

INVOLVING THE PUBLIC IN THE MANAGEMENT OF RADIOACTIVE WASTE – THE EUROPEAN UNION'S LEGISLATIVE AND RESEARCH INITIATIVES

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ABSTRACT

In the European Union (EU), nuclear energy has produced during the last few years over one third of the total electricity generated and consumed. Nuclear energy plays – and must continue to play – an important role in the diversity and security of the EU's energy supply. Also, as a direct result of its negligible emission of greenhouse gases, its use results in important environmental benefits. The crucial problem faced by the nuclear industry regarding greater development of nuclear energy is that of public acceptance. This is increasingly influenced by the absence of a clearly defined and established route for the safe, long-term management of some of the more hazardous radioactive wastes. There is a need to better inform the public about radioactive waste and, through wider consultation, involve them more in the decision-making process concerning the management of these wastes. Existing and proposed new European legislation not only encourages this provision of information and involvement in the decision-making process, but actually requires it. It is important for developers and national authorities not to see these new legislative requirements as an additional burden but rather as an opportunity to achieve a wider acceptance of a technology that can help the EU meet the massive challenge of climate change. This paper briefly summarises public opinion about radioactive waste in the EU (Part 1), the development of Community legislation regarding public information and involvement (Part 2) and the latest research in this area carried out under the Community's Framework Programme (Part 3).

EUROPEAN PUBLIC OPINION ON RADIOACTIVE WASTE MANAGEMENT

Radioactive waste is seen by many as the major issue for nuclear energy in the EU. It is a widely held view that the nuclear option can only remain open if all radioactive wastes can be managed in a safe and sustainable way. Public opinion surveys conducted by the European Commission (EC) show that while the public know little about radioactive waste, they feel concerned about it and have very little trust in the nuclear industry.

In 1998 and 2001, the EC conducted two public opinion surveys on the subject of radioactive waste (Eurobarometer EB 50 (1) and Eurobarometer EB 56 (2)). On both occasions, over 16 000 people across the EU were interviewed on the subject. The information from these two surveys is supplemented by data from a more recent Eurobarometer survey (spring 2002) covering all energy sources that included a number of questions about nuclear energy and its wastes (Eurobarometer EB 57 (3)).

The results of these surveys were presented in a number of papers, including to Waste Management '03 (4). To set the scene they may be briefly summarised as follows:

- If asked, around three-quarters of the population would profess to be worried about radioactive waste.

- Similarly, three-quarters of the people questioned thought they were not well informed on the subject.
- Very few – only one person in eight – realise that the large majority of low-level radioactive waste is disposed of by shallow burial. Even in France – where disposal sites have been in operation for many years – only 16% of those questioned identified “at or near surface burial” as the technique used for disposal of such wastes.
- For information on how radioactive waste is managed in his or her country, the average European trusts independent scientists (32%), NGOs (31%), government bodies (29%), waste agencies (27%) with the media (23%) and international organisations (22%) also playing a role. The nuclear industry is the least trusted source of all – with only 10% support.
- Nearly 10% of the population spontaneously said they did not trust anybody when it came to information about radioactive waste.
- About 50% of the people think that the media are fair in its reporting of nuclear issues.
- When asked why they thought high-level waste had not yet been disposed of, on average nearly half (46%) chose the response “because there is no safe way to do it”. On the other hand, only around 20% believe that the delay was caused by “the authorities carefully assessing all the risks before taking a decision”, with a similar percentage believing that a decision might not have been taken because “it is politically unpopular”.
- Nearly half the people interviewed thought nuclear power is a significant cause of climate change, with only a little over one quarter believing nuclear power is not a contributing factor.
- When asked whether nuclear power should remain an option for electricity production in the EU *if all the waste were safely managed*, the majority of those questioned agreed while only 25% disagreed.

