

# **A COMPARATIVE STUDY OF THE RISK PERCEPTIONS AND RISK COMMUNICATIONS OF STAKEHOLDERS WITHIN FIVE EUROPEAN COUNTRIES AFTER THE ISSUE OF THE TSE ROADMAP\***

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## **SUMMARY**

Science-based control measures (such as the ban of the inclusion of meat and bone meal in feed and the removal of potentially BSE infected animal tissues, the so called specified risk materials, from the feed/food chains) by the EU and elsewhere resulted in the continuous decline of the BSE epidemic in recent years. The pressure to lift certain control measures led the European Commission to issue a TSE Roadmap allowing an open discussion on the potential for regulation relaxation. To investigate the risk perceptions of stakeholders and how to improve the communication in dealing with the TSE roadmap a qualitative social research has been carried out. Forty-six in-depth, semi-structured face-to-face interviews with risk managers and stakeholders were obtained in Belgium, France, Germany, Italy and the United Kingdom. The main results obtained may be summarized as follows. TSE is not longer a hot topic: the interviewees shared the view that the TSE risk is clearly on decline and the overall BSE (and TSE) risk perception is low. Moreover all examined stakeholders appreciated the TSE Roadmap as a new communication strategy; however they provided several suggestions to improve the communication in the field of TSE.

**Keywords:** BSE, TSE Roadmap, Risk perception, Communication, Qualitative study.

## **RESUME**

Des mesures de contrôle importantes prises par l'UE et fondées sur la science, comme par exemple l'interdiction de l'utilisation des farines de viande et le retrait des matériaux à risques à l'abattoir, ont entraîné une régression continue de l'épizootie d'ESB ces dernières années. La pression pour relâcher certaines de ces mesures a poussé la Commission Européenne à publier la « TSE roadmap » (Feuille de route pour les ESST), permettant une discussion ouverte sur le potentiel du relâchement. Afin d'étudier les perceptions des acteurs concernés et les moyens d'amélioration de la communication sur la feuille de route, une étude qualitative a été réalisée. Quarante-six entretiens semi-directifs ont été réalisés avec les gestionnaires du risque et les acteurs en Belgique, en France, en Allemagne, en Italie et au Royaume-Uni.

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Les résultats peuvent être résumés ainsi : les ESST ne sont plus vraiment d'actualité ; les personnes interviewées partageaient l'idée que le risque lié aux ESST est clairement en baisse et donc la perception globale du risque BSE est faible. De plus, tous les acteurs appréciaient la feuille de route comme un nouvel outil de communication ; par contre, ils soulignaient l'importance de la communication sur les ESST en donnant plusieurs suggestions de communication.

**Mots-clés** : ESB, feuille de route pour les ESST, perception du risque, communication, étude qualitative.




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## I - INTRODUCTION

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During the eighties Bovine spongiform encephalopathy (BSE, mad cow disease), a fatal neurodegenerative disease, led to an epidemic in the cattle of UK. Years later, in 1996, a worldwide alarm exploded when the BSE agent was found to transmit to humans and cause a new type of dreadful neurological disease, variant Creutzfeldt-Jakob disease (vCJD). A new crisis occurred few years later when active surveillance applied to slaughter animals and fallen stock proved the presence of BSE as much more widespread in continental Europe than believed [Ducrot *et al.*, 2008].

Science-based control measures by the EU and elsewhere succeeded in restricting the BSE epidemic to a continuous decline in recent years. In particular the responsibility of contaminated meat and bone meal (MBM) in the disease spreading led to a ban on the feeding of MBM to ruminants, implemented in 1988 in the United Kingdom and subsequently in the European Union (EU), to reduce the exposure of cattle to BSE via MBM. The bans had a great effect in decreasing the epidemic, but were not fully effective in controlling the disease, so that further and stricter measures were taken, based on the safety of MBM (e.g. the removal from food and feed chains of the specified risk materials, SRM, i.e. mainly nervous tissues where infectivity is restricted) and finally on an extended ban of mammalian MBM and other by-products in 2001 at the EU level (called total feed ban as it is extended to all farmed animals) in order to prevent all possible contaminations.

