COUNCIL CONSEIL OF EUROPE DE L'EUROPE

# EUROPEAN CONVENTION FOR THE PROTECTION OF VERTEBRATE ANIMALS USED FOR EXPERIMENTAL AND OTHER SCIENTIFIC PURPOSES 

Strasbourg, 18.III. 1986

Text amended according to the provisions of the Protocol (ETS No. 170), as of its entry into force, on 2 December 2005.

## Preamble

The member States of the Council of Europe, signatory hereto,
Recalling that the aim of the Council of Europe is to achieve a greater unity between its members and that it wishes to co-operate with other States in the protection of live animals used for experimental and other scientific purposes;

Recognising that man has a moral obligation to respect all animals and to have due consideration for their capacity for suffering and memory;

Accepting nevertheless that man in his quest for knowledge, health and safety has a need to use animals where there is a reasonable expectation that the result will be to extend knowledge or be to the overall benefit of man or animal, just as he uses them for food, clothing and as beasts of burden;

Resolved to limit the use of animals for experimental and other scientific purposes, with the aim of replacing such use wherever practical, in particular by seeking alternative measures and encouraging the use of these alternative measures;

Desirous to adopt common provisions in order to protect animals used in those procedures which may possibly cause pain, suffering, distress or lasting harm and to ensure that where unavoidable they shall be kept to a minimum,

Have agreed as follows:

## Part I - General principles

## Article 1

1 This Convention applies to any animal used or intended for use in any experimental or other scientific procedure where that procedure may cause pain, suffering, distress or lasting harm. It does not apply to any non-experimental agricultural or clinical veterinary practice.

In this Convention:
a "animal", unless otherwise qualified, means any live non-human vertebrate, including free-living and/or reproducing larval forms, but excluding other foetal or embryonic forms;
b "intended for use" means bred or kept for the purpose of sale, disposal or use in any experimental or other scientific procedure;
c "procedure" means any experimental or other scientific use of an animal which may cause it pain, suffering, distress or lasting harm, including any course of action intended to, or liable to, result in the birth of an animal in any such conditions, but excluding the least painful methods accepted in modern practice (that is "humane" methods) of killing or marking an animal.

A procedure starts when an animal is first prepared for use and ends when no further observations are made for that procedure; the elimination of pain, suffering, distress or lasting harm by the successful use of anaesthesia or analgesia or other methods does not place the use of an animal outside the scope of this definition;
d "competent person" means any person who is considered by a Party to be competent in its territory to perform the relevant function described in this Convention;
e "responsible authority" means, in the territory of a given Party, any authority, body or person designated for the relevant purpose;
f "establishment" means any stable or mobile facility, any building, group of buildings or other premises, including a place which is not wholly enclosed or covered;
"breeding establishment" means any establishment where animals are bred with a view to their use in procedures;
"supplying establishment" means any establishment, other than a breeding establishment, from which animals are supplied with a view to their use in procedures;
"user establishment" means any establishment where animals are used in procedures;
j "humane method of killing" means the killing of an animal with a minimum of physical and mental suffering appropriate to the species.

## Article 2

A procedure may be performed for one or more of the following purposes only and subject to the restrictions laid down in this Convention:
i avoidance or prevention of disease, ill-health or other abnormality, or their effects, in man, vertebrate or invertebrate animals or plants, including the production and the quality, efficacy and safety testing of drugs, substances or products;
ii diagnosis or treatment of disease, ill-health or other abnormality, or their effects, in man, vertebrate or invertebrate animals or plants;
c protection of the environment;
d scientific research;
e education and training;
f forensic inquiries.

## Article 3

Each Party undertakes to take all the necessary steps to give effect to the provisions of this Convention and to ensure an effective system of control and supervision as soon as possible and in any case within a period of five years from the date of entry into force of the present Convention in respect of that Party.

## Article 4

No provision in this Convention shall affect the liberty of the Parties to adopt stricter measures for the protection of animals used in procedures or for the control and restriction of the use of animals in procedures.

## Part II - General care and accommodation

## Article 5

1 Any animal used or intended for use in a procedure shall be provided with accommodation, an environment, at least a minimum degree of freedom of movement, food, water and care, appropriate to its health and well-being. Any restriction on the extent to which an animal can satisfy its physiological and ethological needs shall be limited as far as practicable. In the implementation of this provision, regard should be paid to the guidelines for accommodation and care of animals set out in Appendix A to this Convention.

2 The environmental conditions in which animals are bred, kept or used shall be checked daily.
3 The well-being and state of health of animals shall be observed sufficiently closely and frequently to prevent pain or avoidable suffering, distress or lasting harm.

4 Each Party shall determine arrangements to ensure that any defect or suffering discovered is corrected as quickly as possible.

## Part III - Conduct of procedure

## Article 6

1 A procedure shall not be performed for any of the purposes referred to in Article 2, if another scientifically satisfactory method, not entailing the use of an animal, is reasonably and practicably available.

2 Each Party should encourage scientific research into the development of methods which could provide the same information as that obtained in procedures.

## Article 7

When a procedure has to be performed, the choice of species shall be carefully considered and, where required, be explained to the responsible authority; in a choice between procedures, those should be selected which use the minimum number of animals, cause the least pain, suffering, distress or lasting harm and which are most likely to provide satisfactory results.

## Article 8

A procedure shall be performed under general or local anaesthesia or analgesia or by other methods designed to eliminate as far as practicable pain, suffering, distress or lasting harm applied throughout the procedure unless:
a the pain caused by the procedure is less than the impairment of the animal's well-being caused by the use of anaesthesia or analgesia, or
b the use of anaesthesia or analgesia is incompatible with the aim of the procedure. In such cases, appropriate legislative and/or administrative measures shall be taken to ensure that no such procedure is carried out unnecessarily.

## Article 9

1 Where it is planned to subject an animal to a procedure in which it will or may experience severe pain which is likely to endure, that procedure must be specifically declared and justified to, or specifically authorised by, the responsible authority.

2 Appropriate legislative and/or administrative measures shall be taken to ensure that no such procedure is carried out unnecessarily.

Such measures shall include:

- either specific authorisation by the responsible authority;
- or specific declaration of such procedure to the responsible authority and judicial or administrative action by that authority if it is not satisfied that the procedure is of sufficient importance for meeting the essential needs of man or animal, including the solution of scientific problems.


## Article 10

During a procedure, an animal used shall remain subject to the provisions of Article 5 except where those provisions are incompatible with the objective of the procedure.

## Article 11

1 At the end of the procedure it shall be decided whether the animal shall be kept alive or killed by a humane method. An animal shall not be kept alive if, even though it has been restored to normal health in all other respects, it is likely to remain in lasting pain or distress.

2 The decision referred to in paragraph 1 of this article shall be taken by a competent person, in particular a veterinarian, or the person who, in accordance with Article 13, is responsible for, or has performed, the procedure.

3 Where, at the end of the procedure:
a an animal is to be kept alive, it shall receive the care appropriate to its state of health, be placed under the supervision of a veterinarian or other competent person and kept under conditions conforming to the requirements of Article 5. The conditions laid down in this sub-paragraph may, however, be waived where, in the opinion of a veterinarian, the animal would not suffer as a consequence of such exemption;
b an animal is not to be kept alive or cannot benefit from the provisions of Article 5 for its well-being, it shall be killed by a humane method as soon as possible.

4 No animal which has been used in a procedure entailing severe or enduring pain or suffering, irrespective of whether anaesthesia or analgesia was employed, shall be used in a further procedure unless it has returned to good health and well-being and either:
a the further procedure is one in which the animal is subject throughout to general anaesthesia which is to be maintained until the animal is killed; or
b the further procedure will involve minor interventions only.

## Article 12

Notwithstanding the other provisions of this Convention, where it is necessary for the legitimate purposes of the procedure, the responsible authority may allow the animal concerned to be set free provided that it is satisfied that the maximum practicable care has been taken to safeguard the animal's well-being. Procedures that involve setting the animal free shall not be permitted solely for educational or training purposes.

