

Report on
the Assessment of
the Geographical BSE-Risk
(GBR) of
THE REPUBLIC OF CYPRUS

NOTE TO THE READER

Independent experts have produced this report, applying an innovative methodology by a complex process to data that were voluntarily supplied by the responsible country authorities. Both, the methodology and the process are described in detail in the final opinion of the SSC on "the Geographical Risk of Bovine Spongiform Encephalopathy (GBR)", 6 July 2000. This opinion is available at the following Internet address:

<http://europa.eu.int/comm/food/fs/sc/ssc/outcome_en.html>

In order to understand the rationale of the report leading to its conclusions and the terminology used in the report, it is highly advisable to have read the opinion before reading the report. The opinion also provides an overview of the assessments for other countries.

FULL REPORT

1. DATA

- The available information was suitable to finalise the GBR risk assessment.

Sources of data

Country dossier consisting of:

- Basic questionnaire for the assessment of the Geographical BSE-risk as transmitted by the Department of Veterinary Services (DVS) on November 3, 2000.
- Supporting information file concerning the basic questionnaire transmitted by the Veterinary Service by mail on November 3 and received by the Commission Services on November 14.
- Answer of the authorities of the Republic of Cyprus on the draft report (received 16 February and 9 March 2001).

Other sources:

- EUROSTAT data on exports of "live bovine animals" and of "flour, meal and pellets of meat or offal, unfit for human consumption; greaves", from EU Member States, covering the period 1980 to 1999.
- UK-export data on "live bovine animals", 1980-1996, and on "Mammalian Flours, Meals and Pellets", 1980-2000. As it was illegal to export mammalian meat meal, bone meal and MBM from UK since 27/03/1996, exports indicated after that date may have included non-mammalian MBM.

2. EXTERNAL CHALLENGES

2.1 **Import of cattle from BSE affected countries**

Table 1 provides an overview of the import of live cattle into the Republic of Cyprus, as provided in the country dossier (CD) and compares this with the exports from BSE-affected countries, as indicated in Eurostat and UK export statistics.

According to the country dossier, the Republic of Cyprus did not import live cattle from the UK from 1980 until present. This is confirmed by EUROSTAT and UK export-data.

According to the Republic of Cyprus no live cattle were imported as well from any other BSE affected country since 1980. Two sources of statistical data were checked:

- Data collected by the Department of Veterinary Services when issuing import permits, and records available at the 2 entry points;
- Data collected by the Department of Statistics and Research from the Ministry of Finance (certificate provided).

EUROSTAT export data, however, indicate exports of 426 live cattle from France and the Netherlands to the Republic of Cyprus (Table 1). The latter could not yet

be confirmed by NL but they would, if confirmed, represent only a negligible external challenge.

Import of live cattle (n/year) into <u>THE REPUBLIC OF CYPRUS</u> from BSE-affected countries									
Period	UK			FR		NL		Non-UK	
<i>Source:</i>	CD	EU	UK	CD	EU	CD	EU	CD	EU
1980					0				
1981					0				
1982					0				
1983					76				76
1984					0				
1985					0				
1986					0				
1987					0				
80-87:	0	0	0		76				76
1988					0				
1989					0		324		324
1990					0				
1991					0				
1992					0				
1993					0				
88-93:	0	0	0		0		324		324
1994					0		26		26
1995					0				
1996					0				
1997					0				
1998					0				
1999					0				
94-99:	0	0	0		0		26		26

Table 1: Live Cattle imports. Shading indicates period of different risk that UK-exports carried the agent, 1988-1993 being the period of highest risk.

Sources: CD = Country Dossier, EU = Eurostat, UK = Export data from UK.

2.2 Import of MBM or MBM-containing feedstuffs from BSE affected countries

Table 2 gives an overview of the MBM-imports into the Republic of Cyprus, as provided in the country dossier and compares it with the Eurostat and UK-export statistics.

