

STANDING COMMITTEE OF THE EUROPEAN CONVENTION FOR THE PROTECTION OF ANIMALS KEPT FOR FARMING PURPOSES (T-AP)

RECOMMENDATION CONCERNING TURKEYS
(*Meleagris gallopavo ssp.*)

adopted by the Standing Committee on 21 June 2001
(In accordance with Article 9 of the Convention, the Recommendation will enter into force on 21 December 2001)

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PREAMBLE

The Standing Committee of the European Convention on the Protection of Animals kept for Farming Purposes,

Having regard to its responsibility under Article 9 of the Convention for the elaboration and adoption of recommendations to the Parties containing detailed provisions for the implementation of the principles set out in Chapter I of the Convention based on scientific knowledge concerning the various species of animals;

Aware also of the established practice in the implementation of the principles of animal welfare set out in Articles 3-7 of the Convention;

Aware that the basic requirements for good welfare including good health of livestock consist of good stockmanship, husbandry methods appropriate to the biological needs of the animals and suitable environmental factors, so that the conditions under which turkeys are kept fulfil the needs for appropriate nutrition and methods of feeding, freedom of movement, physical comfort, social contact; the need to perform normal behaviour in connection with getting up, lying down, resting and sleeping postures, wing-flapping, walking and running, roosting, grooming, eating, drinking, defecating, social interaction, other behaviour such as dust-bathing and egg-laying; the need for protection against adverse climatic conditions, injury, fear and distress, infestation and disease or behavioural disorder; as well as other requirements as may be identified by established practice or scientific knowledge;

Considering that in the light of established experience and scientific knowledge about the biological needs of turkeys, some methods of husbandry at present in commercial use, fail to meet the biological needs and hence result in poor welfare;

Aware that welfare problems arise when birds are overstocked and that

this needs to be addressed as a matter of urgency.

Aware that breeding programmes have already been established that have affected the capacity of birds to perform normal behaviour and concerned that further developments in breeding and biotechnology shall not adversely affect the welfare, including especially the health of turkeys;

Bearing in mind that the environment and management must fulfil the animal's biological needs rather than trying to "adapt" the animals to the environment by procedures such as mutilation;

Considering therefore that strong and continuous efforts have to be made to adapt existing systems and methods of breeding and management as well as to develop new husbandry systems and methods of breeding and management in line with the Convention so that the needs of the animals can be met;

Bearing in mind that it is an obligation of the Committee to reconsider any Recommendation when relevant new knowledge is available and therefore wishing to encourage the continuation of research by all Parties with the object of making optimum use of new techniques to ensure that the needs of turkeys are met and hence that their welfare, including their health, is good;

Has adopted the following Recommendation concerning turkeys:

BIOLOGICAL CHARACTERISTICS OF TURKEYS ▲

a. The domestic turkey is probably descended from the South-Mexican turkey (*Meleagris gallopavo gallopavo*) and domestication started approximately 2500 years ago by North American native peoples. The turkey was introduced to Europe during the sixteenth century and has undergone intensive selection in the last 40 years to produce a fast-growing meat bird. The majority of commercial turkeys are white-feathered, though there are some bronze- and black-feathered breeds.

b. Wild turkeys live in North-America from Pennsylvania to South-Mexico. The seven subspecies are found in a variety of habitats, ranging from forests to plains, and require cover for nesting and trees for roosting and protection from predators. They spend the majority of the daytime on the ground searching for food, fly only in short bursts and are non-migratory, but some subspecies move between breeding and winter areas. Turkeys are omnivorous, feeding on plants, seeds, insects and worms. The body weight of the wild turkey varies markedly from one subspecies to another. There is marked sexual dimorphism in both wild and domestic turkeys. For instance, in the subspecies *Meleagris gallopavo gallopavo*, the average weight of a male is 7,5 kg and of a female is 4 kg. Turkeys are diurnal. Where trees are available most wild turkeys rest at the top of special roost-

trees at night.

