

Opinion of the
Scientific Steering Committee
on the
GEOGRAPHICAL RISK OF
BOVINE SPONGIFORM
ENCEPHALOPATHY (GBR) in
Finland

Update adopted by the SSC on 16/5/2002

**Opinion of the Scientific Steering Committee on the
GEOGRAPHICAL RISK OF BOVINE SPONGIFORM ENCEPHALOPATHY
(GBR)
in FINLAND – update 2002**

THE QUESTION

The Scientific Steering Committee (SSC) was asked by the Commission to provide an up-to-date scientific opinion on the Geographical BSE-Risk (GBR), i.e. the likelihood of the presence of one or more cattle being infected with BSE, pre-clinically as well as clinically, in countries that have formally requested the determination of their BSE status in accordance with Article 5 of the Regulation (EC) No 999/2001 of the European Parliament and of the Council.

This opinion addresses the up-to-date GBR of Finland as assessed in May 2002.

THE ANSWER

The BSE-agent was most likely imported into the country via live cattle or MBM and it could have reached domestic cattle, before 1990 via deliberate inclusion of MBM into cattle feed and thereafter via cross-contamination in feed mills, during transport or on farm. It is therefore concluded that it is likely that one or several cattle that are (pre-clinically or clinically) infected with the BSE agent are currently present in the domestic herd of Finland (**GBR-III**). This is confirmed by the domestic BSE case that was identified in Finland in 2001.

THE BACKGROUND

In July 2000 the SSC adopted its final opinion on "the Geographical Risk of Bovine Spongiform Encephalopathy (GBR)". It described a method and a process for the assessment of the GBR and summarised the outcome of its application to 23 countries. Detailed reports on the GBR-assessments were published on the Internet for each of these countries.

On 1 July 2001 Regulation (EC) No 999/2001 of the European Parliament and of the Council entered into force. This regulation lays down rules for the prevention, control and eradication of transmissible spongiform encephalopathies in animals (TSE Regulation). Appropriate risk management measures are defined in relation to the BSE Status category. In Annex II of this Regulation the method for the determination of the BSE status is described. It requires two steps, namely a risk assessment and the evaluation of specific criteria listed in annex II, chapter A, point (b) to (e). The Commission regards the GBR as provided by the SSC as an adequate Risk Assessment as required by the regulation. However, countries may also provide their own risk assessment in which case the SSC will be requested to provide a scientific opinion on the validity of that risk assessment as well as of its result.

In January 2002 the SSC updated its opinion on the GBR and determined that exports from all countries classified as GBR III or IV pose a certain risk of carrying the BSE agent, independent if they have or have not confirmed at least one domestic BSE case. The SSC also provided an estimate of the level of risk emitted from these "BSE-risk countries" in relation to the time of export.

Finland has formally requested the determination of its BSE status in accordance with Article 5 of the TSE Regulation and subsequently the Commission asked the Scientific Steering Committee (SSC) to provide an up-to-date scientific opinion on the Geographical BSE-Risk of Finland.

THE RISK ASSESSMENT

For Finland the SSC already expressed an opinion on its GBR in July 2000, concluding that it was “unlikely but not excluded” that in Finland could be present one or more cattle being infected with BSE, pre-clinically as well as clinically.

In the meantime Finland has, as all Member States of the EU, implemented a large-scale active sampling programme. As Finland has found one domestic BSE case it fulfils the conditions for GBR III “presence of one or more cattle clinically or pre-clinically infected with the BSE agent in a geographical region/country is confirmed, at a lower level”.

In addition to the improvement with regard to BSE surveillance Finland has, as all Member States of the European Union, implemented an SRM-ban (October 2000) and a “total feed ban” prohibiting feeding of MBM to any animal farmed for food (1/1/2001).

These developments, together with imports from BSE risk countries that were previously not taken into account, made an update of the GBR assessment of Finland necessary.

THE ANALYSIS

EXTERNAL CHALLENGE

Finland was exposed to a **moderate external challenge** from 1980-1985 and a **very high external challenge** from 1986-2000. This external challenge resulted from imports of live cattle (919 according to the country and 1,148 according to Eurostat and other export statistics) and in particular from large amounts of MBM (around 198,000 tons according to the country and around 182,500 tons according to Eurostat and other export statistics) from BSE risk countries.

Taken account of the available information on the origin and use made of the imported cattle and MBM it is concluded that from 1980 to 1985 the external challenge from cattle imports was very low, changing to moderate from 1986 to 1990. It was very low again for 1991 to 1995 and negligible for the period 1996-2000.

On the other hand MBM imports were posing a moderate external challenge for 1980-1985 and a very high external challenge throughout the period 1986 to 2000.

STABILITY

On the basis of the available information it was concluded that the country's BSE/cattle system was **very unstable** from **1980 to 1995**, i.e. it would have recycled and amplified BSE infectivity, should it have entered the system, rather fast. The system became **unstable** in **1996** when an MMBM-feed ban improved the feeding and it became **neutrally stable** in **1998** when in addition appropriate rendering conditions were met throughout. It is **optimally stable** since **2001** when first an SRM ban (October 2000) and then a “total” feed ban and incineration of the domestically produced MBM was entering into force on 1/1/2001.

Feeding

Until 1990 it was legally possible to feed imported and domestic MBM to cattle and a significant fraction of cattle feed is assumed to have included MBM. In 1990 inclusion of imported MBM into cattle feed was prohibited but domestic MBM could still be included. Feeding was therefore “**not OK**” until end 1995. Since 1996 an MMBM-to-ruminant feed ban was in force and some control measures were put in place. This made deliberate inclusion of MBM into cattle feed

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unlikely but as cross-contamination remained possible feeding can only be considered **“reasonably OK” since 1996**. Since January 2001 EU legislation requires a total ban of processed animal protein (other than fishmeal) from feed to be used for farmed livestock animals. Controls are strongly increased and feeding is now **“OK”**.