Since 1990 the Republic of Cyprus has undertaken a series of measures to control these imports:

1990: Import ban for animal feed from BSE/Scrapie-affected countries and ban on the use of ruminant protein in the feeding of ruminants (Legal Order 236/90).

Request of veterinary certificate that the import consignment of feeding stuffs of animal or vegetal origin does not contain bovine protein (Legal Order 250/90).

1991: Pre-import clearance of any quantity of animal feed by veterinary service.

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1994: Request of veterinary certificate for the import of feeding items from EU countries other than the UK, that they do not contain animal protein of bovine origin and that other animal protein was processed according to 133/20/3 standard.

Request that all imported feedstuffs, which contain mammalian protein, are labelled "not for ruminants" (Legal Order 300/1994).

1996: Import ban on any product derived from UK-ruminants.

2000: Analytical control of imported feedstuffs started in July. 20 samples were checked by the UK's ELISA test. No ruminant or porcine protein was found.

The import data provided by the country are mainly referring to "concentrates" and are therefore not fully comparable to the export figures of Eurostat under the category "flours, meals, pellets of meat or meat offal, greaves; unfit for human consumption". According to the Republic of Cyprus, these quantities include fishmeal and protein concentrates for poultry and pigs as well as feed supplements and premixes with trace elements, vitamins and coccidiostats. The Republic of Cyprus claims that the quantities of MM, MBM and BM imported were very small (however, in the same order of magnitude as Eurostat records for MBM) and they were used for the production of concentrates for pigs and poultry. These concentrates were produced in feed mills, which did not produce feeding stuffs for ruminant animals. However, it is clear from Eurostat data that the Republic of Cyprus has imported large amounts of MBM from BSE-affected countries, including UK, throughout the period under consideration. Eurostat registered exports of 16,171 tons of "flours, meals, pellets of meat or meat offal, greaves; unfit for human consumption" before 1991 and 17,650 tons between 1991 and 1999.

The data in table 2 show significant imports from the UK (833 tons in total) but also from other BSE-affected countries, in particular France, BE/LUX, the Netherlands, and Denmark (32,405 tons between 1980 and 1999). While the exports from Germany and Spain, where BSE was only recently confirmed, remained small, more than 10,000 tons of MBM were exported from Italy, mainly in the last 10 years.

Examples of certificates have been produced but only for 1998, 1999 and 2000 and not for all importing countries (only NL and BE) (the Republic of Cyprus notes that certificates are destroyed every three years). For the import of pet food into the Republic of Cyprus, evidence is provided that UK has issued specific certificates stating that the product does not contain any products from bovine animals slaughtered in the UK or mammalian derived meat and bone meal of UK origin. Evidence of certificates for poultry meal has been provided as well (1999-2000).

It is stated that imported concentrates were exclusively destined for feed for partridges, horses and fish, and that they anyway did not contain proteins of mammalian origin. It is not clear if and how the appropriate use was controlled. The composition was not verified by analytical controls, but it was taken from the import certificates.