c. The social structure of wild turkeys is complex. They form a cohesive social structure and communicate by means of calls, tactile means and visual displays. Within the different groups a linear social hierarchy is established. According to the season males and females form groups and subgroups of different size and function. Male and female turkeys live in large separate flocks out of the breeding season (winter-flocks). In spring these flocks split into small bands of adult males (male-bands) and larger groups of females (display-flocks). As the breeding season approaches, the males establish territories or strutting areas. Females become solitary and move freely from territory to territory. Territorial males attract females by vocalising: gobbling and pulmonary puffs and carrying out elaborate movements and tail-fanning. Where groups of young males associate, they will display in synchrony but only the most dominant will copulate. Additionally, single highly aggressive males may dominate entire local populations. Hens move between territories until they approach a male and invite copulation. They then establish nests but may return to copulate daily until ready to incubate. They lay 8-15 eggs and incubate for 28 days. Females often form 'nesting-groups' (2-5 hens) and breed in the same nest. Hens and poults join together to form larger flocks (brood-flocks) and the poults stay with the hen until they are about 6-7 months old. If mating was not successful females form 'broodless-flocks'. In autumn adult males and females move separately to the winter areas and form new 'winter-flocks'. Juvenile males leave the 'brood-flocks' and establish their own 'winter-flock'.

d. Domestic turkeys, if given the opportunity, will exhibit the same wide range of comfort and grooming activities as their ancestors, including preening, which involves the arrangement, cleaning and general maintenance of the structure of the feathers by the beak or feet; raising and ruffling the feathers; stretching the wings; and dust-bathing.

e. Domestic turkeys have retained most aspects of courtship behaviour.

f. Domestic turkeys have retained the typical feeding pattern of their ancestors, which consists of investigation of the surroundings and pecking, followed by ingestion and covers up to 50% of the whole activity time. The turkey's beak is richly innervated and has a complete array of sensory corpuscles in the area just behind the beak tip. These sense organs are used in investigatory pecking. Domestic turkeys are less active than their ancestors.

g. Domestic turkeys retain many anti-predator responses, such as freezing, alarm-calling, running rapidly away from danger, flying away or at least attempting to take off, and vigorous struggling if caught.

Sudden events, in particular noises, may elicit such responses.

h. Turkeys are often very willing to approach and investigate humans who enter turkey houses.

i. Some heavy domestic turkey strains have difficulty in performing some aspects of the behavioural repertoire, e.g. flying, locomotion, preening, perching and mating, because of their increase in weight and change in body form.

GENERAL PROVISIONS ▲

Article 1

1. This Recommendation shall apply to turkeys (*Meleagris gallopavo ssp.*) kept for the production of meat, for breeding or for any other farming purposes.

2. Special provisions contained in the Appendix to this Recommendation constitute an integral part thereof.

Article 2

When considering husbandry practices, the biological characteristics of the turkey (*Meleagris gallopavo ssp.*) presented under "Biological characteristics" should be borne in mind.

Article 3

No turkey shall be taken from the wild and kept for farming purposes unless it is used only for nucleus breeding programmes.

STOCKMANSHIP AND INSPECTION ▲

Article 4

1. Any person who owns turkeys, or for the time being has turkeys under his or her control (hereafter referred to as "the stockman"), and every person engaged in the keeping of turkeys shall, according to their responsibilities, ensure that every reasonable step is taken to safeguard the welfare, including the health, of all birds.

2. A substantial period of training appropriate to their responsibilities, including practical experience, as well as continued training are considered essential for those engaged in the keeping of turkeys.

3. A system should be considered, whereby a certificate of competence, approved by the competent authorities, can be issued at least to the

stockman.

4. All persons (staff and stockman) shall be trained to act and respond in cases of emergency to safeguard, as far as possible, the welfare of the turkeys.

5. The birds shall be cared for by a sufficient number of persons with adequate knowledge of turkeys and of the husbandry system in use to be able to:

- (a) recognise whether or not the birds are in good health;
- (b) recognise whether the birds can stand and move normally;
- (c) understand the significance of behavioural changes;
- (d) appreciate the suitability of the total environment for the birds' welfare, including their health.

6. Turkeys shall be caught and handled in a careful manner and only by competent trained staff, working under the direct supervision of the stockman and in accordance with Article 20.

Article 5

1. In order to develop a positive relationship between man and bird, there shall be frequent, quiet but close approach from the first few days after hatching so that the birds are not unduly frightened.

2. Young birds shall be given appropriate experience of management practices (e.g. particular feeding and watering systems) and environmental conditions (e.g. natural light, litter) to enable them to adapt to the husbandry systems which they will encounter later in life.

Article 6

Turkeys bred for farming purposes shall not be used to achieve any other goal, including public spectacles or demonstrations, if such use is likely to be detrimental to their welfare, including their health.

