VI. RECOMMENDATIONS FOR THE APPLICATION OF ANNEX C TO COUNCIL DIRECTIVE 92/65 ("BALAI") AS AMENDED BY COUNCIL REGULATION (EC) NO 1282/2002 OF 15 JULY 2002 (OJ L 187/3) IN APPROVED ZOOS

1. Introduction

The amendment of 15 July 2002 to the Council Directive 92/65/EEC laying down animal health requirements governing trade in and imports into the Community of animals, semen, ova and embryos not subject to animal health requirements laid down in specific Community rules referred to in Annex A (1) to Directive 90/425/EEC ("BALAI") was made in the legal form of a regulation. As a consequence, the Annexes A, C and E are directly applicable in Member States. ANNEX C contains, however, a few points which leave considerable room for interpretation. The present recommendations aim at contributing to a uniform interpretation of these points, and thus at achieving the ultimate goal of this annex, namely to facilitate the exchange of animals between approved zoos easily and without major health risks.

These recommendations are the result of two meetings held on 15/16 September 2003 and 5 February 2004 at Cologne Zoo with the participation of representatives of the European Commission (DG SANCO - Health and Consumer Protection), the Department for Environment, Food & Rural Affairs (DEFRA), the Rijksdienst voor de Keuring van Vee en Vlees (RVV), the Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft (BMVEL), the European Association of Zoo and Wildlife Veterinarians (EAZWV), the EAZWV Infectious Diseases Working Group (IDWG) and zoo veterinarians from France, Germany, Italy, The Netherlands and the United Kingdom representing also their respective professional organisations at the national level.

The recommendations are meant to provide some practical guidance to both, Veterinary Authorities and zoo veterinarians, throughout the European Union. EU veterinary legislation applies also to the British Crown Dependencies (Channel Islands, Isle of Man), Andorra, Monaco and San Marino. As Council Directive 92/65/EEC and Commission Regulation (EC) No. 1282/2002 are texts with EEA relevance (Regulation 1282/2002 was incorporated into the EEA Agreement by Decision of the EEA Joint Committee of 14 March 2003), and are also part of the equivalent sector of the Bilateral Agreement on Agriculture with Switzerland (Regulation 1282/2002 is included in the 2003 update), they apply in Liechtenstein, Norway, and Switzerland too.

Note:  
To make reading of this document easier, the term “Bodies, institutes and centres” is usually replaced by the word “zoo”

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A. The term ‘animals’


2. The following animal species are referred to in the Directives mentioned above:

<table>
<thead>
<tr>
<th>Directive</th>
<th>Article</th>
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<tbody>
<tr>
<td>90/426/EEC</td>
<td>Art. 2 (b)</td>
<td>Equidae means wild or domesticated animals of the equine (including zebras) or asinine species</td>
<td>i.e. all Equidae species</td>
</tr>
<tr>
<td>64/432/EEC</td>
<td>Art. 2 (b) and (c)</td>
<td>Bovines including <em>Bison bison</em> (American bison) and <em>Bubalus bubalis</em> (Domestic buffalo) and swine for slaughter, breeding or production</td>
<td>Wild cattle, except American bison, and wild Suidae, including ‘feral pigs’, do not fall under 64/432/EEC</td>
</tr>
<tr>
<td>91/68/EEC</td>
<td>Art. 2 (1 and 2)</td>
<td>Ovine and caprine animals for slaughter, breeding and fattening</td>
<td>Wild species do not fall under 91/68/EEC</td>
</tr>
<tr>
<td>90/539/EEC</td>
<td>Art. 2 (1)</td>
<td>Fowl, turkeys, guinea fowl, ducks, geese, quails, pigeons, pheasants, partridges and ratites reared or kept in captivity for breeding, the production of meat and eggs for consumption, or for re-stocking supplies of game</td>
<td>‘breeding’ in this context means production of hatching eggs for the production of animals for breeding, the production of meat and eggs for consumption, or for re-stocking supplies of game</td>
</tr>
<tr>
<td>91/67/EEC</td>
<td>Art. 2 (1)</td>
<td>‘aquaculture animals’ i.e. live fishes, crustaceans or molluscs coming from a farm, including those from the wild intended for a farm</td>
<td>i.e. animals in a zoo or aquarium do not fall under 91/67/EEC if animals are transferred from a zoo to another zoo, this transfer is covered by 91/67.</td>
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3. Although the animals listed in the above tabulation do, in principle, not fall under 92/65/EEC, it would make no sense to exclude them from the health surveillance plan (see Section C paragraph 3 of these recommendations).
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B. The approved veterinarian

