Department for Rural Affairs

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GUIDANCE FOR OPERATORS AND MASTERS OF LIVESTOCK VESSELS AND PERSONS SHIPPING FARM ANIMALS AND HORSES

1 Introduction

1.1 This Guidance has been prepared to assist with uniform application of Council Regulation (EC) 1/2005 on the protection of animals during transport and related operations (The Regulation) as it applies to shipments of farm animals and horses carried on livestock vessels. Enforcement of the Regulation and other related provisions will be provided in the UK through: The Welfare of Animals (Transport) (England) Order 2006; The Welfare of Animals (Transport) (Wales) Order 2007; The Welfare of Animals (Transport) (Scotland) Order 2007; and The Welfare of Animals (Transport) (Northern Ireland) Order 2007.

1.2 Enforcement of the Regulation is the responsibility of Local Authorities (usually Trading Standards or Animal Health Officers) and the State Veterinary Service Agency.

1.3 The Regulation is directly applicable in all EU Member States with effect from 5 January 2007.

1.4 Technical Guidance for construction, operation and use of vessels transporting live animal shipments (walk-on walk-off) is given in order to consolidate relevant requirements into one place, and to assist with clarification of what Defra considers to be practical application and enforcement of the Regulation, however only a court of law will be able to give a definitive ruling in any dispute between enforcers and transporters.

1.5 This Guidance only applies to commercial shipments of Farm Animals and Horses, but the general principles may be a useful guide for transport of other species carried on a livestock vessel.

1.6 Requirements set out here and in Appendices 1, 2 and 3 are, for clarity of meaning, sometimes a précis of the legal wording in the Regulation. Not every provision has been included. The text of the Regulation should always be consulted.
2 Application

2.1 The Regulation is directly applicable, in all EU Member States, with effect from 5 January 2007.

2.2 Regulation only applies to transport “in connection with an economic activity” (Article 1.5) (commercial transport). Examples are given in Part 1 of this guidance to assist with determination of the meaning] of “economic activity”.

2.3 Transport of animals outside the scope of the Regulation is regulated by the Welfare of Animals (Transport) Order 2006. In such shipments on a livestock vessel the general principles of this Guidance should be followed, as appropriate to the species, in order to comply with the requirement to protect the welfare of these animals during transport.

3 Notes

3.1 The Regulation defines a ‘Means of Transport’ as road or rail vehicles, vessels and aircraft used for the transport of animals (Article 2 (n)).

3.2 ‘Livestock vessel’ is defined (Article 2 (l)) as a vessel which is used or intended to be used for the carriage of domestic equidae (horses and ponies etc.) or domestic animals of bovine, ovine, caprine or porcine species (farm animals) - other than a roll-on roll-off vessel, and other than a vessel carrying animals in moveable containers.

3.3 All ‘Means of Transport’, including livestock vessels when carrying animals, must comply with the general provisions of the Regulation, as applicable, in Article 3 and Annex I Chapters II and III.

3.4 Livestock vessels must also comply with the special provisions of the Regulation in Annex I Chapter IV. And when the animals are being transported on a long journey (see 3.9) the additional provisions of Annex I Chapter VI must also be complied with.

3.5 Construction requirements for a livestock vessel are set out in Appendix 1. and operational requirements in Appendix 2.

3.6 Livestock vessels must be inspected and approved before use, and inspected before each loading as described in Appendix 3.

3.7 In order to fully protect the welfare of animals being transported on a livestock vessel additional precautions and guidance (based on practical experience) should be followed and has been included in the Appendices to this guidance.
3.8 ‘Journey’ is defined (Article 2 (j)) as including the entire transport of the animals between places of departure and destination. This includes transport to and from the port, the time the animals spend there, and the voyage.

3.9 ‘Long Journey’ is defined (Article 2 (m)) as one that exceeds 8 hours from when the first animal is moved (i.e. loaded at the point of origin).

3.10 The Regulation appears to regard animals being carried on a livestock vessel as being transported in the course of a long journey. Therefore this guidance assumes that the applicable ‘Additional Provisions for Long Journeys’ (Annex I Chapter VI) must be complied with by the livestock vessel.

