
Stakeholder involvement in the management of rural areas after an accident

A. F. Nisbet

*National Radiological Protection Board (NRPB)
Chilton – Didcot - Oxon OX11 0RQ - UK*

Abstract: Widespread contamination of the foodchain following a nuclear accident could have considerable consequences for European farming and food industries. For the purposes of contingency planning it is important to bring together the many and diverse stakeholders who would be involved in intervention so that strategies can be developed for maintaining agricultural production and food safety. This type of approach has been successfully implemented in the UK through the setting up of the Agriculture and Food Countermeasures Working Group. Building on this initiative, the European Commission under the auspices of its 5th Framework Programme is funding a thematic network in which similar stakeholder groups are being established in four other Member States. These national groups contain individuals involved in making policy decisions within government departments and agencies, regulatory authorities, the water, milk and farming industries, the retail trade and consumer groups, as well as individuals with specialist expertise. The stakeholder network will provide a European focus for tackling future nuclear accidents and assist in the harmonisation of policies and strategies between Member States. This paper gives an overview of the approaches being adopted and discusses the achievements and expected benefits of stakeholder engagement.

1. INTRODUCTION

Widespread contamination of the foodchain following a nuclear accident could have considerable consequences for European farming and food industries. As a result, contingency plans, which include a range of agricultural countermeasures, are needed to reduce the radiological impact on the affected population and to return the land to agricultural production. Experience following the Chernobyl accident showed that a wide range of effective countermeasure techniques exists (e.g. [1]). The applicability of these agricultural countermeasures for use in the UK was subsequently evaluated in a study funded by the Ministry of Agriculture, Fisheries and Food (MAFF). This study [2] necessitated the collection of expert opinion from a wide range of organisations including the farming industry, agricultural research institutes and university departments. These consultations highlighted a divergence of opinion between experts on many of the criteria discussed. As a consequence it was impossible to propose a coherent strategy for the UK should rural areas become contaminated with radionuclides following a nuclear accident. The study concluded with a recommendation to MAFF that for the purpose of pre-accident planning, a working group comprising all the relevant stakeholders be set up to develop strategies for the post-accident management of rural areas. A detailed report on how this initiative was taken forward in the UK has already been published [3]. This paper provides an overview of the approach

adopted and describes how a stakeholder network is being developed in other European Member States. The achievements and expected benefits from stakeholder engagement are discussed.

2. THE UK AGRICULTURE AND FOOD COUNTERMEASURES WORKING GROUP

2.1. Terms of Reference

The Agriculture and Food Countermeasures Working Group (AFCMWG) was set up in 1997 by MAFF¹. Draft terms of reference for the new Group were agreed at the first meeting and are as follows:

1. To establish lines of communication between those organisations who, in the event of a nuclear accident, would be involved in decisions on the need for intervention in agricultural systems in the medium to long term, and in their implementation.
2. To provide a forum for the dissemination of relevant information on agricultural countermeasures.
3. To debate and judge the practicability of various countermeasure options, as part of pre-accident planning, and to distil the implications for government and the agriculture and food industries; and to identify where further work is required.
4. To provide the core of a working group that, in the event of an accident affecting agriculture in the UK, could be convened to provide an input to decisions on countermeasure strategy.

2.2. Membership and structure

The AFCMWG was originally chaired by MAFF¹, with the technical secretariat provided jointly by MAFF¹ and NRPB. Membership of the Group was selected on the basis of the following four criteria:

- Adequate representation of the interests and concerns of each stakeholder type
- Reasonable balance between Government Organisations (GOs) and Non-Government Organisations (NGOs)
- Participation from individuals with responsibility for input to policy type decisions and with a broad knowledge of the issues
- Willingness to participate

Key organisations with responsibilities for the food supply chain as well as those affected by the implementation of countermeasure strategies in rural areas were identified. Representatives were drawn from GOs and NGOs to widen the expertise available and enhance the credibility and independence of the Group. These included various government departments and regulatory authorities, the water, milk and farming industries, the retail trade and consumer groups. Senior personnel from each organisation were selected so that authoritative and representative views of a wide range of issues could be presented and discussed at meetings. The composition of the Group has evolved, and at the October 2000

¹ Since April 2000 responsibility for food safety has transferred from MAFF to the Food Standards Agency (FSA).

meeting 9 of the 21 representatives, were from NGOs (Table 1). Membership is kept under constant review with consideration currently being given to including **representatives from** the environment movement and the media.

