

Written evidence submitted by Dr Steven McCulloch (AWB0041)

EFRA Committee inquiry: Animal Welfare (Sentience) Bill 2021

Submission by Dr. Steven P. McCulloch MRVCS

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Executive summary

The introduction of the Animal Welfare (Sentience) Bill is a welcome move by DEFRA to replace Article 13 of the Treaty of Lisbon and strengthen sentience policy after the UK has left the EU. Both Article 13 and the Animal Welfare (Sentience) Bill make provision to pay regard to animal welfare in the formulation and implementation of Government policy. In governance terms, paying regard (either 'full' or 'all due') to animal welfare means i) animal welfare impact assessments, and ii) ethical review of policy options (weighing impacts on humans and sentient animals). Animal welfare impact assessments could be conducted either within Government or in the Animal Sentience Committee (ASC), or both.

The ASC should provide expert input and scrutiny on positive as well as negative impacts of policy, in all policy areas that significantly impact sentient animals. The ASC should have three functions: a) conducting impact assessments, b) conducting ethical review (weighing the impact of policy options), and c) scrutiny of Government implementation of sentience legislation (i.e., to what extent it pays 'all due regard' to animal welfare). To fulfil these roles, the ASC must be genuinely independent from Government and have the requisite expertise in animal welfare, ethics, policy and law. The Chair should be appointed by either Parliament or DEFRA. The Chair should appoint remaining members, who should be selected by open advertisement and on the basis of expertise in sentience and welfare policy. The ASC should be adequately resourced with a full time Chair, a secretariat, and 15-20 expert members.

Clause 1 of the Bill, which establishes the ASC, should be amended to make provision for an Animal Sentience Strategy. The Animal Sentience Strategy provides a framework for the ASC to fulfil its advisory and scrutiny role. The Government should publish an Animal Sentience Strategy at the beginning of each Parliamentary session. The Strategy will communicate information on policy areas that the Government envisages will have impacts on sentient animals. The Strategy enables the ASC to conduct prospective animal welfare impact assessments and ethical review. It facilitates a constructive dialogue between the ASC, Government and Parliament, to mitigate adverse impacts on animal welfare, as well as promote positive impacts.

Scrutiny of the Bill and the role and composition of the ASC can be informed by similar public bodies. These include the Scottish Animal Welfare Commission (SAWC), the New Zealand Animal Welfare Advisory Committee, (NAWAC), the Netherlands Council on Animal Affairs, and the Nuffield Council on Bioethics. Based on a review of these, the ASC should be an independent statutory body, it should have a minimum of 15-20 members with expertise in animal welfare, ethics, policy and law,

and its responsibilities should include assessing impacts of Government policy and scrutinising Government policy that impacts sentient species.

Clause 5 of the Bill restricts the scope of sentience legislation to vertebrate animals other than *homo sapiens*, and includes subsection (2) provides for the Secretary of State to amend the meaning of ‘animal’ for the purposes of the Act, to include invertebrates of any description. If DEFRA continues with this approach to define ‘animal’ and limit the scope of the bill, it should include cephalopods (e.g., octopus and squid) and decapod crustaceans (e.g., lobsters and crabs) at the outset. There is sufficient evidence that such invertebrates are sentient, which to varying degrees are already recognised in other UK legislation. However, DEFRA should also consider defining ‘sentience’ in the Bill, and not ‘animal’, and leaving consideration of which species are sentient to the ASC, which as a body composed of experts on animal sentience and welfare impacts is better placed for this role.

Introduction

This introduction provides the rationale for sentience legislation, explains what paying ‘all due regard’ to animal welfare means in governance terms, and based on this provides a list of policy objectives to inform scrutiny of the Animal Welfare (Sentience) Bill. The response to EFRA Committee questions 1-5 is found after this introduction on page 5-12.

Why sentience legislation?

As a member of the EU, the UK was bound by Article 13 of the Treaty on the Functioning of the EU (‘The Lisbon Treaty’):

In formulating and implementing the Union's agriculture, fisheries, transport, internal market, research and technological development and space policies, the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the EU countries relating in particular to religious rites, cultural traditions and regional heritage¹.