4 Responsibilities

4.1 Every person involved with the commercial transport of animals has a responsibility (Article 3) as appropriate to their role in planning, organising, and carrying out the journey to comply with the Regulation and to protect the welfare of the animals, in particular not to cause them injury or undue suffering. In the case of transport by livestock vessel such responsibility may be broadly, but not exclusively, described as follows:-

4.2 Animal shippers (i.e. those who arrange for animals to be transported from one place to another) must plan the journey and have contingency arrangements in place should any delay occur. Examples might be delayed loading or departure of the vessel which could be caused by one of several reasons including adverse weather. They must be satisfied that the vessel has a Certificate of Approval, and is suitable for transport of the number and type of animals which they intend to ship, and that water feed and rest intervals for the animals can be complied with.

4.3 Shipowner/charterer/operator must ensure that the vessel has been inspected and issued with a certificate of approval, and that the appropriate competent authority has been notified of any subsequent significant change to the livestock fittings and equipment. They must ensure that the vessel has sufficient and suitable accommodation and facilities for transport of the number and type of animals that the shipper intends to load, and that the Master is competent in and has specific instructions for transport of animals.

4.4 Shipmaster, and officers under his authority must ensure that:
- the vessel’s livestock accommodation, fittings and equipment (including load/unload equipment) are suitable and sufficient for the animals to be carried, and that these are in good working order and state of repair;
- the vessel is provided with sufficient water food and bedding for the animals and the length of voyage;
- the animals are fit for the journey, and are accommodated singly or in
• appropriate groups with sufficient floor-space and headroom;
• sufficient ventilation and protection from the weather and the sea is provided for the animals;
• the weather conditions anticipated for the voyage are such that the animals will not be caused injury or undue suffering;
• If loading of animals is likely to be delayed on account of anticipated weather conditions (or for any other reason), the shipper or agent should be advised as early as possible. This will enable the animals to be held at the premises of origin, or another suitable place, and could avoid unnecessary loading and unloading of the animals and the stress which this might cause.
• sufficient trained and competent attendants (who may be members of the crew) travel on the vessel, that they have access when necessary to the animals, and tend them at appropriate intervals.

5 Authorisation of transporters

5.1 All Transporters, defined as ‘any natural or legal person transporting animals on his own account, or for the account of a third party’ (Article 2(x)) must be authorised by the Competent Authority (Article 6.1) where the journey exceeds 65km (approx 35 nautical miles) (Article 6.7).

5.2 Authorisations are valid for not more than 5 years, and must be either for journeys up to 8 hours (‘Type 1’) (Article 10) or for long journeys (‘Type 2’) (Article 11). See section 3 in part 1 of this guidance.

5.3 In the case of transport by livestock vessel (which is assumed to form part of a long journey) the shipowner/operator/charterer will require a ‘Type 2’ authorisation where the voyage is of more than 35 nautical miles, and the journey and the animals carried are within the scope of the Regulation.

6 Animal attendants – competence and training

6.1 Transporters (see 5.1) must ensure that an attendant accompanies the animals (Article 6.6). The only exception is when the animals are in certain containers (Article 6.6(a)).

6.2 Transporters must ensure that personnel responsible for animals during transport have received training in relevant parts of the Regulation’s Annexes I and II (Article 6.4). Training may be by any suitable method.

6.3 The master, officers, and crew of a livestock vessel must be trained in and be competent to perform their duties with respect to carriage of animals as appropriate to their individual role in the operation. There is no requirement for any certificate of competence, but evidence of training may help the transporter be sure that Article 6 has been fulfilled.
6.4 Sufficient attendants (who may be members of the crew) must be carried for the number of animals transported on the vessel. They must be trained in and be competent to perform their duties with respect to care of the animals as appropriate to their individual role in the operation. There is no requirement for any certificate of competence, but evidence of training may help the transporter to be sure that Article 6 has been fulfilled.

6.5 See section 4 of Part 1 of this guidance for detailed advice about competence and training.
Appendix 1

CONSTRUCTION - REQUIREMENTS AND GUIDANCE

1 General

1.1 The vessel and its livestock fittings must be designed, constructed, and maintained so as to avoid injury and suffering and ensure the safety of the animals (Ch. II, 1.1(a)).

1.2 There must be no sharp edges, protrusions, gaps or spaces, or fittings within the livestock decks, pens, passageways or loading ramps which might cause injury to the animals.

1.3 The animals must be protected from adverse effects of the weather and the sea, and extreme temperatures (Ch. II, 1.1(b)). All pens or stalls in which livestock are accommodated must have a substantial overhead covering (Ch. IV, 1.1). Where necessary the sides and ends of pens and stalls must be closed in order to provide sufficient protection from the weather and the sea. Any deckhand, bulkhead or deck through which extreme heat is likely to be transferred to the animal compartment should be insulated as appropriate.