Article 7

1. The flock or group of turkeys shall be thoroughly inspected at least twice a day, preferably more frequently, to gain a good indication of flock health and physical condition. Birds in hospital pens must be inspected more frequently. A source of light strong enough for each bird to be seen clearly shall be available for the purpose of this inspection. Such inspections shall be made independently of any checks of automatic surveillance equipment.

2. For the thorough overall inspection of the flock or group of birds, special attention shall be paid to vocalisation, movements, respiration, bodily

condition such as the condition of plumage, eyes, skin, beak, legs, feet and claws; attention shall also be paid to the existence of any injuries, the presence of external parasites, to the condition of droppings, to feed and water consumption, to growth and to egg production. Furthermore, in order to recognise leg problems, the birds shall be encouraged to walk. Individual examination shall be made of those birds for which the overall inspection indicates this to be necessary.

3. Mortality, culling and, if possible, morbidity levels shall be closely monitored and post-mortem examinations shall be carried out as necessary. Records shall be kept of all these results.

Article 8

1. At the inspection it must be borne in mind that the healthy turkey has sounds and activity appropriate to its age, breed or type, clear bright eyes, good posture, clean healthy skin, good plumage, well formed snood, shanks and feet, vigorous movements if unduly disturbed, normal walking and active feeding and drinking behaviour.

2. If the birds are apparently not in good health, have difficulty in walking, are injured or showing signs of behaviour such as feather-pecking, excessive aggression or cannibalism, the stockman must take immediate steps to establish the cause and take remedial action. If the action taken by the stockman is not effective, a veterinarian must be consulted and, if necessary, expert advice must be sought on other technical factors involved. If the cause is traced to an environmental factor within the production unit which it is not essential to remedy immediately this shall be corrected when the accommodation is emptied and before the next batch of turkeys is put in.

3. Injured, sick or distressed birds must be treated without delay and if necessary separated from the rest of the flock in a suitable hospital pen according to Article 11 paragraph 2 unless a veterinarian directs otherwise. However, any bird which is unlikely to survive including birds which are not able to stand or feed or drink, must be culled immediately and not placed in a hospital pen and any bird in a hospital pen which is not showing improvement at inspection must be humanely killed in accordance with Article 25.

4. All units should have a written veterinary health management plan.

ENCLOSURES, BUILDINGS AND EQUIPMENT

Article 9

1. Professional advice on health and welfare aspects should be sought when a new enclosure or accommodation for turkeys is planned or when an

existing enclosure or accommodation is modified.

2. New methods of husbandry and new design of equipment or accommodation for turkeys should be comprehensively and objectively tested from the point of view of welfare, including health, and not be put into commercial use unless found to be satisfactory in accordance with a procedure laid down by the competent authority.

Article 10

When new accommodation for turkeys is planned a suitable site shall be selected taking into consideration the risks from outside environmental factors such as noise, light, vibration, atmospheric pollution and adverse weather conditions and predators. Where appropriate, advantage shall be taken of natural features, such as trees and bushes, to provide shelter from predators and from adverse weather conditions.

Article 11

1. The design, construction and maintenance of enclosures, buildings and equipment for turkeys shall be such that they:

- allow the fulfilment of essential biological needs of turkeys, including the maintenance of good health;
- avoid barren environments;
- permit the birds to be kept in a level of light which does not impair normal behaviour and physiological function;
- do not cause traumatic injuries to the birds;
- limit the risk of disease and disorders manifested by behavioural changes;
- allow, without difficulty, a thorough inspection and facilitate the management of the birds;

- allow for easy maintenance of good conditions of hygiene and air quality and ensure thermal comfort for the birds at all ages, in particular during hot periods to avoid heat stress;
- provide protection from predators and from adverse weather conditions;
- avoid sharp corners, projections and materials which may be harmful to the birds;
- allow the prevention and treatment of infestations of internal and external parasites.

2. An appropriate number of hospital pens shall be available. They must have feeding and watering equipment according to Article 12 paragraph 4 and the stocking density shall be low.

3. Endeavours shall be made to provide turkeys with adequate facilities to allow the expression of the various behaviours described under "Biological

characteristics". In particular, materials and means - e.g. straw bales, perching places - shall be provided which promote activity and exploratory behaviour, reduce injurious behaviour and allow the animals to escape from aggressors.

Article 12

1. Where turkeys are housed, floors shall be of a suitable design and material and not cause discomfort, distress or injury to the birds. The floor shall have an area sufficient to enable all birds to rest simultaneously and be covered with an appropriate bedding material. Perforated floors shall not be allowed but drains are allowed close to drinking facilities.