## Part IV - Authorisation

## Article 13

A procedure for the purposes referred to in Article 2 may be carried out by persons authorised, or under the direct responsibility of a person authorised, or if the experimental or other scientific project concerned is authorised in accordance with the provisions of national legislation. Authorisation shall be granted only to persons deemed to be competent by the responsible authority.

## Part V - Breeding or supplying establishments

## Article 14

Breeding and supplying establishments shall be registered with the responsible authority subject to the grant of an exemption under Article 21 or Article 22. Such registered establishments shall comply with the requirements of Article 5.

## Article 15

The registration provided for in Article 14 shall specifiy the person in charge of the establishment, who shall be competent to administer or arrange for suitable care for animals of the species bred or kept in the establishment.

## Article 16

1 Arrangements shall be made at registered breeding establishments to record, in respect of the animals bred there, the number and species of such animals leaving, the dates they leave and the name and address of the recipient.

2 Arrangements shall be made at registered supplying establishments to record the number and species of such animals entering and leaving, the dates of these movements, from whom the animals concerned were acquired and the name and address of the recipient.

3 The responsible authority shall prescribe the records which are to be kept and made available to it by the person in charge of the establishments mentioned in paragraphs 1 and 2 of this article. Such records shall be kept for a minimum of three years from the date of the last entry.

## Article 17

1 Each dog and cat in an establishment shall be individually and permanently marked in the least painful manner possible before it is weaned.

2 Where an unmarked dog or cat is taken into an establishment for the first time after it has been weaned, it shall be marked as soon as possible.

3 Where a dog or cat is transferred from one establishment to another before it is weaned and it is not practical to mark it beforehand, a full documentary record, specifying in particular its mother, shall be kept until it can be marked.

4 Particulars of the identity and origin of each dog or cat shall be entered in the records of the establishment.

## Part VI - User establishments

## Article 18

User establishments shall be registered with or otherwise approved by the responsible authority and shall comply with the conditions laid down in Article 5.

## Article 19

Provisions shall be made at user establishments for installations and equipment appropriate for the species of animals used and the performance of the procedures conducted there. The design, construction and functioning of such installations and equipment shall be such as to ensure that the procedures are performed as effectively as possible, with the object of obtaining consistent results with the minimum number of animals and the minimum degree of pain, suffering, distress or lasting harm.

## Article 20

In user establishments:
a the person or persons who are administratively responsible for the care of the animals and the functioning of the equipment shall be identified;
b sufficient trained staff shall be provided;
c adequate arrangements shall be made for the provision of veterinary advice and treatment;
d a veterinarian or other competent person should be charged with advisory duties in relation to the well-being of the animals.

## Article 21

1 Animals of the species listed below which are for use in procedures shall be acquired directly from or originate from registered breeding establishments, unless a general or special exemption has been obtained under arrangements to be determined by the Party:

| Mouse | Mus musculus |
| :--- | :--- |
| Rat | Rattus norvegicus |
| Guinea pig | Cavia porcellus |
| Golden hamster | Mesocricetus auratus |
| Rabbit | Oryctolagus cuniculus |
| Dog | Canis familiaris |
| Cat | Felis catus |
| Quail | Coturnix coturnix |

2 Each Party undertakes to extend the provisions of paragraph 1 of this article to other species, in particular of the order of primates, as soon as there is a reasonable prospect of a sufficient supply of purpose-bred animals of the species concerned.

3 Straying animals of a domesticated species shall not be used in procedures. A general exemption made under the conditions of paragraph 1 of this article may not extend to stray dogs and cats.

## Article 22

In user establishments, only animals supplied from registered breeding or supplying establishments shall be used, unless a general or special exemption has been obtained under arrangements to be determined by the Party.

## Article 23

Procedures may, where authorised by the responsible authority, be conducted outside user establishments.

## Article 24

Arrangements shall be made at user establishments to maintain records and make them available as required by the responsible authority. In particular, these records shall be sufficient to meet the requirements of Article 27 and, in addition, show the number and species of all animals acquired, from whom they were acquired and their date of arrival.

## Part VII - Education and training

## Article 25

1 Procedures carried out for the purpose of education, training or further training for professions or other occupations, including the care of animals being used or intended for use in procedures, must be notified to the responsible authority and shall be carried out by or under the supervision of a competent person, who will be resposible for ensuring that the procedures comply with national legislation under the terms of this Convention.

2 Procedures within the scope of education, training, or further training for purposes other than those referred to in paragraph 1 above shall not be permitted.

3 Procedures referred to in paragraph 1 of this article shall be restricted to those absolutely necessary for the purpose of the education or training concerned and be permitted only if their objective cannot be achieved by comparably effective audio-visual or any other suitable methods.

## Article 26

Persons who carry out procedures, or take part in procedures, or take care of animals used in procedures, including supervision, shall have had appropriate education and training.

## Part VIII - Statistical information

## Article 27

1 Each Party shall collect statistical information on the use of animals in procedures and this information shall where lawful be made available to the public.

2 Information shall be collected in respect of:
a the numbers and kinds of animals used in procedures;
b the numbers of animals in selected categories used in procedures directly concerned with medicine and in education and training;
c the numbers of animals in selected categories used in procedures for the protection of man and the environment;
d the numbers of animals in selected categories used in procedures required by law.

## Article 28

1 Subject to requirements of national legislation relating to secrecy and confidentiality, each Party shall communicate every year to the Secretary General of the Council of Europe information in respect of the items mentioned in paragraph 2 of Article 27, presented in the form set out in Appendix B to this Convention.

2 The Secretary General of the Council of Europe shall publish the statistical information received from the Parties in respect of the items mentioned in paragraph 2 of Article 27.

3 Each Party is invited to communicate to the Secretary General of the Council of Europe the address of its national authority from which information about more comprehensive national statistics may be obtained on request. Such addresses will be contained in the publications of statistics made by the Secretary General of the Council of Europe.

## Part IX - Recognition of procedures carried out in the territory of another Party

## Article 29

1 In order to avoid unnecessary repetition of procedures required by law on health and safety, each Party shall, where practicable, recognise the results of procedures carried out in the territory of another Party.

2 To that end the Parties undertake, where practicable and lawful, to render each other mutual assistance, in particular by furnishing information on their legislation and administrative practice relating to the requirements for procedures to be carried out in support of submissions for registration of products, as well as factual information on procedures carried out in their territory and on authorisation or any other administrative particulars pertaining to these procedures.

## Part X - Multilateral consultations

## Article 30

1 The Parties shall, within five years from the entry into force of this Convention and every five years thereafter, or more frequently if a majority of the Parties should so request, hold multilateral consultations within the Council of Europe to examine the application of this Convention, and the advisability of revising it or extending any of its provisions.

2 These consultations shall take place at meetings convened by the Secretary General of the Council of Europe. The Parties shall communicate the name of their representative to the Secretary General of the Council of Europe at least two months before each meeting.

3 Subject to the provisions of this Convention, the Parties shall draw up the rules of procedure for the consultations.

## Part XI - Amendments

## Article 31

1 Any amendment to Appendices A and B, proposed by a Party or by the Committee of Ministers of the Council of Europe shall be communicated to the Secretary General of the Council of Europe and forwarded by him to the member States of the Council of Europe, to the European Community and to any non-member State which has acceded to, or has been invited to accede to the Convention in accordance with the provisions of Article 34.

2 Any amendments proposed in accordance with the provisions of the preceding paragraph shall be examined, not less than six months after the date of forwarding by the Secretary General, at a multilateral consultation where it may be adopted by a two-thirds majority of the Parties. The text adopted shall be forwarded to the Parties.

3 Twelve months after its adoption at a multilateral consultation, any amendment shall enter into force unless one third of the Parties have notified objections.