1. **In order to be granted official approval under Article 13 of the Directive, a zoo must secure by contract or legal instrument the services of a veterinarian approved by and under the control of the competent authority** (ANNEX C paragraph 1.(g)).

2. The role of the approved veterinarian is to ensure that the requirements of the present directive and other related legislation are complied with on a day to day basis.

3. Where this veterinarian is a member of a practice, other members of the same practice may be included provided that they are also approved by the competent authority and individually nominated in writing.

4. **The approved veterinarians shall comply mutatis mutandis with the requirements referred to in Article 14(3)(B) of Directive 64/432/EEC** (ANNEX C paragraph 1.(g)(i)).

5. Taken directly from Directive 64/432- Article 14 (3)(b)

   “According to this article, the approved veterinarians must:
   i. meet the conditions for pursuing the veterinary profession;
   ii. have no financial interest or family links with the owner of or person responsible for the holding (but see point 6 below);
   iii. possess particular knowledge in the field of animal health as it applies to animals of the species concerned. This means that they must:
   - regularly update their knowledge, especially as regards the relevant health regulations,
   - meet the requirements laid down by the competent authority to ensure the proper functioning of the network,
   - provide the owner of or person responsible for the holding with information and assistance in order that all steps are taken to ensure that the holding's status is maintained, particularly on the basis of programmes agreed with the competent authority,
   - ensure compliance with the requirements concerning:
     (i) the identification and health certification of the animals of the collection, the animals introduced and those traded;
     (ii) compulsory reporting of infectious animal diseases and any other risk factor for animal health or welfare, and for human health;
     (iii) establishing as far as possible the cause of death of animals and where they are to be consigned;
     (iv) the hygiene conditions of the herd and of the livestock production units.”

6. For the purposes of the implementation of the present Directive point ii. above is of less importance than it is in Directive 64/432/EEC as zoo animals have a conservation value rather than an economic value and because, for the purposes of the present Directive, the approved veterinarian is working under the supervision of the official veterinarian. It is thus up to the official veterinarian to assess whether there could be a conflict of interest, and whether the approved vet appointed by the zoo fulfils the requirements above, and in particular has appropriate specialist knowledge in relation to zoo animals.

7. The competent authority shall draw up lists of approved veterinarians and of the approved holdings participating in the network. If the competent authority finds that a participant in the network no longer fulfils the conditions set out above, it shall suspend or withdraw approval, without prejudice to any penalties that may be applied.
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C. The Annual Disease Surveillance Plan

1. The approved veterinarian has to draw up and implement an annual disease surveillance plan (ANNEX C paragraph 1 (g) (ii) 1st indent). This plan is subject to annual audits by an official veterinarian from the competent authority (ANNEX C paragraph 2 (a) (ii).

2. For the purposes of approval under the present directive the surveillance plan must cover those diseases listed in Annex A (and B if relevant).

3. The surveillance plan may also include other general measures as may be required under Council Directive 1999/22/EC of 29 March 1999 relating to the keeping of wild animals in zoos (“Zoo Directive”, O.J. L94/24 of 09.04.1999), and specific measures for individual taxonomic groups as may be agreed by the relevant Taxonomic Advisory Group from the European Endangered Species Program (EEP) of the European Association of Zoos and Aquaria (EAZA). As a general rule such specific measures would be elaborated by the EAZWV Infectious Diseases Working Group and subsequently be integrated into the Husbandry Guidelines for the taxon concerned.