Import of MBM, MM, BM or greaves (t/year) into <u>THE REPUBLIC OF CYPRUS</u> from BSE-affected countries																			
Period	UK			FR		BE/Lux		NL		DK		IT		SP		DE		Non-UK	
Source:	CD	EU	UK	CD	EU	CD	EU	CD	EU	CD	EU	CD	EU	CD	EU	CD	EU	CD	EU
1980		58	58		733		38												
1981					1369		239			18									
1982					626		519		524										
1983		10	10		1214		639		120										
1984					1040		680			20									
1985					612		797					84							
80-85		68	68		5594		2912		644		38		84						9272
1986					256		678		2			124							
1987		18	18		72		600		2			345							
1988					40		800					557		560					
1989							1291		38	40		584		60		8			
1990							529			140		87							
86-90		18	18		368		3898		42		180		1697		620		8		6813
1991							863		83		160								1106
1992							664		128		120		575						1487
1993	<i>18</i>	<i>230</i>	<i>230</i>	<i>105</i>	<i>210</i>	<i>418</i>	<i>701</i>	<i>104</i>			<i>30</i>	<i>162</i>	<i>1131</i>						2072
91-93		230	230		210		2227		211		310		1706						4664
1994	<i>76</i>			<i>149</i>	<i>126</i>	<i>425</i>	<i>620</i>	<i>84</i>				<i>139</i>	<i>268</i>						1014
1995		6	6			349	343	100	57			102	4977		100				5468
1996						215	161	101	121	20		122	2931						3213
1997		87	87			18	21	20	44			127	127						192
1998	<i>54</i>	3	3	<i>20</i>		93	267	168	64			535	578						909
1999	<i>93</i>	117	117			485	486	167	366			547	715				171		1738
<i>94-99</i>	<i>223</i>			<i>169</i>		<i>1,585</i>		<i>640</i>		<i>20</i>		<i>1,572</i>							
94-99:	833	213	213	40	126	8311	1898	5427	652	258	0		9596		100		171	14036	12543

Table 2: MBM-imports. Shading indicates period of different risk that exports carried the agent, 1986-1990 being the period of highest risk for UK imports while 1994-1999 UK-exports are assumed to have been safer than exports from other BSE-affected countries. Sources: CD = Country Dossier, EU = Eurostat, UK = UK-Export statistics. The total CD import figures (in bold) include fishmeal and protein concentrates for poultry and pigs as well as feed supplements and premixes. Since 1993 an annual breakdown is provided in the CD on meat meal imports (in italic).

2.3 Overall assessment of the 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.

It appears that the challenge resulting from live cattle imports has been negligible for the reference period (80-99).

The imports of MBM posed a significant external challenge throughout the same period. Assuming that the "concentrates" represented a similar challenge as "MBM", it was assessed as "high" from 1980 to 1990. Although legal orders were enforced since 1993 on restrictions of imports from BSE-affected countries, evidence is too limited to conclude that the external challenge resulting could be assessed at a lower level. Therefore the imports between 1991-93 are assessed as high and because of the evidence provided, the external challenge due to MBM imports since 1994 can be reduced by a factor 10 and hence assessed as high instead of very high.

External Challenge experienced by <u>THE REPUBLIC OF CYPRUS</u>				
<i>External challenge</i>		<i>Reason for this external challenge</i>		
Period	Level	Cattle imports	MBM imports	Comment
1980 - 1999	High	Negligible	High	MBM imports from non-UK BSE affected countries

Table 3: External Challenge resulting from live cattle and/or MBM imports from the UK and other BSE-affected countries. The Challenge level is determined according to the SSC-opinion on the GBR of July 2000.

3. STABILITY

3.1 Overall appreciation of the ability to avoid recycling of BSE infectivity, should it enter processing

Feeding:

According to the country dossier it has never been "common practice" to feed MBM to ruminants. It is said that no animal tissue has ever been incorporated in ruminants feed. Ruminant feed is claimed to be solely based on feeding items of vegetal origin. Feed mills due to the subsidy of grain did not and do not have any financial advantage to include animal proteins in feeds for ruminants. It was, however, not forbidden to feed ruminants with MBM until 1990. By order 236/90 feeding of ruminant MBM to ruminants was prohibited (effective 21.9.1990). In

1994 this prohibition was extended to include mammalian protein (Legal Orders N. 291 and 300/94).

The milk yields are low, which makes the use of high value animal proteins unnecessary and unprofitable. In addition the prices of meat and milk are fixed and controlled by the Ministry of Commerce and a free competition does not exist. This practice was supported by the Government policy to subsidise heavily feeding stuffs of vegetal origin. The prices of grains, barley and maize during the years 1970-1990 varied from 25-35 Cyprus pounds per ton and for soy bean meal from 80-120 Cyprus pounds. The prices of meat meal varied from 150-200 Cyprus pounds per ton and for fishmeal from 200-250 Cyprus pounds per ton. It is concluded that feed mills did not and do not have any financial advantage to include animal proteins in feeds for ruminants. Furthermore complete rations of cattle and small ruminants' feeds were prepared and sold to farmers by the grain commission.