## Part XII - Final Provisions

## Article 32

This Convention shall be open for signature by the member States of the Council of Europe and by the European Communities. It is subject to ratification, acceptance or approval. Instruments of ratification, acceptance or approval shall be deposited with the Secretary General of the Council of Europe.

## Article 33

1 This Convention shall enter into force on the first day of the month following the expiration of a period of six months after the date on which four member States of the Council of Europe have expressed their consent to be bound by the Convention in accordance with the provisions of Article 32.

2 In respect of a Signatory which subsequently expresses its consent to be bound by it, the Convention shall enter into force on the first day of the month following the expiration of a period of six months after the date of the deposit of the instrument of ratification, acceptance or approval.

## Article 34

1 After the entry into force of this Convention, the Committee of Ministers of the Council of Europe may invite any State not a member of the Council to accede to this Convention, by a decision taken by the majority provided for in Article 20.d of the Statute of the Council of Europe and by the unanimous vote of the representatives of the Contracting States entitled to sit on the Committee.

2 In respect of any acceding State, the Convention shall enter into force on the first day of the month following the expiration of a period of six months after the date of deposit of the instrument of accession with the Secretary General of the Council of Europe.

## Article 35

1 Any Signatory may, at the time of signature or when depositing its instrument of ratification, acceptance, approval or accession, make one or more reservations. No reservations may, however, be made in respect of Articles 1 to 14 or Articles 18 to 20.

2 Any Party which has made a reservation under the preceding paragraph may wholly or partly withdraw it by means of a notification addressed to the Secretary General of the Council of Europe. The withdrawal shall take effect on the date of receipt of such notification by the Secretary General.

3 A Party which has made a reservation in respect of a provision of this Convention may not claim the application of that provision by any other Party; it may, however, if its reservation is partial or conditional, claim the application of that provision insofar as it has itself accepted it.

## Article 36

1 Any Signatory may, at the time of signature or when depositing its instrument of ratification, acceptance, approval or accession, specify the territory or territories to which this Convention shall apply.

2 Any Party may at any later date, by a declaration addressed to the Secretary General of the Council of Europe, extend the application of this Convention to any other territory specified in the declaration. In respect of such territory, the Convention shall enter into force on the first day of the month following the expiration of a period of six months after the date of receipt of such declaration by the Secretary General.

3 Any declaration made under the two preceding paragraphs may, in respect of any territory specified in such declaration, be withdrawn by a notification addressed to the Secretary General. The withdrawal shall become effective on the first day of the month following the expiration of a period of six months after the date of receipt of such notification by the

Secretary General.

## Article 37

1 Any Party may at any time denounce this Convention by means of a notification addressed to the Secretary General of the Council of Europe.

2 Such denunciation shall become effective on the first day of the month following the expiration of a period of six months after the date of receipt of the notification by the Secretary General.

## Article 38

The Secretary General of the Council of Europe shall notify the member States of the Council of Europe, the European Communities and any State which has acceded to this Convention of:
a any signature;
b the deposit of any instrument of ratification, acceptance, approval or accession;
c any date of entry into force of this Convention in accordance with Articles 33, 34 and 36;
d any other act, notification or communication relating to this Convention;

In witness whereof the undersigned, being duly authorised thereto, have signed this Convention.

Done at Strasbourg, this 18th day of March 1986, in English and French, both texts being equally authentic, in a single copy which shall be deposited in the archives of the Council of Europe. The Secretary General of the Council of Europe shall transmit certified copies to each member State of the Council of Europe, to the European Communities and to any State invited to accede to this Convention.

## APPENDIX A

Guidelines for accomodation and care of animals (Article 5 of the Convention)

## Introduction

1. The physical facilities
1.1. Functions and general design
1.2. Holding rooms
1.3. Laboratories and general and special purpose procedure rooms
1.4. Service rooms
2. The environment in the holding rooms and its control
2.1. Ventilation
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3. Care
3.1. Health
3.2. Capture
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3.4. Reception and unpacking
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3.6. Caging
3.7. $\quad$ Feeding
3.8. Water
3.9. Bedding
3.10. Exercising and handling
3.11. Cleaning
3.12. Humane killing of animals

## Introduction

1 The member States of the Council of Europe have decided that it is their aim to protect live animals used for experimental and other scientific purposes to ensure that any possible pain, suffering, distress or lasting harm inflicted upon them, as a consequence of procedures being conducted upon them, shall be kept at a minimum.

It is true that some procedures are conducted under field conditions on free-living, self-supporting, wild animals, but such procedures are relatively few in number. The great majority of animals used in procedures must for practical reasons be kept under some sort of physical control in facilities ranging from outdoor corrals to cages for small animals in a laboratory animal house. This is a situation where there are highly conflicting interests. On the one hand, the animal whose needs in respect of movement, social relations and other manifestations of life must be restricted, on the other hand, the experimenter and his assistants who demand full control of the animal and its environment. In this confrontation of interests the animal may sometimes be given secondary consideration.

Therefore, the European Convention for the Protection of Vertebrate Animals Used for Experimental or Other Scientific Purposes provides in Article 5 that: "Any animal used or intended for use in a procedure shall be provided with accommodation, an environment, at least a minimum degree of freedom of movement, food, water and care, appropriate to its health and well-being. Any restriction on the extent to which an animal can satisfy its physiological and ethological needs shall be limited as far as practicable."

4 This appendix draws up certain guidelines based on present knowledge and practice for the accommodation and care of animals. It explains and supplements the basic principles adopted in Article 5. The object is thus to help authorities, institutions and individuals in their pursuit of the aims of the Council of Europe in this matter.

5 Care is a word which, when used in connection with animals intended for or in actual use in procedures, covers all aspects of the relationship between animals and man. Its substance is the sum of material and non-material resources mobilised by man to obtain and maintain an animal in a physical and mental state where it suffers least and performs best in procedures. It starts from the moment the animal is destined to be used in procedures and continues until it is humanely killed or otherwise disposed of by the establishment in accordance with Article 11 of the Convention after the close of the procedure.

6 The appendix aims to give advice about the design of appropriate animal quarters. There are, however, several methods of breeding and keeping laboratory animals that differ chiefly in the degree of control of the microbiological environment. It has to be borne in mind that the staff concerned will sometimes have to judge from the character and condition of the animals where the recommended standards of space may not be sufficient, as with especially aggressive animals. In applying the guidelines described in this appendix, the requirements of each of these situations should be taken into account. Furthermore, it is necessary to make clear the status of these guidelines. Unlike the provisions of the Convention itself, they are not mandatory: they are recommendations to be used with discretion, designed as guidance to the practices and standards which all concerned should conscientiously strive to achieve. It is for this reason that the term "should" has had to be used throughout the text even where "must" might seem to be the more appropriate word. For example, it is self-evident that food and water must be provided (see 3.7.2 and 3.8).

7
Finally, for practical and financial reasons, existing animal quarters' equipment should not need to be replaced before it is worn out, or has otherwise become useless. Pending replacement with equipment conforming with the present guidelines, these should as far as practicable be complied with by adjusting the numbers and sizes of animals placed in existing cages and pens.

## Definitions

In this Appendix A, in addition to the definitions contained in Article 1.2 of the Convention:
a "holding rooms" mean rooms where animals are normally housed, either for breeding and stocking or during the conduct of a procedure;
b "cage" means a permanently fixed or movable container that is closed by solid walls and, at least on one side, by bars or meshed wire or, where appropriate, nets and in which one or more animals are kept or transported; depending on the stocking density and the size of the container, the freedom of movement of the animals is relatively restricted;
c "pen" means an area enclosed, for example, by walls, bars or meshed wire in which one or more animals are kept; depending on the size of the enclosure and the stocking density the freedom of movement of the animals is usually less restricted than in a cage;
d "run" means an area closed, for example, by fences, walls, bars or meshed wire and frequently situated outside permanently fixed buildings in which animals kept in cages or pens can move freely during certain periods of time in accordance with their ethological and physiological needs, such as exercise;
e "stall" means a small enclosure with three sides, usually a feed-rack and lateral separations, where one or two animals may be kept tethered.