Since 1999 two sub-groups have been set up to take forward specific issues and to develop policy where appropriate. The work of these groups is discussed in section 2.4.

2.3. Meetings

A wide range of topics has been discussed on the five occasions that the Group has met over the period 1997-2000. The scope of the topics may be divided into the following broad areas:

- Background information on nuclear emergency arrangements, radionuclide transfer in foodchains and countermeasure strategies
- Realistic accident scenarios and stakeholder response
- Findings from complementary/supporting studies and the work of subgroups
- International activities

At the first meeting of the Group it was agreed that contamination of milk following a nuclear accident would give members considerable cause for concern. The rapid transfer of several important radionuclides from pasture to milk as well as the continuous nature of its production has the potential to result in the rapid generation of large volumes of milk being considered unfit for human consumption. Whilst several options are theoretically available for disposing of this waste milk, none had previously been considered from practical and legislative points of view. Consequently, members were keen to use the Group as a forum for discussing these options, based on a credible accident scenario. They were also given the opportunity to propose additional options, including those for minimising the production of contaminated milk. The acceptability of different techniques and approaches has been actively discussed at meetings. There has been a general consensus that any option that was perceived to undermine consumer confidence was likely to be unacceptable to stakeholders, whatever its strengths scientifically.

Table 1: Stakeholder organisations represented on UK Group

Membership	Organisation
Government: Central	Food Standards Agency (3 representatives) National Radiological Protection Board Meat and Livestock Commission
Local	Local authority
Territorial	Ministry of Agriculture, Fisheries and Food Scottish Executive for Rural Affairs Department National Assembly for Wales Agriculture Department Department for Agriculture and Rural Development for Northern Ireland Environment Agency Scottish Environment Protection Agency
Non Government	Water UK Federation of Milk Groups Dairy Industry Federation Food and Drink Federation British Retail Consortium National Farmers Union National Federation of Consumer Groups Centre for Ecology and Hydrology Royal Agricultural College

2.4. Achievements

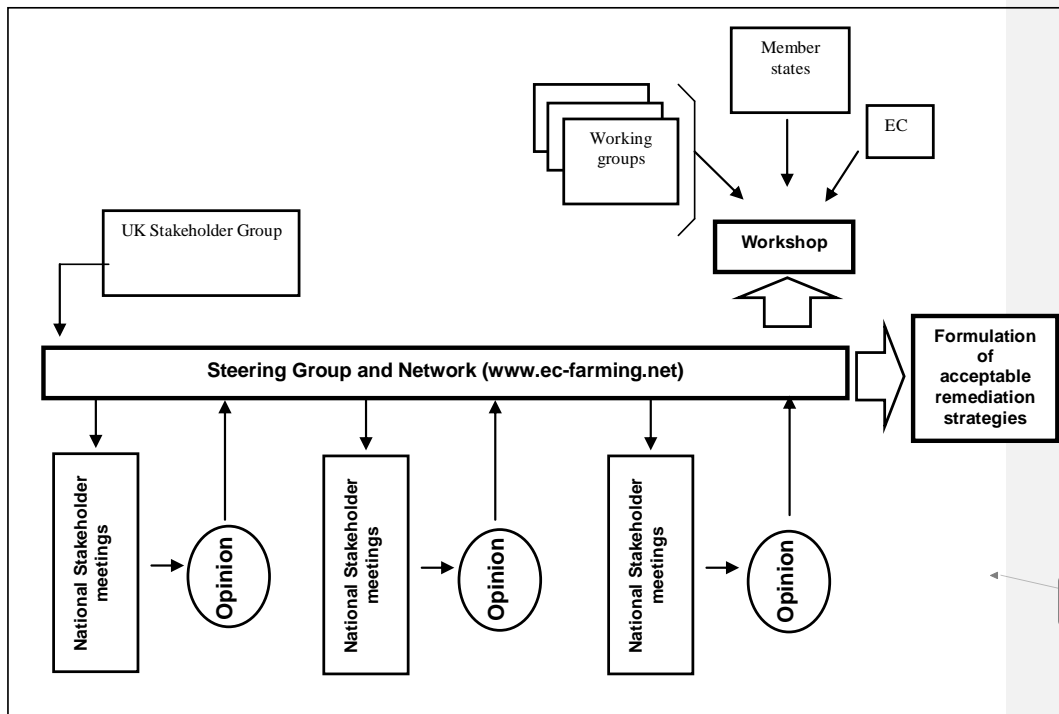
The Group continues to address each of its four terms of reference. Firstly, it has established communication links between those organisations that had not hitherto collectively considered the implications of contamination of the foodchain. Secondly, members of the Group have been kept up to date on remediation issues through the distribution of relevant literature by the technical secretariat. This information has been made available for wider dissemination within each stakeholder organisation, where appropriate. Thirdly, the Group has successfully debated the practicability of a wide range of remediation options and, despite a diversity of opinion, a consensus view has generally been reached on many issues. As a result, findings from the Group have been taken forward by both Government and Industry. Government has, for example, been prepared to consider the legislative implications of options such as disposal of contaminated milk to sea or to land. The water industry has also made a valuable contribution by identifying a number of long sea out-falls potentially suitable for the disposal of large volumes of contaminated milk. In addition, the Group has successfully identified gaps in the current knowledge base which are being addressed either through the work of active sub-groups or by the commissioning of funded research.