Indeed, the UK played a key role lobbying for the recognition of animal sentience and the development of Article 13 in the EU. Article 13 makes a declarative statement that animals are sentient beings. It then states that, because animals are sentient beings, the EU (institutions) and member states (formerly the UK), must ‘pay full regard’ to the welfare requirements of animals².

What does paying ‘full regard’ or ‘all due regard’ mean in sentience policy?

The UK Animal Welfare (Sentience) Bill has been introduced to replace and strengthen Article 13, outside of the EU. In either the original Article 13 formulation (‘pay full regard’) or the UK Animal Welfare (Sentience) Bill formulation (‘pay all due regard’) it is important to unpack what this means,

¹ Article 13 puts consideration of animal welfare on an equal footing with other key principles, including the promotion of gender equality, the guarantee of social protection, and the protection of human health.

² A criticism of the Animal Welfare (Sentience) Bill during the Second Reading in the Lords related to the necessity for the legislation, since the UK is an established leader in animal welfare (e.g., some Lords cited various laws from the Cruelty to Cattle Act 1822 through to the Animal Welfare Act 2006). These criticisms appear to misunderstand the rationale for the Bill. Government have enormous resources and power to impact, positively and negatively, the lives of sentient animals. Such impacts can occur directly (i.e., in what we might consider as animal health and welfare policy areas), and indirectly (e.g., in planning or trade policy). The UK Government has never had a formal process to pay regard to animal welfare during policy making. Brexit, and the public and media focus related to losing Article 13 and sentience legislation, has highlighted this. In this way, the Bill fulfils the Government’s various official policy statements (e.g., in the 2019 General Election Conservative [Manifesto](#)) to replace Article 13 and strengthen sentience policy in the UK post-Brexit.

for the benefit of scrutinising the Bill and developing sound legislation that meets policy objectives related to it. In effect, paying ‘all due regard’ to animal welfare in policy making entails two related processes:

- I. Animal welfare impact assessment, and
- II. Ethical review of policy options (weighing impacts on human society and sentient animals)

Animal welfare impact assessment

To pay any level of regard to animal welfare, the Government must have a means to assess how policy impacts sentient species. Governments ordinarily use impact assessments to assess how policy might affect various sectors of society or the living environment. The Government uses regulatory impact assessment³ to assess the monetary costs and benefits of policy. Environmental impact assessment (EIA) is conducted for policy that might have a significant impact on the environment⁴.

The first part of the implementation of sentience legislation, therefore, means that Government policy must be informed by some kind of impact assessment for sentient animals. Following on from the well-established practice of Environmental Impact Assessment, we can call this first stage of fulfilling sentience legislation Animal Welfare Impact Assessment (AWIA)⁵. AWIA might be conducted either in central Government, or through one of its agencies, or in the newly established Animal Sentience Committee (ASC), or in a combination of these.

Given that the overall quality of lives of sentient animals is a function of both the positive as well as the negative states of wellbeing or welfare⁶, the impact assessments should also include consideration of both positive and negative impacts of Government policy⁷. Animal welfare impact assessments should be used *prospectively* to assess the positive and negative impacts of policy options, to inform the political decision-making process. Estimates of impacts can be made based on numbers of sentient animals affected, the intensity/severity⁸ of the impact, and duration of the impact.

Ethical review

³ Regulatory impact assessment promotes cost effective policy making. However, it is also concerned with the distribution of resources (money) for economic agents (people). The Government has also used other impact assessment methods, such as health impact assessment and equality impact assessment, to measure impacts on human society. See <https://www.gov.uk/government/collections/impact-assessments-guidance-for-government-departments>

⁴ ‘The aim of Environmental Impact Assessment is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process’. <https://www.gov.uk/guidance/environmental-impact-assessment>

⁵ E.g., see McCulloch S.P. and Reiss M.J., (2017), The Development of an Animal Welfare Impact Assessment (AWIA) Tool and Its Application to Bovine Tuberculosis and Badger Control in England: <https://link.springer.com/article/10.1007/s10806-017-9684-5>

⁶ This is true also for humans.