1 The physical facilities
1.1. Functions and general design
1.1.1. Any facility should be so constructed as to provide a suitable environment for the species housed. It should also be designed to prevent access by unauthorised persons.

Facilities that are part of a larger building complex should also be protected by proper building measures and arrangements that limit the number of entrances and prevent unauthorised traffic.
1.1.2 It is recommended that there should be a maintenance programme for the facilities in order to prevent any defect of equipment.
1.2. Holding rooms
1.2.1. All necessary measures should be taken to ensure regular and efficient cleaning of the rooms and the maintenance of a satisfactory hygienic standard. Ceilings and walls should be damage-resistant with a smooth, impervious and easily washable surface. Special attention should be paid to junctions with doors, ducts, pipes and cables. Doors and windows, if any, should be constructed or protected so as to keep out unwanted animals. Where appropriate, an inspection window may be fitted in the door. Floors should be smooth, impervious and have a non-slippery, easily washable surface which can carry the weight of racks and other heavy equipment without being damaged. Drains, if any, should be adequately covered and fitted with a barrier which will prevent animals from gaining access.
1.2.2 Rooms where the animals are allowed to run freely should have walls and floors with a particularly resistant surface material to stand up to the heavy wear and tear caused by the animals and the cleaning process. The material should not be detrimental to the health of the animals and be such that the animals cannot hurt themselves. Drains are desirable in such rooms. Additional protection should be given to any equipment or fixtures so that they may not be damaged by the animals or hurt the animals themselves. Where outdoor exercise areas are provided measures should be taken when appropriate to prevent access by the public and animals.
1.2.3. Rooms intended for the holding of farm animals (cattle, sheep, goats, pigs, horses, poultry, etc.) should at least conform with the standards laid down in the European Convention for the Protection of Animals kept for Farming Purposes and by national vererinary and other authorities.
1.2.4. The majority of holding rooms are usually designed to house rodents. Frequently such rooms may also be used to house larger species. Care should be taken not to house together species which are incompatible.
1.2.5. Holding rooms should be provided with facilities for carrying out minor procedures and manipulations, where appropriate.
1.3. Laboratories and general and special purpose procedure rooms
1.3.1. At breeding or supplying establishments suitable facilities for making consignments of animals ready for disptach should be made available.
1.3.2. All establishments should also have available as a mimimum laboratory facilities for the carrying out of simple diagnostic tests, post-mortem examinations, and/or the collection of samples which are to be subjected to more extensive laboratory investigations elsewhere.
1.3.3. Provision should be made for the receipt of animals in such a way that incoming animals do not put at risk animals already present in the facility, for example by quarantining. General and special purpose procedure rooms should be made available for situations where it is undesirable to carry out the procedures or observations in the holding room.
1.3.4. There should be appropriate accommodation for enabling animals which are ill or injured to be housed separately.
1.3.5. Where appropriate, there should be provision for one or more separate rooms suitably equipped for the performance of surgical procedures under aseptic conditions. There should be facilities for post-operative recovery where this is warranted.
1.4. Service rooms
1.4.1. Store rooms for food should be cool and dry, vermin and insect proof and those for bedding, dry, vermin and insect proof. Other materials, which may be contaminated or present a hazard, should be stored separately.
1.4.2. Store rooms for clean cages, instruments and other equipment should be available.
1.4.3. The cleaning and washing room should be large enough to accommodate the installations necessary to decontaminate and clean used equipment. The cleaning process should be arranged so as to separate the flow of clean and dirty equipment to prevent the contamination of newly cleaned equipment. Walls and floors should be covered with a suitably resistant surface material and the ventilation system should have ample capacity to carry away the excess heat and humidity.
1.4.4. Provision should be made for the hygienic storage and disposal of carcasses and animal waste. If incineration on the site is not possible or desirable, suitable arrangements should be made for the safe disposal of such material having regard to local regulation and by-laws. Special precautions should be taken with highly toxic or radioactive waste.
1.4.5. The design and construction of circulation areas should correspond to the standards of the holding rooms. The corridors should be wide enough to allow easy circulation of movable equipment.

2 The environment in the holding room and its control
2.1. Ventilation
2.1.1. Holding rooms should have an adequate ventilation system which should satisfy the requirements of the species housed. The purpose of the ventilation system is to provide fresh air and to keep down the level of odours, noxious gases, dust and infectious agents of any kind. It also provides for the removal of excess heat and humidity.
2.1.2. The air in the room should be renewed at frequent intervals. A ventilation rate of 15-20 air changes per hour is normally adequate. However, in some circumstances, where stocking density is low, 8-10 air changes per hour may suffice or mechanical ventilation may not even be needed at all. Other circumstances may necessitate a much higher rate of air change. Recirculation of untreated air should be avoided. However, it should be emphasised that even the most efficient system cannot compensate for poor cleaning routines or negligence.
2.1.3. The ventilation system should be so designed as to avoid harmful draughts.
2.1.4. Smoking in rooms where there are animals should be forbidden.

### 2.2. Temperature

2.2.1. Table 1 gives the range within which it is recommeded that the temperature should be maintained. It should also be emphasised that the figures apply only to adult, normal animals. Newborn and young animals will often require a much higher temperature level. The temperature of the premises should be regulated according to possible changes in the animals' thermal regulation which may be due to special physiological conditions or to the effects of the procedures.
2.2.2. Under the climatic conditions prevailing in Europe it may be necessary to provide a ventilation system having the capacity both to heat and cool the air supplied.
2.2.3. In user establishments a precise temperature control in the holding rooms may be required, because the environmental temperature is a physical factor which has a profound effect on the metabolism of all animals.

### 2.3. Humidity

Extreme variations in relative humidity ( RH ) have an adverse effect on the health and well-being of animals. It is therefore recommended that the RH level in holding rooms should be appropriate to the species concerned and should ordinarily be maintained at $55 \%+/-10 \%$. Values below $40 \%$ and above $70 \%$ RH for prolonged periods should be avoided.

### 2.4. Lighting

In windowless rooms, it is necessary to provide controlled lighting both to satisfy the biological requirements of the animals and to provide a satisfactory working environment. It is also necessary to have a control of the intensity and of the light-dark cycle. When keeping albino animals, one should take into account their sensitivity to light (see also 2.6).
2.5. Noise

Noise can be an important disturbing factor in the animal quarters. Holding rooms and procedure rooms should be insulated against loud noise sources in the audible and in the higher frequencies in order to avoid disturbances in the behaviour and the physiology of the animals. Sudden noises may lead to considerable change in organ functions but, as they are often unavoidable, it is sometimes advisable to provide holding and procedure rooms with a continuous sound of moderate intensity such as soft music.

### 2.6. Alarm systems

A facility housing a large number of animals is vulnerable. It is therefore recommended that the facility is duly protected by the installation of devices to detect fires and the intrusion of unauthorised persons. Technical defects or a break-down of the ventilation system is another hazard which could cause distress and even the death of animals, due to suffocation and overheating or, in less serious cases, have such negative effects on a procedure that it will be a failure and have to be repeated. Adequate monitoring devices should therefore be installed in connection with the heating and ventilation plant to enable the staff to supervise its operation in general. If warranted, a stand-by generator should be provided for the maintenance of life support systems for the animals and lighting in the event of a break-down or the withdrawal of supply. Clear instructions on emergency procedures should be prominently displayed. Alarms for fish tanks are recommended in case of failure of the water supply. Care should be taken to ensure that the operation of an alarm system causes as little disturbance as possible to the animals.

Care
3.1. Health
3.1.1. The person in charge of the establishment should ensure regular inspection of the animals and supervision of the accommodation and care by a veterinarian or other competent person.
3.1.2. According to the assessment of the potential hazard to the animals, appropriate attention should be paid to the health and hygiene of the staff.

