and Production History
The following options that may be specified by the purchaser require traceability systems to be in place.

Traceability requires a verifiable method of identification of ovine animals, carcasses, cartons, and cuts (optional) at all stages of production. The identification numbers must be applied and recorded correctly guaranteeing a link between them.
If used, traceability procedures must be agreed on by the Authority for Conformity Assessment referred to in paragraph 4.8 of the General Conditions.
The EAN.UCC System provides global language of traceability by means of multi industry standards for the identification and communication for products, services and locations. They may be used by organisations for traceability purposes across the supply chain to track and trace ovine products between the farm to retail outlets.

For information on using the EAN.UCC System please contact EAN International or national EAN organisation.

Contact addresses for EAN.UCC System details:

EAN International
145 rue Royale
B-1000 Brussels
Belgium
Tel: +32-2-227 10 20
Fax: +32-2-227 10 21
e-mail: info@ean.be

Uniform Code Council
Princeton Pike Corporate Centre
1009 Lenox Drive, suite 202
Laurenceville
USA
Tel: +1-609-620 0200
Fax: +1-609-620 1200

dating from 13

1.4.3.1 Ovine Category

The standard provides for categorization of ovine into four categories:

- **Not specified**
- **YOUNG LAMB** – Young ovine under 5 months of age
- **LAMB** - Young ovine under 12 months of age or which do not have any permanent incisor teeth in wear.
- **HOGGET** – A young male ovine or female ovine having no more than two permanent incisors in wear.
- **MUTTON** – Female ovine and castrated male ovine having more than two permanent incisors in wear
- **EWEMUTTON** – Female ovine only
- **WETHER MUTTON** – Castrate ovine males only
- **RAM** – Adult uncastrated male ovine having more than two permanent incisors in wear.

Other Ovine Categories may be specified using individual country grading criteria.

Ovine secondary sexual characteristics (SSC):

- Thicken pizzle
- Prominent erector muscle
- Prominent bulbo-urethral glands.

1.4.3.2 Production, Feeding and Animal Identification Systems

- **Intensive Systems** describe production methods which include restricted stocking, housing and feeding regimes developed to promote rapid growth. Specific standards need to be defined between buyer and seller.
• **Extensive Systems** describe production methods which include relatively unrestricted access to natural forage, ‘forage fed’, for the majority of the animal’s lives. Specific standards need to be defined between buyer and seller.

• **Organic systems** describe production methods which follow internationally recognised standards or national standards if they are more restrictive. Specific standards need to be defined between buyer and seller.

• **Husbandry systems** that control specific animal treatments such as Growth Promotants (GP) which follow internationally recognised standards or national standards if they are more restrictive

• **Other systems** must be described by the seller.

1.4.3.3 Slaughter Systems

• **Traditional** - stunning prior to bleeding is the accepted traditional system.

• **Kosher** - appropriate ritual slaughter procedures must be satisfied.

• **Halal** – appropriate ritual slaughter procedures must be specified.

• **Other** – any other method of slaughter must be specified by seller/buyer.

• **None specified.**

1.4.3.4 Post slaughter processing

• **Electrical stimulation** – if this is specified the system parameters must be agreed within the contractual terms.

• **Method of carcass suspension** – if different from the traditional Achilles tendon suspension then the required method must be specified.

• **Chilling regimes** – if a specific chilling procedure is required then this must be specified

• **Maturation process** – any specific requirement must be specified.

• **Other requirements** – must be specified.

• **None specified.**

1.4.3.5 Weight ranging of meat cuts.

1.4.4 Ovine Specific Coding

The following tables demonstrate the general application of the 14 field, 20 digit UN/ECE using the EAN.UCC coding scheme as it applies to bovine species specifications. See appendix 1 for details.
## UN/ECE OVINE STANDARD CODING

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Code Range</th>
<th>Specified Use</th>
<th>Data Field Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovine Species/Class</td>
<td>0 – 9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sub-primal Cut</td>
<td>0 – 9999</td>
<td>0 –9999</td>
<td>7</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>0 – 9</td>
<td>1 – 3</td>
<td>11</td>
</tr>
<tr>
<td><strong>Optional – requiring traceability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category (Sex/Type/Age)</td>
<td>0 – 9</td>
<td>0 – 8</td>
<td>2</td>
</tr>
<tr>
<td>Feeding System</td>
<td>0 – 9</td>
<td>0 – 5</td>
<td>3</td>
</tr>
<tr>
<td>Certification</td>
<td>0 –99</td>
<td>0 – 7</td>
<td>4</td>
</tr>
<tr>
<td>• Grade/Classification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Third party certification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Animal Identification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slaughter Systems</td>
<td>0 – 9</td>
<td>0 – 4</td>
<td>5</td>
</tr>
<tr>
<td>Post slaughter processing</td>
<td>0 – 9</td>
<td>0 – 1</td>
<td>6</td>
</tr>
<tr>
<td><strong>Optional – not requiring traceability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Fat</td>
<td>0 – 9</td>
<td>0 – 7</td>
<td>8</td>
</tr>
<tr>
<td>Colour (meat)</td>
<td>0 –99</td>
<td>0 –99</td>
<td>10</td>
</tr>
<tr>
<td>Weight Range</td>
<td>0 – 9</td>
<td>0 – 1</td>
<td>12</td>
</tr>
<tr>
<td>Packing</td>
<td>0 – 9</td>
<td>0 – 7</td>
<td>13</td>
</tr>
<tr>
<td>Reserved</td>
<td>000 – 999</td>
<td>None</td>
<td>14</td>
</tr>
</tbody>
</table>
1.4.4.1 Use Codes For Ovine Specific Coding

