Response to the Draft Contingency Plan for the Possibility of Bovine Spongiform Encephalopathy (BSE) in Sheep from the Department of Environment, Food & Rural Affairs (DEFRA)
1.0 Given the degree of uncertainty surrounding the potential presence of BSE in sheep, the contingency plan is welcomed, especially in light of comments from the BSE Inquiry.

**Chapter 2 - Action and Decisions Following Emergence of Test Results**

2.0 The need to validate any evidence of BSE in sheep, arising from new research, in certain circumstances, is accepted. Similarly the proposal to seek advice from the Spongiform Encephalopathy Advisory Committee (SEAC) in cases of uncertainty is understood. However, swift resolution should be sought in all such cases, given the potential public health risks.

2.1 This chapter talks about the Food Standards Agency amending its advice on the consumption of sheep meat, however this should be extended to include other sheep products e.g. cheeses etc, in light of the potential for transmission into milk. Similarly goats meat, milk and dairy products should also be included.

**Chapter 3 - The Human Food Chain**

3.0 In the event of confirmation of BSE in sheep, consideration is given in the plan to measures necessary to protect public health. The need to remove sheep and goats meat, together with associated products, from the human food chain would be endorsed. The possibility of allowing some sheep meat and products into the food chain is raised, where these could be shown to be BSE-free or originating from Transmissible Spongiform Encephalopathy (TSE) resistant flocks. For this to be effective and to offer suitable public health protection, it would be essential to ensure full traceability of such "safe" animals and their products.

3.1 In the event of a ban on the consumption of sheep and goats meat and their products, it will be essential to know the full extent of their usage. As a consequence the audit of usage of sheep and lambs for human consumption is essential. If this project does not also cover the usage of goat meat, milk and dairy products then this will need to be included. At the same time as the audit is carried out, major stakeholders in areas of usage should be identified. This would allow effective dissemination of information should a ban need to be introduced.

**Human and Veterinary Medicinal Products**

3.2 If BSE were to be found in sheep, then risk management decisions would need to be applied to the use of products, derived from these sources, for human and veterinary medicines. If information is not available on the full range of products, then action will be limited. As a consequence a proposal to seek the views of SEAC on this point is endorsed.

**Other Sheep and Goat Derived Products**

3.3 A full audit to identify all uses of sheep and goat derived products would provide the most comprehensive information on which to act in the eventuality that BSE were found in sheep. However, action taken in such situations should always be proportionate to risk. In consequence the proposal to consult SEAC on relative risk in these areas is endorsed.
Import and Export Controls

3.4 Whilst the details of controls would depend on a variety of factors, experience from the foot and mouth disease outbreak has shown difficulties arising from certification when issued by a number of different bodies. Previous incidents involving emergency controls, e.g. relating to dioxins in certain products from Belgium, also highlighted difficulties in certification. In consequence, the contingency planning should look in detail at how certification could most effectively be managed.

Chapter 4 - Slaughter and Disposal Programme

4.0 In light of the proposals to operate any disposal scheme on a priority basis, to allow for the practicalities of increased slaughter demand, it is essential that measures are included in the scheme to address the welfare of the animals that will remain on farms for the longer term. The proposals to link compensation to "fitness" of animal at the time of slaughter would seem appropriate but support would also be needed to provide feed etc up to the point of slaughter, especially for animals with a lower priority for disposal.

4.1 In terms of the practicality of spreading the cull over a longer period of time, this would appear the only reasonable option. However, it would allow for potential "infection" of any "safe" sheep that might remain, or be introduced. Strict segregation would be necessary.

4.2 Similarly at slaughter, robust, enforceable measures would be needed to ensure that only "safe" sheep entered the human food chain. This could be helped by designation of abattoirs for use only for slaughter for human consumption and others for cull use only. Full traceability of "safe" sheep would be essential and this would need to extend to all uses of the meat and its products. Staining of all meat from infected or potentially infected animals would also be essential to ensure it did not enter the human food chain.

Chapter 5 - Aid Proposals

5.0 Aid should be targeted to maintain the welfare of animals up until slaughter and to ensure correct disposal of all relevant animals. In order to control correct disposal of all affected stock compensation should also be payable for fallen and casualty animals. This could be provided in the form of direct payment, through the proposed registration scheme, on production of veterinary certification.