4. Animals for the purpose of this surveillance programme mean those species that are covered by article 13 of Directive 92/65/EEC; namely any species susceptible to the diseases listed in Annex A or Annex B. In practice this means all mammals, all birds, fishes of the salmonid group, and honey bees but not other invertebrates. Where animals of the domestic species are kept within a zoo premises, for example in a children's zoo, they will be regarded as part of the zoo collection and subject to all the same conditions as the rest of the collection as far as approval is concerned, including the surveillance programme. Note in this context that there may be specific requirements for domestic animal species that are covered by other Directives. Reptiles and amphibians and fishes other than salmonids are not included.

5. The Annual Disease Surveillance Plan and the measures based thereon must include
   a. Immediate notification to the competent authority if there is any cause for suspicion that animals may be affected by any disease, including zoonoses, that is notifiable under Community legislation (including 92/65 and Directive 82/894 and other relevant Community legislation) or national legislation.
   b. Close observation of each animal at least once per day by suitably qualified staff, under the direction of the approved veterinarian (in the case of large group species, such as fish in an aquarium, the veterinarian may decide that observation of the group is sufficient).
   c. Immediate notification of the approved veterinarian by zoo staff if any animals appear unwell or die (in the case of large group species, notification may be triggered by mortality above an agreed, expected level).
   d. Laboratory examination to establish the infective agent in any live animals that appear to be affected by an infectious disease (in the case of large group species, such as fish in an aquarium, the veterinarian may decide that a representative sample is sufficient). In the case of suspicion of a disease that is listed on Annex A and B and/or is notifiable under national legislation, the official veterinarian must be informed immediately. The official veterinarian will be responsible for arranging disease control precautions and further investigation for diseases notifiable under national legislation, and may direct that samples should be taken and submitted to a designated laboratory.
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e. Procedures for newly arrived and diseased animals, taking into account the relevant risk factors and, therefore, including handling practices, clinical examination and specific tests as appropriate.

f. Regular parasitological examination of faecal samples (individual or group samples, depending on the housing system) in particular with regard to zoonotic parasites. It is recommended by EAZWV that all relevant groups should be checked at least once a year; the frequency of examination should be related to the prevalence of parasites.

g. Opportunistic examination and taking of appropriate samples from immobilised or otherwise restrained animals. EAZWV recommends all serum samples to be retained and stored at \(-180^\circ\) C or below.

h. Specific guidelines for the systematic testing of specific animal species may be developed and recommended by the Infectious Diseases Working Group of EAZWV.

i. Post mortem examination without unnecessary delay to check for significant pathology, and as far as possible to establish the cause of death in every animal that dies or foetus that is aborted (but the approved veterinarian may exercise discretion where there is clearly no suspicion of infectious disease, such as obvious trauma, or euthanasia of a healthy animal; and where it has been established that an infectious disease is affecting a group, the veterinarian may decide, in consultation with the competent authority if necessary, that a representative sample is sufficient).

j. The vaccination programme should be based on the availability of safe vaccines. It should take into account the species involved and the risk of diseases likely to occur in the zoo, and may cover zoonotic diseases other than those mentioned in Annex A or B, but these vaccinations must be in compliance with the applicable legislation.

k. Records must be kept in an easily accessible form, to be available as necessary for audit purposes, and retained for at least 10 years, to show at least the following information:
   - All cases of disease, and treatment if applicable.
   - Preventive actions such as vaccinations.
   - Results of blood tests and other diagnostic procedures.
   - Results of post mortem examinations including records of stillbirths.
   - Observations during any periods of precautionary isolation.
   - Reports to the veterinary authority of any suspicion of Annex A diseases or diseases notifiable under national law.

l. Zoo vets should be aware that they will be asked for specific information on diseases under the zoonosis directive and should therefore be able to extract this information easily.
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D. The Added Animals Procedure