⁷ The inclusion of a duty to assess *positive* impacts of Government policy, either by the ASC or by Government itself, on sentient species does not lead to problematic consequences. It is widely accepted that agents (whether individuals or the Government) have a greater duty to avoid harming others, and so the priority remains on avoiding and reducing negative impacts. Furthermore, the inclusion of consideration of positive impacts benefits policy makers, since the Government, the ASC, and stakeholders can work to mitigate negative impacts of policy by promoting positive impacts (i.e., benefiting target species and ameliorating criticism of policy that has negative impact).

⁸ The term ‘severity’ is only applicable to negative impacts.

The second part of the process of fulfilling the duty to pay ‘all due regard’ to animal welfare relates to how Government policy has differential impacts on various sections of society and other groups. Impact assessments are necessary to provide empirical information on how Government policy affects sentient animals. But they do not provide any information about weighing the interests of humans and sentient animals⁹. So, the second part of fulfilling sentience obligations and paying all due regard to animal welfare is an ethical review process¹⁰.

The need for such a process has been recognised both in the UK and elsewhere. In the UK, the Nuffield Council of Bioethics is a world leader on the ethical review of issues in medical ethics and bioethics generally. In the Netherlands, the Council on Animal Affairs conducts ethical appraisal of Government policy impacting sentient animals. Again, it is not possible to pay ‘full regard’ (Article 13) or ‘all due regard’ (UK Animal Welfare (Sentience) Bill), unless one is considering in a meaningful way how the positive and negative impacts of Government policy are affecting different groups, both human society, sentient animals and in some cases the living environment.

Ministers, Governments and Parliaments are decision makers

Sentience policy, including impact assessment and ethical review, does not *determine* policy. They are best considered as a necessary part of evidence-based policy making. I.e. it is not possible to do evidence-based policy making and account for the interests of sentient species (‘pay all due regard’) without conducting these processes, either within or external to Government. Sentience policy *informs* political decision making. But it remains for the Government, represented by ministers, and Parliament, as the democratically elected decision makers, to make policy. Sentience policy, as outlined in the Bill, essentially fulfils the requirement to pay all due regard to animal welfare in policy making, which must be a baseline standard for any global leader in animal welfare, as the UK Government claims to be.

The Sentience Bill: Policy objectives

Based on these considerations, the following policy objectives can be used to inform Parliamentary scrutiny of the Bill in order to develop sound legislation that protects sentient animals and mitigate Government concerns, e.g. related to judicial review:

1. The Animal Welfare (Sentience) Bill replaces Article 13 of the Treaty of Lisbon and strengthens sentience policy
2. The Bill provides scope to cover all sentient animals within all conventional animal categories (farmed, companion, research, wild, entertainment)
3. The Bill provides scope to cover policy of all Government departments (preferably including Government agencies)
4. The Bill covers all species/biological categories of sentient animals
5. The Bill provides for structures and processes to effectively implement sentience legislation, including animal welfare impact assessment and ethical review
6. The Bill makes provision to conduct animal welfare impact assessment by recognised experts in the field
7. The Bill provides for an independent body to conduct ethical review by recognised experts in the field

⁹ Or indeed weighing the interests of some species of sentient animals against other species of sentient animals.

¹⁰ E.g., see McCulloch S.P. and Reiss M.J., (2018), A Proposal for A UK Ethics Council for Animal Policy: The Case for Putting Ethics Back Into Policy Making: <https://www.mdpi.com/2076-2615/8/6/88>

8. The Bill provides a mechanism or framework whereby the independent body can effectively scrutinise Government policy that impacts sentient species.

1. Will the Animal Welfare (Sentience) Bill ensure that animal sentience is properly taken into account in both new and existing Government policy in England?

DEFRA should be congratulated for introducing the Animal Welfare (Sentience) Bill. The Bill aims to fulfil the Government's commitment to replace and strengthen Article 13 of the Treaty of Lisbon¹¹. The Bill aims to make provision for sentience legislation, to recognise the substantial public concern about the recognition that animals are sentient beings and the commitment to pay due regard to animals in policy making.

The Bill is in some ways an improvement on Article 13. Improvements include extending the scope of application to all policy areas. Given that all policy areas have the potential to impact sentient animals, it would be arbitrary to exempt particular areas¹². Furthermore, the Bill aims to provide a mechanism, in the form of the ASC, to implement sentience legislation. Continuing with comparing the Bill to Article 13, the restriction of 'animal' in clause 5 weakens obligations. It means that animal sentience would not properly be taken account by omitting considerations of some species (see response to Q5).