### 3.2. Capture

Wild and feral animals should be captured only by humane methods and by experienced persons who have a thorough knowledge of the habits and habitats of the animals to be caught. If an anaesthetic or any other drug has to be used in the capturing operation, it should be administered by a veterinarian or other competent person. Any animal which is seriously injured should be presented as soon as possible to a veterinarian for treatment. If the animal, in the opinion of the veterinarian, can only go on living with suffering or pain it should be killed at once by a humane method. In the absence of a veterinarian, any animal which may be seriously injured should be killed at once by a humane method.
3.3. Packing and transport conditions

All transportation is undoubtedly, for the animals, a stressful experience, which should be mitigated as far as possible. Animals should be in good health for transportation and it is the duty of the sender to ensure that they are so. Animals which are sick or otherwise out of condition should never be subjected to any transport which is not necessary for therapeutic or diagnostic reasons. Special care should be exercised with female animals in an advanced state of pregnancy. Female animals which are likely to give birth during the transport or which have done so within the preceding forty-eight hours, and their offspring, should be excluded from transportation. Every precaution should be taken by sender and carrier in packing, stowing and transit to avoid unnecessary suffering through inadequate ventilation, exposure to extreme temperatures, lack of feed and water, long delays, etc. The receiver should be properly informed about the transport details and documentary particulars to ensure quick handling and reception in the place of arrival. Even in the case of States which are not Parties to the European Convention on the Protection of Animals During International Transport, strict observance of the provisions of this Convention is recommended; strict observance of national laws and regulations as well as of the regulations for live animals of the International Air Transport Association and the Animal Air Transport Association is also recommended.
3.4. Reception and unpacking

The consignments of animals should be received and unpacked without avoidable delay. After inspection, the animals should be transferred to clean cages or pens and be supplied with feed and water as appropriate. Animals which are sick or otherwise out of condition should be kept under close observation and separately from other animals. They should be examined by a veterinarian or other competent person as soon as possible and, where necessary, treated. Animals which do not have any chance to recover should be killed at once by a humane method. Finally, all animals received must be registered and marked in accordance with the provisions of Articles 16, 17 and 24 of the Convention. Transport boxes should be destroyed immediately if proper decontamination is impossible.
3.5. Quarantine, isolation and acclimatisation
3.5.1. The objects of quarantine are:
a to protect other animals in the establishment;
b to protect man against zoonotic infection;
c to foster good scientific practice.

Unless the state of health of animals introduced into an establishment is satisfactory, it is recommended that they should undergo a period of quarantine. In some cases, that of rabies, for example, this period may be laid down in the national regulations of the Party. In others, it will vary and should be determined by a competent person, according to the circumstances, normally the veterinarian appointed by the establishment (see also Table 2).

Animals may be used for procedures during the quarantine period as long as they have become acclimatised to their new environment and they present no significant risk to other animals or man.
3.5.2. It is recommended that facilities should be set aside in which to isolate animals showing signs of or suspected of ill-health and which might present a hazard to man or to other animals.
3.5.3. Even when the animals are seen to be in sound health it is good husbandry for them to undergo a period of acclimatisation before being used in a procedure. The time required depends on several factors, such as the stress to which the animals have been subjected which in turn depends on several factors such as the duration of the transportation and the age of the animal. This time shall be decided by a competent person.

### 3.6. Caging

3.6.1. It is possible to make a distinction between two broad systems of housing animals.

Firstly, there is the system found in breeding, supplying and user establishments in the bio-medical field designed to accommodate animals such as rodents, rabbits, carnivores, birds and non-human primates, sometimes also ruminants, swine and horses. Suggested guidelines for cages, pens, runs and stalls suitable for such facilities are presented in Tables 3 to 13. Supplementary guidance on minimum cage areas is found in Figures 1 to 7. Furthermore, a corresponding guidance for the appraisal of the stocking density in cages is presented in Figures 8 to 22.

Secondly, there is the system frequently found in establishments conducting procedures only on farm or similar large animals. The facilities in such establishments should not be less than those required by current veterinary standards.
3.6.2. Cages and pens should not be made out of material that is deterimental to the health of the animals, and their design should be such that the animals cannot injure themselves and, unless they are disposable, they should be made from a resistant material adapted to cleaning and decontamination techniques. In particular attention should be given to the design of cage and pen floors which should vary according to the species and age of the animals and be designed to facilitate the removal of excreta.
3.6.3. Pens should be designed for the well-being of the species. They should permit the satisfaction of certain ethological needs (for example, the need to climb, hide or shelter temporarily) and be designed for efficient cleaning and freedom from contact with other animals.

### 3.7. Feeding

3.7.1. In the selection, production and preparation of feed, precautions should be taken to avoid chemical, physical and microbiological contamination. The feed should be packed in tight, closed bags, stamped with the production date when appropriate. Packing, transport and storing should also be such as to avoid contamination, deterioration or destruction. Store rooms should be cool, dark, dry and vermin and insect proof. Quickly perishable feed like greens, vegetables, fruit, meat, fish, etc. should be stored in cold rooms, refrigerators or freezers.

All feed hoppers, troughs or other utensils used for feeding should be regularly cleaned and if necessary sterilised. If moist feed is used or if the feed is easily contaminated with water, urine, etc., daily cleaning is necessary.
3.7.2. The feed distribution process may vary according to the species but it should be such as to satisfy the physiological needs of the animal. Provision should be made for each animal to have access to the feed.

### 3.8. Water

3.8.1. Uncontaminated drinking water should always be available to all animals. During transport, it is acceptable to provide water as part of a moist diet. Water is however a vehicle of micro-organisms and the supply should therefore be so arranged that the hazard involved is minimised. Two methods are in common use, bottles and automatic systems.
3.8.2. Bottles are often used with small animals like rodents and rabbits. When bottles are used, they should be made from translucent material in order to enable their contents to be monitored. The design should be wide-mouthed for easy and efficient cleaning and, if plastic material is used, it should not be leachable. Caps, stoppers and pipes should also be sterilisable and easy to clean. All bottles and accessories should be taken to pieces, cleaned and sterilised at appropriate and regular periods. It is preferable that the bottles should be replaced by clean, sterilised ones rather than be refilled in the holding rooms.
3.8.3. Automatic drinking systems should be regularly checked, serviced and flushed to avoid accidents and the spread of infections. If solid-bottom cages are used, care should be taken to minimise the risk of flooding. Regular bacteriological testing of the system is also necessary to monitor the quality of the water.
3.8.4. Water received from public waterworks contains some micro-organisms which are usually considered to be harmless unless one is dealing with microbiologically defined animals. In such cases, the water should be treated. Water supplied by public waterworks is usually chlorinated to reduce the growth of micro-organisms. Such chlorination is not always enough to keep down the growth of certain potential pathogens, as for example Pseudomonas. As an additional measure, the level of chlorine in the water could be increased or the water could be acidified to achieve the desired effect.
3.8.5. In fishes, amphibians and reptiles, tolerance for acidity, chlorine and many other chemicals differs widely from species to species. Therefore provision should be made to adapt the water supply for aquariums and tanks to the needs and tolerance limits of the individual species.
3.9. Bedding

Bedding should be dry, absorbent, non-dusty, non-toxic and free from infectious agents or vermin, or any other form of contamination. Special care should be taken to avoid using sawdust or bedding material derived from wood which has been treated chemically. Certain industrial by-products or waste, such as shredded paper, may be used.
3.10. Exercising and handling
3.10.1.It is advisable to take every possible opportunity to let animals take exercise.
3.10.2 The performance of an animal during a procedure depends very much on its confidence in man, something which has to be developed. The wild or feral animal will probably never become an ideal experimental animal. It is different with the domesticated animal born and raised in contact with man. The confidence once established should however be preserved. It is therefore recommended that frequent contact should be maintained so that the animals become familar with human presence and activity. Where appropriate time should be set aside for talking, handling and grooming. The staff should be sympathetic, gentle and firm when associating with animals.