According to the country dossier imported concentrates containing animal protein have been exclusively used for feeding of pigs, poultry and fish. All containers or bags containing feedstuffs with animal protein are required to be labelled "not for feeding to ruminants". This measure is controlled since 1993 but only since 1997, inspections (a total of 219) have been carried out on a random basis directly in feed mills. All quantities of MM imported from EU countries were exclusively used in feed mills producing concentrates of feeds for pigs and poultry only. These feed mills produce no feeds for ruminants. Since 1993, 1044 farms were visited to control the feed ban.

The enforcement of all feeding prohibitions for ruminants is controlled by:

- education of farmers
- inspection visits to feed mills
- control of storage of animal proteins separately from grains and soy used for the production of feeds for ruminants.
- sampling for laboratory examination
- inspections at the port of entry

No violations of the provisions of the legal orders on the prohibitions for feeding animal protein of mammalian origin were reported.

Rendering:

Before 1990, no rendering industry existed in the Republic of Cyprus and bovine offal was either incinerated or buried, as this was a provision of a Legal Order issued in 1972.

Since 1990 the Republic of Cyprus has a small rendering industry consisting of one single plant. The amount of MBM produced annually is 4,500 tonnes (15-18 tonnes per day). The rendering plant processes slaughterhouse by-products originating from the Central Slaughterhouse and a poultry slaughterhouse that belongs to the rendering plant company. Only low-risk materials are processed; i.e. no fallen stock but including SRM from animals fit for human consumption.

According to the country law, all bovine materials are batch-type rendered at $133^{\circ}\text{C}/20^{\text{min}}/3^{\text{bar}}$ at a maximum particle size of 50 mm since 1990. This has been certified as well by the company that installed the rendering plant. The country dossier contains thermograph records for several batches between 1996-2000, which indicate that the $133^{\circ}\text{C}/20^{\text{min}}/3^{\text{bar}}$ standard has been respected.

SRM and fallen stock

There was no official SRM ban before January 2001. It appears that SRM from animals fit for human consumption was normally rendered for MBM production. Before 1990 it was burned or buried. Fallen stock has not been rendered for MBM production. Fallen stock, carcasses or parts of carcasses, which are rejected as unfit for human consumption, are disposed of by burial or burning. In large livestock areas disposal pits are in place. All slaughterhouses are obliged to maintain incinerators or disposal pits for rejected material.

Since January 2001, the Republic of Cyprus has harmonised its legislation with EU Decision 2000/418/EC as amended by Decision 2001/2/EC. The relevant Legal Order N. 28/2001 provides for the removal of SRM and their destruction and for the collection and destruction of fallen stock either by incineration or burial after full heat treatment in an approved establishment.

Cross-contamination:

In the Republic of Cyprus there are 335 feed mills: 74 produce fodder exclusively for cattle, 116 for pigs and 115 for poultry only. Thirty feed mills produce fodder for ruminants, pigs and poultry. In 24 of them (that have vertical mixers) flushing batches with grains and wheat feed is performed several times and this is kept separately for use in feeds for non-ruminants.

All feeds for ruminants produced in feed mills are packed in new bags or are transported in special containers and there is no possibility for cross-contamination during transport with poultry or pig feeds which are always sold and distributed from these feed mills in bags.

Apparently only since 1997 feed mills are inspected to verify if flushing batches between ruminant and non-ruminant feed takes place.

According to the country dossier there is no co-farming (cattle with other farmed animal species) in the Republic of Cyprus and controls on farms (1044 since 1993) are supposed to verify that no feeding items containing mammalian protein are stored in cattle farms.

