THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Regulation (EC) No 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation) (1), and in particular Article 43(m), in conjunction with Article 4 thereof,

Whereas:

(1) By Commission Decision 2005/240/EC (2), the use of four methods for grading pig carcasses in Poland was authorised.

(2) Poland has stated that since the adoption of Decision 2005/240/EC the slaughter value of the fatteners in Poland has improved considerably. It is therefore necessary to update the formula of the methods after nearly 6 years of use since their approval and to obtain and use new, up-to-date grading methods with a view to increasing competition as well as to introduce cheaper grading methods.

(3) Poland has requested the Commission to authorise the replacement of the formula used in the 'CAPTEUR GRAS/MAIGRE — SYDEL (CGM)', 'ULTRA FOM 300', 'FULLY AUTOMATIC ULTRASONIC CARCASE GRADING (AUTOFOM)' and 'IM-03', methods of grading pig carcasses as well as to authorise four new methods for grading pig carcasses on its territory and has presented a detailed description of the dissection trial, indicating the principles on which that method is based, the results of its dissection trial and the equations used for assessing the percentage of lean meat in the protocol provided for in Article 23(4) of Commission Regulation (EC) No 1249/2008 of 10 December 2008 laying down detailed rules on the implementation of the Community scales for the classification of beef, pig and sheep carcasses and the reporting of prices thereof (3).

(4) Examination of that request has revealed that the conditions for authorising those grading methods are fulfilled. Those grading methods should therefore be authorised in Poland.

(5) Decision 2005/240/EC should therefore be amended accordingly.

(6) Modifications of the apparatus or grading methods should not be allowed, unless they are explicitly authorised by Commission Decision.

(7) The measures provided for in this Decision are in accordance with the opinion of the Management Committee for the Common Organisation of the Agricultural Markets,

HAS ADOPTED THIS DECISION:

Article 1

Decision 2005/240/EC is amended as follows:

(1) Article 1 is replaced by the following:

‘Article 1

The use of the following methods is authorised for grading pig carcasses pursuant to point 1 of Section B.IV of Annex V to Council Regulation (EC) No 1234/2007 (4) in Poland:

(a) the "Capteur Gras/Maigre — Sydel (CGM)" apparatus and the assessment methods related thereto, details of which are given in Part 1 of the Annex;

(b) the "Ultra FOM 300" apparatus and the assessment methods related thereto, details of which are given in Part 2 of the Annex;

(c) the "Fully automatic ultrasonic carcass grading (Autofom)" apparatus and the assessment methods related thereto, details of which are given in Part 3 of the Annex;

(d) the “IM-03” apparatus and the assessment methods related thereto, details of which are given in Part 4 of the Annex;

(e) the “Autofom III” apparatus and the assessment methods related thereto, details of which are given in Part 5 of the Annex;

(f) the “CSB Image-Meater (CSB)” apparatus and the assessment methods related thereto, details of which are given in Part 6 of the Annex;

(g) the “Fat-O-Meater II (FOM II)” apparatus and the assessment methods related thereto, details of which are given in Part 7 of the Annex;

(h) the “manual method (ZP)” and the assessment methods related thereto, details of which are given in Part 8 of the Annex.

As regards the apparatus “Ultra FOM 300”, referred to in point (b) of the first subparagraph, after the end of the measurement procedure it must be possible to verify on the carcass that the apparatus measured the values of measurement $F_1$ and $F_2$ on the site provided for in the Annex, Part 2, point 3. The corresponding marking of the measurement site must be made at the same time as the measurement procedure.

The manual method ZP, referred to in point (h) of the first subparagraph, shall only be authorised for abattoirs having a slaughter line with a capacity to process no more than 40 pigs per hour.


(2) the Annex is replaced by the text in the Annex to this Decision.

Article 2

This Decision shall apply from 12 December 2011.

Article 3

This Decision is addressed to the Republic of Poland.

Done at Brussels, 16 August 2011.

For the Commission

Dacian CIOLOȘ

Member of the Commission
ANNEX

METHODS FOR GRADING PIG CARCASSES IN POLAND

Part 1
CAPTEUR GRAS/MAIGRE — SYDEL (CGM)

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as “Capteur Gras/Maigre — Sydel (CGM)”.

2. The apparatus shall be equipped with a high-definition Sydel probe 8 mm in width, a light-emitting infra-red diode (Honeywell) and two light sensors (Honeywell). The operating distance is between 0 and 105 mm. The values measured will be converted into estimated lean meat content by the CGM itself.

3. The lean meat content of the carcass shall be calculated according to the following formula:

\[
\hat{\gamma} = 59.42 + 0.1322 \times M_2 - 0.6275 \times F_2
\]

where:

\(\hat{\gamma}\) = the estimated percentage of lean meat in the carcass,

\(M_2\) = the thickness of the dorsal muscle in millimetres, measured at the third to fourth last rib position, 6 centimetres from the dorsal midline, measured parallel to the split line of the carcass,

\(F_2\) = the thickness of back-fat (including rind) in millimetres measured at the same time, in the same place and in the same way as \(M_2\).