### 3.11. Cleaning

3.11.1 The standard of a facility depends very much on good hygiene. Clear instructions should be given for the changing of bedding in cages and pens.
3.11.2. Adequate routines for the cleaning, washing, decontamination and, when necessary, sterilisation of cages and accessories, bottles and other equipment should be established. A very high standard of cleanliness and order should also be maintained in holding, washing and storage rooms.
3.11.3. There should be regular cleaning and, where appropriate, renewal of the material forming the ground surface in outdoor pens, cages and runs to avoid them becoming a source of infection and parasite infestation.
3.12. Humane killing of animals
3.12.1. All humane methods of killing animals require expertise which can only be attained by appropriate training.
3.12.2.A deeply unconscious animal can be exsanguinated but drugs which paralyse muscles before unconsciousness occurs, those with curariform effects and electrocution without passage of current through the brain, should not be used without prior anaesthesia.

Carcass disposal should not be allowed until rigor mortis occurs.

Tables and figures relating to Appendix A of the European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes
(Guidelines for accomodation and care of animals)

TABLE 1
Guidelines for room temperature
(animals kept in cages, pens or indoor runs)

| Species or groups of species | Optimal range <br> in ${ }^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Non-human New World primates | $20-28$ |
| Mouse | $20-24$ |
| Rat | $20-24$ |
| Syrian hamster | $20-24$ |
| Gerbil | $20-24$ |
| Guinea pig | $20-24$ |
| Non-Human Old World primates | $20-24$ |
| Quail | $20-24$ |
| Rabbit | $15-21$ |
| Cat | $15-21$ |
| Dog | $15-21$ |
| Ferret | $15-21$ |
| Poultry | $15-21$ |
| Pigeon | $15-21$ |
| Swine | $10-24$ |
| Goat | $10-24$ |
| Sheep | $10-24$ |
| Cattle | $10-24$ |
| Horse | $10-24$ |

Note: In special cases, for example when housing very young or hairless animals, higher room temperatures than those indicated may be required.

TABLE 2

## Guidelines for local quarantine periods

Introductory note: For imported animals, all quarantine periods should be subject to the Parties' national regulations. In regard to local quarantine periods, the period should be determined by a competent peron according to circumstances, normally a veterinarian appointed by the establishment.

| Species | Days |
| :--- | :---: |
| Mouse | $5-15$ |
| Rat | $5-15$ |
| Gerbil | $5-15$ |
| Guinea pig | $5-15$ |
| Syrian hamster | $5-15$ |
| Rabbit | $20-30$ |
| Cat | $20-30$ |
| Dog | $20-30$ |
| Non-human primates | $40-60$ |

TABLE 3
Guidelines for caging small rodents and rabbits
(in stock and during procedures)

|  | Species | Minimum cage floor area $\mathrm{cm}^{2}$ | Minimum cage height cm |
| :---: | :---: | :---: | :---: |
| Mouse |  | 180 | 12 |
| Rat |  | 350 | 14 |
| Syrian hamster |  | 180 | 12 |
| Guinea pig |  | 600 | 18 |
| Rabbit | 1 kg | 1400 | 30 |
|  | 2 kg | 2000 | 30 |
|  | 3 kg | 2500 | 35 |
|  | 4 kg | 3000 | 40 |
|  | 5 kg | 3600 | 40 |

[^0]TABLE 4
Guidelines for caging small rodents in breeding

| Species | Minimum cage floor area <br> for mother and litter <br> $\mathrm{cm}^{2}$ | Minimum cage height <br> Mouse <br> Rat <br> Syrian hamster <br> Guinea pig |
| :--- | :---: | :---: |
| 200 | 12 |  |
| Guinea pig <br> in harems | 800 | 14 |

Note: For definition of "cage height" see note to Table 3.

TABLE 5
Guidelines for caging breeding rabbits

| Weight of doe | Minimum cage floor area <br> per doe and litter <br> $\mathrm{m}^{2}$ | Minimum <br> cage height <br> cm | Minimum <br> nest box floor <br> $\mathrm{m}^{2}$ |
| :---: | :---: | :---: | :---: |
| 1 | 0,30 | 30 | 0,10 |
| 2 | 0,35 | 30 | 0,10 |
| 3 | 0,40 | 35 | 0,12 |
| 4 | 0,45 | 40 | 0,12 |
| 5 | 0,50 | 40 | 0,14 |

Note: For definition of "cage height" see note to Table 3.
The minimum cage floor area per doe and litter includes the area of the nest box floor.
See also Figure 6.

TABLE 6
Guidelines for housing cats
(during procedures and breeding)

| Weight <br> of cat | Minimum cage <br> floor area for cat | Minimum <br> cage height | Minimum cage <br> floor area per <br> queen and litter <br> $\mathrm{m}^{2}$ | Minimum pen <br> floor area per <br> queen and litter <br> $\mathrm{m}^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| $0,5-1$ | $\mathrm{~m}^{2}$ | cm | - | - |
| $1-3$ | 0,2 | 50 | 0,58 | 2 |
| $3-4$ | 0,3 | 50 | 0,58 | 2 |
| $4-5$ | 0,4 | 50 | 0,58 | 2 |

Note: The housing of cats in cages should be strictly limited. Cats confined in this way should be let out for exercising at least once a day, where it does not interfere with the procedure. Cat pens should be equipped with dirt trays, ample shelf room for resting and objects suitable for climbing and claw-trimming.
"Cage height" means the vertical distance between the highest point on the floor and the lowest point in the top of the cage.
For the purpose of calculating the minimum floor area, the shelf area may be included. The minimum cage floor area per queen and litter includes the $0,18 \mathrm{~m}^{2}$ area of the kittening box.

See also Figure 7.

TABLE 7
Guidelines for housing dogs in cages
(during procedures)

| Height of dog <br> to point of shoulder <br> cm | Minimum cage floor area <br> per dog <br> $\mathrm{m}^{2}$ | Minimum height <br> of cage <br> cm |
| :---: | :---: | :---: |
| 30 | 0,75 | 60 |
| 40 | 1,00 | 80 |
| 70 | 1,75 | 140 |

Note: Dogs should not be kept in cages any longer than is absolutely necessary for the purpose of the procedure. Caged dogs should be let out for exercise at least once a day unless it is incompatible with the purpose of the procedure. A time-limit should be set beyond which a dog should not be confined without daily exercise. Exercise areas should be large enough to allow the dog freedom of movement. Grid floors should not be used in dog cages unless the procedure requires it.

In the light of the great differences in height and the limited interdependence of height and weight of various breeds of dogs, the cage height should be based on the body height to the shoulder of the individual animal. As a general rule the minimum cage height should be twice the height to the shoulder.

For definition of "cage height", see note to Table 6.

TABLE 8
Guidelines for housing dogs in pens
(in stock and during procedures and breeding)

| Weight of dog <br> kg | Minimum pen floor area per dog$\mathrm{m}^{2}$ | Minimum adjacent exercise area per dog |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  | $\begin{aligned} & \text { up to } 3 \text { dogs } \\ & \mathrm{m}^{2} \end{aligned}$ | more than 3 dogs $\mathrm{m}^{2}$ |
| <6 | 0,5 | 0,5 (1,0) | 0,5 (1,0) |
| 6-10 | 0,7 | 1,4 (2,1) | 1,2 (2,9) |
| 10-20 | 1,2 | 1,6 (2,8) | 1,4 (2,6) |
| 20-30 | 1,7 | 1,9 (3,6) | 1,6 (3,3) |
| >30 | 2,0 | $2,0 \quad(4,0)$ | 1,8 (3,8) |

Note: Figures in brackets give the total area per dog, that is, the pen floor area plus the adjacent exercise area. Dogs kept permanently outdoors should have access to a sheltered place to find protection against unfavourable weather conditions. Where dogs are housed on grid floors, a solid area should be provided for sleeping. Grid floors should not be used unless the procedure requires it. Partitions between pens should be such as to prevent dogs from injuring each other.

