Scientific Opinion Concerning the Welfare of Animals during Transport

Adopted by the AHAW Panel on 2nd December 2010

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Development of the Scientific Opinion

**Mandate**
DG Sanco (January 2010)

**Acceptance**
EFSA & AHAW Unit (February 2010)

**WG Meetings** (n=6)
Stakeholder Technical Meeting

**Scientific Opinion**
Conclusions and Recommendations

**Working Group set up**
Chairman, ad hoc Experts (n=14)

**Adoption of the Scientific Opinion**
Plenary Meeting (2 December 2010)
Publication at EFSA website
Previous Scientific Opinions on the welfare of animals during transport

- Welfare of animals during transport (details for horses, pigs, sheep and cattle) (SCAHAW, 2002)
  - Comprehensive review of the subject including recommendations on travelling times, resting times and space allowances.
- Welfare of animals during transport (EFSA, 2004).
  - Including species that were not previously covered by the SCAHAW opinion (i.e. poultry, rabbits, ratites, deer, dogs, cats and other animals including exotic animals);
- Standards for the microclimate inside animal road transport vehicles (EFSA, 2004)
Council Regulation (EC) No 1/2005 on the protection of animals during transport:
- The proposal aimed at replacing the legislation in force at that time, including standards on travelling times, resting times and space allowances.
- Council decided to maintain the previous standards on travelling times, resting times and space allowances, adopted in 1995 (Directive 95/29/EC) and based on a scientific opinion established in 1992.

“...Community legislation should therefore be amended to take into account new scientific evidence”. 
Collect the most recent scientific information (after 2004) concerning the main farm species: horses, pigs, sheep, goats, cattle, poultry and rabbits.

In the light of the new scientific information available, EFSA will assess the risks for the welfare of the transported animals according to the provisions of the current Regulation 1/2005.

Evaluate outcome-based animal welfare indicators (i.e. indicators of welfare based on the observations of the animals) and their possible use as an alternative to the present requirements.

Only indicators which can be used by transporters and veterinary inspectors under commercial conditions should be detailed.
Risks shall be presented according to the sections of Annex I (Technical rules) of Regulation 1/2005:

- Fitness for transport;
- Means of transport;
- Transport practices;
- Watering and feeding interval, journey times and resting periods;
- Additional provisions for long journeys of domestic equidae and domestic animals of bovine, ovine, caprine and porcine species;
- Space allowances.

The level of risk associated with each area shall be indicated.
For each Species, sections of Annex I of Regulation 1/2005 are followed:

1) New Evidence/ Data since 2002-2004:
Highlighting what is new.
2) Conclusions and Recommendations according to new scientific evidence linked with provisions of Annex I of Regulation 1/2005.

Old data not considered in Regulation 1/2005 not to be included in the EFSA SO: “not second try: the Commission already have the information”.

Presentation focused on Recommendations (if no Recommendation, section not cited)
EFSA Scientific Opinion concerning the welfare of animals during transport

Recommendations
Chapter I Fitness for Transport

- **Cattle:**
  - There should be repeated humane handling during rearing and immediately prior to transport, in order to minimise aversive reactions during transport.

- **Poultry:**
  - Birds with both “old” injuries, catching-induced injuries and pre-existing pathologies may be loaded and transported. There should be careful inspection of both broilers and laying hens to ensure that they are fit for transport.
  - Inspection responsibilities and procedures should be specified.
Rabbits:

Horses:
- Because the high potential level of aggression, horses should always be transported in individual stalls or pens (except for mares with their foals), whether by road, rail, air or sea;
- Since there are high levels of injury, as well as the vulnerability of equid animals to thermal stress, the partitions used between stalls should protect and isolate (physically and socially) each animal but should not impair ventilation within a load.
Chapter II Means of Transport
1. Provisions for all means of transport

- **Pigs:**
  - Pigs should be **fasted before transport**.
  - **Water should always be available at the farm, assembly point and lairage.** During long transports (over 8 h) water should be provided at rest stops. It is unnecessary to provide water continuously while the vehicle is in motion.

- **Sheep:**
  - During transport, **driving events** (acceleration, braking, stopping, cornering, gear changes) and uneven road surfaces should be avoided;
  - On long journeys, **driving quality should be monitored and recorded** (i.e. accelerometers).
Poultry:
- Specific thermal limits should be defined for broilers, point of lay hens and end of lay hens;
- Upper Temperature limit of a container for broilers should be 24-25 °C (HR of 70% or higher). Lower Temperature limit for broilers in containers should be 5 °C;
- Localised high air velocities should be avoided on passively ventilated vehicles;
- Wetting of broilers and laying hens prior to or during transport should be prevented;
- For journeys of >4 h, vehicles should be equipped with mechanical ventilation systems with the capacity to regulate both air T° and HR%.
Chapter II Means of Transport
3. Additional Provisions for transport on roll-on-roll-off vessels

- **Horses:**
  - For animal welfare reasons, the **time spent on a lorry loaded onto a vessel** should not be considered as a resting period but as **journey time**.