PUBLIC INFORMATION AND INVOLVEMENT – EUROPEAN LEGISLATION

Environmental Impact Assessments – the Key to Public Information and Involvement

The most important piece of EU legislation in the area of public information and effecting nuclear projects was adopted in 1985. It is the Directive on the assessment of the effects of certain public and private projects on the environment (85/337/EEC) (5) – often referred to as the **Environmental Impact Assessment (EIA) Directive**.

This Directive identifies all types of projects that must be subject to an EIA and specifies the minimum amount of information that must be provided by the developer, with the requirement that this information be made available so that the “public concerned is given the opportunity to express an opinion before the project is initiated”. The list of projects covered by this Directive includes “installations solely designed for the permanent storage or final disposal of radioactive waste”

The Directive was subsequently revised in March 1997 by the adoption of a new Directive (97/11/EC) (6) that reinforced the existing requirements on Member States concerning EIAs and extended the list of projects with potential impact on the environment. Concerning radioactive waste management facilities in particular, projects now covered by EIA requirements include:

- installations for the processing of irradiated nuclear fuel or high-level radioactive waste;
- installations for the final disposal of irradiated nuclear fuel;
- installations solely for the final disposal of radioactive waste;
- installations for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production site.

Importantly, the coverage of nuclear power stations and “other nuclear reactors” was extended to include the dismantling and decommissioning of all such installations.

The Directive gave Member States wide discretion on how the above requirements are to be implemented in practice. For example, the Directives call for EIA results to be made available to the public before development consent is granted, but the detailed arrangements for such information and consultation is determined by individual Member States.

A study, carried out for the EC’s Directorate-General for Environment, investigated the scope and application of EIA legislation and current EIA practice in Member States and the then EU applicant countries of Central and Eastern Europe, specifically in relation to the geological disposal of radioactive waste. The level of compliance with the EIA Directives was determined, along with the extent to which international “best practice” had been adopted.

The study went on to investigate a model approach to an EIA in the context of geological repositories, including the role of the assessment on the overall decision processes for repository development, the scope and content of the assessment report, and approaches to public involvement. The study report (7) was published in 1999 in the EC’s “Nuclear safety and the environment” series and can be downloaded from the EC’s website.

We recommend that everybody working in the area of radioactive waste management in the EU read both the Directive and the 1999 study report, in particular the notes on guidance. This is especially important in the context of the reinforcement of requirements in the EIA Directives by legislation following the Aarhus Convention (described later in this paper).

To supplement the EIA Directive, a new Directive was adopted in 2001 (Directive 2001/42/EC) (8) that introduces a system of prior environmental assessment at the strategic planning stage. The Directive – often referred to as the **Strategic Environmental Assessment (SEA) Directive** – applies to plans and programmes likely to have, when implemented, significant effects on the environment and that are prepared and/or adopted by an authority at national, regional or local level, or have been prepared by such an authority for adoption by means of a legislative procedure, and that are required by legislative, regulatory or administrative provisions.

Environmental assessment is automatically required for a range of different plans and programmes – including both energy and waste management – that set the framework for subsequent development consent for all those projects listed in the annexes to the EIA Directive. This assessment must be carried out during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

As the SEA Directive has only very recently come into force, it is worth giving a little extra information containing the contents of the environmental report that must be prepared. This report must set out, *inter alia*:

- the contents of the plan or programme and its main objectives;
- the environmental characteristics of any area likely to be significantly affected by the plan or programme;
- any existing environmental problems which are relevant to the plan or programme;
- the national, Community or international environmental protection objectives which are relevant to the plan or programme in question;
- the likely environmental effects of implementing the plan or programme;
- the measures envisaged to prevent, reduce and offset any significant adverse effects on the environment;
- the envisaged monitoring measures.

The report must also include a non-technical summary of this information. The draft plan or programme and the environmental report must be made available to the environmental protection authorities and the public, who can then express their views on the draft plan or programme prior to its adoption or submission to the legislative process. The Member State must also send a copy of the draft plan or programme, together with the environmental report, to other Member States if the plan or programme is liable to have environmental impacts on the territory of these States or if these States request this information.