All pens should have adequate drainage.

TABLE 9
Guidelines for caging non-human primates
(in stock and during procedures and breeding)
Introductory note: Because of the wide variations in sizes and characteristics of primates, it is especially important to match the shape and internal fittings as well as the dimensions of their cages to their particular needs. The total volume of the cage is just as important to primates as the floor area. As a general principle, the height of a cage, at least for apes and other simians, should be its greatest dimension. Cages should be high enough at least to allow the animals to stand up erect. The minimum cage height for brachiators should be such as to allow them to swing in full extension from the ceiling without their feet touching the cage floor. Where appropriate, perches should be fitted to allow the primates to use the upper part of the cage.

Compatible primates may be kept two to a cage. Where they cannot be kept in pairs, their cages should be so placed that they can see one another, but it should also be possible to prevent this when required.

Subject to these observations, the following table constitutes a general guideline for caging the groups of species most commonly used (superfamilies Ceboidea and Cercopithecoidea).

| Weight of primate $\mathrm{kg}$ | Minimum cage floor area for one or two animals $\mathrm{m}^{2}$ | Minimum cage height cm |
| :---: | :---: | :---: |
| <1 | 0,25 | 60 |
| 1-3 | 0,35 | 75 |
| 3-5 | 0,50 | 80 |
| 5-7 | 0,70 | 85 |
| 7-9 | 0,90 | 90 |
| 9-15 | 1,10 | 125 |
| 15-25 | 1,50 | 125 |

[^1]TABLE 10
Guidelines for caging pigs
(in stock and during procedures)

| Weight of pig | Minimum cage floor <br> area per pig <br> $\mathrm{m}^{2}$ | Minimum cage height <br> kg |
| :---: | :---: | :---: |
| $5-15$ | 0,35 | cm |
| $15-25$ | 0,55 | 50 |
| $25-40$ | 0,80 | 60 |

Note: The table would also apply to piglets. Pigs should not be kept in cages unless absolutely necessary for the purpose of the procedure and then only for a minimum period of time.

For definition of "cage height" see note to Table 6.

TABLE 11
Guidelines for accommodating farm animals in pens (in stock and during procedures in user establishments)

| Species and weights kg | Minimum pen floor area $\mathrm{m}^{2}$ | Minimum pen length <br> m | Minimum pen partition height m | Minimum pen floor area for groups $\mathrm{m}^{2}$ /animal | Minimum length of feed rack per head m |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pigs 10-30 | 2 | 1,6 | 0,8 | 0,2 | 0,20 |
| 30-50 | 2 | 1,8 | 1,0 | 0,3 | 0,25 |
| 50-100 | 3 | 2,1 | 1,2 | 0,8 | 0,30 |
| 100-150 | 5 | 2,5 | 1,4 | 1,2 | 0,35 |
| >150 | 5 | 2,5 | 1,4 | 2,5 | 0,40 |
| Sheep $<70$ | 1,4 | 1,8 | 1,2 | 0,7 | 0,35 |
| Goats $<70$ | 1,6 | 1,8 | 2,0 | 0,8 | 0,35 |
| Cattle $<60$ | 2,0 | 1,1 | 1,0 | 0,8 | 0,30 |
| 60-100 | 2,2 | 1,8 | 1,0 | 1,0 | 0,30 |
| 100-150 | 2,4 | 1,8 | 1,0 | 1,2 | 0,35 |
| 150-200 | 2,5 | 2,0 | 1,2 | 1,4 | 0,40 |
| 200-400 | 2,6 | 2,2 | 1,4 | 1,6 | 0,55 |
| >400 | 2,8 | 2,2 | 1,4 | 1,8 | 0,65 |
| Adult horses | 13,5 | 4,5 | 1,8 | - | - |

TABLE 12
Guidelines for accommodating farm animals in stalls (in stock and during procedures in user establishments)

| Species and weight <br> kg | Minimum stall area <br> $\mathrm{m}^{2}$ | Minimum stall length <br> m | Minimum stall partition <br> m |
| :---: | :---: | :---: | :---: |
| $\begin{array}{ll} \text { Pigs } & \\ & 100-150 \\ & >150 \end{array}$ | $\begin{aligned} & 1,2 \\ & 2,5 \end{aligned}$ | $\begin{aligned} & 2,0 \\ & 2,5 \end{aligned}$ | $\begin{aligned} & 0,9 \\ & 1,4 \end{aligned}$ |
| Sheep $<70$ | 0,7 | 1,0 | 0,9 |
| Goats $<70$ | 0,8 | 1,0 | 0,9 |
| Cattle  <br>  $60-100$ <br>  $100-150$ <br>  $150-200$ <br>  $200-350$ <br>  $350-500$ <br>  $>500$ | $\begin{aligned} & 0,6 \\ & 0,9 \\ & 1,2 \\ & 1,8 \\ & 2,1 \\ & 2,6 \end{aligned}$ | $\begin{aligned} & 1,0 \\ & 1,4 \\ & 1,6 \\ & 1,8 \\ & 1,9 \\ & 2,2 \end{aligned}$ | $\begin{aligned} & 0,9 \\ & 0,9 \\ & 1,4 \\ & 1,4 \\ & 1,4 \\ & 1,4 \end{aligned}$ |
| Adult horses | 4,0 | 2,5 | 1,6 |

Note: Stalls should be sufficiently wide to allow an animal to lie comfortably.

## TABLE 13

Guidelines for caging birds (in stock and during procedures in user establishments)

| Species and weight <br> g | Minimum area for one bird $\mathrm{cm}^{2}$ | Minimum area for 2 birds $\mathrm{cm}^{2} /$ bird | Minimum area for 3 birds $\mathrm{cm}^{2} /$ bird | Minimum cage height <br> cm | Minimum length of feed trough per bird cm |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chickens |  |  |  |  |  |
| 100-300 | 250 | 200 | 150 | 25 | 3 |
| 300-600 | 500 | 400 | 300 | 35 | 7 |
| 600-1 200 | 1000 | 600 | 450 | 45 | 10 |
| $1200-1800$ | 1200 | 700 | 550 | 45 | 12 |
| 1800-2 400 | 1400 | 850 | 650 | 45 | 12 |
| $\begin{aligned} & \text { (Adult males) } \\ & >2400 \end{aligned}$ | 1800 | 1200 | 1000 | 60 | 15 |
| Quails 120-140 | 350 | 250 | 200 | 15 | 4 |

Note: "Area" means the product of cage length and cage width measured internally and horizontally, NOT the product of the floor length and floor width.

For definition of "cage height" see note to Table 6.

Mesh size in grid floors should not be greater than $10 \times 10 \mathrm{~mm}$ for young chicks, and $25 \times 25 \mathrm{~mm}$ for pullets and adults. The wire thickness should be at the least 2 mm . The sloping gradient should not exceed $14 \%\left(8^{\circ}\right)$. Water troughs should be of the same length as the feed troughs. If nipples or cups are provided, each bird should have access to two. Cages should be fitted with perches and allow birds in single cages to see each other.

FIGURE 1

Mice (in stock and during procedures)
Minimum cage floor area
Given the weight of a mouse, the full-drawn line, EU-EU, gives the minimum area that it should be allocated.


FIGURE 2

Rats (in stock and during procedures)
Minimum cage floor area
Given the weight of a rat, the full-drawn line, EU-EU, gives the minimum area that it should be allocated.


FIGURE 3

Syrian hamsters (in stock and during procedures)
Minimum cage floor area
Given the weight of a Syrian hamster the full-drawn line, EU-EU, gives the minimum area that it should be allocated.


FIGURE 4

Guinea pigs (in stock and during procedures)
Minimum cage floor area

Given the weight of a guinea pig, the full-drawn line, EU-EU, gives the minimum area that it should be allocated.