A further concern about the Bill is that it appears to outsource responsibility for sentience legislation to the ASC. Within Clause 1 of the Bill, there is a direct duty on the DEFRA Secretary of State to establish and maintain the ASC. In Clause 3, there is a second direct duty for the DEFRA Secretary of State to lay a response to a report produced by the ASC within three months of publication. Following the discussion in the Introduction to this submission, the key policy objective is that the ASC and/or Government must prospectively assess policy impacts on sentient animals. The following Animal Sentience Strategy is proposed to facilitate fulfilling this policy objective.

Animal Sentience Strategy

The Bill should make provision for an Animal Sentience Strategy, for instance in Clause 1 of the Bill. The Animal Sentience Strategy should be published by DEFRA at the start of each Parliamentary session. The Strategy would include the policy issues that the Government foresaw would have a significant positive or negative impact on sentient animals. The Animal Sentience Strategy would provide a framework to bring together the roles of the Government¹³, Parliament, and the ASC.

¹¹ E.g., In *Our Action Plan for Animal Welfare* (2021), DEFRA states 'At the heart of our reform programme is our commitment to recognise in law the sentience of animals... Explicitly recognising and enshrining animals as sentient beings in law will be at the very heart of central government decision making going forward... We will make sure government ministers are held accountable to Parliament for the way they take animal welfare into account when making policy decisions. This includes creating an Animal Sentience Committee to look at and report on government decisions.' See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/985332/Action_Plan_for_Animal_Welfare.pdf

¹² Concerns voiced in the Second Reading in the Lords about the scope of the Bill, and amendments aimed at limiting the scope, arguably misunderstand the purpose of the Bill and the powers of the ASC. The ASC provides expert advice and scrutinises Government policy on sentience policy, i.e., all policy that impacts sentient animals. However, it remains the decision of the minister, Government, and Parliament to make decisions on policy. Thus, the Bill and the ASC does not outsource decision making, but makes provision for a public body to provide expert input and scrutiny about policy making in a complex and contested area.

¹³ Led by DEFRA.

What is imperative for sentience policy is that the Bill provides for a mechanism whereby the Government *prospectively* advises the ASC on policy which may have a significant impact on sentient animals, early in the policy cycle, and prior to decision making taking place. Related to this, it is also necessary, as stated above, for either the Government, or the ASC, or both, to assess the impact of policy options on sentient animals prior to policy formulation and implementation. This element is necessary for the UK Government to genuinely pay ‘all due regard’ to animal welfare, i.e., be consistent with the overriding statement and purpose of the Bill.

What is ultimately envisaged is a cooperative relationship between the ASC, Government, and Parliament, which utilises the expertise of the ASC (and possibly within central Government, e.g., conducting impact assessments) to implement sentience legislation as an ongoing process involving both an advisory and a scrutiny element.

Overall, the Bill should be welcomed as a positive development to replace and strengthen Article 13, outside of the EU. However, the Bill requires amending to ensure there is a framework, for instance established by an annually published Animal Sentience Strategy, to permit the ASC, the Government and Parliament to collectively fulfil their respective roles such that policy formulation and implementation pays all due regard to animal welfare.

2. Are there sufficient safeguards to ensure that the proposed Animal Sentience Committee will be (a) independent (b) have the necessary expertise and (c) have the necessary powers to be effective?

The Bill is very sparse on detail about the ASC. Clause 1 subsection 1 makes provision for the Secretary of State to establish and maintain the ASC. Subsection 2 states that the ASC members should be appointed by the Secretary of State. Subsection 3 states that the terms of the appointment are at the discretion of the Secretary of State.

To be effective, the ASC will need to be a) independent, b) a genuine expert body, and c) have the necessary powers to scrutinise Government policy.

Independence

In terms of independence, members should be selected by open appointment and based on expertise. Ideally, the Chair would be appointed by a Parliamentary body independent of Government, and then the members appointed based on merit by the Chair. Members should be appointed as individuals based on their expertise in animal welfare, ethics, and policy/law, and not as representatives of stakeholder organisations¹⁴.