The environmental report, the opinions expressed by the relevant authorities and the public and the results of any transboundary consultations must be taken into account by the competent authority during the preparation of the plan or programme and before it is adopted.

This Directive had to have been transposed into national legislation in each Member State and implemented by 21 July 2004.

THE AARHUS CONVENTION AND RELATED EU LEGISLATION

In June 1998 the UN Economic Commission for Europe (UNECE) held its Fourth Ministerial Conference on the “Environment in Europe” in the Danish city of Århus (Aarhus). This conference adopted the “**Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters**”. The Convention entered into force on 30 October 2001.

The **Aarhus Convention** as it is known establishes a number of rights of the public (citizens and their associations) with regard to the environment. Public authorities (at national, regional or local level) must contribute to allow these rights to become effective. The Convention provides for:

- the right of everyone to receive environmental information that is held by public authorities (**First Pillar** – “*access to environmental information*”). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;

- the right to participate from an early stage in environmental decision-making. Arrangements are to be made by public authorities to enable citizens and environmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it (**Second Pillar** – “*public participation in environmental decision-making*”);
- the right to challenge, in a court of law, public decisions that have been made without respecting the two aforementioned rights or environmental law in general (**Third Pillar** – “*access to justice*”).

Under the Convention, all parties must:

- take the necessary legislative, regulatory and other measures to implement it;
- enable public officials and authorities to help and advise the public on access to information, participation in decision-making and access to justice;
- promote environmental education and environmental awareness among the public;
- provide for recognition of and support to associations, organisations or groups promoting environmental protection.

Since signing the Convention in 1998, the EU has taken important steps to update existing legal provisions so that the Community may meet the requirements of the Convention. This was done by means of legislation directed to the Member States. This is necessary so that the Community can formally ratify the Convention. These measures are presented below under the Convention's three pillars.

The First Pillar

The first move to bring Community law in line with the Aarhus Convention was the adoption on 28 January 2003 of the Directive on **public access to environmental information** (2003/4/EC) (9).

One objective of the Directive is to ensure that environmental information is systematically available and disseminated to the public. The Directive describes what information must be available, including data on activities affecting the environment, on environmental authorisations and agreements and on environmental impact studies and risk assessments.

Member States must ensure that public authorities make environmental information held by or for them available to any applicant at his request and without him having to state an interest. They must also ensure that:

- officials support the public in seeking access to information;
- lists of public authorities are publicly accessible;
- the right of access to environmental information can be effectively exercised.

Member States must ensure that all information held by the public authorities relating to imminent threats to human health or the environment is immediately disseminated to the public likely to be affected. **It is important to note that where the requested information relates to emissions into the environment, requests cannot be refused on grounds of confidentiality – such as the confidentiality of commercial or industrial information.**

The Directive also obliges the Member States to provide for an administrative “appeal”, (optional in the Aarhus Convention) which is a procedure that has the advantage of being rapid and free of charge.

Member States must bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 14 February 2005.

The Second Pillar

The main instrument to align Community legislation with the Second Pillar of the Convention – public participation – is the Directive “*providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC*” 2003/35/EC of 26 May 2003 (OJ L 156 of 25.06.2003, p. 17) (10).

This Directive updates provisions on public **participation in the decision-making procedures** at national level under legislation on environmental impact assessment and integrated pollution prevention and control, and it introduces rules on access to justice. Furthermore, it contains rules on public participation in the preparation of a number of environmental plans and programmes under Directives on waste, air pollution and protection of waters against nitrate pollution.

Of particular interest here is the amendment affecting the EIA Directive. In this Directive “the public concerned” must now be taken to be “*the public affected or likely to be affected by, or having an interest in, the environmental decision-making procedures*”. For the purpose of this definition, non-governmental organisations promoting environmental protection “shall be deemed to have an interest”. In addition, “the public concerned shall be given early and effective opportunities to participate in the environmental decision-making procedures”.