1. General
   a. Only animals coming from another approved body, institute or centre may be introduced into an approved zoo (ANNEX C paragraph 2 (b). There is, however a derogation from this requirement provided that certain conditions are respected (ANNEX C paragraph 3).
   
   b. By way of derogation from Article 5(1) of the Directive, ANNEX C paragraph 3 allows also for the introduction of “apes” (i.e. non-human primates)¹ from non-approved sources.
   
   c. Animals having an origin other than an approved body, institute or centre may be introduced in an approved zoo provided they undergo a quarantine under official control before being added to the collection (ANNEX C paragraph 3).
   
   d. Animals from approved zoos and from non-approved sources should not be transported together in the same container or vehicle.
   
   e. The animals must be accompanied by transport permits or any other documentation as may be required by national legislation. ANIMO requirements apply.

2. Animals from another approved establishment
   a. Animals coming from another approved establishment in the same member state fall outside the scope of Directive 92/65, and hence under Community legislation there is no requirement for the animal to be accompanied by the model health certificate in Annex E. However, national rules governing certification may apply. For the same reason, there is no official requirement for post-arrival isolation, although the establishment may choose to carry out isolation and/or testing for its own private purposes.
   
   b. If the animals are coming from an approved establishment in another Member State they must be accompanied by the model health certificate in Annex E type 3. Depending of the health situation there may be additional requirements imposed by EU or national legislation.

3. Animals from a non-approved establishment in the same Member State
   a. Animals coming from a non-approved establishment in the same member state fall outside the scope of Directive 92/65, and hence under Community legislation there is no requirement for the animal to be accompanied by the model health certificate in Annex E. However, national rules governing certification may apply. However, in accordance with Annex C of Directive 92/65, the animals must undergo post-arrival isolation in the isolation area, designated in the terms of approval, for at least 30 days or such longer period as may be required by the approved veterinarian and/or the competent authority to be satisfied that the health status of the animals is not inferior to the health status of the other animals in the collection.
   
   b. During isolation the animals may be required to undergo testing for any disease on Annex A that the approved veterinarian and the competent authority consider appropriate. They should have particular regard to diseases for which national programmes are in place, such as tuberculosis, brucellosis, Aujeszky's disease. The approved veterinarian may also wish to carry out specific testing for any diseases for

¹ “apes” is zoologically not correct but it is the term used in the core text of the directive
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which the premises runs its own surveillance, control and eradication programme, covering diseases other than those listed in Annex A.

c. The arrival of the new animals must be recorded by the receiving establishment, as laid down in Annex C. There is no official requirement for any other health certification.

4. Animals from a non-approved establishment in another Member State

a. Member states may, by way of derogation, allow the movement of animals from non-approved establishments in another member state. The Veterinary Service of the receiving country has to be informed under paragraph 3 of ANNEX C and may lay down specific conditions under which transfer must take place. In addition, in accordance with Annex C of Directive 92/65, the animals must undergo post-arrival isolation in the isolation area, designated in the terms of approval, for at least 30 days or such longer period as may be required by the approved veterinarian and/or the competent authority.

5. Animals from non-approved establishment to a non-approved establishment

a. Between establishments in the same Member State: National rules apply

b. Between establishments in different Member States: Not covered by Annex C of Directive 92/65. This means that the rules laid down in the body of the Directive apply in full. Therefore, where no provisions are laid down, the Member State of destination can request specific requirements for introduction (e.g. requests for additional guarantees such as the status, negative tests or treatments see Article 6 of Directive 92/65 for details)

6. Animals from third countries

a. Animals being imported into the Community must fulfil the animal health conditions as laid down in Directive 92/65. However where harmonised rules for a particular species have not been laid down in the Directive, then national rules shall apply, although these also should be based on the animal health principles laid down in the Directive. EU rule, or if not applicable national rules, for licensing, health certification, post-import quarantine and testing will apply, as appropriate for the species. The importing zoo must apply for a specific import licence, which will contain the conditions relevant to the species and place of origin.