Expertise

The ASC will principally have three functions:

- a) Conduct animal welfare impact assessments¹⁵
- b) Conduct ethical review of policy objectives and options
- c) Scrutinise Government sentience policy (i.e., how Government policy impacts sentient species)

¹⁴ There is significant animal welfare expertise in animal protection NGOs, as well as in academia and the veterinary profession.

¹⁵ Animal welfare impact assessment might also be conducted by Government departments, e.g., DEFRA, or by Government agencies, e.g., APHA.

The expertise required on the committee tracks these three ASC functions. They include therefore:

- i) Expertise relating to how policy impacts welfare (i.e., assessing/measuring impacts of policy/interventions/environments/actions) on sentient species,
- ii) Expertise relating to ethical analysis (i.e., the ethical appraisal of policy)
- iii) Expertise in governance, policy and law that relates to animal protection.

Given the major public interest in sentience policy and the complexities of communication in animal welfare, incorporating considerations relating to welfare, ethics, uncertainty and risk, the ASC would also benefit from expertise in the public understanding and/or communication of science.

Powers

The Bill outlines the role of the ASC in Clause 2. Clause 2 provides for the ASC to produce a report containing its views on whether ‘the Government is having, or has had, all due regard to the ways in which the policy might have an adverse effect on the welfare of animals as sentient beings’.

First, the Government and ASC should be concerned with positive impacts, as well as negative impacts, of Government policy. The Government may have a greater duty to avoid and reduce negative impacts of policy, and as a society there may be greater interest in reducing negative impacts. However, the quality of life for sentient beings is a function of both positive and negative (as well as neutral) impacts¹⁶.

Aside from the power to produce a report, there are no further powers provided for in the Bill. In order to conduct the three functions above in a-c (animal welfare impact assessments, ethical review, Government scrutiny), the ASC would require access to certain information. This information would include:

- I. Advance notice of any policies that might impact sentient species,
- II. Relevant documents related to the potential impacts in (I) above,
- III. Access to the minister(s) and civil servant(s) that are leading on such policies, and
- IV. Access to documents and other sources of information relating to how the Government has gone about paying ‘all due regard’ to animal welfare in policy making.

The ASC must have sufficient and requisite (a) independence, (b) expertise, and (c) powers, in order to be effective. Further detail in the Bill, for example in an accompanying schedule, could provide such information, such that the ASC can be effective in providing expert input and scrutiny of a critically important area of Government policy.

3. Are the proposed requirements on the Government to respond to an Animal Sentience Committee’s report sufficient?

Clause 3 of the Bill states that the Secretary of State must lay a response to the report before Parliament within three months of publication.

¹⁶ The restriction of the scope of the Government and/or the ASC duties to negative welfare is arbitrary, and, arguably, based on a conceptual misunderstanding related to sentience and quality of life. Consider that the total net welfare state in sentient animals (including humans) is the sum of both positive and negative welfare states. By restricting duties to focus on negative states alone, the Government would be discarding a tool (i.e., the promotion of positive states) that might be used to mitigate policy impacts causing negative states. Such a broader focus would be both beneficial for animal welfare, and would reduce potential critical scrutiny of Government policy (by the public, the ASC, or Parliament), which might otherwise arise.

On the implementation of sentience policy and the relationship between Government and the ASC, it is important to reiterate the point made in the Introduction to this submission and in Q2 above. The primary purpose of sentience policy and the Bill is to provide for a mechanism whereby an appropriate group of experts (either the ASC, or those in Government, or both), appraise the impacts of policy objectives and options on sentient animals. In order to achieve this key policy objective, appraisal of policy options, i.e., animal welfare impact assessment and ethical review, must be conducted *prior* to policy implementation (i.e., *ex ante* policy analysis)¹⁷.

It is assumed here that Clause 3 of the Bill is based on the process outlined above. I.e., that Government would consult with the ASC early in the policy making process, advise the ASC of policy areas/issues that were likely to impact sentient species (both negatively and positively), such that the ASC could fulfil its remit of advising on and scrutinising sentience legislation (i.e., the policy impacts on animals and how they were balanced with policy impacts generally).