The Group continues to accrue a good working knowledge of remediation issues and has been successful in promoting mutual trust and respect between its Members. Consequently, there has been enthusiasm for the setting up of various sub-groups. For example, a sub-group has been established to develop an emergency monitoring

programme for individual farms in, or close to affected areas, to determine whether milk is above or below a given intervention level. Another sub-group has recently been convened to establish a national plan for the disposal of milk considered unfit for human consumption. It is the intention that in the event of a future nuclear accident this plan can be implemented without delay. In this way, the UK Group acts not only as a forum for discussion but also as a platform for taking forward plans for dealing with contaminated foods. From a Government Department perspective, the new links that have been established with all the major stakeholders will promote the level of authoritative advice that can be given to Ministers and the credibility of information communicated to members of the public.

3. 'FARMING' - A EUROPEAN STAKEHOLDER NETWORK

Accidental releases of radioactivity do not respect national boundaries and subsequent contamination of the foodchain could affect several Member States. The BSE crisis, problems with dioxin contaminated animal feed and more recently Foot and Mouth disease have highlighted the need for good lines of communication between countries. Building on the achievements of the UK AFCMWG, the European Commission (EC) under the auspices of its 5th Framework Programme, is funding the FARMING (Food and Agriculture Restoration Management Involving Networked Groups) thematic network. This four-year project, which started in November 2000, aims to create a European network of stakeholder groups, initially in 5 Member States (UK, Finland, Belgium, France and Greece) and involving more than 50 individual stakeholders, to assist in the development of robust and practicable restoration strategies. This will provide a European focus for tackling future nuclear accidents and assist in the harmonisation of policies and strategies between Member States.



Formatiert: Nummerierung und Aufzählungszeichen

Figure 1: Schematic diagram of FARMING project

3.1. Approach

An overview of the approach being taken in the FARMING project is given in Figure 1. Experience gained in the UK from the setting up and operation of the AFCMWG is being fed into a steering group, which is responsible for overseeing the formation of similar stakeholder groups in other Member States. Terms of reference are similar to those adopted in the UK. The national groups are scheduled to convene annually in the autumn of 2001, 2002 and 2003 for a series of two-day meetings. Additional meetings may also be set up on an ad hoc basis as and when required. Information, expertise and stakeholder opinion from meetings is being exchanged with other national groups via the existing web-site (www.ec-farming.net). This site provides the focus for the FARMING network: it contains agendas and minutes/reports of national stakeholder meetings, details of, and links to its members, as well as state-of-the-art information on countermeasure options. A series of annual web-site articles will consolidate principal findings from a European perspective. A workshop scheduled to take place towards the end of the project will provide a forum for promoting the wider application of stakeholder involvement in the development of an holistic approach to restoration strategies within Europe.

3.2. Membership

The initial membership composition of each national stakeholder group is given in Table 2. Chairmanship of each group is also indicated.

Table 2: Types of stakeholder organisations represented on national working groups

	Stakeholders	UK	Finland	Belgium	France	Greece
Government	Food Standards/Control Agency	+ ¹	+	+	-	+ ¹
	Ministry of Agriculture	+	+ ¹	+	+ ¹	+
	Ministry of Social Affairs and Health	-	+	+	-	-
	Ministry of Trade and Industry	-	+	-	-	-
	Radiological advisors	+	+	+	+	+ ¹
	Agricultural advisors	-	+	-	+	+
	Environment Agency	+	+	+	-	-
	Local authority/Mayor	+	-	-	+	-
	Emergency Supply Agency	-	+	-	-	-
Non-Government	Farming unions/farmers	+	+	+	+	+
	Production	+	-	+	-	+
	Processing	+	+	+	+	+
	Retailing/Marketing	+	+	+	-	-
	Consumers	+	+	+	+	+
	Families/Quality of life	-	-	-	+	+
	Rural advisory	-	+	-	+	-
	Environmental/Green movement	+	-	-	+	-
	Water industry	+	-	+	-	-
	Experts: agriculture, ecology, forestry, fishing	+	-	+	+	+
	Experts: home economics/food	-	+	-	+	-
Expert: nuclear	-	-	+ ¹	+	+	