2. In the case of turkeys kept for breeding, an adequate number of nesting facilities of a suitable design and which protect birds on nests from the entry of other birds shall be available.

3. Turkeys shall not be kept in cages.

4. Feeding and watering equipment shall be designed, constructed, placed, operated and maintained in such a way that:

- it minimises contamination of feed and water and the spillage of water in order to avoid the degradation of the litter under the watertroughs;
- all birds have sufficient access to it to avoid undue competition between individuals;
- it does not cause or result in injury to birds;
- it operates in all weather conditions;
- the consumption of water and where necessary feed, can be monitored.

5. Buildings in which birds are confined shall be constructed and maintained in such a way as to minimise any risk of fire. Materials should be fire resistant or treated with flame retardants; all appropriate measures shall be taken to allow for immediate action in order to protect the animals, e.g. installing an alarm system, providing fire extinguishers. Electric equipment and wiring shall be well maintained.

MANAGEMENT

Article 13

1. When considering the establishment or replacement of a flock, the choice of the strain of bird shall be made with the aim of reducing welfare problems.

2. Injurious pecking between birds may be a significant problem in turkeys. Factors which could be used to help preventing or at least minimising this, include: choice of strain, quality of light, including supplementary ultra-

violet light, visual barriers such as compacted straw bales and other environmental enrichment.

3. The space allowance for birds shall be set taking account of their age, sex, live weight, health and needs to move around freely and to perform normal social behaviour and shall allow the birds to:
- stand with a normal posture,
 - turn around without difficulty,
 - defecate showing normal movements,
 - flap the wings,
 - show normal preening behaviour,
 - perform normal social interactions,
 - carry out normal feeding and drinking movement,
 - run during at least the first five weeks, and
 - escape from aggressors.

The size of the group shall be such that it does not lead to behavioural or other disorders or injuries.

4. Adequate litter shall be provided and maintained in a dry, friable state in order to help the birds to keep themselves clean and to dust bath, to enrich the environment, to reduce abnormal behaviour, and to reduce health problems, in particular foot, leg and breast lesions.

Article 14

1. When turkeys are kept indoors without free access to an outer enclosure, the accommodation shall be kept so that the ambient temperature, the air velocity, the relative humidity, the dust level and other atmospheric conditions do not adversely affect the welfare, especially the health, of the birds. The stocking density of groups shall, when they are set up, take account of ventilation capacities of the buildings in order to maintain adequate temperatures to prevent heat stress, in particular during hot weather. Moreover, appropriate measures, such as cooling of buildings, shall be taken when the weather is exceptionally hot.

2. The ventilation system, and facilities for storing and handling litter and manure shall be designed, maintained and managed to prevent the exposure of birds to adverse levels of gases such as ammonia, hydrogen sulphide, carbon dioxide or carbon monoxide in concentrations which cause discomfort to the birds or which are detrimental to their health.

3. Where the welfare, including the health, of the animals depend on automatic or other mechanical systems of ventilation, an effective alarm system shall be installed and arrangements shall be made to ensure continued adequate ventilation in the event of power equipment failure.

4. On each farm, the list of measures to be taken in case of emergency,

including an evacuation plan for the birds, shall be established, appropriate to the husbandry system used. This list shall be clearly visible. Where buildings need to be locked, arrangements shall be made to allow rapid entry in case of emergency.

5. Under free range conditions a freely accessible shelter must be provided to protect animals from adverse weather conditions. The shelter shall be large enough to contain all birds at the same time and its floor shall be kept dry.

6. In free range systems, where there is a risk of land becoming contaminated with organisms which could prejudice the health of the birds, this risk shall be minimised, for example by using enclosed range areas in rotation.

7. If turkeys are to be driven from one place to another this shall be done quietly and slowly.

Article 15

As far as practicable, the sound level shall be minimised and constant or sudden noise shall be avoided. Ventilation fans, feeding machinery or other equipment shall be constructed, placed, operated and maintained in such a way that they cause the least possible noise, both directly inside the accommodation and indirectly through the structure of the accommodation itself.

Article 16

1. All buildings shall have light levels sufficient to allow all birds to see one another and be seen clearly, to investigate their surroundings visually and to show normal levels of activity. The minimum illumination level shall be 10 Lux at bird eye level, measured as the average in 3 planes at right angles to each other. As far as practicable, natural light shall be provided. In this case, light apertures should be arranged in such a way that light is distributed evenly within the accommodation. Reduction in light level may be used as an emergency measure only if a significant amount of injurious pecking is occurring.