In this case, there is merit in the process of the Secretary of State laying a report before Parliament. It would be preferable, however, if this were to be an oral statement, such that there could be debate related to Government sentience policy, the ASC report, and the Government response. This would facilitate Parliamentary scrutiny of the executive, and would be a meaningful way of tying together the separate but related roles of Government, Parliament and the ASC in this important policy area.

4. How does the proposed Animal Sentience Committee compare to similar bodies, such as the Scottish Animal Welfare Commission?

Scottish Animal Welfare Commission

The Scottish Animal Welfare Commission (SAWC)¹⁸ focuses on protecting wild and companion animals and provides scientific and ethical advice to the Scottish Government. The Commission is established in statute by Section 3 of the Scottish Animal Welfare Commission Regulations 2020¹⁹. The Regulations provide detail on the functions (s5), general powers (s6), appointment of members (s7) and other elements of the Commission's remit and work (s8-14).

SWAC is Chaired by Cathy Dwyer, Professor of Animal Behaviour and Welfare at Scotland's Rural College. It recruits a total of 12 commissioners through open advertisement, who are selected based on expertise as individuals and not as representatives of organisations. The commissioners currently include two animal welfare scientists, 5-6 veterinary surgeons (overlapping with other areas of expertise), four experts from animal protection NGOs, one academic lawyer with expertise in animal welfare policy, one ethicist, and one epidemiologist.

The SWAC can inform the Animal Welfare (Sentience) Bill by providing more detail about the composition, function, and powers of the ASC. The composition of the SWAC, made up of veterinary surgeons, animal welfare scientists, and experts from animal protection organisations, includes members with genuine expertise in animal welfare. My own view is that expertise in the social sciences, ethics and law are not fully represented on SWAC, given the importance of these disciplinary areas in sentience and animal welfare policy.

New Zealand National Animal Welfare Advisory Committee

¹⁷ And then the process would effectively be continuous, analogous to other policy areas, whereby the implementation of policy should also be monitored (including *ex post* impact assessment).

¹⁸ <https://www.gov.scot/groups/scottish-animal-welfare-commission/>

¹⁹ <https://www.legislation.gov.uk/ssi/2020/177/contents/made>

The New Zealand National Animal Welfare Advisory Committee (NAWAC)²⁰ advises the government minister responsible for animal welfare on the welfare of animals in New Zealand, including research needs, legislative proposals, codes of welfare, traps and devices, and hunting and killing animals in a wild state. The functions of NAWAC are provided in the New Zealand Animal Welfare Act 1999²¹.

NAWAC is chaired by Gwyneth Verkerk, a veterinary surgeon. The membership includes the Chair of the National Animal Ethics Advisory Committee (NAEAC)²², and up to nine further members. The Animal Welfare Act 1999 specifies members must have expertise in the following areas: veterinary, agricultural, and animal science; care, breeding, and management of companion animals; ethical standards and conduct in respect of animals; understanding of the public's interest in animals; and environmental and conservation management.

Netherlands Council on Animal Affairs

The Netherlands Council on Animal Affairs, or Raad voor Dierenaangelegenheden (RDA)²³ provides both solicited and unsolicited advice to the Minister of Agriculture, Nature and Food Quality. RDA is an independent Dutch Council of experts that provides advice and scrutiny across the spectrum of public policy that affects animals.

The RDA Council includes around 40 experts as well as nine secretarial and managerial support staff. Councillors are appointed based on a range of expertise and advise in a personal capacity. Councillors have expertise in fields including veterinary medicine, animal welfare, agricultural science, ethics, economics, law, and conservation.

Reports produced by the RDA include *The state of the Animal in the Netherlands*, *Weighing wildlife welfare*, *Fish welfare*, and *Invertebrates as production animals*. The RDA informs the Bill and ASC structure in terms of the diversity of expertise, both scientific and social sciences, including ethics, that are required for sentience policy. The large size of the RDA, with 40 experts, also reflects the multiple ways that society uses animals (farmed, research, companion, wild, entertainment), the broad range of expertise required (stated above), and arguably reflects the significant importance the Netherlands Government places on the issue.

