Opinion of the

Scientific Steering Committee

on the

GEOGRAPHICAL RISK OF BOVINE SPONGIFORM ENCEPHALOPATHY (GBR) in

Croatia

Adopted by the SSC on 27 June 2002

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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 Croatia as assessed in June 2002.

THE ANSWER

The BSE agent was probably already introduced to the Croatian territory before its independence and Croatia was exposed to significant external challenges since 1992. As the Croatian BSE/cattle system was extremely unstable it is likely that the BSE-agent was recycled, propagated and amplified in the country. Even if since 1997 the recycling was somewhat reduced, thanks to the improved rendering, it is concluded that it is likely but not confirmed that one or more domestic cattle in Croatia are (clinically or pre-clinically) infected with the BSE-agent **(GBR-III)**.

The SSC is aware that the available information was not confirmed by inspection missions as they are performed by the FVO in the Member States. It recommends that BSE-related aspects are included in the program of future inspection missions, as far as feasible.

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 2001Regulation (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.

Croatia 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 Croatia.

THE RISK ASSESSMENT

Regarding the current geographical BSE risk, it is "likely but not confirmed" **(GBR III)** that at least one domestic cattle is pre-clinically or clinically infected with the BSE-agent.

THE ANALYSIS

EXTERNAL CHALLENGE

Croatia became independent in 1991. Separate data for Croatia is only available since 1992.

The external challenge faced by the former Yugoslavia prior to 1992 was always significant. Between 1980 and 1991 it was high, mainly due to imports of MBM or due to the combined imports of live cattle and MBM from BSE risk countries. The proportion of these imports that remained in Croatia is not known and therefore as a realistic worst case assumption, it is assumed that the external challenge experienced by the territory of Croatia before 1992 was high enough to make it possible that the BSE-agent could have been introduced.

The level of the external challenge that has to be met by the Croatian BSE/cattle system since 1992 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.

- Live cattle imports: From 1992 to 2000 the country imported 577,310 live cattle from BSE risk countries, of which none came from the UK. These imports represent a **high external challenge** but not an extremely high external challenge because a significant fraction was slaughtered at very young age. Broken down to shorter periods the resulting external challenge **moderate from 1992 to 1995 and high thereafter**. This assessment takes into account aspects that allow assuming that certain imported cattle did not enter the domestic BSE/cattle system, i.e. were not rendered into feed or were very young when slaughtered.
- MBM imports: From 1992 to 2000 the country imported 12,654 tons MBM from BSE risk countries, of which nothing came from the UK. Together these imports represent a **very high external challenge**. Broken down to shorter periods the resulting external challenge was **high for the period 1992-1995 and very high thereafter**. This assessment takes into different aspects that allow assuming that a certain fraction of the imported MBM could not have entered the domestic BSE/cattle system.

STABILITY

On the basis of the available information it was concluded that the country's BSE/cattle system was **extremely unstable** between 1992 and 2000 and is, subject to confirmation of the efficiency of the then introduced measures, **very stable** since 2001. For the period before the independence of Croatia, a reasonable worst case assumption is that the stability was similar to the situation in Croatia after 1992.

Feeding

Until March 1997 feeding of any kind of MBM to cattle was legally possible. Since then a ruminant to ruminant ban was installed but non-ruminant mammalian MBM could still be fed to cattle until 2001. As no data were provided on the controls of the RMBM-feed ban and cross-contamination is regarded likely, it is concluded that feeding was **"not OK"** before and after the feed ban of 1997. In 2001, a recall action was carried out and the available MBM (imported and domestic) was bought by the government in order to be incinerated. However, as it is not fully clear how effective this measure was and cross-contamination in feed mills, during transport and

on farm remained possible, feeding is regarded as **"reasonably OK"** since 1/1/2001 until it is shown that no MBM is anymore present in the system.

Rendering

Since 1996, the only plant that was processing fallen bovine stock has complied with the operating standards required. But the "closed" plant, which is linked to a slaughterhouse and produces MBM from cattle material from its own abattoirs and cutting plants, continued to operate under unknown conditions. Most likely it also processed SRM that were included in the normal slaughter waste. Rendering has therefore been **"not OK" up to end 2000**. Since January 2001, bovine animal waste, including SRM and all fallen stock, is to be incinerated or otherwise disposed. Subject to confirmation of the efficiency of this measure, rendering is assessed as **"OK" since January 2001**.