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Use Code</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Species</td>
<td></td>
<td>1</td>
<td>= Ovine</td>
</tr>
<tr>
<td>8. Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Not specified</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 YOUNG LAMB</td>
<td></td>
<td>2</td>
<td>Young ovine under 5 months of age</td>
</tr>
<tr>
<td>3 LAMB</td>
<td></td>
<td>3</td>
<td>Young ovine under 12 months of age or which do not have any permanent incisor teeth in wear.</td>
</tr>
<tr>
<td>4 HOGGET</td>
<td></td>
<td>4</td>
<td>A young male ovine or female ovine having no more than two permanent incisors in wear.</td>
</tr>
<tr>
<td>5 MUTTON</td>
<td></td>
<td>5</td>
<td>Female ovine and castrated male ovine having more than two permanent incisors in wear.</td>
</tr>
<tr>
<td>6 EWE MUTTON</td>
<td></td>
<td>6</td>
<td>Female ovine only</td>
</tr>
<tr>
<td>7 WETHER MUTTON</td>
<td></td>
<td>7</td>
<td>Castrate ovine males only</td>
</tr>
<tr>
<td>8 RAM</td>
<td></td>
<td>8</td>
<td>Adult uncastrated male ovine having more than two permanent incisors in wear.</td>
</tr>
<tr>
<td>Other Ovine Categories may be specified using individual country grading criteria.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Feeding System

| = Not specified | 0          |
|                | = Intensive |
|                | = Extensive |
|                | = Organic  |
|                | = Husbandry|
|                | = Other    |

3. Certification

| = Not Specified | 0          |
|                | = Grade/Classification Specified |
|                | = Third Party Certification Specified |
|                | = Origin and Production History Specified |
|                | = Grade/Classification and Third Party Certification Specified |
|                | = Grade/Classification and Origin and Production History Specified |
|                | = Third Party Certification and Origin and Production History Specified |
|                | = Grade/Classification, Third Party Certification and Origin and |
Production History Specified

4. **Slaughter Systems**

   0 = Not Specified
   1 = Traditional – Stunning prior to bleeding is the accepted traditional system
   2 = Kosher – appropriate ritual slaughter procedures must be specified
   3 = Halal – appropriate ritual slaughter procedures must be specified
   4 = Other – any other method of slaughter must be specified by seller/buyer

5. **Post Slaughter Processing**

   0 = Not Specified
   1 = Specified

7. **Four digit cut code defined in Standard**

9. **External fat thickness/level**

   0 = Not Specified
   1 = Peeled Denuded, surface membrane removed
   2 = Peeled Denuded
   3 = Practically free (75% lean/seam surface removed)
   4 = 3 mm maximum fat thickness
   5 = 6 mm maximum fat thickness
   6 = 13 mm maximum fat thickness
   7 = 25 mm maximum fat thickness

10. **Lean and Fat Colour**

    00 = Not Specified
    01 = Other System Specified

The AUS-MEAT Lean and Fat Colour chips can be coded into the item specification by the Lean Colour being the first digit (AUS-MEAT 1a – 7 Chips) and the AUS-Meat Fat Colour being the second digit (AUS-MEAT 0 – 9 Chips). The following table demonstrates the code matrix for using the AUS-MEAT Lean and Fat Colour Chips where lean colour is on the y-axis and fat colour is on the x-axis.
9. Refrigeration

1 = Chilled
2 = Frozen
3 = Deep Frozen

10. Weight Range

0 = Not Specified
1 = Specified

11. Packing

0 = Not Specified
1 = Carcases and quarters – Chilled with or without packaging
2 = Carcases and quarters – Frozen/deep Frozen packed to protect the products
4 = Cuts – Bulk packaged (plastic or wax-lined container).
5 = Cuts – Vacuum-packed (VAC).
6 = Cuts – Modified Atmosphere Packed (MAP).
7 = Cuts – Other.

1.4.4.2 Codification example:

The item characterised by the 20-digit code 15301016434000105000 would be:

Field 1 Species = 1 (OVINE)
Field 2 Category = 5 (Lamb / Mutton)
Field 3 Feeding System = 3 (Organic)
Field 4 Certification = 0 (Unspecified)
Field 5 Slaughter System = 1 (Traditional)
Field 6 Post Slaughter Processing = 0 (Unspecified)
Field 7 Cut = **4910** (Saddle)
Field 8 External Fat = 4 (3mm fat thickness)
**Field 9 Marbling** = 0 (Unspecified) *(Not required or a subjective measurement that means the same)*
Field 10 Lean and Fat Colour = 00 (Unspecified) *(A subjective measurement that means the same)*
Field 11 Refrigeration = 1 (Chilled)
Field 12 Weight Range code = 0 (Unspecified)
Field 13 Packing code = 5 (Vacuum Packaged)
Field 14 Reserved codes = 000

[Associated pictures are to be included in the final document]

1. The customer orders, using the UN/ECE Standard for Ovine Carcases and Cuts coding scheme.

[picture]

2. On receipt of the order, the supplier translates the UN/ECE codes into its own trade item codes (i.e., Global Trade Item Number).

[picture]

3. The supplier delivers the order to the customer. The goods are marked with the UCC/EAN-128 bar code standard.

[picture]

4. The customer receives the order and the UCC/EAN-128 bar code scanned, thus allowing for the automatic update of commercial, logistics and administrative processes.

[picture]

5. The physical flow of goods, marked with EAN/UCC standards, may be linked to the information flow using electronic data interchange (EDI – EANCOM® messages).

[picture]