Member States are obliged to adapt their laws and other provisions to comply with this Directive by 25 June 2005 at the latest.

The Third Pillar

Directives 2003/4/EC and 2003/35/EC both contain provisions on access to justice that are in line with the Aarhus Convention. In addition, the Commission has adopted a proposal for a Directive to address fully the requirements of the Convention on **guaranteeing the public access to justice in environmental matters**. This proposal covers a double objective. Firstly, it will contribute to the implementation of the Aarhus Convention. Secondly, it will fulfil existing shortcomings in controlling the application of environmental law. For example, it has been recognised that better access to courts for non-governmental organisations and individuals would have a beneficial effect on the implementation of Community law.

This proposed Directive (COM(2003)624 final – “access to justice in environmental matters” - (11)) was adopted by the Commission in October 2003. It is now in the co-decision process, where it has passed its first reading in the European Parliament and the European Economic and Social Committee has delivered its opinion.

At the same time, the Commission also adopted a Regulation on “the application of the provisions of the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters to the EC institutions and bodies” (COM(2003)622 final of 24 October 2003 – (12)). This Regulation is moving through the co-decision procedure in parallel to the Directive on access to justice. A political agreement on this

Regulation was reached in the Council in December 2004 together with agreement on a Council Decision that the European Community should conclude the Convention (13). The formal adoption of both the Directive (11) and the Regulation (12) are expected in 2005.

EU FUNDED RESEARCH ON SOCIETAL ISSUES AND PUBLIC INVOLVEMENT IN WASTE MANAGEMENT

EU support for R&D in the field of nuclear science and technology, including radioactive waste management, is covered in the Treaty establishing the European Atomic Energy Community, or EURATOM Treaty for short. In the 5th EURATOM Framework Programme (1998 – 2002) providing funding, through shared-cost actions, for research in this field, the scope of the thematic areas of radioactive waste management and radiation protection was broadened to include projects on societal aspects, such as governance and related public acceptance issues. This marked an important break with previous Framework Programmes which had been concerned with purely technical issues, and was a recognition of the growing importance of these societal issues in all decisions related to development, and especially siting, of long-term waste management options. This policy has been retained in the 6th EURATOM Framework Programme (2002 – 2006) and so far has resulted in the funding of four important projects on societal / governance aspects.

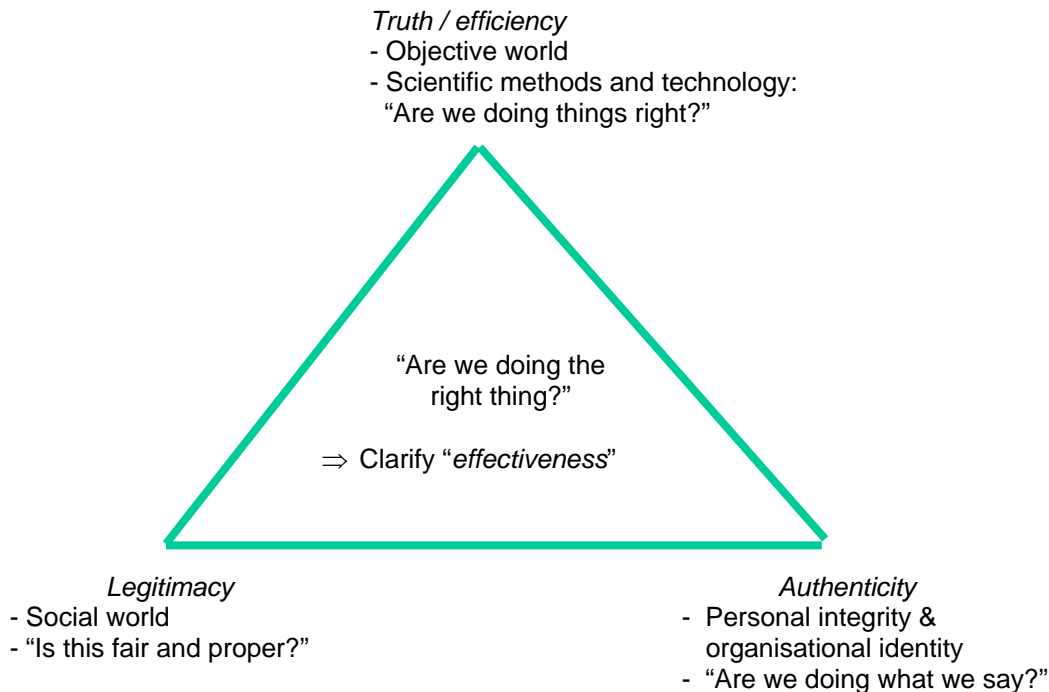
“RISCOM-II”