1.4 Each livestock compartment must be of a suitable size to accommodate the animals to be carried, and to enable them to stand in a natural position with sufficient space above them for adequate circulation of air. There must be sufficient height in any passageway, doorway, and ramp for an animal to move through it without injury (Ch. II, 1.2).

1.5 Strength of pen rails and decks must be appropriate for the size, weight and number of animals to be carried. The Regulation requires that strength calculations must be verified during construction or conversion of the vessel for livestock by a classification society approved by the competent authority (Ch. IV, Section 1, 1). The competent authority in the UK is the Maritime and Coastguard Agency who delegate technical functions to Lloyds Register of Shipping, American Bureau of Shipping, Bureau Veritas, Germanischer Lloyd, Det Norske Veritas, Registro Italiano Navale, Nippon Kaiji Kyokai.

1.6 A useful source for guidance about design, construction and strength of livestock vessel decks and fittings is the Australian Maritime Safety Authority Marine Orders Part 43 ‘Cargo & Cargo Handling – Livestock’. These detailed rules, which are revised from time to time, have been developed to regulate standards for livestock vessels loading in Australia.
2 Ramps for loading and unloading animals

2.1 The vessel must be provided with a livestock ramp for loading and unloading animals, and where necessary be fitted with a suitable ramp or ramps for moving animals between decks.

2.2 Each livestock ramp, whether fixed or portable, must comply with the following criteria Ch. III, 1.4(a)).

- Maximum angle of ramp when in use: 20 degrees – for horses, pigs and calves (cattle under 6 months of age); 26 degrees 34 minutes – for sheep and cattle (other than calves);
- Foot battens, or similar anti-slip means, must be fitted to the ramp if its slope exceeds 10 degrees. It is recommended that foot battens are not less than 50 mm high and 25 mm wide, and spaced with centres between 25 cm and 30 cm apart.

2.3 Ramps must be fitted with side barriers (lateral protection) to prevent animals escaping (Ch. III, 1.3(a)). It is recommended that these should be of solid construction with a minimum height of 1.25 m for cattle and horses and 0.75 m for sheep, pigs and goats.

2.4 It is recommended that the width of the ramp should be not less than 0.90 m and not more than 1.10 m for cattle and horses, and not less than 0.55 m for sheep, pigs and goats.

2.5 It is recommended that a ramp for animals is, where necessary, fitted with a side ramp suitable for stockmen to assist the movement of animals on the ramp.

2.6 Barriers of a suitable strength, design and height, which may be portable, should be provided to ensure the safe movement of animals onto and away from a ramp - both on the quayside and within the vessel.

2.7 Foot battens, or other effective anti-slip measures, should be fitted or provided in the immediate area of the deck or ground at each end of a ramp.

2.8 If animals are moved onto or off the vessel by lifting platform this must have safety barriers to prevent animals falling or escaping (Ch. III, 1.4(b)).

3 Decks, drainage and anti-slip floors

3.1 The floor surface of every pen, stall and passageway must provide the animals with adequate grip, so that they do not slip (Ch. II, 1.1(g)).

3.2 Livestock decks (and the drainage system) must be designed to minimise leakage of urine and faeces onto animals accommodated below (Ch. II, 1.1(h)).
3.3 A drainage system consisting of channels and pipes of sufficient capacity must be provided to drain fluids from each livestock deck and pen. The system must connect with wells or tanks from where sewage can be discharged (overboard) by pumps or ejectors. There must be an alternative pumping system (which may be portable) for use if the primary system fails (Ch. IV, Section 1, 5).

4 Design and Construction of livestock decks, pens and stalls, and partitions

4.1 Design and construction of the animal accommodation must take account of several factors in order to properly protect the safety of the animals (Ch. II, 1.1).

4.2 There must be a means for the attendant to gain access to each livestock deck at all times (Ch. II, 1.1(f)). This should be available in any weather conditions.

4.3 There must be a passageway adjacent to one side of each pen or stall of sufficient width for the attendant to gain access for the purpose of inspecting, watering, feeding and otherwise tending the animals. This passageway should be at least 0.6 m wide. But, where cattle or horses are to be moved through the passageway it is recommended that the minimum width should be not less than 0.9 m.