- **Cattle:**
  - Ventilation systems should have the capacity to prevent excessive heat load. In some circumstances **mechanical ventilation is essential**;
  - **Electrolyte solutions should be made available to cattle on long sea journeys** when there is a risk of heat stress.
Goats:
- Groups should be kept stable, repeated regrouping should be avoided, and the introduction of new individuals should be monitored (espec. first 24 h after regrouping);
- Horned and hornless goats should be kept separate unless, when previously reared together;
- Daily contacts humans/goats to be encouraged;
- If goats have to be isolated for management purposes, they should be provided with olfactory, vocal, and visual contact with other members.

Cattle:
- Vehicles should be fitted with partitions to transport, loaded and unload in small groups.
Chapter III Transport Practices
1. Loading, unloading and handling

- **Pigs:**
  - Groups of animals should be kept stable and limited to 6 pigs during loading;
  - Sows and boars should be handled separately and transported in separate compartments. 'Birth to slaughter' systems (litters of pigs kept together from birth to slaughter, including transport and pre-slaughter lairage), are recommended.

- **Rabbits:**
  - Proper handling is crucial for rabbit welfare during loading and unloading (training required);
  - Rabbits should be put into or taken out of crates only if the person handling can see inside.
Rabbits:
- Adequate ventilation during transport has to be ensured to maintain the inside crate temperature within a range of 5-20 °C.

Poultry:
- Optimum vehicle temperatures for newly hatched chicks are currently proposed to be 24-25 °C with limits of 22-28 °C and container temperatures of 30-31 °C;
- Temperature limits for newly hatched chicks during transportation should be introduced.
1. Domestic Equidae, domestic animals of bovine, ovine, caprine and porcine species

- **Horses:**
  - When untrained horses of uncertain health status are transported for slaughter, the journey time should not normally exceed 12 hours;
  - At least one hour should be allowed during the watering stop to allow animals to drink and feed;
  - During the whole of any rest period, all horses should have continual access to an unrestricted supply of clean drinking water for a period of one hour before transport and for one hour immediately following transport.
Chapter V. Watering and feeding interval, journey times, resting p.
1. Domestic Equidae, domestic animals of bovine, ovine, caprine and porcine species

- **Pigs:**
  - For journeys >24 hours, feed should be available every 24 h at staging point followed by 6 h rest.
- **Cattle:**
  - During journeys of 8 to 29 hours, cattle should be offered water during rest periods. This is especially important in hot conditions;
  - Adult cattle should not be transported longer than 29 hours, even when ventilation is good and space allowance adequate. After this time there should be a 24 hour recovery period with access to appropriate food and water.
2. Other species

- **Rabbits:**
  - When transported in containers (unloaded), journey time should be defined as commencing when the first animal is loaded and as ending when the last animal is unloaded from container;
  - Journeys should not exceed 7 h.

- **Poultry:**
  - Journey times should be minimal and before journey, weather conditions should be considered
  - For journeys >4 h, vehicles should be equipped with mechanical ventilation (satisf. thermal limits)
  - Thermal environ. should be monitored/recorded.
  - Journey time should include loading and unloading, and standing periods.
A. Domestic Equidae

- Space allowances should be given in terms of kg/m² instead of m²/animal where animals are likely to differ significantly in weight or body condition.

B. Bovine animals

- Cattle should be provided with sufficient space to stand without contact with their neighbours and to lie down if the journey is more than 12 hours. (SA Equations: \( A = 0.021W^{0.67} \) m² for journeys <12 h; \( A = 0.027W^{0.67} \) m² for journeys of >12 h).
- For cattle with horns, the SA should be 7% higher.
- If offered feed and drink as well as space to rest, SA should be calculated \( A=0.0315W^{2/3}\) m²;
- Ceiling height should be at least 20 cm above the withers height of the tallest animal.
C. Sheep
- SA should be based on allometric equations relating size to body weight \(A = k \cdot W^{2/3}\). For journeys of up to 6 h, the recommended empirical coefficient (and space allowances) are:
  (i) shorn ewes, \(k = 0.026\) (0.44 m\(^2\) for 67 kg),
  (ii) fleeced ewes and lambs, \(k = 0.033\) (0.56 m\(^2\) for 65 kg, 0.4 m\(^2\) for 40.5 kg),
  (iii) shorn lambs, \(k = 0.029\) (0.3 m\(^2\) for 32.5 kg).

E. Poultry
- Stocking densities of broilers in containers should be related to thermal conditions. Numbers should be limited in conditions when external temperatures exceed the proposed acceptable range (e.g. > 22 °C) and on long journeys.
For any additional info:

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Thanks for your attention !!