## FIGURE 5

Rabbits (in stock and during procedures)
Minimum cage floor area
Given the weight of a rabbit, the full-drawn line, EU-EU, gives the minimum area it should be allocated.


FIGURE 6

Rabbits (in breeding)
Minimum cage floor area for doe with unweaned litter
Given the weight of a doe, the full-drawn line, EU-EU, gives the minimum area it should be allocated


## FIGURE 7

Cats (in stock and during procedures)
Minimum cage floor area
Given the weight of a cat, the full-drawn line, EU-EU, gives the minimum area it should be allocated.


Cage floor area $\left(\mathrm{m}^{2}\right)$

## FIGURE 8

Guide to the relationship between number of mice per cage and cage floor area (in stock and during procedures)

The lines represent the average weights and correspond to the line EU-EU in Figure 1


## FIGURE 9

Guide to the relationship between number of rats per cage and cage floor area (in stock and during procedures)

The lines represent the average weights and correspond to the line EU-EU in Figure 2


FIGURE 10
Guide to the relationship between number of hamsters per cage and cage floor area (in stock and during procedures)

The lines represent the average weights and correspond to the line EU-EU in Figure 3


## FIGURE 11

Guide to the relationship between number of guinea pigs per cage and cage floor area (in stock and during procedures)

The lines represent the average weights and correspond to the line EU-EU in Figure 4


Number of guinea pigs
Minimum height of guinea pig cage: 18 cm

Guide to the relationship between number of rabbits per cage and cage floor area (in stock and during procedures)

The lines represent the average weights and correspond to the line EU-EU in Figure 5


Number of rabbits
Minimum height of rabbit cage: see Table 3

## APPENDIX B

## Statistical tables

and
Explanatory notes for their completion in fulfilment of the requirements
in Articles 27 and 28
of the Convention

## Introduction

Under Article 27 and 28 of the Convention, each Party shall collect statistical information relating to certain aspects of procedures coming under the Convention and communicate this information to the Secretary General of the Council of Europe who shall publish the information received.

The method used to collect the information is for each Party to decide and, of course, any additional statistical information may be collected to satisfy national requirements. However, in order to facilitate the work of the Secretary General, the information supplied to him must be comparable and in accordance with the attached tables. Data shall be collected per calendar year.

## General

The animals to be counted are those which will be put to a use which may cause them pain, suffering, distress or lasting harm (see Article 1.2.c of the Convention). The counting shall take place when the animals are put to use in a procedure. Each animal shall be counted once only in the same table. Animals not subject to procedures as defined in Article 1.2.c shall not be counted for the purpose of collecting statistical information in the context of this Convention.

The very nature of biological research makes it inevitable that occasions will arise when it is difficult to decide in which column of a table an animal being used in a procedure should be recorded. There is no right or wrong method of solving the problem, which is one of individual choice. Subject to such directives as the competent authorities may give, it is for the scientist to decide where to record his animal.

## It is, however, essential to ensure that no animal is counted twice in the same table.

Table 1

## The number and kinds of animals used in procedures

In this table the total number of animals used in procedures shall be given, this total being broken down by types or classes of animal.

Table 2

The number of animals used in procedures for selected purposes
This table is intended to show the number of animals used in the broad areas of: fundamental research, development of new products, safety evaluation, diagnosis of disease, and education and training. In column 1, "medical" includes veterinary medicine.

## Table 3

The number of animals used in procedures for selected purposes for the protection of man, animals and the environment by toxicological or other safety evaluations

This table is intended to give a more detailed breakdown of procedures carried out for the general protection of man, animals and the environment excluding medical purposes. Column 6 includes harmful radiation.

## Table 4

The number of animals used in procedures concerned with diseases and disorders
This table is intended to illustrate the number of animals used for medical purposes, including veterinary medicine, with special reference to three areas of human disease which are of particular public concern.

## Table 5

## The number of animals used in procedures required by law

An entry in the column "Party only" shall be made when the procedure is required by the law of the Party in which the procedure takes place, including international obligations into which that Party has entered (for example as a Party to the Convention on the Elaboration of a European Pharmacopoeia or as a member State of the European Communities).

An entry in the column "Other Parties only" shall be made where the aim of the procedure is specifically to meet requirements, including trade requirements, in countries other than the Party, including also requirements of conventions to which the latter is not a party.
"Both" shall be used where the procedure is intended to meet requirements of both groups; in this case no entry shall be made in either of the other two columns.

TABLE 1
The number and kinds of animals used in procedures during (year) in (Party)

| Mice (Mus musculus) |  |
| :--- | :--- |
| Rats (Rattus norvegicus) |  |
| Guinea pigs (Cavia porcellus) |  |
| Other rodents (other Rodentia) |  |
| Rabbits (Oryctolagus cuniculus) |  |
| Apes (Hominoidea) |  |
| Other simians (Cercopithecoidea \& Ceboidea) |  |
| Prosimians (Prosimia) |  |
| Dogs (Canis familiaris) |  |
| Cats (Felis catus) |  |
| Other carnivores (other Carnivora) |  |
| Horses, donkeys and cross-breds (Equidae) |  |
| Pigs (Sus) |  |
| Goats and sheep (Capra \& Ovis) |  |
| Cattle (Bos) |  |
| Other mammals (other Mammalia) |  |
| Birds (Aves) |  |
| Reptiles (Reptilia) |  |
| Amphibians (Amphibia) |  |
| Fish (Pisces) |  |
| Total |  |

TABLE 2
The number of animals used in procedures for selected purposes during (year) in (Party)

| 1 | Biological (including medical) studies of a fundamental nature | All species | Selected species |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rodents and rabbits | Dogs and Cats | Primates |
|  |  |  |  |  |  |
| 2 | Discovery, development and quality control (including safety evaluation) of products or appliances for human and veterinary medicine |  |  |  |  |
| 3 | Diagnosis of disease |  |  |  |  |
| 4 | Protection of man, animals and the environment by toxicological or other safety evaluations |  |  |  |  |
|  | Education and training |  |  |  |  |

TABLE 3
The number of animals used in procedure for selected purposes for the protection of man, animals and the environment by toxicological or other safety evaluations during (year) in (Party)

|  | Further classification of Item 4 of Table 2 | All species | Selected species |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rodents and rabbits | Dogs and Cats | Primates |
| 1 | Substances used or intended to be used mainly in agriculture |  |  |  |  |
| 2 | Substances used or intended to be used mainly in industry |  |  |  |  |
| 3 | Substances used or intended to be used mainly in households |  |  |  |  |
| 4 | Substances used or intended to be used mainly as cosmetics or toiletries |  |  |  |  |
| 5 | Substances used or intended to be used mainly as additives in food for human consumption |  |  |  |  |
| 6 | Potential or actual hazards of contaminants in the general environment |  |  |  |  |

TABLE 4
The number of animals used in procedures concerned with diseases and disorders during (year) in (Party)

|  |  |  | All species | Selected species |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rodents and rabbits | Dogs and Cats | Primates |
|  | 1 | Cancer (excluding evaluations of carcinogenic hazards) |  |  |  |  |  |
|  | 2 | Cardiovascular diseases |  |  |  |  |
|  | 3 | Nervous and mental disorders |  |  |  |  |
|  | 4 | Other human and animal diseases |  |  |  |  |

Note: When a procedure covers cancer under any item from 2 to 4 , the cancer classification should take precedence.

TABLE 5
The number of animals used in procedures required by law during (year) in (Party)

| Party only | All species | Selected species |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Rodents and rabbits | Dogs and Cats | Primates |
|  |  |  |  |  |
| Other Parties only |  |  |  |  |
| Both |  |  |  |  |


[^0]:    Note:
    "Cage height" means the vertical distance between the cage floor and the upper horizontal part of the lid or cage. When designing procedures, consideration should be given to the potential growth of the animals to ensure adequate room according to this table in all phases of the procedures.

[^1]:    Note: For definition of "cage height", see note to Table 6.