European Food Safety Authority Animal Health and Welfare

The European Food Safety Authority (EFSA) Animal Health and Welfare Panel²⁴ provides scientific advice on animal disease and welfare to the EU Commission. EFSA Animal Health and Welfare Panel is chiefly focused on production animals, including fish. The current Chair is Søren Nielsen, and there are a further ~20 members. EFSA is an expert science body, and members have expertise in risk assessment, microbiology and pathology, epidemiology, animal welfare, and animal production and slaughter. EFSA has produced reports on African Swine Fever, animal-based welfare indicators, avian influenza, and foot and mouth disease. Notably, the UK has lost access to EFSA through leaving the UK.

Nuffield Council on Bioethics

²⁰ <https://www.mpi.govt.nz/animals/animal-welfare/national-animal-welfare-advisory-committee/>

²¹ <https://www.legislation.govt.nz/act/public/1999/0142/latest/DLM49664.html>

²² In New Zealand NAEAC is established under the Animal Welfare Act to advise the government on welfare and ethics issues related to the use of animals in research. See <https://www.mpi.govt.nz/animals/animal-welfare/national-animal-ethics-advisory-committee/>

²³ <https://english.rda.nl/>

²⁴ <https://www.efsa.europa.eu/en/science/scientific-committee-and-panels/ahaw>

The Nuffield Council on Bioethics²⁵, established in 1991, is an independent body that informs government policy and public debate on ethical questions related to biological and medical research. It is a charitable body that is jointly funded by the Nuffield Foundation and the Wellcome Trust. The Council is composed of 15 members, and working groups are established with a chair to work on individual projects. Members have expertise in ethics, philosophy, public participation, public health, law, the environment, political philosophy, philosophy of science, genetics, sociology, and science education.

The Nuffield Council is relevant as a globally respected body that focuses on the inherent moral dimension of many contested issues in medicine and biology, such as euthanasia, abortion, and xenotransplantation. Whilst natural scientists are a necessary element to inform such debates, so is a broader range of expertise. In the field of biology and medicine, there is now widespread recognition of the need for expert input on the moral dimension to inform policy and public debate. Arguably, we are currently in a transitional period in sentience and animal welfare policy in recognising this crucial moral dimension²⁶.

5. Is the Government correct to limit the scope of the Bill to vertebrate animals?

The Bill restricts the scope of application by defining ‘animal’, which it does in Clause 5 subsection (1). Clause 5 subsection (1) defines ‘animal’ as any vertebrate other than *homo sapiens*²⁷. Clause 5 then provides for the Secretary of State to amend the Bill such that they can include invertebrates under the meaning of ‘animal’ for the purposes of the Act, and this would be done by statutory instrument.

There are three possible broad approaches to the scope of the Bill in terms of the species or biological categories of animals it applies to:

- i. To define the species/biological category, with no provision to amend this under secondary legislation,
- ii. To define the species/biological category, with provision to amend this under secondary legislation, or
- iii. To not define the species/biological category.

DEFRA/the Bill therefore take the second of the above three approaches. My view is that the order of preference for defining ‘animal’, i.e., the scope of the Bill, is that (iii) is the most preferable, then (ii), then (i).

The problem with option (i) is that whichever category of animals are included (in this case ‘vertebrates’), it is almost certain that developments in science will, in time, mean that the Bill is not covering all sentient species. Indeed, there is already good evidence that cephalopods (i.e., octopuses and squid) and decapod crustaceans (i.e., crabs and lobsters) are sentient^{28 29 30}.

²⁵ <https://www.nuffieldbioethics.org/>

²⁶ McCulloch S.P. and Reiss M.J., (2018), A Proposal for A UK Ethics Council for Animal Policy: The Case for Putting Ethics Back Into Policy Making: <https://www.mdpi.com/2076-2615/8/6/88>

²⁷ Subsection (5) of the Bill states that the term ‘vertebrate’ has the same meaning as that given in Section 1 of the Animal Welfare Act 2006.

²⁸ Sneddon, L.U., (2015). Pain in aquatic animals. *The Journal of experimental biology*, 218(7), pp.967-976: <https://journals.biologists.com/jeb/article/218/7/967/14518/Pain-in-aquatic-animals>

²⁹ Crook, R.J. and Walters, E.T., (2011). Nociceptive behavior and physiology of molluscs: animal welfare implications. *IJAR Journal*, 52(2), pp.185-195:

<https://academic.oup.com/ilarjournal/article/52/2/185/659960?login=true>

³⁰ Appel, M. and Elwood, R.W., (2009). Motivational trade-offs and potential pain experience in hermit crabs.