4.4 Every passageway used for the movement of animals must have an anti-slip floor surface (Ch. II, 1.1(h)).

4.5 There must be a means for the attendant to gain access into each livestock pen or stall for the purpose of tending the animals.

4.6 Pens and stalls should, so far as possible, be 4-sided rectangular enclosures. The floor surface must have anti-slip properties (Ch. II, 1.1(g)).

4.7 The strength of partitions and pen rails must be sufficient for the weight of the animals, and their fittings must be designed for quick and easy operation (Ch. II, 1.4). Strength calculations must be verified during construction or conversion of the vessel for livestock by a classification society approved by the competent authority (Ch. IV, Section 1, 1).

4.8 Pen and stall sides may be of open rail or solid construction, and should be set at or close to right-angles to the livestock deck. Where exceptionally the ship’s side is used as a pen or stall boundary this should not result in a boundary wall at an angle which exceeds 15 degrees to the perpendicular.

4.9 Rail spacing must be appropriate for the species and size of animal to be carried. In particular it must be such that animals cannot escape, or their heads or limbs become trapped.
4.10 Young animals may require protection from cold drafts when accommodated in pens formed of railings.

4.11 It is recommended that stalls for horses and ponies are positioned so that the animals stand facing across the vessel, and they should be constructed with solid boundaries.

4.12 Solid pen sides may be necessary to prevent aggression between different groups of pigs.

5 Dimensions of pens and stalls for farm animals

5.1 The dimensions of pens and stalls must be appropriate for the species, size, and number of animals to be transported in them. The Regulation does not set dimensions for pens and stalls, but the following are given as guidance:
- Length 0.9 m – 5.0 m (fore and aft of vessel);
- Width 2.0 m – 3.0 m (port to starboard of vessel);
- Area should not exceed 15 m².

5.2 A pen or stall should have boundaries which are of sufficient height for the size and species of animal being carried, and not less than: 1.2 m high for adult cattle; 0.9 m high for young calves, sheep, and pigs.

5.3 The clear height within any pen or stall must be sufficient for the animals to stand in a natural position, and with adequate space above them for the free movement of ventilating air. Recommended minimum clear heights are:
- 2.15 m for adult cattle;
- 1.50 m for young calves;
- 1.25 m for sheep, pigs, and goats.

5.4 When goats are carried it may be necessary to provide the pen or stall with a ‘roof’ to prevent the animals escaping.

6 Dimensions of stalls and ‘loose boxes’ for horses and ponies.

6.1 Each horse or pony (with the exception of a mare with her foal which may be together) must be carried in an individual stall or ‘loose box’ of appropriate size (Chap. IV, 1.6). The animal must be able to stand in a natural position, and with adequate space above it for the free movement of ventilating air. The horse or pony should either be constrained in a stall so that it cannot turn around, or be in a ‘loose box’ with adequate space to turn around and lie down.

6.2 The following dimensions for a horse stall are given as a guide only:
- length 2.1 m - 2.5 m (breast rail to rear);
- width 0.7 m - 0.8 m;
- height within stall 2.15 m;
- height of breast rail 1.15 m;
- height of side partitions 1.20 m;
- height of rear partition 1.50 m.

6 Ventilation

6.1 The provision of adequate ventilation of the animal compartments during loading, throughout the voyage, and at unloading is essential. The amount of ventilation provided at any time must be sufficient to ensure that an acceptable environment for the animals is maintained within each livestock compartment (Ch.II, 1.1(e) & Ch.III, 2.6).

6.2 Enclosed and partially enclosed livestock decks must be fitted with a mechanical (forced) ventilation system (Ch.IV, section 1, 2).

6.3 The ventilation system must be capable of changing the air of a fully enclosed compartment at least:
- 40 times per hour for a compartment of 2.30m height or less;
- 30 times per hour for a compartment of more than 2.30m height.

6.4 The ventilation system must be capable of changing the air of a partially enclosed compartment at least:
- 30 times per hour for a compartment of 2.30m height or less;
- 22.5 times per hour for a compartment of more than 2.30m height.

Note: Partially enclosed is not defined in the Regulation, but is taken to mean a compartment in which natural ventilation is substantially restricted by the ship’s structure.

6.5 There should be more than one fan serving each enclosed or partially enclosed livestock compartment. It is recommended that all fans should be ‘reversible’ and capable of supplying and exhausting air as appropriate.