In the current context of fading out of the BSE epidemic, there is a huge pressure from different stakeholders to lift certain control measures of BSE. That drove the European Commission to publish in 2005 the so-called TSE roadmap ([http://ec.europa.eu/food/food/biosafety/bse/roadmap\\_en.pdf](http://ec.europa.eu/food/food/biosafety/bse/roadmap_en.pdf); consulted 20 June 2010) suggesting the potential for relaxation of the BSE measures in the short, medium and long-term. According to the TSE roadmap « *any relaxation of BSE measures following the scientific assessment should be initiated by an open discussion with all stakeholders and supported by a strong communication strategy* ». The TSE roadmap is a very short document that comprises all relevant (scientific and legal) information. It is like a « catalogue of options open » for further discussion and calls all concerned about TSEs to participate in the discussion process. Discussion is governed and should take place within a given time frame. Finally transparency is obtained by putting all documents on the Internet.

In this context, the application of social research methods may be helpful in collating and interpreting the experience of the main stakeholders; this approach allows an investigation of intentions, beliefs, motifs, evaluations and justifications. Therefore it may help in assessing the level of available knowledge and anticipating the acceptability and the impact of regulatory changes; moreover the comparative analysis is useful to better understand factors at play [Wynne & Dressel, 2001 ; Dressel, 2002 ; Lemyre *et al.*, 2009A ; Lemyre *et al.*, 2009B].

The objective of this study was to describe the risk perception of 4 stakeholder groups in regard to the relaxation of BSE measures in five European countries. Moreover the

investigation allowed to identify best practices in risk communication in dealing with the TSE roadmap.

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## II - METHODS

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The risk perception and risk communication strategies were investigated in five European countries with in-depth, semi-structured face-to-face interviews with stakeholders and an analysis of relevant documents (literature as well as website research).

The interviews were conducted on the basis of a guideline which was developed for this purpose and adapted according to the respective interviewee (like adapted in regard to contextual conditions or adapted according to the results of the literature research of the organization). The guideline included 30 main questions in regard to the risk perception of Transmissible spongiform encephalopathies (TSE), evaluation of implemented TSE risk regulation, evaluation of risk communication as well as questions in regard to stakeholder involvement by public policy-making. The guideline encompassed also questions of available TSE knowledge and an evaluation of TSE research and research funding. Questions in regard to the application of the precautionary principle were also addressed. The administration of the interview took on average 1 hour: all the interviews were audio recorded and then transcribed.

Risk managers as well as scientific advisers and stakeholder groups from Belgium, France, Germany, Italy and the United Kingdom were recruited for the study. The stakeholder groups included the main association of farmers, consumers and meat/food industry.

The selection of the interviewees was done on the base of their specific function and position

within the relevant stakeholder group that is those who are the person in charge for TSE issues within the organization and representing the respective organization in TSE relevant national and international meetings. Most of interviewees were quite senior, such as the president or the managing director of an organization or the head of division within the ministry.

The study was extended on the European level in regard to the risk management (DG SANCO) and in regard to risk assessment (EFSA).

The country reports were then analysed in a comparative study: cross-national as well as cross-stakeholders.

The analysis followed the guidelines, focused, hence, on TSE risk perception, TSE risk communication and assessments of and relaxation potential for TSE risk regulation (TSE risk management). The guideline was therefore a pre-defining mean for the subsequent analysis. The report was written on the basis of the literature research and the analysis of the interviews and, if necessary, translated into English. The country reports as well as the EU level report were sent after finalization to the interviewees. All interviewees had the opportunity to read, to review and to comment on the respective country or EU report before the reports became part of the final report. Several replies were made by the interviewees that went into the final version of the overall report.

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## III - RESULTS

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In total 46 interviews were conducted, complemented by several additional background talks with other persons in the field. Only the consumer organisations from France were not at all interested to participate.

The risk perception and the opinion of what should be considered adequate risk communication varied by country and stakeholder group.