(Please note that new legislation (amending Decision 79/542/EEC) is due to come into force in the near future that will lay down a list of third countries and harmonised rules (certification and animal health requirements) for the importation of all ungulates (including all Artiodactyla). Because of these rules, imports of such animals will only be allowed exclusively from a small number of third countries authorised for each species. However a draft Decision is under discussion which foresees a particular regime for importation of live animals originating in any third country but imported after a residency period in St.Pierre and Miquelon (a little island in the Atlantic ocean close to Canada) where they will spend a period in a quarantine station. During this period, specific testing will be carried out on the animals. For the moment, these special conditions are limited to the import of live Camelidae, but the intention is to extend this possibility to other species.

Following introduction of this new legislation national rules will therefore no longer apply to imports belonging to the order Artiodactyla.
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E. Quarantine / Isolation requirements

1. Definitions
   a. ‘Isolation’ and ‘quarantine’ are not precisely defined in European Union legislation, and one word is usually described by reference to the other. For example in the poultry trade directive 90/539/EEC: ‘Quarantine station shall mean facilities where the poultry is kept in complete isolation and away from direct or indirect contact with other poultry, so as to permit long-term observation and testing’ (Council Directive 90/539/EC, Article 2).
   b. The Office International des Epizooties (OIE) Terrestrial Animal Health Code defines a quarantine station as ‘a facility under the control of the veterinary authority where a group of animals is maintained in isolation, with no direct or indirect contact with other animals, in order to undergo observation for a specified length of time and, if appropriate, testing and treatment.
   c. In order to emphasize the difference between quarantine of the above types and quarantine required for added animals under the BALAI Directive, the latter is referred to as 'isolation' throughout this document.
   d. The conditions below refer to isolation for added animals entering a BALAI approved zoo from a non-approved source within the EU (or in Norway, Liechtenstein, and Switzerland).

2. Principles
   a. In order to be granted approval, zoos must have adequate means for isolating animals, and have available adequate quarantine facilities and approved procedures for animals from non-approved sources. (ANNEX C paragraph 1. (b).
   b. Incoming animals must be isolated as necessary (ANNEX C paragraph 1 (g) (iv).
   c. Animals having an origin other than an approved body, institute or centre may be introduced in an approved zoo provided they undergo quarantine under official control before being added to the collection (ANNEX C paragraph 3).
   d. For the purposes of the approval under the Directive only the diseases listed in Annex A have to be taken into account. In addition, it should be considered that the introduction of new animals susceptible to these diseases is only possible either from within the EU or from listed third countries.
   e. A risk analysis has to be made and the quarantine / isolation requirements must cope with the risk. Quarantine requirements for comparable livestock could provide some guidance. In this context it is noted that management procedures could be adjusted easily to each individual case, but that the availability of suitable facilities is a prerogative for approval and has to be seen without a specific case in mind.
   f. For the purposes of the approval, i.e. for the introduction of animals from non-approved sources within the European Union or from listed Third Countries where such lists exist, the following information may be useful when considering, which general requirements to apply:

There are three risk groups:

- Primates: can be imported from anywhere (no Third Countries List), they may be carriers of zoonoses.
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- Birds: the introduction from areas where OIE list A diseases exist cannot be excluded (occurrence of NCD in wild birds), and the relevant diseases, NCD, AI and Psittacosis are easily transmitted via the air or, in the case of West Nile Virus, by mosquitoes.

- Mammals other than primates: introduction only from areas free from highly contagious diseases, all relevant diseases not transmissible by air over a longer distance, in most cases direct contact required.

Consequently, the following general requirements apply:

- **Primates:** The quarantine requirements laid down in the OIE Terrestrial Animal Health Code (Chapter 2.11 and Appendix 3.5.1) shall be respected (ANNEX C paragraph 3).

- Birds must be isolated in buildings and the possibility of disease transmission by air or insects has to be taken into account. Windows should be kept closed. EAZWV strongly recommends that the isolation rooms should be ventilated, and the exhausted air should pass through a dust filter.