6.6 The ventilation system must be designed to ensure that sufficient fresh air is distributed throughout all parts of each livestock compartment, and ‘foul’ air removed, without leaving ‘dead-air’ pockets. It may be necessary to distribute air from the supply points through trunkings fitted with apertures at appropriate intervals.

6.7 Sufficient spare parts for repair of ventilation fans in the event of mechanical or electrical breakdown should be carried on the vessel.

6.8 A combination of high temperature and high relative humidity within a livestock compartment can cause distress or even death. As a guide conditions are likely to be safe until such time as the following combinations are reached.
- Temperature (°C) 24 26 28 31 35
• Humidity (% Rh) 100 75 50 25 0

6.9 It is recommended that one or more thermometers, as appropriate to the size of the livestock compartment, are provided and read at regular intervals.

7 Lighting and electrical fittings

7.1 There must be sufficient light, which may be natural or artificial, at the loading point, ramps and passageways for the needs of the animals and the attendants (Ch. III, 1.6).

7.2 There must be sufficient light within the livestock decks for inspection and care of the animals (Ch. II, 1.1(i) & Ch .IV, section 1 point 6), and for the needs of the animals.

7.3 Lighting within the vessel must be part of the permanent fittings and be connected to the primary power source, but emergency and portable lighting must also be available.

7.4 Electrical fittings and wiring should be positioned or protected to prevent injury to the animals.

7.5 Illumination need only be provided in livestock areas when required, particularly for the animals to drink eat and move about, and for the attendants to inspect and care for them.

8 Fresh water and feeding systems and equipment

8.1 There must be a fresh water supply system to each livestock deck, and a means of distributing drinking water continuously to each pen or stall (Ch. III, 2.7 & Ch .IV, section 1 point 4).

8.2 Sufficient portable drinking troughs or fixed water bowls must be provided so that all animals may have constant access to fresh water. Troughs or bowls must be suitable, and fitted at an appropriate height, for the animals being carried.

8.3 Before sailing the vessel must have on board sufficient potable water for the voyage, or an adequate means of distillation, so that the fresh water requirements set out in Appendix 2, para 5.2 can be complied with.

8.4 There must be an alternative means of supplying water to the animals in the event of failure of the primary pumping system.

8.5 There must be a suitable means of providing feed to the animals appropriate to the species, including sufficient feeding utensils or other equipment when necessary. Such equipment must be designed to be capable of
being secured in place, at an appropriate height, to prevent overturning when in use (Ch.VI, 1.4 & 1.5). It is acceptable to 'floor-feed' where appropriate, provided that contamination by urine and dung is minimised.

8.6 Before sailing the vessel must have on board sufficient feed, appropriate for the species, for the voyage so that the feeding requirements set out in Appendix 2, para 5.2 can be complied with. Supplies of feed must be protected from the weather and contamination (Ch. VI, 1.3).

9 Monitoring, Control and Alarm systems

9.1 The bridge (wheelhouse) must be equipped so that essential systems for the livestock of ventilation, fresh water supply (and production if necessary), drainage, and lighting can be controlled and monitored. These systems must also be fitted with alarms which indicate any malfunction to the bridge watch-keeper (Ch.IV, section 1 point 8).

10 Power sources

10.1 The vessel must be fitted with a primary source of power of sufficient capacity to supply continuous power to the livestock systems for ventilation, water supply, drainage and lighting during normal operation of the vessel. In addition, in the event of failure of the primary power source, there must be a secondary source of power sufficient to operate these systems continuously for three days (Ch. IV, section 1 point 9).

11 Fire Fighting

11.1 All livestock areas must be fitted with a fire fighting system and equipment in compliance with the current International Convention for the Safety of Life at Sea (SOLAS) standards (Ch. IV, section 1 point 7).

12 Cleansing and disinfection

12.1 Parts of the vessel and its equipment which are used for animals must be capable of being effectively cleaned and disinfected (Ch. II, 1.1(c)).
OPERATION - REQUIREMENTS AND GUIDANCE

1 General

1.1 The vessel and its livestock fittings must be operated so as to avoid injury and suffering and ensure the safety of the animals (Ch. II, 1.1(a)).

1.2 The animals must be fit for the intended journey (Ch. I, 1) See section 2.3 in Part 1 of this guidance for detailed advice about animal fitness for transport.

2 Weather conditions and ambient temperature

2.1 Animals must not be shipped when the effects of weather conditions anticipated for the voyage are likely to cause them injury or suffering (Ch. II, 1.1(b)).