Chapter 6 - Screening for "Safe" Sheep Meat and Segregation from potentially infected sheep meat

6.0 The three options suggested for allowing "safe" sheep meat into the human food chain all have limitations.

6.1 SEAC has noted the possibility that genetically resistant sheep could theoretically be carriers of TSEs. Further research is urgently needed into this area.

6.2 Whilst some genetically resistant sheep exist within the flock, practical difficulties of genotyping prior to slaughter have been identified. As a consequence, the introduction of the national scrapie plan should be accelerated in order to build up an effectively traceable flock that are securely identified. Such work should proceed
alongside research to determine whether genetically resistant sheep can carry TSE infection, as delay until research results become available would further increase the projected timescales for full implementation of the national scrapie plan.

6.3 The possibility of testing animals for TSEs before entering the human food chain is raised. Currently there are practical, technical and economic problems with such tests. Ideally animals entering abattoirs would be securely identified as "safe" for human consumption or otherwise. Until a secure system of identification exists, linked to animals known to be safe e.g. genotypically resistant to TSEs, then TSE testing to identify animals suitable for human consumption could be used to allow some of the national flock into the human food chain.

6.4 However, the TSE tests would need to be sufficiently sensitive to detect TSEs at an early stage and would also need to be economically sound. Urgent research is required to develop such tests, with the ultimate aim being to develop a test that could detect BSE in sheep.

6.5 Testing would need to take place prior to slaughter, in order to allow separation of slaughter processes for animals suitable for human consumption and others. If this were to be carried out at abattoirs, effective separation would be necessary for the two "classifications" of animals. Abattoirs would need to either be licensed for both human consumption and cull animals or would need to arrange onwards transportation for some livestock. As a consequence, a preferable arrangement might be the use of intermediate "collection centres" where animals could be screened and held until test results were available. On receipt of results animals could be dispatched to appropriate abattoirs.

6.6 All options currently have difficulties associated with them and need long term work in order to address the problems identified. The most urgent areas of work would appear to be:

(a) development of a sensitive test for TSEs (or preferably BSE)  
(b) acceleration of the national scrapie plan  
(c) research into the possible carrier status of sheep that are genotypically resistant to TSEs

Identification

6.7 Effective traceability will be essential in order to differentiate between "safe" and "unsafe" sheep. An electronic system, with centrally allocated numbers, would appear appropriate. However, in order for the system to be effective it will need to be easy to access and use, yet remain secure. Scanning facilities and computer software will need to be reliable and easy to use. They should be readily available, at a cost that is economically viable. Training packages should also be considered in order to support such an initiative.

The commercial incentive to market "safe" sheep

6.8 There has been considerable discussion on the potential for BSE to be present in sheep in recent months, particularly in light of the Bostock experiments. A recent open stakeholder meeting, led by the Food Standards Agency, identified the need to more effectively communicate the uncertainties in this area to consumers. One outcome of this could be that consumers will look for "safe sheep meat". This could lead to a decrease in the demand for domestic products and an increase in imports.
However, if sheep meat could be identified as "safe" this might fill a market niche. The implementation of the national scrapie plan, with full traceability of such sheep, could be utilised to identify and market such "safe" products. Full implementation of the national scrapie plan will take time, but a gradual build up of products that are labelled as "safe" should build consumer confidence over time. This confirms the need to implement the national scrapie plan urgently.

Testing and Identification

6.9 Concerns have been raised about the costs involved for testing and identification. For the schemes to be fully effective, these costs must be economically viable and this might well require government support.

General Comments

7.0 As previously mentioned, the plan does not specifically refer to milk and dairy products for sheep and goats. If BSE in sheep were to follow transmission patterns for scrapie then these would be likely to be infected. Contingency planning therefore should consider this and should encompass withdrawal of such products.

7.1 Goats are only sparingly mentioned in the contingency plan although they are consumed in the United Kingdom. Given that currently there are not believed to be any goats that are genetically resistant to TSEs, the only available options to allow them into the human food chain for consumption would appear to be TSE testing, or importation from a "TSE" free country.

7.2 In general, further consideration of the position of goats and milk and dairy products for both sheep and goats should be included within the contingency plan.