

Opinion on Bovine Spongiform Encephalopathy in a second UK animal born after 1 August 1996 (Case confirmed in Northern Ireland) adopted by the Scientific Steering Committee at its meeting of 29-30 March 2001

I. The questions

The Scientific Steering Committee (SSC) is invited to express its appreciation on the information provided on 14 February 2001 by the UK Ministry of Agriculture, Fisheries and Food to the European Commission services, on the BSE case confirmed in an animal born after 1 August 1996 in Northern Ireland.

II. Background

1. On 14 February 2001, the UK Ministry of Agriculture, Fisheries and Food informs the European Commission services, on a BSE case confirmed in an animal born after 1 August 1996 in Northern Ireland. The case history and epidemiological inquiry into possible sources of infection (including maternal and feed borne transmission) were provided to the EC services and are also publicly available on the MAFF Internet site.

The animal was born on 10 September 1996 in Northern Ireland. The dam survived for 23 months after giving birth to the BSE case and was slaughtered for management reasons. The case itself entered and was killed under the emergency / casualty slaughtering arrangements of the Overt Thirty Months Scheme (OTMS). The presence of infection was detected in the course of a survey of 2.546 casualty / emergency slaughtered animals entering the OTMS using a rapid *post mortem* test.

At this stage no firm conclusions can be drawn as to the source of the BSE infection. However, from the farming and feeding practices and case history, it would look that the route of infection was unlikely maternal and most likely feedborne, although maternal infection cannot be definitively excluded. The epidemiological investigations are continuing and the BSE case's birth cohort is being monitored.

2. Given the facts that:

(1) the recommendations of the SSC in relation to the UK-DBES scheme were based on the assumption of a fully effective feed ban as from August 1996 and accepted the occurrence of a number of BSE cases born after that date due to maternal transmission alone;

(2) the SSC has the permanent mandate to monitor the evolution of the BSE epidemic in the UK and

(3) the exemption for the removal of vertebral column from UK cattle on the basis of an effective feed ban foreseen to enter into force on 1 April 2001,

the Scientific Steering Committee (SSC) is invited to express its appreciation on the information provided on 14 February 2001 by the UK Ministry of Agriculture, Fisheries and Food to the European Commission services, on the BSE case confirmed in an animal born after 1 August 1996 in Northern Ireland.

III. Opinion

1. On 27 June 2000, BSE was confirmed in a Holstein/Friesian dairy cow born on 25 August 1996. In its opinion of 14-15 September 2000 on *Export from the UK of bone-in veal*, the SSC considered that "this [first] case did not affect its risk assessments with regard to the DBES, because the animal would not have been eligible under the DBES ¹ and because it had been accepted that (small) numbers of BSE cases would occur in animals born after 1 August 2000 as a result of vertical transmission. (...)".

2. In its opinions of 29 October 1999 and 14 April 2000² the SSC accepted that a (very small and decreasing) number of BARB cases would occur, attributable to vertical risk enhancement. A BARB case where vertical risk enhancement can be excluded, may therefore be indicative for a failing feed ban and / or for other routes of transmission. In its Report and Opinion of 14-15 September 2000 on the Export from the UK of bone-in veal the SSC stated: "*However, should the origin be attributable to a contaminated feed source, then this would imply the need to improve the feed-ban and the control system. These issues are beyond the scope of the mandate of the EC's Scientific Committees.*" Whether there is a need to improve the feed-ban and the control system would appear from inspections to be carried out by the appropriate services.

The Scientific Steering Committee considers that the occurrence so far of 2 BARB cases does not call for an immediate revision of the SSC's various opinions on the UK Date Based Export Scheme and related issues. Whilst these opinions indeed consider feed and maternal transmission as the only possible routes of infection of cattle with BSE and assume that the feed ban is fully complied with, one must nevertheless accept that it is unrealistic to assume that under field conditions no single feed-borne case would occur. The SSC considers that the number of BARB-cases recorded so far is surprisingly low.

The SSC considers that the question whether or not a revision of the DBES-opinions is needed would depend upon the outcome of an [inspection] exercise verifying the current feed ban enforcement and upon the confirmation that the number of BARBS is indeed as low as currently reported.

In its Opinion of 7-8 December 2000 on Monitoring Some Important aspects of the evolution of the Epidemic of BSE in Great-Britain, the SSC also addressed the question *How should BSE cases born after 1 August 1996 be investigated?*

The SSC wishes to confirm the answer given to the question on 8 December 2000 and the recommendation that, ideally, surviving dams of BARBs (and controls) and their calves born in the calving seasons before and after birth of the BARB should be bought in and kept on ministry farms so that their definitive BSE status can be established.

They are attached in Annex, for ease of reference.

Annex: Extract from the SSC Opinion of 7-8 December 2000 on Monitoring Some Important aspects of the evolution of the Epidemic of BSE in Great-Britain.

"Question 4: How should BSE cases born after 1 August 1996 be investigated?"

Investigations of BSE cases born after 1 August 1996, so-called BARBs, should follow an agreed protocol. A special BARB-controls database should be defined to facilitate investigation of feed-based exposure, maternal or other transmission.

Investigation of feed-based-exposure means recording the suppliers of feed for cattle or other species to all farms at which the BARB was located from birth to onset. For each such farm, a record should be reconstructed, if possible, of feed quantities and numbers of other species on farm at the same time as the BARB was located there.

Investigation of maternal transmission requires the identifier(s), disposal/survival status (e.g as fallen stock, emergency slaughter, OTMS or routine slaughter for human consumption) and BSE status of the BARB's dam. The dam's calving history should include the identifier(s), disposal/ survival status and BSE status of calves born to it in the calving seasons before and after birth of BARB.

BARBs born more than 24 months before BSE onset in the dam are less likely to have been infected "maternally" BARBs born more than 24 months before BSE onset in the dam are therefore of particular interest because they either challenge our understanding of maternal transmission, or were not maternally-infected. BARBs whose dam was known to have survived for 7.5 years without developing BSE are also of particular interest because a non-maternal transmission route should be considered.

Ideally, surviving dams of BARBs (and controls) and their calves born in the calving seasons before and after birth of the BARB should be bought in and kept on ministry farms so that their definitive BSE status can be established.

Investigation of veterinary transmission ideally requires a record of any invasive procedure(s) and the identity of the veterinary practitioner/other person providing them."

¹ The animal was 44 months old, its dam had not survived for at least six months after birth.

² See the following SSC opinions:

- 28-29 October 1999 on the Scientific Grounds of the Advice of 30 September 1999 of the French Food Safety Agency (the Agence Française de Sécurité Sanitaire des Aliments, AFSSA), to the French Government on the Draft Decree amending the Decree of 28 October 1998 establishing specific measures applicable to certain products of bovine origin exported from the United Kingdom.

- 13-14 April 2000 on the UK decision to lift the ban on the consumption of meat on the bone.