2.2 Many factors will need to be considered by the master of the vessel when making a judgement about the suitability of weather conditions for the voyage. These include:
   - the species, size and age of the animals;
   - the sea-keeping qualities of the vessel, including whether or not it is stabilized;
   - the actual and forecast wind direction and strength, and state of the sea;
   - the course to be followed by the vessel, and what action might be taken to mitigate the effects of adverse weather encountered during the voyage.

2.3 Ambient temperature is also a factor which needs to be considered because this may result in conditions during the voyage which are unsuitable for some animals.

2.4 If loading of animals is likely to be delayed on account of anticipated weather conditions (or for any other reason), the shipper or agent should be advised as early as possible. This will enable the animals to be held at the premises of origin, or another suitable place, and could avoid unnecessary loading and unloading of the animals and the stress which this might cause.

3 Minimum space allowances (Stocking density)

3.1 Correct stocking of the animals according to species and age is the responsibility of the master and loading officer. The loading plan should have been arranged and agreed with the shipper before loading of animals commences.
3.2 Minimum space allowances for horses and ponies (domestic equidae), cattle, sheep and goats, and pigs are set in the Regulation (Ch.VII), and are reproduced in the tables below.

<table>
<thead>
<tr>
<th>Liveweight – kgs</th>
<th>Equidae</th>
<th>Cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 – 300</td>
<td>0.900 – 1.175</td>
<td>0.8100 – 1.0575</td>
</tr>
<tr>
<td>300 - 400</td>
<td>1.175 – 1.450</td>
<td>1.0575 – 1.3050</td>
</tr>
<tr>
<td>400 - 500</td>
<td>1.450 – 1.725</td>
<td>1.3050 – 1.5525</td>
</tr>
<tr>
<td>500 - 600</td>
<td>1.725 – 2.000</td>
<td>1.5525 – 1.8000</td>
</tr>
<tr>
<td>600-700</td>
<td>2.000 – 2.250</td>
<td>1.8000 – 2.0250</td>
</tr>
</tbody>
</table>

Note: Pregnant cattle should be allowed 10% more space than shown above.

<table>
<thead>
<tr>
<th>Liveweight - kgs</th>
<th>Sheep &amp; Goats</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M² per animal</td>
<td>Liveweight - kgs</td>
</tr>
<tr>
<td>20 – 30</td>
<td>0.240 – 0.265</td>
<td>10 or less</td>
</tr>
<tr>
<td>30 – 40</td>
<td>0.265 – 0.290</td>
<td>45</td>
</tr>
<tr>
<td>40 – 50</td>
<td>0.290 – 0.315</td>
<td>70</td>
</tr>
<tr>
<td>50 – 60</td>
<td>0.315 – 0.340</td>
<td>100</td>
</tr>
<tr>
<td>60 – 70</td>
<td>0.340 – 0.390</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180</td>
</tr>
<tr>
<td></td>
<td></td>
<td>270</td>
</tr>
</tbody>
</table>

3.3 Stocking animals according to predetermined space allowance figures does not necessarily result in the most appropriate loading density for the animals and the voyage in prospect. Adjustment may be needed based on the actual circumstances, experience and visual observation.

4 Journey times and water, feed and rest intervals

4.1 Maximum journey times and intervals between watering feeding and resting animals are complex, and vary between species and age of animals. The shipper of the animals has an overall responsibility to ensure that these can be complied with.

4.2 The master of the vessel is responsible for ensuring that the animals are watered and fed within the permitted maximum intervals.

4.3 See section 2.5 of the main guidance document.

5 Provision, supply and storage of water, feed and bedding

5.1 Before departing the port where the animals are loaded the vessel must be provided with sufficient fresh water (or the means of distilling it) and sufficient
feed appropriate for the animals being carried, and reserve supplies in case the animals are on the vessel for longer than planned (Ch. IV, Section 2).

5.2 Minimum daily quantities required for each animal are shown in the table.

<table>
<thead>
<tr>
<th></th>
<th>Water</th>
<th>Feed (% of liveweight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equidae</td>
<td>45 litres</td>
<td>Either 2% fodder or 1.6% concentrated pellets</td>
</tr>
<tr>
<td>Cattle</td>
<td>45 litres</td>
<td>Either 2% fodder or 1.6% concentrated pellets</td>
</tr>
<tr>
<td>Sheep</td>
<td>4 litres</td>
<td>Either 2% fodder or 1.8% concentrated pellets</td>
</tr>
<tr>
<td>Pigs</td>
<td>10 litres</td>
<td>3% concentrated pellets</td>
</tr>
</tbody>
</table>
Notes

- Water (for all species) may, instead of the volume shown, be equivalent to 10% of liveweight to take account of the size of the animals (1 kg = 1 litre).
- Feed may be an equivalent mix of fodder and pellets.
- Animals must be accustomed to the type of feed provided.