2. The lighting regime shall be such as to prevent health and behavioural problems. Therefore, after conditioning of the poults to the housing system used, it shall follow a 24-hour cycle and include uninterrupted dark and light periods, as a guideline 8 hours, but no less than 4 hours.

3. To avoid injury to the birds, twilight periods should be provided in the dimming and raising of light.

Article 17

1. All turkeys shall have appropriate access to adequate, nutritious, balanced and hygienic feed each day and to adequate supplies of fresh water of good quality at all times. In the case of birds, which have difficulty in feeding or drinking, appropriate measures shall be taken in accordance with Article 8 paragraph 2.
2. Sudden substantial changes in the type or quality of feed and feeding procedures should be avoided except in case of emergency. Methods of feeding and feed additives, which cause injury or distress to the birds, shall not be permitted.
3. The provisions of paragraph 2 shall not apply in the case of therapeutic or prophylactic treatment administered on the instruction of a veterinarian.
4. No substance other than those given for therapeutic or prophylactic purposes shall be administered to an animal unless it has been demonstrated by scientific knowledge or established experience that the effect of the substance is not detrimental to the welfare, including the health, of the animals.
5. The routine use of drugs as part of a management system to compensate for poor hygienic conditions or management practices or to mask signs of poor welfare, such as pain or distress, shall not be allowed.

Article 18

1. All automatic or other mechanical equipment upon which birds depend for their welfare to be good must be thoroughly checked at least once daily. Where defects are discovered these must be rectified immediately, or, if this is impracticable, other appropriate steps taken to safeguard the welfare of the poultry until the defect can be rectified.
2. Records should be made of the stocking density, feed and water consumption, daily maximum and minimum temperatures, equipment, alarm and fire extinguisher checks and of any other maintenance carried out.

Article 19

If artificial insemination is undertaken, it shall be carried out with particular care and only by competent, trained staff, who shall use only those turkeys, which are in good physical condition.

Article 20

1. Collection times shall be co-ordinated with the planned time of slaughter

at the slaughterhouse in order to limit the time birds are held in transport containers.

2. Turkeys shall have access to water up to the point of loading.
3. Before de-populating enclosures or houses, potentially injurious fixtures and fittings must be removed. Particular care shall be taken when moving birds within or from an enclosure or house to ensure that no bird is injured by the equipment or the handling process. Where possible, handling shall be reduced to a minimum.
4. Care must be taken in catching birds in order to avoid panic and subsequent injury to and smothering of the birds.
5. When turkeys are caught or carried, vigorous struggling may occur and care shall be taken to avoid heads or wings hitting solid objects particularly when they are passed through the openings of containers which should always be large enough for the birds to be put into them without causing injury or unnecessary stress. Only transport containers with large openings shall be used.

Turkey shall not be lifted by a single leg only. When turkeys are carried, they shall be carried individually, using techniques appropriate to the size and weight of the birds. Small birds should either be held by both legs or be supported between the catcher's arm and body. Larger birds should be carried by one leg and the diagonally opposite wing. They shall be carried with their heads upwards except for short periods whilst they are picked up. The birds shall not be swung into or dropped into containers.

6. Unfit birds, even if they have reached slaughter weight, must not be sent for slaughter. Any bird which is unable to stand on both legs shall not be transported but must be humanely killed on the farm in accordance with the provisions of Article 25.
7. The distance birds are carried or have to walk shall be minimised, for example by bringing transport containers as close to the birds as possible, or using conveyors.
8. The containers shall not be overstocked and must be well ventilated. During the time the birds are held in the containers, they shall be protected from bad weather and excessively hot or cold conditions.

Article 21

1. Those parts of the accommodation with which turkeys come into contact shall be thoroughly cleaned and disinfected, every time the accommodation has been emptied and before new birds are brought in. Accommodation, enclosures, and all equipment, including facilities for providing water, shall

be kept satisfactorily clean as long as animals are present.

2. Any dead bird must be removed promptly from the flock.

Article 22

When there is a risk of attack by predators, measures shall be taken to minimise the risk in accordance with domestic law and other legal instruments for the protection of animals or for the conservation of threatened species.

CHANGES OF GENOTYPE ▲

Article 23

1. Breeding or breeding programmes, which cause or are likely to cause suffering or harm to parent birds or their offspring shall not be practised. In particular, strains of birds whose genotype has been modified for production purposes shall not be kept under commercial farm conditions unless it has been demonstrated by scientific studies that the birds can be kept under such conditions without detrimental effects on their welfare, including their health and aspects of behaviour.