- Mammals should, as a general rule, be isolated indoors, but no special precautions have to be taken regarding the exhausted air to cope with the relevant diseases listed in Annex A of the Directive. If, for specific reasons, mammals have to be isolated outdoors, the ground should be solid and easy to disinfect. If this is not possible, the isolation enclosure should be relatively small to allow for other treatment of the soil, e.g. removal of top soiling. No zoo will be able to have specific isolation facilities for all mammalian taxa, which may include a diverse range of species, including e.g. big cats, dolphins, elephants, hippopotamuses. In such cases it should be possible to use the standard facility for isolation purposes.

In order to be granted approval, zoos must have available adequate quarantine / isolation facilities. This wording does not imply that the facilities are on the ground or owned by the zoo concerned. In addition, the option exists for several zoos to jointly operate a facility, or have contracts among themselves. In this last case, the option should be specified in the annual plan.

3. General conditions - Structural requirements

a. Location
The isolation quarters must be physically separated from other animal accommodation by a reasonable distance, taking into account the species concerned and the ability of the relevant viruses to spread on the air. This distance can be much reduced if the exhausted air is filtered (for animals originating from within the EU or from listed Third Countries the use of dust filters is sufficient, otherwise High Efficiency Particulate Extraction (HEPA) may be required).

b. Demarcation
The limits of the isolation area must be clearly demarcated by walls or fences as appropriate. This does not preclude the possibility that specific areas or pens within the premises may be designated as isolation areas for a limited time and a particular purpose, provided that they meet the general requirements.

c. Access
There must be a double door system to prevent escape at the entry/exit with sufficient space between the doors to allow one to be closed before the other is opened. Entry/exit
doors must be lockable and must display a notice stating: ‘QUARANTINE: No Admission to Unauthorised Persons’.

d. Hygiene barrier
Facilities must be available at the entry/exit point for attendants to change overalls, to change and disinfect boots, to wash hands, and if appropriate to shower.

e. Loading/Unloading.
Suitable facilities must be available to load or unload animals between transport crates and isolation pens without the risk of escape.

f. Restraint
Suitable crush or penning facilities should be available within reasonable access of the isolation area, so that animals may be safely restrained for clinical and diagnostic procedures such as blood sampling.

The route from isolation to restraint must not put other animals at risk of infection from the introduced animals.

g. Inspection
The design of the pens or cages within the isolation area must be such that the animals may be visually inspected at any time, with adequate light and ease of access.

h. Disinfection
The physical structure and all equipment must be made of such materials that they can be effectively cleansed and disinfected, or destroyed after use.

i. Vermin
The design must be suitable to minimise access by rodents, wild birds and insects, as appropriate for the species in question. Where drains are present, they must be fitted with rodent proof covers.

j. Feed Store
The feed store must be suitably protected from vermin.

k. Waste Disposal
Adequate storage facilities must be available to contain the litter and animal waste produced during the isolation period, and the storage facility must be bird and vermin proof. There must be facilities to dispose of the waste either during or after the isolation period in a way which will ensure that there is no risk of the spread of disease.

l. Post Mortem
Refrigeration facilities or equivalent must be available within the isolation area, or in a suitably disease-protected location nearby, to hold carcases of animals that die until they can be subject to post mortem examination. Procedures for conveying carcases safely to the storage facility must be laid down in writing by the approved veterinarian.

4. General conditions - Management procedures

a. Surveillance
Every animal in isolation must be visually inspected at least once a day by suitably competent staff. Any signs of illness must be recorded and reported immediately to the responsible veterinarian, who should make a further examination of the affected animals without any unreasonable delay.

b. Staff
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The premises must have designated staff who are present on a sufficiently regular schedule to ensure surveillance of the animals on a daily basis, and more frequently if appropriate.

c. Hygiene

Staff entering the isolation premises must always change into protective clothing and footwear. On leaving, the overalls and footwear must be removed and left within the isolation area, and the footwear must be disinfected. Hands must be washed, or otherwise disinfected, on entering and leaving.