Packages containing animal protein are labelled not to be used for ruminant feed. The compliance with the labelling requirement is according to the country dossier, controlled and the District Veterinary officers report quarterly on the results of such inspections. Feed samples have been examined between 1990-1994 by microscope (all results are stated to be negative) and since the year 2000 by a specific ELISA test (it is not clear if examination has been carried out between 95-99). Until present, the 20 samples sent for ELISA examination are all reported not to include bovine protein. According to the country dossier, the worst case scenario

for cross-contamination of ruminant feed with animal protein during mixing is not more than 0.1%, and during the last ten years no bovine animal protein was imported in the Republic of Cyprus. Furthermore all imported MBM has been treated at the 133°C/20^{min}/3^{bar} standard since 1994. During the years 1993-2000, 22 tons of animal feeding stuffs were sent back because they did not fulfil the veterinary import requirement after laboratory and other examinations upon import.

Conclusion on the ability to avoid recycling

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 90 it would not have been recycled. After 1990, recycling and amplification became technically possible because ruminant material was rendered for feed.

Because of sufficient evidence on the efficiency of the different control measures (controls on farm level 1993, control on rendering conditions 1996, control in feed mills 1997) an assumption is made that recycling became less likely since 1996.

3.2 Overall appreciation of the ability to identify BSE-cases and to eliminate animals at risk of being infected before they are processed

Cattle population structure

According to the country dossier, the total cattle population of the Republic of Cyprus is currently 54,023 heads of which 24,052 are dairy cattle. The average slaughter age for meat cattle is reported to be 12 months now (before 1994-18 months) and dairy cattle is said to be slaughtered between 7 and 8 years of age. It should be noted that a substantial increase in the cattle population took place in the early eighties, which is an indication of large imports.

Year	Total n° of farms	Total n° of dairy farms	Total n° of dairy cows	N° of bulls >1 year	Total n° of cattle (all ages)
1980	1,117	909	8,549	1,797	19,873
1985	1,098	892	16,168	4,536	39,618
1990	646	526	22,411	5,383	54,032
1991	592	480	23,120	5,457	54,681
1992	558	433	23,897	5,346	55,613
1993	495	390	25,646	5,568	60,954
1994	434	338	27,574	5,443	64,214
1995	379	316	29,481	4,919	67,949
1996	348	293	27,319	6,608	69,918
1997	311	282	25,491	3,251	62,276
1998	281	266	23,822	1,991	55,741
1999	276	268	24,052	530	54,023

Table 4: Cattle population structure in the Republic of Cyprus.

Surveillance and culling

Notification of BSE has been compulsory since 8/6/1990.

No specific description is given of the criteria for a BSE-suspect. It is only indicated that animals "displaying neurological signs" and "moribund animals without signs of infection" are considered suspect BSE cases.

Awareness / training measures have been in place since 1991 and instructions to all veterinary officers and inspectors are provided. Farmers and private veterinarians are trained by lectures and video about BSE. Since 1990 laboratory personnel was trained in the Weybridge Laboratory (UK) apparently only for histopathological methods of examination. No details on how many staff or methods are provided.

Since 1996 all field veterinary officers and private veterinarians under contract were instructed to send the heads of bovines over 4 years of age showing neurological symptoms which did not respond to treatment, for laboratory examination (instructions provided). Until 1998 only one such animal was diagnosed and after examination, histopathology was negative (confirmed by the Institute of Tierneurologie, Bern, Switzerland).

Since 1998 the Republic of Cyprus has followed the criteria for BSE surveillance and testing set in Commission Decision 98/272/EC. Since then, 46 cows over 36 months were examined for BSE with negative results. It is not clear if all cattle examined were normal slaughter animals at abattoirs or if fallen stock on farm level or animals dead on arrival had been included. In January 2001, 48 brains of cattle at risk which were collected during the last six months of 2000 were examined histopathologically, with negative results. Sampling occurs according to the OIE standard.