2. In breeding programmes, at least as much attention shall be paid to criteria conducive to the improvement of birds' welfare, including their health as to production criteria. Therefore, the conservation or development of breeds or strains of animals, which would limit or reduce animal welfare problems connected with, for instance, aggressiveness, feather pecking, mating or locomotory disorders shall be encouraged.

CHANGES OF PHENOTYPE ▲

Article 24

1. For the purposes of this Recommendation, "mutilation" means a procedure carried out other than for therapeutic purposes and resulting in damage to or loss of a sensitive part of the body or alteration of bone structure.

2. The mutilation of turkeys shall be generally prohibited; measures shall be taken to avoid the need for such procedures by changing inappropriate environmental factors or management systems, by enriching the environment and by selecting appropriate breeds and strains of birds.

If these measures are not sufficient to prevent injurious pecking, exceptions to this general prohibition may be made by the competent authority only in respect of:

- the removal of at most a third of the upper mandible, measured from the tip of the beak to the nostrils, or the trimming of the tips of both mandibles within the first 10 days of life;

- and beak trimming after 10 days of life, which shall only be performed in circumstances of veterinary need and then only by a veterinarian or under veterinary supervision when permitted by national legislation.

During the beak trimming procedure, birds shall be handled manually with care. In any case the birds shall be able to feed normally and the method used shall be such that it minimises the risk of re-growth and damage to living tissue.

3. Birds which have their beak trimmed shall be kept in substantially brighter lighting conditions.

4. Those who carry out mutilations shall be properly trained and competent, in particular to avoid overtrimming of the beak. Inspections, to ensure that overtrimming does not occur, shall be considered by the competent authority.

5. Exceptions to the general prohibition of mutilation made in accordance with paragraph 2 shall be reviewed regularly by each Party involved to determine whether or not they shall be maintained. The Standing Committee shall be informed regularly of the improvement made in this respect.

EMERGENCY KILLING ▲

Article 25

1. If turkeys are ill or injured to such an extent that treatment is no longer feasible and transport would cause additional suffering, they must be killed on the farm. This must be done without causing undue pain, agitation or other forms of distress and without delay by a person experienced in the techniques of killing unless in case of emergency when such a person is not immediately available.

2. The methods used shall either:

a. cause immediate loss of consciousness and death, or

b. rapidly render the animal insensible to pain and distress, until death supervenes, or

c. cause the death of an animal which is anaesthetised or effectively stunned.

Drowning and suffocation shall not be permitted.

Methods which may be used for killing unwanted poults and embryos in hatcheries are presented in the Appendix.

3. The person responsible for the killing shall ensure that for each bird the requirements of paragraph 2 are fulfilled and that the animal is dead.

RESEARCH ▲

Article 26

Contracting Parties shall encourage research on the developments of:

- husbandry systems which respect the biological needs of turkeys. Studies should in particular examine the interrelationships of group size, stocking density, light intensity, pattern and quality, and environmental enrichment, as well as the impacts of these factors on the welfare of the animals;
- improved systems for handling large numbers of birds and heavy strains,
- methods of improving skeletal and tendon strength and cardiac/pulmonary efficiency relative to high daily liveweight gain.

SUPPLEMENTARY PROVISION ▲

Article 27

This Recommendation shall be reviewed within 5 years of coming into force, and, if appropriate, amended in particular according to any new scientific knowledge, which becomes available, or practical experience acquired.

APPENDIX: KILLING OF UNWANTED POULTS AND EMBRYOS IN HATCHERIES ▲

1. Poults, which are not intended for rearing, shall be killed as soon as possible and in any case before they are 24 hours old.
2. Poults should be killed by using a specially designed apparatus approved for this purpose in accordance with national legislation and operated in such a way as to ensure that, during its operation, all poults are killed immediately even if they are handled in large numbers.
3. Only gases or gas mixtures, which do not induce respiratory distress to the birds during induction, may be used. The procedure shall be in

accordance with Article 25 and approved under national legislation.

Measures shall be taken to ensure rapid death and to avoid suffocation under other birds by putting birds in a single layer and monitoring gas concentrations.

4. To kill any living embryos instantaneously, all hatchery waste shall be treated without delay using a mechanical apparatus or any living embryo must be killed without delay in accordance with Article 25.