## 1. RISK PERCEPTION AND OPINIONS ON THE RISK MANAGEMENT MEASURES

The current TSE overall risk perception show no distinguishable differences between the five jurisdictions: all examined stakeholder groups in all countries agreed that the risk from BSE and other TSEs have diminished – a fact that was ascribed to adequate risk management measures.

With regards to the general reactions towards the TSE Roadmap, only in Italy several general reservations were raised, if the control of the disease can be safeguarded once the regulation changed; however in this country the knowledge regarding the TSE Roadmap and its envisaged changes was not broadly distributed. Contrary to Italy, French, German, Belgium and the UK stakeholders welcomed suggestions made by TSE roadmap as timely and sufficiently scientific based. For instance TSE Roadmap is considered by the UK meat industry representative to be a « *really good*

*piece of work* » as « *it is very, very difficult to remove regulations when you put them in place ... and I think therefore it is quite helpful to have a plan for how we're going to do that* ». Particularly in consumers from the UK, but also from Germany, the idea of science-based or risk-based decision-making was prominent.

When investigating which are the most important measures currently in place (table 1), all stakeholders in all countries regarded the feed ban and the removal of SRM as absolutely fundamental for TSE risk regulation. If risk managers considered equally important both the measures, most stakeholders, but the Italian interviewees which put main emphasis on the feed ban, were convinced of the importance of the SRM ban.

The potential for measure relaxation : the guideline included some questions requiring an opinion on each of the specific main measures (feed and SRM bans and surveillance).

**Table 1**  
**Which are the most important measures currently in place?**

Stakeholder Group	Consumers	Farmers	Food and Meat Industry	Risk Management
Countries				
<b>Belgium</b>	SRM removal	SRM removal	SRM removal	SRM removal & Feed ban
<b>France</b>	**	SRM removal	SRM removal	SRM removal & Feed ban
<b>Germany</b>	SRM removal	Feed ban	SRM removal & Feed ban	SRM removal & Feed ban
<b>Italy</b>	Feed ban	Feed ban	Feed ban	Feed ban
<b>United Kingdom</b>	SRM removal	SRM removal	Feed ban	SRM removal & Feed ban
<b>EU</b>	*	*	*	SRM removal & Feed ban

\* no interview programmed ; \*\* refuse of the actor to participate

### 1.1. SURVEILLANCE

The surveillance system was seen as an important measure, although most of the participants consider the testing regime as a mere tool for the epidemiological monitoring of the disease. If the surveillance has to be kept for some more years, however its relaxation (in

particular modifying the age limit of the animal to be tested) was considered easy to implement (table 2). However consumers in Germany, Italy and the UK (here also the farmers) deemed routine testing as very important – not just for monitoring the epidemic, but also for public health reasons.

**Table 2**  
**Surveillance: potential for relaxation**

Stakeholder Group	Consumers	Farmers	Food and Meat Industry	Risk Management
<b>Countries</b>				
<b>Belgium</b>	Possible	Possible	Possible	Possible
<b>France</b>	**	Possible	Possible	Possible
<b>Germany</b>	Not possible	Possible	Possible	Possible
<b>Italy</b>	Not possible	Possible	Possible	Possible
<b>United Kingdom</b>	Not possible	Not possible	Possible	Possible
<b>EU</b>	*	*	*	Possible

\* no interview programmed ; \*\* refuse of the actor to participate

### 1.2. SRM REMOVAL

With regards to SRM removal (table 3), we found a wide range of opinion within the jurisdictions. As said above, all would agree (except Italy) that the SRM control is the core measure to safeguard public health in regard to TSE risks. Hence, Italian stakeholders look more open to relaxation of the SRM ban. We did not found an unified French position, as stakeholders and risk managers totally disagreed on their evaluation of relaxation potential in regard to the SRMs. Risk managers were more in favour of amendments, all other stakeholders were widely against, or they thought that only slight modifications are possible. UK stakeholders

were united by their strong request for strong scientific evidence and very careful considerations where any amendment should be based upon. Otherwise we should keep the current legislation as it is now. In Germany we found also no congruent response by the various stakeholders: whereas the industry found the current legislation « exaggerated » and should be changed consequently, consumers do not feel the need to modify anything of this core measure at the moment. The German risk management is in favour for modest relaxations of the SRM removal, whereas German farmers and breeders just want to have the same regulation applied in Germany than elsewhere.