Since January 2001 Legal Order N. 28/2001 provides for the testing of all bovine animals over 30 months of age at risk by one of the approved rapid tests listed in Annex IV (A) to Decision 2000/374/EC. Animals to be tested are bovines over 30 months of age which are subject to emergency slaughter, those which have died on the farm or during transport or if they have shown lasting neurological symptoms and did not respond to a therapeutic treatment. Two hundred eighty two samples of brains from cattle at risk (1.18% of the bovine population over 24 months of age) were collected between December 2000 and March 2001, examined by ELISA and all showing negative results. From July 2001 onwards all bovines slaughtered over 30 months of age will be examined by the approved ELISA test.

Since 1990 compensation has covered 75% of the market value of confirmed cases and culled suspects.

3.3 Overall assessment of the stability

For the overall assessment of the stability, the impact of the three main factors (i.e. feeding, rendering and SRM-removal) and of the additional stability factors, mainly cross-contamination and surveillance and culling, has to be estimated. Again the guidance provided by the SSC in its opinion on the GBR of July 2000 is applied.

Feeding: Feeding RMBM to cattle was legally possible until 1990 and of non-ruminant MBM until 1994. Inspection on enforcement of the feed-ban started in 1997, therefore it is assumed that feeding before was "not OK". Since feed controls started (1997) feeding is assumed to be “reasonably OK”.

Rendering: Rendering was introduced in the Republic of Cyprus in 1990, before that slaughterhouse offal was either buried or incinerated. Materials rendered include ruminant material and SRM from healthy animals. Fallen stock is prevented from entering rendering. Before 1990 rendering is assessed as “OK”. The process parameters used since 1990 have been according to the EU standard, but rendering was only "reasonably OK" for the period as controls of appropriate process conditions are provided only since 1996. Rendering is assessed as "OK" from 1996 onwards.

SRM-removal: An official SRM ban has existed since January 2001. Before then only SRM from fallen stock and rejected animals were excluded from rendering. SRM removal is judged “OK” before 1990, and “not OK” between 1990 and 2000 because it entered rendering. Subject to verification, the recently (since 2001) installed measures on SRM-removal will turn this stability factor into “OK”.

Other stability factors had no effect on stability until 1999. Since then they slightly enhanced stability thanks to better surveillance. The measures (enhanced testing) enforced recently will increase stability in the future and may be able to reveal BSE-cases in the country.

Stability of the BSE/cattle system in <u>THE REPUBLIC OF CYPRUS</u> over time					
Stability		Reasons			
Period	Level	Feeding	Rendering	SRM	Other*
1980	Stable	Not OK	OK	OK	
1981					
1982					
1983					
1984					
1985					
1986					
1987					
1988					
1989					
1990	Very Unstable		Reasonably OK	Not OK	
1991					
1992					
1993					
1994					
1995	Neutrally Stable		OK		
1996					
1997					
1998					
1999					
2000	Very Stable			OK*	
At current					

Table 5: Stability resulting from the interaction of the three main stability factors and the other stability factors. The Stability level is determined according to the SSC-opinion on the GBR of July 2000. *: pending verification of the SRM-removal.

On the basis of the available information it was concluded that the country's BSE/cattle system was stable before 1990. When rendering started in 1990, it became very unstable. Because rendering was better controlled since 1996, the system turned neutrally stable. It remained like this, even when feed controls were implemented, because SRM was still rendered. Subject to verification, the system will become very stable from 2001 onwards because of the SRM-removal.

4. CONCLUSION ON THE RESULTING RISKS

4.1 Interaction of stability and challenges

The conclusion on the stability of the BSE/cattle system of the Republic of Cyprus over time and on the external challenges the system had to cope with are summarised in the table below. From the interaction of the two parameters "stability" and "external challenge" a conclusion is drawn on the level of "internal challenge" that emerged and that had to be met by the system, in addition to external challenges that occurred.

