

Opinion of the
Scientific Steering Committee
on the
GEOGRAPHICAL RISK OF
BOVINE SPONGIFORM
ENCEPHALOPATHY (GBR) in
the Republic of Cyprus
adopted by the SSC on 10 April 2003

Opinion of the Scientific Steering Committee on the GEOGRAPHICAL RISK OF BOVINE SPONGIFORM ENCEPHALOPATHY (GBR) in the Republic of Cyprus – 2003

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 Cyprus as assessed in April 2003.

THE ANSWER

The BSE-agent was most likely imported into Cyprus via contaminated MBM and could have reached domestic cattle. It is concluded that it is likely but not confirmed that domestic cattle are (clinically or pre-clinically) infected with the BSE-agent (**GBR III**).

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.

Cyprus 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 Cyprus.

THE RISK ASSESSMENT

The SSC concluded that it was "likely but not confirmed" (**GBR III**) that domestic cattle in Cyprus are (clinically or pre-clinically) infected with the BSE-agent.

THE ANALYSIS

EXTERNAL CHALLENGE

- The level of the external challenge that has to be met by the BSE/cattle system is estimated according to the guidance given by the SSC in its final opinion on the GBR of July 2000 (as updated in January 2002). This assessment takes account of the available information on the origin and use made of the imported cattle and MBM.
- Live cattle imports: Over the period 1980 to 2001, 426 live cattle have been exported to Cyprus from BSE-risk countries, of which none came from the UK. Cyprus authorities contest these imports. However, compared to the external challenge caused by MBM imports the external challenge due to live cattle imports is negligible and would not change the total external challenge if these cattle imports would be neglected.
- MBM imports: Over the period 1980 to 2001 32,702 tons of MBM have been exported to Cyprus from BSE-risk countries, of which 86 tons came from the UK.

Stability

From 1980 to 1989 the BSE/cattle system of Cyprus was **stable**. However, imported MBM might have been fed to cattle and thereby infected them. From 1990 to 1994 the BSE/cattle system turned to **extremely unstable** because rendering was carried out and no proof was provided that the rendering conditions reached constantly the 133°C/3bar/20min standard. From 1995 to 2000 the stability was upgraded to **very unstable** because a mammalian MBM to ruminant feed ban was introduced. Since 2001 the system is considered **very stable** because the rendering plant reliably uses the 133°C/3bar/20min standard, an official but limited SRM ban was installed and a total feed ban including controls was introduced.

Feeding

Feeding ruminant MBM to cattle was legally possible until 1990 and of non-ruminant MBM until December 1994. Inspection on enforcement of the mammalian to ruminant feed-ban started in 1995, therefore it is assumed that feeding was "**not OK**" before 1995 and to be "**reasonably OK**" since then. From 2001 onwards, feeding is considered "**OK**" due the introduction of a total feed ban and the implementation of controls.

Rendering

Rendering was introduced in the Republic of Cyprus in 1990. Before 1990 slaughterhouse offal was either buried or incinerated. Materials rendered since 1990 include ruminant material and SRM from healthy animals. Fallen stock is not rendered. Rendering is therefore assessed as "**OK**" before 1990. The process parameters used since 1990 have been according to the 133°C/20^{min}/3^{bars} standard, but rendering was "**not OK**" for 1990 to 2000 as controls of appropriate process conditions are provided only since 1996 and not in a complete manner. Rendering is assessed as "**OK**" from 2001 onwards.

SRM-removal

An official SRM ban exists since January 2001. Before 1990 no animal waste including SRM was rendered at all. Therefore SRM-removal was "**OK**" before 1990. From 1990 to 2000, only SRM from fallen stock was excluded from rendering. SRM removal is therefore assessed as "**not OK**"

for that period. The measures installed since 2001 on SRM-removal (non-complete SRM list) changed this stability factor to “**reasonably OK**”. Since the second half of 2002 the full list of SRM organs/tissues is used. This stability factor is therefore considered to be “**OK**” since 2003.