Rendering

Until 1996, only a part of the rendering system was able to significantly reduce BSE infectivity, should it have entered. Rendering was therefore **“not OK”**.

Since 1996/97 the entire rendering system operates according to standard, reaching optimal effectivity with regard to reducing BSE infectivity. Rendering is therefore considered **“OK”** since 1998. Since beginning of 2001 all MBM produced in Finland is destined for incineration.

SRM-removal

Before October 2000 SRM was rendered into feed, as was fallen stock, the latter, however, in fur feed dedicated plants. SRM removal is regarded as **“not OK” until 1/10/2000**. Since then EU legislation required an SRM ban. As the FVO found some irregularities with the implementation of the SRM ban in April 2001, and as no detailed information is available concerning the efficiency of its implementation, SRM-removal would normally be considered **“reasonably OK”** since 1/1/2001. However, even if some SRM should be rendered, the risk that it could be recycled to cattle is extremely low, given the fact that all domestic MBM is incinerated. SRM-removal is therefore regarded **“OK” since 3/2001**.

BSE surveillance

Until 1997, the surveillance was entirely passive and hence not able to identify all clinical BSE cases, should they occur. Since 1997 surveillance of CNS-suspects in emergency slaughter improved the ability to identify clinical BSE cases. Since 2000 a larger scale active surveillance was introduced. However, the number of cattle that is tested for BSE remains too low to provide statistically significant information as to the size of the BSE incidence in the country. It has, however, already confirmed that BSE is present in the domestic cattle herd of Finland.

CONCLUSION ON THE CURRENT GBR

The BSE-agent was most likely imported into the country via live cattle or MBM and it could have reached domestic cattle, before 1990 via deliberate inclusion of MBM into cattle feed and thereafter via cross-contamination in feed mills, during transport or on farm. It is therefore concluded that it is likely that one or several cattle that are (pre-clinically or clinically) infected with the BSE agent are currently present in the domestic herd of Finland (**GBR-III**). This is confirmed by the domestic BSE case that was identified in Finland in 2001.

EXPECTED DEVELOPMENT OF THE GBR

Given the fact that the system is now **optimally stable** the likelihood of the presence of BSE-infected cattle is expected to decrease in the near future with the rate by which cattle born before 1/1/2001 leave the system.

A table summarising the reasons for the current assessment is given in annex 1 to this opinion. A detailed report on the updated assessment of the GBR of Finland as produced by the GBR-Peer Group is published separately on the Internet. The country had opportunities to comment on different drafts of the report before the SSC took both, the report and the comments, into account for producing this opinion. The SSC appreciates the good co-operation of the country's authorities.

FINLAND – Summary of the GBR-Assessment, May 2002

EXTERNAL CHALLENGE		STABILITY				INTERACTION of EXTERNAL CHALLENGE and STABILITY	
GBR-Level III GBR-trend	EXTERNAL CHALLENGE 1980-1985: Moderate 1986-2000: Very high	MBM imports UK: No imports according to the country and 96 t according to EUROSTAT. Other <u>BSE risk</u> countries: According to the country. According to EUROSTAT, 1021 from BE, DK, FR, DE, and NL.	Feeding Not OK until 1995, Reasonably OK since 1996, OK since 2001. <ul style="list-style-type: none"> In 1990 inclusion of imported MBM into cattle feed prohibited but domestic MBM could still be included. MMBM-ban to ruminants since 1/3/1995. In 1998 compulsory self-control programs for feed producers including measures to avoid cross-contamination. Total feed ban since 21/3/2001. Cross-contamination possible until 1/1/2001. 	Rendering Not OK until 1996, OK since 1998. Until 1996, only a part of the rendering system was able to significantly reduce BSE infectivity, should it have entered. Since 1996/97 the entire rendering system operates according to the standard, $133^{\circ}\text{C}/20^{\text{min}}/3^{\text{bar}}$ reaching optimal effectivity with regard to reducing BSE infectivity. Since 1/1/2001 all MBM produced in Finland is destined for incineration.	SRM-removal Not OK until 1/10/2000, OK since 3/2001. Until October 2000 SRM was rendered together with other high or low risk material for use in feed. Since 1 October 2000 SRM ban in place. Since 3/2001 SRM are normally processed into MBM for incineration but some small slaughterhouses may also bury it. Around 30% of fallen stock was always collected and processed in plants to MBM for fur animals. Since 12 September 2001 a centralised collection system for fallen stock exists, covering all but the most remote Northern and Eastern areas.	BSE surveillance BSE specifically listed as notifiable disease in 1990. Until 1997 surveillance entirely passive. Suspects including production losses. Since 1997 surveillance of CNS-suspects in emergency slaughter. Active surveillance introduced since end 2000, but number of cattle tested remains too low. First domestic BSE case identified in November 2001.	INTERNAL CHALLENGE The very unstable BSE/cattle system of Finland was exposed to an increasing external challenge since the early 80s. Since 1986 the external challenge was very high, resulting from MBM-imports while the system remained very unstable and unstable until 1997. The occurrence of an internal challenge during the late 80s is regarded particularly likely, but it might have occurred before. This internal challenge met the very unstable system and any infectivity that was already in the system was recycled and amplified, growing over time. This growth was further fuelled by the continuing very high external challenge while the system remained unstable until 1997. The internal challenge can be expected to decrease since 3/2001 when the rate of new infection is assumed to be (close to) zero.
	Rapidly decreasing GBR	According to Eurostat and third country export data: 80-85: 4,477 t 86-90: 76,076 t 91-95: 71,294 t 96-2000: 30,601 t total: 182,448 t					