5.3 Bedding or an equivalent material suitable for the animals must be used in the pens and stalls to ensure the comfort of the animals and to absorb urine and faeces (Ch. VI, 1.2). Soiled bedding should be replaced when necessary.

5.4 Reserve supplies of water and feed and bedding must also be provided. These must be 25% of the total needed for the animals during the planned voyage, or 3 days extra supply – whichever is the greater quantity.

5.5 Supplies of water, feed and bedding must be stored so that they do not become contaminated and their quality does not deteriorate.

6 Emergency treatment or slaughter of sick and injured animals

6.1 The requirement concerning animals which fall ill or are injured during transport is that they must be separated from the other animals and receive first-aid treatment as soon as possible, be given appropriate veterinary treatment and if necessary undergo emergency slaughter or killing in a way which does not cause them unnecessary suffering (Ch. I, 4).

6.2 The circumstances of each case including the condition and species of the animal, and the time remaining until the vessel reaches port, should be considered when determining what action needs to be taken.

6.3 It is recommended that the master has a procedure to enable advice to be obtained from a veterinarian, and consults the driver or attendant, about appropriate action to take.

6.4 Humane methods of emergency slaughter vary between species.

6.5 If safety regulations permit, a vessel carrying animals on a voyage which will exceed 3 hours must have a suitable means of emergency slaughter on board (Ch. II, 1.6). This should be made available, when needed, to a person competent in its use.

7 Restrictions

7.1 No more than 4 unbroken equidae may be together in a pen or stall (Ch. III, 2.4).
7.2 Unbroken horses must not be transported on a long journey (Ch. VI, 1.9).

7.3 The following may not be transported on a long journey unless accompanied by their mother (Ch. VI, 1.9):
   - Unregistered horses and ponies of 4 months age or less;
   - Calves of 14 days age or less;
   - Pigs of 10 kgs weight or less.

7.4 Equidae, except a mare with her foal, must be in individual stalls when transported on a long journey (Ch. VI, 1.6).

7.5 No goods may be stowed where they could cause injury, distress or suffering to the animals (Ch. III, 1.5).
LIVESTOCK VESSEL INSPECTION and APPROVAL

1. Livestock vessels require inspection and a certificate of approval before they are used to carry farm animals or horses and ponies when the voyage is to be of more than 10 nautical miles (Article 7.2 and Article 19).

2. Application for inspection and a certificate of approval must be made to the Competent Authority (or designated body) of the Member State (MS) from which the vessel is to be operated. If the vessel is to be operated from more than one MS, the application may be made to any one (but only one) of these.

3. A ‘certificate of approval’, which will be issued by the MS upon successful completion of an inspection of the vessel, will be valid for up to 5 years – but will become invalid if the livestock vessel is modified or refitted in any way that adversely affects animal welfare.

4. In GB pre-use inspection, and approval certification, is the responsibility of the State Veterinary Service Agency and in Northern Ireland, the Department for Agriculture and Rural Development in Northern Ireland (DARD).

5. The livestock vessel must also be inspected by the Competent Authority on each occasion before animals are loaded, and at the time of unloading (Article 20).

6. Approval and pre-loading inspections differ in the following respects:
   - Approval Inspection (Article 19) – Construction and equipment is in compliance with Annex I, Chapter IV, Section 1;
   - Pre-Loading Inspection – Vessel’s livestock equipment and capacity is suitable for the number and type of animals to be loaded, and the livestock compartments and equipment are in a good state of repair and working order (Article 20.1).

7. At the time of loading and unloading the Competent Authority must inspect to confirm that (a) animals are fit to continue journey, (b) load/unload operations comply with Annex I Chapter III, and (c) feed and water arrangements comply with Annex I Chapter IV Section 2 (Article 20.2).

8. In addition, the Competent Authority (Enforcement Officers) may decide to carry out appropriate checks at any stage of a long journey (Article 15.1 & Article 21(d)), in order to verify that the journey and the means of transport comply with the Regulation.