BSE surveillance

The passive surveillance system, which was the only system in place until 1999 was unable to detect low levels of BSE incidence.

The situation improved since in 1999, when an active surveillance system was installed in parallel to the passive system. However, also the active surveillance system was not carried out satisfactorily until the end of 2001. Since 2002, the surveillance improves the stability but so far the number of examinations that have been carried out is not sufficient to detect a low number of BSE-cases.

CONCLUSION ON THE CURRENT GBR

In light of the above-discussed information it has to be assumed that the BSE- agent, should it have entered the territory of the Republic of Cyprus via MBM could have reached cattle but before 1990 it would not have been recycled. After 1990, recycling and amplification became technically possible because ruminant material was rendered for feed. Due to the situation in the feedmills it can be concluded that cross-contamination of cattle feed with MBM was likely. Thanks to the different control measures (controls on farm level 1993, control of rendering conditions 1996, controls in feed mills 1997) it is assumed that recycling became less likely since 1997. It is therefore concluded that it is likely but not confirmed that domestic cattle are (pre-clinically or clinically) infected with the BSE (**GBR III**).

EXPECTED DEVELOPMENT OF THE GBR

If the measures taken recently were properly implemented the GBR will start to decrease.

A table summarising the reasons for the current assessment is given in annex 1 to this opinion. A detailed report on the assessment of the GBR of the Republic of Cyprus 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.

REPUBLIC OF CYPRUS – SUMMARY OF THE GBR-ASSESSMENT, APRIL 2003							
	EXTERNAL CHALLENGE		STABILITY				INTERACTION of EXTERNAL CHALLENGE and STABILITY
	1980-1990: High 1991-1995: Very high 1996-2000: High		1980-1989: stable 1990-1994: Extremely unstable 1995-2000: Very unstable 2001-2002: Very stable				It is likely, that the BSE-agent has entered the Republic of Cyprus via MBM imports and reached domestic cattle but was not recycled in the eighties. From 1990-2000 the BSE agent could have been recycled to a certain extent. Since 2001 recycling can be excluded.
GBR-Level	Live Cattle imports	MBM imports	Feeding	Rendering	SRM-removal	BSE surveillance	
III	UK: No imports according to country import data and according to Eurostat and other export data.	UK: 94 t according to country import data. 86 t according to Eurostat and other export data	Not OK 1980-1994, reasonably OK 1995-2000, OK since 2001.	OK 1980-1989, not OK 1990-2000, OK since 2001.	OK 1980-1989, not OK 1990-2000, reasonably OK 2001-2002, OK since 2003.	BSE has been notifiable since 1990.	INTERNAL CHALLENGE
GBR-trend	Other BSE risk countries: No imports according to country import data	Other BSE risk countries: According to country import data: 80-90: 0 t 91-95: 2,137 t 96-2000: 3,278 t Total: 5,415 t	ruminant MBM to ruminant feed ban since 1990; Since 1994 mammalian MBM to ruminant feed ban; controlled since 1997. Since 2001 total feed ban, controls introduced.	No rendering activities until 1990. Since 1990 rendering, but no proper proof that 133°C, 3bar, 20 min was constantly used. Since 2001, produced MBM is incinerated.	No rendering of SRM until 1989; Since 1990 rendering of SRM, but no proper proof that 133°C, 3bar, 20 min was constantly used. First (incomplete) SRM ban since 2001. Full SRM ban since second half of 2002. Fallen stock was never rendered.	Until 1999 only passive surveillance. This was unable to detect low levels of BSE incidence. Since 1999, active surveillance system in parallel to the passive system. However, only small number of samples taken. Since 2002, the surveillance improves the stability but so far the number of examinations that have been carried out is not sufficient to detect a low number of BSE-cases.	
decreasing	According to Eurostat and other export data 426 from FR and NL. Comment: Cyprus contests any live cattle imports.	According to Eurostat and other export data: 80-90: 14,607 t 91-95: 11,156 t 96-2001: 6,853 t Total: 32,616 t					