d. Equipment

None of the moveable items used in the isolation unit should be taken outside the unit, or used with other stock outside the unit, for the entire duration of the isolation period.

e. Waste

Litter and waste material must be collected regularly, stored in the containers provided, and disposed of either during or after the isolation period in such a way that disease agents will not be spread.

f. Disinfection

Premises must have an effective programme, laid down in writing by the approved veterinarian, for cleansing and disinfection after each isolation session; approved disinfectants must be specified and used in the programme; and an appropriate resting period (usually 7 days) must be specified after each cleansing and disinfection operation.

g. Transport Crates

Crates or cages used for transport, if to be re-used, must be made of materials which allow effective cleaning and disinfection, and this should be carried out within the isolation unit. If not re-used, the crates and cages must be destroyed in such a way that disease agents cannot be spread.

h. All-in, All-out

An ‘all-in, all-out’ policy should be followed in the isolation unit. If it is necessary to add animals whilst others are already present in the unit, the isolation period of all of them must be extended until the latest completion date of any of the animals.

i. Illness

If any animals become ill during isolation and the approved veterinarian considers that they need to be moved to a specialised hospital facility for diagnosis or treatment, he/she must ensure that this is done under his/her personal supervision in such a way as to ensure no possible risk of disease spread. In particular the approved veterinarian must personally supervise the arrangements for maintaining isolation throughout the movement, and for disinfecting any vehicles, rooms and equipment with which the animal has had contact.

j. Disease and Death

Any sign of any disease or death during isolation must be reported immediately to the approved veterinarian. All suspicions of any infectious disease on Annex A and any deaths in isolation must be reported immediately to the competent authority. Carcases of animals, which die during isolation, and if necessary those that are dead on arrival, must be submitted to a post mortem examination without unreasonable delay.

k. Designated Attendants
The establishment must designate suitable staff to attend to the animals in isolation, taking appropriate precautions to ensure that there is no risk of transferring infection from the isolation unit to any other animals, and the arrangements must be agreed in writing by the approved veterinarian.

I. Visitors

Visitors must not be allowed to enter the isolation unit. If personnel apart from the designated attendants need to enter for essential maintenance etc., they must be required to wash thoroughly on entering and leaving, and wear protective clothing which shall be put on prior to entering and removed prior to leaving. There must be a visitors' book to record the dates, names and addresses of all visitors.

m. Records

The person in charge of the isolation unit must keep the following records, which should be retained for at least ten years

- the date, number and identification of animals entering and leaving the isolation facility.
- copies of the export health certificates and border crossing certificates accompanying imported animals.
- significant health observations, cases of illness and deaths on a daily basis.
- dates and results of testing
- dates and types of treatment
- dates and names and addresses of persons entering the isolation unit.

n. Duration

Isolation should normally last for at least 30 days, unless a longer period is required to exclude specific risks such as rabies.

5. Additional requirements specifically for birds

a. Ventilation

Birds must always be isolated in buildings. There must be no possibility of access by wild birds or by mosquitoes.

As a general rule, windows should be kept closed, the isolation rooms should be ventilated, and the exhausted air should pass through a dust filter. If the isolation facility is more than 250m away from other bird enclosures, this requirement can be waived and ventilation through open windows can be permitted. In such case all ventilation openings must be covered with a double layer of wire mesh.

b. Air Space

If there are separate units within the isolation facility, each unit must occupy a separate airspace so as to be an isolated epidemiological unit. If this cannot be achieved, all the birds in isolation must remain until the completion date of the last birds to enter.

6. Additional requirements specifically for ungulates

a. Fencing

If the isolation area includes open paddocks, situations where there may be stock in adjacent paddocks must be avoided. The isolation paddocks must be surrounded by
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double fences allowing a suitable sanitary gap between the fences. A minimum gap of at least 3 meters should normally be satisfactory, but taking account of the species concerned, the competent authority may require a different standard. Both fences must be escape-proof.

b. Herds in Isolation

If the isolation facility is intended to contain large groups of animals, there must be additional provision so that any individual that appears to be unwell can be separated and kept apart from the rest of the group, with facilities for testing and treatment as appropriate.