**Table 3**  
**SRM removal: potential for relaxation**

Stakeholder Group	Consumers	Farmers	Food and Meat Industry	Risk Management
<b>Countries</b>				
<b>Belgium</b>	Difficult	Difficult	Difficult	Difficult
<b>France</b>	**	Difficult	Difficult	Possible
<b>Germany</b>	Difficult	Difficult	Possible	Possible
<b>Italy</b>	Possible	Possible	Possible	Possible
<b>United Kingdom</b>	Difficult	Possible	Difficult	Possible
<b>EU</b>	*	*	*	Possible

\* no interview programmed ; \*\* refuse of the actor to participate

### 1.3. FEED BAN

In Italy all the stakeholders agreed on the risk regulation tool feed ban which should be uphold as it is (table 4).

No coherent response emerged in Belgium: risk managers and consumers were less keen on relaxations, whereas other stakeholders generally agreed on relaxations. Similarly in France: whereas risk managers tend to be reluctant for relaxations of the feed ban, industry and farmers vividly ask for them. We have here the opposite reaction as we found in regard to the SRM control (see above). No coherent position were found in Germany: whereas risk managers see relaxation potential of the feed ban like the farming community or the industry, German consumers don't want « too much » changes in regard to the feed ban. In the UK all stakeholders and risk managers tend to maintain the feed ban – at least in theory and for different reasons. In practice, good scientific evidence and a sophisticated communication strategy toward

the general public would change this attitude as there appears not a general reluctance against relaxations of the feed ban, providing that certain standards are always kept.

## 2. HOW RISK COMMUNICATION WAS ASSESSED

In all five countries, there's currently hardly information on TSEs from the media. Italian consumers asked for more information from their health authorities and not just following the emergency. In Belgium stakeholders said that only decisions are communicated by the European Commission but not how they were made or on which assumptions or which alternatives. In France stakeholders asked for more and more adequate communication as a tool to gain consumer trust in food. In UK, compared to the past, all stakeholders complimented TSE risk communication by official UK bodies (UK's Food Standards Agency).

**Table 4**  
**Feed ban: potential for relaxation**

Stakeholder Group	Consumers	Farmers	Food and Meat Industry	Risk Management
<b>Countries</b>				
<b>Belgium</b>	Not possible	Possible	Possible	Not possible
<b>France</b>	**	Possible	Possible	Not possible
<b>Germany</b>	Not possible	Possible	Possible	Possible
<b>Italy</b>	Not possible	Not possible	Not possible	Not possible
<b>United Kingdom</b>	Not possible	Not possible	Possible	Possible
<b>EU</b>	*	*	*	Not possible

\* no interview programmed ; \*\* refuse of the actor to participate

## IV - CONCLUSION

The main results obtained may be summarized as follows. TSE is not longer a hot topic. All interviewees shared the view that the TSE risk is clearly on decline and the overall BSE (and TSE) risk perception is low. All examined stakeholders appreciated the Roadmap as a new communication strategy. However not all stakeholders who should be concerned by TSE roadmap were actually aware about its existence.

A general lesson learned by the BSE crisis is that better risk communication is needed and several improvements may be suggested. To this purpose what may be summarised from the views of the interviewees is:

1. Sound science knowledge must be a prerequisite of modifications of risk management;
2. It is imperative to communicate in plain, basic language;

3. Stakeholder involvement in political decision-making will lead to a much more robust social acceptance of risk management measures;
4. There is an overall request of the implementation of effective communication channels based on the identification of reliable and efficient structures and organizations by risk managers instead of communicating just with the media;
5. There is the need of new alliances of risk communication: cooperation between risk assessment bodies and consumer association in regard to risk communication
6. It is necessary to bridge the gap between risk assessment and risk management via new dedicated fora;
7. « No-risk messages » are not required by the general public – contrary to the perception of risk managers. We found in none of the examined countries an accentuation or a request for « zero risk » in life.

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