Option (ii) appears to provide the legal safeguard that all sentient species, and only sentient species, fall within the scope of the Bill. If scientific evidence develops to such an extent that certain invertebrates can be included, then the Secretary of State can include them under the definition of animal.

There are two problems with this approach. First, the approach has demonstrably failed in the Animal Welfare Act 2006. In Section 1(3) of the Animal Welfare Act³¹, the appropriate national authority may similarly extend the definition of ‘animal’ (and thus ‘protected animal’) to include invertebrates of any description. The problem is that there has now for some time been good evidence that cephalopods and decapod crustaceans are sentient, and the Animal Welfare Act has not been amended to reflect this.

The second problem with this approach is that it does not account for species where there is inconclusive evidence. Again, given the overriding policy objective of sentience legislation is to pay all due regard to animal welfare by assessing and weighing impacts of policy options, defining out sentient species, and possibly not one but thousands of them, would result in major policy failure. This situation is one example of where science and ethics are inextricably linked in animal welfare policy. Where there is reasonable evidence of sentience, the precautionary principle should be applied, such that the ASC provides expert input and scrutiny on policy impacts on such species³².

For the above reason, the recommended approach would be to simply not define ‘animal’, i.e., the scope of beings that the Bill applies to. Arguably, when the purpose of the Bill is understood, one sees the merits and the lack of danger (e.g., related to judicial review) of not defining the species. As a society, as experts, and as legislators, we all know that science will advance. Those that work in the policy area are aware of the evidence that cephalopods and decapod crustaceans are sentient.

Given that the ASC is to be composed of experts in animal welfare, it is more consistent with the policy objectives, to not define ‘animal’ and let the ASC investigate and report on which species/biological categories they believe are sentient, based on the latest scientific evidence. Given that law, even secondary regulation, will be behind the curve compared to science, and given the reality of the failure of the Animal Welfare Act to be amended to include cephalopods and decapod crustaceans, when considering sentience legislation, legislators should be mindful of this problem.

Note that Article 13 of the Treaty of Lisbon did not define ‘animal’. In the statement ‘the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals...’, Article 13 brings with it the precautionary principle. It does not define animals, but the operative part of the statement relates to paying full regard to the *welfare requirements* of animals. Since only those animals that are sentient have a welfare, the duty only applies to those animals.

In the context of the ASC, Government, and Parliament, consider if the ASC believes a species or biological class of animals (e.g., decapod crustaceans) to be sentient, and the Secretary of State, representing the Government, does not. The ASC might in this case produce a report outlining its

Applied Animal Behaviour Science, 119(1-2), pp.120-124:

<https://www.sciencedirect.com/science/article/abs/pii/S0168159109001038>

³¹ <https://www.legislation.gov.uk/ukpga/2006/45/section/1>

³² The precautionary principle is accepted in other areas of Government policy, generally those that would have a detrimental impact on public health, e.g., food or medicine safety, or the environment. The principle should similarly be applied to sentience policy. Such judgements, i.e., those that are informed by the latest science and normative aspects such as the precautionary principle, are arguably better made by the expert ASC, rather than effectively being set in stone by statute.

case. The Government would present its response to the ASC report in Parliament. The ASC report, and the Government report, would be debated in Parliament. I.e., an expert body would advise and scrutinise Government policy, the executive branch of Government would respond, and the legislature would debate and further scrutinise Government policy. This is precisely the sequence of events that should be happening in a well-functioning Parliamentary democracy.

If 'animal' or the scope of application were not to be applied, it may be useful to instead define 'sentience'. There are numerous definitions of sentience, but the important principle would be to relate the meaning of sentience to the impact of Government policy. I.e., the fundamental principle of the Bill is to pay full regard to animal welfare, and sentient animals are those that have a welfare, or subjective conscious experiences, that can have a life that goes well or badly. A definition similar to the Scottish Animal Welfare Commission could be used: 'the ability to have physical and emotional experiences, which matter to the animal, and which can be positive and negative'³³.

³³ <https://www.gov.scot/publications/scottish-animal-welfare-commission-statement-on-animal-sentience/>