7. Additional requirements specifically for primates

(based on the OIE Terrestrial Health Code, chapter 2.10.1. and Appendix 3.5.1. (2002 edition)

a. Zoonoses

Any biting or scratching incidents involving humans, or other events in which humans are exposed to primate blood or saliva, are to be reported immediately to the responsible zoo veterinarian, who should consult with medical authorities as appropriate.

b. Protection of Attendants

The overalls and boots provided for entry to the isolation facility should completely cover the attendant's body, and suitable masks, visors, goggles and gloves should also be provided (where this raises issues such as welfare and socialisation, the approved veterinarian should consult with the competent authority who may agree to alternative methods providing equivalent security).

c. Staff Training

The responsible veterinarian or physician should ensure that all attendants are fully instructed in the procedures necessary to protect their own health, as well as the health and welfare of the animals in isolation. Personnel must not eat, drink, smoke or store food for human use within the isolation rooms.

d. Staff Health

Personnel working within the isolation area should be encouraged to provide baseline serum samples, which would be stored for study and comparison if appropriate. Additional serum samples may be collected periodically as an aid to epidemiological investigations. Staff should be encouraged to report any signs of illness immediately to their medical adviser.

e. Ventilation

If natural ventilation is used, the openings must be covered with a double layer of mesh, each of which is individually strong and secure enough to prevent the escape of the animals. Ventilation intakes and outlets must not be so close to any other animal holding area as to present a disease risk. If forced ventilation with HEPA filtration is used, there should be provision to maintain adequate ventilation in the event of a technical failure. Separate units must be ventilated separately.

f. Washing facilities

Washing facilities with hot and cold running water should be available for personnel to wash hands within each animal holding room. Personnel should wash or otherwise disinfect hands at frequent intervals whilst working within the isolation premises.
g. Footbaths

Footbaths should be available not only at the entrance/exit of the isolation premises, but also between individual holding rooms within the premises. The footbaths should contain an approved disinfectant agreed by the approved veterinarian. Personnel should use the footbaths as they pass from one room to another.

h. Equipment

Each holding room should have its own complete range of dedicated equipment, and equipment should not be transferred from one holding room to another. After use all equipment including work surfaces should be effectively cleaned and disinfected. Because of the aerosol risk power hoses should not be used, except with the agreement of the approved veterinarian.

i. Group Separation

Separate groups entering the isolation premises from different sources or on different occasions must remain physically and epidemiologically isolated from each other. Separate groups must be accommodated in separate, isolated units. Animals may not be transferred between groups. However where this raises issues such as welfare and socialisation, the approved veterinarian in consultation with the competent authority may agree to mixing animals, provided that isolation conditions then apply to all those in contact with the introduced animals.

j. Cage Discipline

No animals may be removed from their cages, albeit within the self-contained isolation premises, without the specific authority and supervision of the responsible zoo veterinarian.

k. Duration

OIE recommends a quarantine duration of at least 30 days when the primate is sent from another premises under veterinary supervision, and at least 12 weeks if it is coming from circumstances without veterinary supervision or from the wild. In Great Britain under rabies regulations the duration of quarantine for primates must be at least 6 months.
F. The certificates

Where certificates are required

1. ‘Animals’ in the terms of article 2(b) of Directive 92/65/EEC must be accompanied by a certificate corresponding to the specimen in Annex E (Directive 92/65, Article 5).

2. Bovines and swine falling under the scope of Directive 64/432/EEC must be accompanied by a certificate conforming to the model set out in Annex F of that Directive.

3. Ovines and caprines falling under the scope of directive 91/68/EEC must be accompanied by a certificate conforming to the model set out in Annex E of that Directive.

4. Equines (including zebras) must be accompanied by a certificate complying with Annex C of Directive 90/426/EEC.