INTERACTION OF STABILITY AND EXTERNAL CHALLENGE IN <u>THE REPUBLIC OF CYPRUS</u>			
Stability		External Challenge	Internal challenge
Period	Level	Level	
1980 - 1989	Stable	High	Possibly present (but not recycled)
1990 - 1995	Very Unstable		Likely and growing
1996 - 2000	Neutrally stable		Likely but decreasing
At current	Very Stable		

Table 6: Internal challenge resulting from the interaction of the external challenge and stability. The internal challenge level is determined according to guidance given in the SSC-opinion on the GBR of July 2000.

The BSE/cattle system was exposed to a high external challenge since 1980 because of MBM imports.

Imports of contaminated MBM, MM, BM or Greaves would lead to an internal challenge in the year of import, if fed to cattle. The feeding system is of utmost

importance in this context. If it could be excluded that imported, potentially contaminated feed stuffs reached cattle, such imports might not lead to an internal challenge. In the case of the Republic of Cyprus it cannot be excluded that some imported MBM reached domestic cattle, especially before 1991 when the MBM consignments were not certified and no RMBM ban was yet installed. Because only since 1997 controls on the feedban started, this internal challenge remained unchanged. Therefore some internal challenge must be assumed to appear between 1985-1990. An internal challenge is likely to appear about 5 years after cattle have been fed with potentially contaminated MBM. For the Republic of Cyprus this would have been in 1985. Because of the stable system, the internal challenge would not have been growing, unless more animals would have had access to potentially infected MBM. However, the continuous imports would have fuelled this internal challenge further. Due to the installation of the rendering industry, the possible internal challenge would have been recycled and thus growing in a very unstable system after 1990. Since 1996, however, the rendering process has been properly controlled and it turns the system neutrally stable, which means that amplification became unlikely while some recycling can still not be fully excluded. It can be assumed that the growth of the internal challenge has been decreasing since 1996 also because the exposure to external challenges has decreased due to better controls and certification.

4.2 Risk that BSE infectivity entered processing

Given the fact that the BSE-agent was most likely imported into the country, a risk that BSE infectivity entered processing first existed about 5 years after import of potentially contaminated feed stuff that could have reached domestic cattle. Given the fact that the Republic of Cyprus imported continuously MBM from France and considering that the first birth cohort in France with a BSE case was in 1981 this could have happened since 1986.

4.3 Risk that BSE infectivity was recycled and propagated

Since 1990, recycling was possible in a very unstable system and it has to be assumed that infected cattle were entering processing and hence a risk that BSE infectivity was recycled and propagated exists since then. Since 1996 amplification will not occur anymore but recycling may still happen, and since 2001 the risk of recycling and propagation will most probably decrease significantly.

5. CONCLUSION ON THE GEOGRAPHICAL BSE-RISK

5.1 The current GBR as function of the past stability and challenge

- The current geographical BSE-risk (GBR) level is *III*, i.e. *it is likely but not confirmed* that domestic cattle are (clinically or pre-clinically) infected with the BSE-agent.

5.2 The expected development of the GBR as a function of the past and present stability and challenge

- As long as the system remains neutrally stable, the GBR will remain constant, as long as no additional external challenges occur. This will most probably remain, taken into consideration that certification of the imports and own checks on the imports are properly being carried out, and hence the external challenge can be regarded as decreasing. In view of the proper implementation of the adequate measures taken recently, the GBR will start to decrease.

5.3 Recommendations for influencing the future GBR

- Improving the stability of the system, in particular by ensuring that no MBM is fed to cattle but also confirming that SRM does not enter the feed cycle would reduce the GBR over time. Recent measures taken by the Republic of Cyprus already reflect these recommendations.
- The better surveillance, as foreseen by the measures recently taken (testing cattle) will improve the basis for controlling the efficiency of the stability enhancing measures. Moreover, it will underpin the current GBR and show evidence of the decreasing trend.