+ Representation

¹ Provides chairperson of national group

In some cases, the same stakeholders are represented in each national group (e.g. representatives from the Ministry of Agriculture, radiological advisers, farming unions and consumers): national differences are also apparent however. Membership will be kept under constant review and evolve as the groups mature. Some of the stakeholders listed are contributing more than one representative either because of the diversity of disciplines of some of the larger organisations or due to regional representation. When this is taken into account, the balance between GOs and NGOs is as shown in Table 3. The high level of involvement of NGOs serves to widen the expertise available and enhance the credibility and independence of the national groups.

Table 3: Representation of GOs and NGOs on national groups

	UK	Finland	Belgium	France	Greece
GO	12	9	8	7	8
NGO	9	6	13	11	9

3.3. Expected benefits of the network

3.3.1. Improved communication and debate

The FARMING network will establish new lines of communication between stakeholders on a European basis. The practicability of restoration strategies will be debated by stakeholders at a senior level and in a European context, taking into account regulatory views, social and political factors and industrial constraints. This unique source of information will promote the level of authoritative advice given to Government ministers at the national level. Good communication links at the early stages of an accident will also enable more timely strategic decisions to be made, thereby minimising disruption to the food supply chain. This should help to maintain public's confidence in the authorities managing the accident situation.

3.3.2. Wider dissemination of information on restoration strategies

The network will provide a forum for the dissemination of relevant and up to date information on restoration strategies in advance of a nuclear accident. The FARMING web-site will enable information on practicable as well as impracticable strategies to be exchanged between Member States in a fast and accessible form, thereby avoiding duplication in research effort and the implementation of inappropriate techniques. The final-year workshop will also serve to promulgate information on management strategies and act as a platform for further expansion of the FARMING network in Europe.

3.3.3. Applicability to non-nuclear contaminants

The setting up of a network of stakeholder groups with interests in agriculture and the food industry will ensure that an infrastructure is in place that can potentially deal with other types of contamination event involving the generation of food considered unsuitable for human consumption. Some of the stakeholders involved could be the same, as could some of the strategies. The network can therefore be exploited for other purposes in the future.

3.3.4. Sustainability

Once the benefits of the network are realised, national stakeholder groups are likely to be self-sustaining, even when EC funds are withdrawn. The continuation and expansion of the network beyond the timescales of the 5th Framework Programme will maintain a high level of expertise in restoring and managing contaminated rural areas that could be exploited for non-nuclear contaminants in the future.

4. CONCLUSIONS

- For the purposes of contingency planning it is important to bring together the many and diverse stakeholders who would be involved in intervention so that strategies can be developed for maintaining agricultural production and food safety. The Agriculture and Food Countermeasures Working Group in the UK has proved to be an effective forum in this respect.
- The UK Group has been successful in establishing lines of communication between stakeholders, for disseminating relevant information on agricultural countermeasures and in facilitating debate on the practicability of various options and their impact on the food industry.
- The use of accident scenarios at meetings has proven to be an effective way of focusing discussion and eliciting stakeholders' views on the acceptability of specific management options. In general, any option that was perceived to undermine consumer confidence was likely to be unacceptable to UK stakeholders, despite its strengths scientifically.
- The contamination of milk is an issue that would cause stakeholders most cause for concern. Practicable disposal options as well as novel ideas and suggestions for minimising the volumes of waste milk produced have evolved through discussions of the Group. These are being taken forward at a policy level by both Government and Industry.
- The new links that have been established with all the major stakeholders from both GOs and NGOs, will promote the level of authoritative advice that the Group can give to Ministers and the credibility of information communicated to members of the public in the event of an accident.
- The FARMING network, which builds on the initiative taken in the UK, is establishing new lines of communication between stakeholders on a European basis. Its web-site is already proving to be an effective mechanism for promulgating information on countermeasure options and a useful medium for an exchange of opinion between different Member States.
- The impact of the network is potentially far reaching, as many of the options being considered are applicable to non-nuclear contaminants.
- The network has the potential to be self-sustaining which should maintain a high level of expertise in restoration management of rural areas.

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