This formula shall be valid for carcasses weighing between 60 and 120 kilograms.

Part 2
ULTRA FOM 300

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as “Ultra FOM 300”.

2. The apparatus shall be equipped with an ultrasonic transducer array at 3,5 MHz (U-Systems). The results of the measurements shall be converted into estimated lean meat content by means of the Ultra FOM apparatus itself.

3. The lean meat content of the carcass shall be calculated according to the following formula:

\[
\hat{\gamma} = 54.48 + 0.1272 \times M_1 - 0.3090 \times F_1 + 0.0828 \times M_2 - 0.2802 \times F_2
\]

where:

\(\hat{\gamma}\) = the estimated percentage of lean meat in the carcass,

\(M_1\) = the thickness of the dorsal muscle in millimetres, measured at the last rib position, 7 centimetres from the dorsal midline perpendicularly to the muscle,

\(M_2\) = the thickness of the dorsal muscle in millimetres, measured at the third to fourth rib from the last rib position, 7 centimetres from the dorsal midline perpendicularly to the muscle,

\(F_1\) = the thickness of back-fat (including rind) in millimetres measured at the same time, in the same place and in the same way as \(M_1\),

\(F_2\) = the thickness of back-fat (including rind) in millimetres measured at the same time, in the same place and in the same way as \(M_2\).
This formula shall be valid for carcasses weighing between 60 and 120 kilograms.

**Part 3**

FULLY AUTOMATIC ULTRASONIC CARCASS GRADING (AUTOFOM)

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as “Autofom (Fully automatic ultrasonic carcass grading)”.

2. The apparatus shall be equipped with 16 ultrasonic transducers at 2 MHz (GE Inspection Technologies). The ultrasonic data shall comprise measurements of back-fat thickness and muscle thickness. The results of the measurements are converted into estimated lean meat content using a computer.

3. The lean meat content of the carcass shall be calculated according to the following formula:

\[
\hat{Y} = 62.9442 + (AF1_{IP005} \times -0.018154) + (AF1_{IP006} \times -0.027186) + (AF1_{IP008} \times -0.047431) + (AF1_{IP022} \times -0.011910) + (AF1_{IP023} \times -0.071926) + (AF1_{IP024} \times 0.005814) + (AF1_{IP034} \times 0.029288) + (AF1_{IP036} \times 0.005096) + (AF1_{IP038} \times 0.010231) + (AF1_{IP039} \times 0.012659) + (AF1_{IP041} \times 0.024470) + (AF1_{IP047} \times -0.007939) + (AF1_{IP049} \times -0.075061) + (AF1_{IP050} \times -0.028977) + (AF1_{IP052} \times -0.091722) + (AF1_{IP055} \times -0.060411) + (AF1_{IP058} \times -0.098989) + (AF1_{IP060} \times -0.064891) + (AF1_{IP061} \times -0.065688) + (AF1_{IP063} \times -0.064035) + (AF1_{IP074} \times -0.078333) + (AF1_{IP078} \times -0.078486) + (AF1_{IP079} \times -0.035330) + (AF1_{IP081} \times -0.048421) + (AF1_{IP091} \times -0.107559) + (AF1_{IP094} \times 0.0008816) + (AF1_{IP096} \times 0.000797) + (AF1_{IP098} \times 0.014608) + (AF1_{IP103} \times 0.007774) + (AF1_{IP104} \times 0.008251) + (AF1_{IP122} \times 0.012957)
\]

where:

\(\hat{Y}\) = the estimated percentage of lean meat in the carcass,

\(AF1_{IP005}, AF1_{IP006}, AF1_{IP008} \ldots AF1_{IP122}\) are the variables measured by Autofom.

4. The measuring points and the statistical method are described in Part II of the protocol presented to the Commission by Poland in accordance with Article 23(4) of Commission Regulation (EC) No 1249/2008 (*)

This formula shall be valid for carcasses weighing between 60 and 120 kg.

**Part 4**

IM-03

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as “IM-03”.

2. The apparatus shall be equipped with a needle-optical probe (single line scanner SLS01) of 7 millimetres diameter. The probe contains the line of contact image sensors (CIS) and green light-emitting diodes. The operating distance is between 0 and 132 millimetres.

3. The lean meat content of the carcass shall be calculated according to the following formula:

\[
\hat{Y} = 60.55 + 0.1142 \times M_2 - 0.6292 \times F_2
\]

where:

\(\hat{Y}\) = the estimated percentage of lean meat in the carcass,

\(M_2\) = the thickness of the dorsal muscle in millimetres, measured at the third to fourth last rib position, 6 centimetres from the dorsal midline, measured parallel to the split line of the carcass,

\(F_2\) = the thickness of back-fat (including rind) in millimetres measured at the same time, in the same place and in the same way as \(M_2\).

This formula shall be valid for carcasses weighing between 60 and 120 kilograms.
Part 5
AUTOFOM III

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as "Autofom III".