Enhancing Transparency And Public Participation In Nuclear Waste Management – project acronym RISCOM-II (RISK COMMunication) – was a 36-month shared-cost project within the EU's 5th EURATOM Framework Programme. The EU contribution to the budget was €300,000 out of a total of €1.8M, the project co-ordinator being the Swedish Nuclear Power Inspectorate (SKI). Other project partners were Swedish Radiation Protection Authority (SSI), Swedish Nuclear Fuel and Waste Management Co. (SKB), Nirex Ltd (UK), Environment Agency (UK), Galson Sciences Ltd (UK), Lancaster University (UK), EDF and Institut de Radioprotection et de Sûreté Nucléaire (France), Posiva Oy (Finland), Nuclear Research Institute (Czech Republic), Diskurssi Oy, (sub-contractor, Finland) and Syncho Ltd, (sub-contractor, UK).

The overall objective was to support the participating organisations in developing transparency in their nuclear waste programmes and means for a greater degree of public participation. However, although the focus was on nuclear waste, the findings are expected to be relevant for decision-making in complex issues in a much wider context.

To meet the objectives, the project addressed procedures in decision-making and the organisational context of nuclear waste programmes. The method used for the evaluation of transparency in decision-making processes was the “RISCOM transparency model”, which was essentially used as an evaluation tool in the development and testing of different procedures for public dialogue. Three basic aspects were considered: technical/scientific issues, normative issues and authenticity. The basic assumption is that to achieve transparency there must be appropriate procedures in which claims of truth, legitimacy and authenticity (both by the proponents and opponents) can be validated. This necessarily requires the unfolding of the different value systems of the participants.

One of the core issues addressed in the project was how a technical subject such as performance assessment could be made more transparent and accessible to the general public. Transparency is strongly linked with public participation; it needs public involvement for testing and challenging the claims put forward by the proponent and the relevant authorities (“*stretching*”). On the other hand, meaningful public involvement cannot take place without transparent organisational processes that provide for real influence. Dialogue, in which stakeholders are fully engaged, needs to be part of a decision-making process, but it can be counterproductive to invite external stakeholders to a dialogue if afterwards they have no influence on the unfolding of events – they must be encouraged to maintain their engagement in the process and be given opportunities to influence the outcome. This kind of engagement requires the design of structural mechanisms for participation, and the RISCUM model highlights the need for local representatives and opponents to be legitimate advocates of the “silent majority” in stretching implementers and other official stakeholders.