SRM-removal

Between 1980 and 2001 brain and spinal cord of cattle and bovine fallen stock were rendered. There was no SRM ban before 1997 and the SRM ban between 1997 and 2001 prohibited the use of SRM for human consumption only, probably increasing the amount of SRM that was rendered for feed. Therefore, SRM removal is regarded as **"not OK" until end 2000**, when an SRM ban for cattle feed was implemented. Subject to confirmation of the efficiency of this measure, SRM-removal is therefore assessed as **"OK"** since January 2001.

BSE surveillance

Before 1996 BSE surveillance did not exist. It was only passive thereafter and the number of BSE suspects remained low. Active BSE surveillance is in place since 2001. However, the number of animals tested is still too low to exclude a certain BSE-incidence, and data on age and risk category of tested animals, which would allow to better judge the validity of available test results, were lacking.

CONCLUSION ON THE CURRENT GBR

The Croatian BSE/cattle system was extremely unstable and exposed to sizeable external challenges. A processing risk therefore may have existed in Croatia since the mid-90s at the latest and the BSE-agent was very likely recycled, propagated and amplified in the country. Since 1997 the recycling was somewhat reduced, thanks to the improved rendering but a propagation risk continued to exist. Therefore, it is concluded that it is likely but not confirmed that domestic cattle in Croatia are (clinically or pre-clinically) infected with the BSE-agent **(GBR-III)**.

EXPECTED DEVELOPMENT OF THE GBR

In 1/1/2001, measures were taken that should have interrupted recycling of the BSE-agent. Although the efficiency of these measures is not well documented but subject to confirmation, it is regarded unlikely that further propagation of the disease occurs after beginning of 2001.
Therefore, given the fact that the system is now, subject to confirmation, **very stable**, it is assumed that the likelihood of the presence of BSE-infected cattle (the GBR) is expected 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 Croatia 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.

Croatia – Summary of the GBR-Assessment, June 2002

	EXTERNAL CHALLENGE		STABILITY				INTERACTION of EXTERNAL CHALLENGE and STABILITY
	1992-1995: High **1996-2000: Very high**		**1992-2000: Extremely unstable** **2001: Very stable (*subject to confirmation)**				Since 1992, and probably before, Croatia faced a high external challenge due to imports of MBM and cattle while the system was extremely unstable. The resulting internal challenge was therefore most likely recycled and amplified. The continuing external challenge could not be coped with by the extremely unstable system and this added to the building-up of an internal challenge.
GBR-Level	***Live Cattle imports***	***MBM imports***	***Feeding***	***Rendering***	***SRM-removal***	***BSE surveillance***	
III **GBR-trend** **Decreasing fast**	UK: No imports according to country import data and to other export data. Other BSE risk countries: 577,310 according to country import data. According to other export data, 315,184 from AT, BE, CZ, FR, DE, HU, IT, LT, NL, PL, SK and SI.	UK: None according to country import data and to other export data. Other BSE risk countries: According to country import data: 91-95: 1,341t 96-2000: 4,554t Total: 5,895t According to other export data: 91-95: 2,760t 96-2000: 9,894t Total: 12,654t	**Not OK: 1992- 2000, Reasonably OK: since 2001.** Any kind of MBM legally fed to cattle until 1997, non-ruminant MBM until 2001. No data provided on controls of RMBM-ban of 1997; cross-contamination likely. Feed ban and MBM-recall action in 2001, imported & domestic MBM for incineration. Effectiveness not fully clear and cross-contamination remained possible.	**Not OK: 1992-2000, OK*: since 2001.** • Since 1996, processing of fallen stock complied with operating standards required but until end 2000, bovine material (incl. SRM) was processed at too gentle conditions. • Since 01/2001, bovine animal waste including SRM and fallen stock is to be incinerated or otherwise disposed.	**Not OK: '92-2000, OK*: since 2001.** • No SRM ban before 1997. • SRM ban 1997-2001 for human consumption, probably increasing amount of SRM rendered for feed. • In 2001 SRM ban for cattle feed implemented.	BSE notifiable disease since 18/6/1996. ▪ No BSE surveillance before 1996. ▪ Only passive BSE-surveillance thereafter but number of BSE suspects low. ▪ Since 2001, active BSE surveillance, but number of tested animals still too low to exclude presence of BSE.	**INTERNAL CHALLENGE** An internal challenge is likely to have already existed in 1992, because of significant external challenges to the probably unstable system of the Former Yugoslavia. Between 1992 and 2001 this internal challenge most probably increased and since 1/2001 it should decline at the rate by which cattle born before 1/1/2001 leave the system.