The legal requirements regarding pig welfare on intensive pig farms are the result of the implementation of Directives 2001/88/EC of 23 October 2001 and 2001/93/EC of 9 November 2001, amending Directive 91/630/EEC of 19 November 1991 laying down minimum standards for the protection of pigs. These laws are codified in Directive 2008/120/EC of 18 December 2008. The most important aspects of this legislation are as follows:

**HOUSING OF PREGNANT SOWS**

The use of tethers for sows on any farm, regardless of when it was constructed, is prohibited. As of 1 January 2013, pregnant sows must be kept in groups for the period between 4 weeks following service and 1 week before the expected time of farrowing. The Scientific Veterinary Committee (1997) reported that some serious welfare problems such as stereotypies, unresolved aggression and consequent stress, inactivity and urinary tract infections are more common in sows allocated in stalls than in groups.

For animals kept in groups, the total unobstructed floor area available to each individual must be at least 1.64 m² per gilt after service and at least 2.25 m² per sow. When the animals are kept in groups of fewer than 6 individuals, the unobstructed floor area must be increased by 10%. When they are kept in groups of 40 or more individuals, the unobstructed floor area may be decreased by 10%. The sides of the pens for pregnant sows must be more than 2.8 m long. When pregnant sows are kept in groups of fewer than 6 individuals, the sides of the pen must be more than 2.4 m long. Part of the aforementioned unobstructed floor area must be continuous. Specifically, 0.95 m² of continuous floor must be available for each gilt after service and 1.3 m² for each sow. In both cases, a maximum of 15% of the continuous floor shall be reserved for drainage openings. In the week before the expected farrowing time, sows and gilts must have access to material allowing them to express nesting behaviour, unless it is not technically feasible due to the slurry system used. Some examples of nesting material are straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such, which does not compromise the health of the animals.

*Stereotypies are defined as repetitive, unvarying behaviours that serve no apparent function, indicating a lack of well-being.*

**CHARACTERISTICS OF SLATTED FLOORS**

The legislation sets the minimum slat width and the maximum width of the openings between the slats for sows, piglets (pigs from birth to weaning), weaners (pigs from weaning to the age of 10 weeks) and rearing pigs (pigs from 10 weeks to slaughter or service).

<table>
<thead>
<tr>
<th>Production Stage</th>
<th>Minimum Slat Width</th>
<th>Maximum Opening Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sows</td>
<td>80mm</td>
<td>20mm</td>
</tr>
<tr>
<td>Piglets</td>
<td>50mm</td>
<td>11mm</td>
</tr>
<tr>
<td>Weaners</td>
<td>50mm</td>
<td>14mm</td>
</tr>
<tr>
<td>Rearing pigs</td>
<td>80mm</td>
<td>18mm</td>
</tr>
</tbody>
</table>
MINIMUM DENSITIES FOR WEANERS AND REARING PIGS

The legislation sets the minimum area per weaners and rearing pigs based on live weight.

<table>
<thead>
<tr>
<th>Minimum unobstructed floor area per weaners and rearing pigs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live weight (kg)</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Up to 10</td>
</tr>
<tr>
<td>More than 10 but not more than 20</td>
</tr>
<tr>
<td>More than 20 but not more than 30</td>
</tr>
<tr>
<td>More than 30 but not more than 50</td>
</tr>
<tr>
<td>More than 50 but not more than 85</td>
</tr>
<tr>
<td>More than 85 but not more than 110</td>
</tr>
<tr>
<td>More than 110</td>
</tr>
</tbody>
</table>

BOARS

The unobstructed floor area available to each adult boar must be at least 6 m². When the pen is used for natural service, the requisite floor area must be at least 10 m².

REDUCTION OF CORNER TEETH

The reduction of corner teeth by grinding or clipping, not later than the seventh day of life, must not be carried out routinely, but rather only where there is evidence of injuries to the sows’ teats.

PREVENTION OF TAIL-BITING

Tail-docking is a way to prevent tail biting. It must not be carried out routinely, but rather only where it can be shown that, despite taking the full range of preventive measures, tail-biting remains a problem on the farm. If tail-docking is done after the seventh day of life, it shall only be performed under anaesthesia and prolonged analgesia by a veterinarian. One of the keys to preventing tail-biting is to ensure that animals can express foraging behaviour. To this end, EU legislation provides that all pigs must have permanent access to material such as straw, hay or wood allowing them to enable proper investigation and manipulation activities.

CASTRATION

Under current legislation, castration may be performed surgically and without anaesthesia or analgesia in piglets up to the seventh day of life. Beyond that age, it shall be performed under anaesthesia and prolonged analgesia by a veterinarian.

WEANING

Piglets may not be weaned at less than 28 days of age unless adequate housing is available, in which case they may not be weaned at less than 21 days.

TRAINING

The legislation establishes that any person responsible for attending to the animals must receive animal welfare training.

FUTURE OUTLOOK

Although it is obviously impossible to predict the content of future directives on animal welfare, it seems reasonable to assume that the current European legislation is not final, but rather will continue to be amended in coming years, leading to an increase in welfare requirements. Thus, for example, it is quite likely that surgical castration will be abandoned from 2018 onwards in the EU.

SUMMARY

In summary, the following ideas should be kept in mind:

- As of 1 January 2013, pregnant sows must be allocated in groups at least 4 weeks after service until 1 week before farrowing.
- All pigs must have permanent access to material such as straw, hay or wood allowing them to enable proper investigation and manipulation activities.
- Routine tail-docking and clipping or grinding of teeth are not permitted. Moreover, if castration or tail-docking is to be performed after the seventh day of life, anaesthesia and prolonged analgesia must be applied.

REFERENCES

- Directiva 91/630/CEE de 19 de noviembre de 1991 relativa a las normas mínimas para la protección de cerdos.
- Directiva 2001/88/CE de 23 de octubre de 2001 por la que modifica la Directiva 91/630/CEE.
- Directiva 2001/93/CE de 9 de noviembre de 2001 por la que se modifica la Directiva 91/630/CEE.
- Directiva 2008/120/CE de 18 de diciembre de 2008 relativa a las normas mínimas para la protección de cerdos (versión codificada).