2. The apparatus shall be equipped with 16 2 MHz ultrasonic transducers (Carometec A/S), with an operating distance between transducers of 25 mm. The ultrasonic data shall comprise measurements of back-fat thickness, muscle thickness and related parameters. The results of the measurements shall be converted into estimates of the percentage of lean meat by using a computer.

3. The lean meat content of carcasses shall be calculated on the basis of 10 variables according to the following formula:

\[
\hat{Y} = 73.8876 + (AF3_{R2P1} \times -1.036616) + (AF3_{R2P3} \times -0.180173) + (AF3_{R2P13} \times -0.144679) + (AF3_{R2P15} \times -0.221519) + (AF3_{R3P5} \times 0.136061) + (AF3_{R4P4} \times 0.249888) + (AF3_{R4P5} \times 0.330109) + (AF3_{R4P6} \times 0.184696) + (AF3_{R4P8} \times -0.112875) + (AF3_{R4P9} \times -0.113663)
\]

where:

\(\hat{Y}\) = the estimated percentage of lean meat in the carcass,

R2P1, R2P3, R2P13 … R4P9 — are the variables measured by Autofom III.

4. The measuring points are described in Part II of the protocol presented to the Commission by Poland in accordance with Article 23(4) of Regulation (EC) No 1249/2008.

This formula shall be valid for carcasses weighing between 60 and 120 kg.

Part 6
CSB IMAGE-MEATER (CSB)

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as "CSB Image-Meater".

2. The CSB Image-Meater consists in particular of a video camera, a PC equipped with an image-analysis card, a screen, a printer, a command mechanism, a trigger mechanism and interfaces. The 5 Image-Meater variables are all measured at the split line in the ham area (around M. gluteus medius).

The results of the measurements shall be converted into estimates of the percentage of lean meat by using a computer.

3. The lean meat content of carcasses shall be calculated according to the following formula:

\[
\hat{Y} = 54.0770376148 - (0.4460170496 \times MS) + (0.1046346719 \times MF) - (0.0575429366 \times VaF) + (0.2303135777 \times VcF) - (0.1637971133 \times Vdf)
\]

where:

\(\hat{Y}\) = the estimated percentage of lean meat in the carcass,

MS — mean averaged fat depth over M. gluteus medius (mm),

MF — mean averaged muscle depth of the muscles lumbar and M. gluteus medius (mm),

VaF, VcF, Vdf — mean averaged muscle depth over the selected three lumbar vertebral bodies cranial (mm).

4. The measuring points are described in Part II of the protocol presented to the Commission by Poland in accordance with Article 23(4) of Regulation (EC) No 1249/2008.

This formula shall be valid for carcasses weighing between 60 and 120 kg.
Part 7
FAT-O-MEATER II (FOM II)

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by means of the apparatus known as “Fat-O-Meater II”.

2. The apparatus is a new version of the Fat-O-Meater measurement system. The FOM II consists of an optical probe with a knife, a depth measurement device having a measurement depth of 125 mm and a data acquisition and analysis board – Carometec Touch Panel i15 computer (Ingress Protection IP69K).

All legally relevant acquisition and analysis are contained within the FOM II pistol. The terminal is part of the FOM II and fully integrated with it.

The results of the measurements are converted into estimated lean meat content by means of a computer.

3. The lean meat content of carcasses shall be calculated according to the following formula:

\[ \hat{Y} = 59.75 + 0.1533 \times M_2 - 0.6342 \times F_2 \]

where:

\( \hat{Y} \) = the estimated percentage of lean meat in the carcass,

\( M_2 \) = the thickness of the dorsal muscle in millimetres, measured at the third to fourth last rib position, 7 centimetres from the dorsal midline, measured perpendicularly to the muscle,

\( F_2 \) = the thickness of back-fat (including rind) in millimetres measured at the same time, in the same place and in the same way as \( M_2 \).

This formula shall be valid for carcasses weighing between 60 and 120 kilograms.

Part 8
MANUAL METHOD (ZP)

1. The rules provided for in this Part shall apply when the grading of pig carcasses is carried out by use of the “manual method (ZP)” measuring by ruler.

2. This method may be implemented using a ruler, with the grading determined on the basis of the prediction equation. It is based on the manual measurement on the midline of the split carcass of the thickness of the fat and of the thickness of the muscle.

3. The lean meat content of carcasses shall be calculated according to the following formula:

\[ \hat{Y} = 52.61 - 0.6148 \times F + 0.1842 \times M \]

where:

\( \hat{Y} \) = the estimated percentage of lean meat in the carcass,

\( F \) = the minimum thickness of visible fat on the midline of the split carcass in millimetres, covering the M. gluteus medius (mm),

\( M \) = the visible thickness of the lumbar muscle on the midline of the split carcass, measured as the shortest connection between the front (cranial) end of the M. gluteus medius and the upper (dorsal) edge of the vertebral canal (mm).

This formula shall be valid for carcasses weighing between 60 and 120 kilograms.

(*) OJ L 337, 16.12.2008, p. 3.'