Who we are

Understanding Animal Research (UAR) is a not-for-profit which seeks to explain how animals are used in scientific research. It is a membership organisation representing research councils, Learned Societies, charities, industry, universities and government agencies.

Definitions within the Bill

The draft Bill does not explicitly define a number of terms, such as:

- ‘sentience’
- ‘animal’
- ‘welfare needs of animals’

Do you consider definitions are required for these terms and, if you do so, what definitions should be used?

It will be vital to ensure that the terms in the Bill are defined so that there is legal clarity for all those involved both in the use of animals and the regulation thereof.

Sentience

‘Sentience’ needs specific definition because in common parlance the word can mean anything between the two extremes of (a) the ability to respond to a stimulus and (b) full consciousness of the world around the individual. It is a core biological property that animals have a mechanism to avoid damage to themselves, but just as humans will reflexively withdraw a hand from a hot pan before damage triggers conscious pain, so all animals will avoid certain types of environment. A mosquito flying off when we try to hit it displays escape behaviour but that does not imply an ability to suffer, or that it is taking a conscious decision. Similarly, in robotics machines may respond to a stimulus, but this does not imply sentience. The human reaction to being tickled shows clearly that even an overt escape response does not necessarily indicate suffering. We would suggest that for the purposes of this legislation sentience should be defined along the lines of:

Sentience: the ability of an animal not only to attempt to escape from an adverse environment, but also to learn to take informed decisions based on its environment and, if treated adversely, to demonstrate adverse physiological changes and behavioural suffering.

Animal

‘Animal’ needs specific definition because most species defined biologically as ‘animal’ (the kingdom Animalia) are not sentient (as defined above). The consultation on the Draft Bill uses one definition of an animal from the Oxford English Dictionary that approximates the scope of Animalia. Under this definition, corals are classified as animals along with fruit flies and earthworms. It would be practically and legally problematic to grant mosquitoes and intestinal parasites legal protection equivalent to a dog, cat or chimpanzee. Humans are also members of Animalia but need to be excluded from the definition.
The Animal Welfare Act acknowledges that the only demonstrably sentient animals are vertebrates, and a similar definition would be both logical and legally helpful here. During the development of EU/2010/63 multiple expert groups worked with the European Commission over 10 years to closely define which animals should be protected through regulation. After reviewing the best available evidence scientists and welfare groups concluded that vertebrates and cephalopods may be considered sentient and justify protection. These animals are currently protected species under the Animals (Scientific Procedures) Act 1986 (2012).

There are unresolved practical difficulties associated with the inclusion of cephalopods in the definition of ‘animal’. There may be unforeseen consequences of protecting the microscopic larval forms of these animals, which cannot possibly be sentient, and which are likely to exist in every bucket of seawater. Scientific evidence suggests the adult forms of these animals have the capacity for sentience, intelligence and therefore the ability to experience suffering.

We would therefore suggest that for the purposes of this legislation animal sentience should be defined along the lines of:

Animal:  All vertebrates and any other species of the kingdom Animalia demonstrated to be sentient (as defined above).

This would permit the addition of other species should subsequent research indicate so-far undetected sentience.

Animal welfare

The concept of animal suffering (and its amelioration) only has relevance in relation to those animals displaying sentience, in particular the ability to exhibit distress through a combination of adverse physiological and behavioural (‘psychological’) changes. If such adverse changes can be ameliorated by providing conditions of less adverse challenge, then that animal’s welfare can be said to have improved.

Since animal welfare is a discipline in itself, with multiple aspects and competing ideas the rich literature on animal welfare is diverse in its conclusions. Consensus opinion in animal welfare supports several current pieces of legislation, but as our knowledge of animals and their behaviours grows the scientific view changes, and it is important that legislation recognises and allows for this.

A safe and simple tenet is that of the ‘Five Freedoms’ (from hunger/thirst, discomfort, pain, fear and restriction of normal behaviour) developed in the 1960s by the UK’s Farm Animal Welfare Committee. However, this concept only makes sense in terms of those animals under human control, as applied under the Animal Welfare Act; it is neither sensible nor helpful to pretend that it can be applied to all sentient animals living outside human control (i.e. in the wild). Under current legislation the Animals (Scientific Procedures) Act (ASPA) enables licensed individuals to operate outside the Animal Welfare Act. It allows that the Five Freedoms will not always be met in particular circumstances of benefit to society and grants licences that exclude that work from the Animal Welfare Act. It is essential to the scientific community, and to potential medical progress, that any new animal welfare legislation does not conflict with, but supports ASPA.
Sentient species may have to be killed, (for example) for food, to limit human or animal disease, or to terminate the animal's suffering. In all such cases killing should be performed as humanely as current scientific understanding and any practical limitations allow. In most situations (such as in agriculture or scientific research) there is guidance on humane killing, and the new legislation should require the adoption of such standards as are already included in various types of legislation, or the best approximation to those where there is no current legislation.

We would therefore suggest that for the purposes of this legislation animal welfare needs should be defined along the lines of:

Animal Welfare Needs: The requirement to provide the Five Freedoms for all animals held under human control, whether permanently or transiently, excepting those already governed by existing animal welfare legislation; and to kill all animals humanely according to, or equivalent to, current legislation and government guidance.

The consultation also requests advice on four other components of the draft bill:

- Policy Scope
- Whether the phrase ‘Should have regard’ is appropriate
- The overall approach
- The proposed increase in maximum sentence length for breaches of the animal welfare act from 6 months to 5 years

**Policy Scope**

Article 13 of the Lisbon Treaty restricts the requirement to consider sentience to various specific sectors, whereas the Draft Bill proposes to extend this consideration to all areas of policy. This would have far-reaching and unforeseen consequences, not improving animal welfare but seriously restricting many forms of human-animal interaction. In particular it is vital that any new legislation takes full account of, and is compatible with, existing legislation, formally replacing it if necessary. Given the multiplicity of such legislation across scientific research, agriculture and wildlife and variations between the devolved nations, this will not be a simple matter.

The scope for serious unintended consequences is considerable. That is particularly the case should the definition of 'animal' and 'sentience' used in this legislation not be made explicit, or diverge from other legislation (see above). Were that to occur, non-sentient animals would be caught in the legislation to an unpredictable degree only clarified retrospectively in the courts, which could be seriously damaging to the entire animal-using sector (domestic, agricultural and scientific) and as a consequence to human and animal health and well-being.

**The phrase ‘Should have regard’**

This is outside the scope of UAR’s expertise and we have no comments.

**Overall approach**
Animal sentience and welfare are areas of considerable public interest and scrutiny, relevant to many different sectors. The welfare of farm, pet, laboratory and wild animals is of great public concern, but the extent of the existing regulations that protect these animals are poorly understood by the public as a whole. The new bill provides an opportunity to ensure that there are no gaps, but care should be taken to avoid unexpected consequences of broad policies or the misinterpretation of animal behaviours. The often-held assumption that escape reactions indicate sentience is an example of common mis-judgements. As already emphasised above, we are concerned that the application of this new legislation to insentient non-vertebrate animals would be seriously damaging for people, the environment and even the species in question. In particular it would hamper scientific research on those species, whether that research is intended to limit human and animal disease (e.g. controlling malaria or intestinal parasites) or to understand and benefit the species being investigated (e.g. environmental research on wild animals).

**Increase in maximum prison sentences**

UAR has no explicit views on the specific examples quoted in the Bill, but has concerns that inappropriate definitions (as discussed above) could render scientists undertaking valid and important research liable to inappropriate prosecution and sentencing.

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