**Fig. 1. RISCUM Model: “Communicative Action”
... the purpose of transparency is to clarify “effectiveness”**

Transparency is therefore the key to understanding the RISCUM model:

- transparency is strongly linked to public participation, and this participation is needed to test and challenge the claims of the proponent & authorities;
- transparency needs decision-making processes that allow for this interaction, and these processes must include dialogue in which stakeholders feel fully engaged;

- the driving force in transparency is understanding and clarification – these can be achieved through “communicative action”;
- the RISCUM model is a structural mechanism for this interaction where transparency is the outcome of the learning process building on this communicative action;
- the term “effectiveness” is used to indicate that assessments in the decision process go beyond questioning the implementer’s legitimacy and proper use of science and engineering – effectiveness implies also reflecting upon the purpose of radioactive waste management, and consequently re-examining objectives and performance of the system and the efficiency of engineering solutions; in short, it permeates the whole triangle. The purpose of transparency is therefore to clarify effectiveness (see Figure 1).

The RISCUM transparency model has been applied to five countries in different phases of their radioactive waste programmes and with different cultural backgrounds and institutional frameworks. This created a basis for insights of a generic nature and a potential for considerable cross-fertilisation between countries.

The project has provided a “map” of values encountered in performance assessment, a review of dialogue processes and hearing formats, a diagnosis of organisational structures and understanding of the organisational impact on transparency, consensus statements from a group of key actors, and has produced and evaluated a Website for schools. Recommendations have been made regarding procedures and strategies for improved dialogue processes and hearing formats and regarding performance assessment.

The RISCUM II project has thus included several examples of the implementation of methodologies, insights and theories from a large knowledge base (such as risk communication and organisational theory) in the area of radioactive waste management. This approach integrating scientific, value-laden, procedural and organisational issues within a consistent framework for improved transparency is unique to RISCUM and could be an important step towards more trustworthy decision processes.

RISCUM deliverables can be downloaded from the project Website (14).

“COWAM”

The COWAM project (COmmunity WASTE Management) was a three-year Concerted Action, total budget €344,000, also funded under the EU’s 5th EURATOM Framework Programme. The project was managed by Mutadis Consultants, Paris, and the other partners were the Municipality of Oskarshamn (SE), NRPB (UK), SCK-CEN (B), Swedish Ministry of Environment, Swiss Federal Nuclear Safety Inspectorate and CEPN (FR).

The objective was to elaborate concrete findings and practicable recommendations in order to improve the decision-making processes at the local and regional community level used in the siting of nuclear waste facilities. COWAM compared, using case studies from different European countries, existing experiences of decision-making processes in the siting of waste management facilities (both nuclear and non-nuclear and involving various technical options), including with regard to historical, cultural and political considerations.

Given the complexity of waste management issues, the methodology was based on an interdisciplinary pluralistic approach. Siting choices are not only determined by scientific or technical options but by genuine political considerations of the relevant communities (local, regional, national). Thus, an assessment of the decision-making process necessitates a broad involvement of different categories of actors (public authorities, local community representatives, waste management operators and industry, NGOs etc.), and of experts from various disciplines (political sciences, regulation, sociology, psychology, ethics, philosophy, risk assessment, economics etc.). The Concerted Action therefore involved a pluralistic network of some 100 representatives of the different categories of stakeholders and experts. The COWAM deliverables include analyses of practical case studies on nuclear and non-nuclear waste facility siting experiences in Europe. The case studies covered management of short/long term low/medium/high level radioactive waste, management of hazardous chemical waste, waste management facilities such as surface and subsurface storage, underground laboratories and geological disposal.

In addition, on the basis of structured dialogue methodologies, work groups analysed the case studies and on-going relevant research was presented and discussed. A Steering Committee was established to take the important strategic and management decisions during the project, to draw the main conclusions and recommendations and to prepare the four major seminars held in Oskarshamn (Sweden), Verdun (France), Fürigen (Switzerland) and Cordoba (Spain). All participants were actively solicited in the drawing-up and dissemination of the COWAM conclusions and recommendations, which can be consulted in their entirety on the project Website (15).

In this way, COWAM has contributed to the exploration of new approaches to decision-making that are more efficient (in time and resources) and transparent, capable of gaining social trust and public confidence and less controversial. The recommendations result from analysis of material provided at the four major seminars and through the COWAM network (see Figure 2).

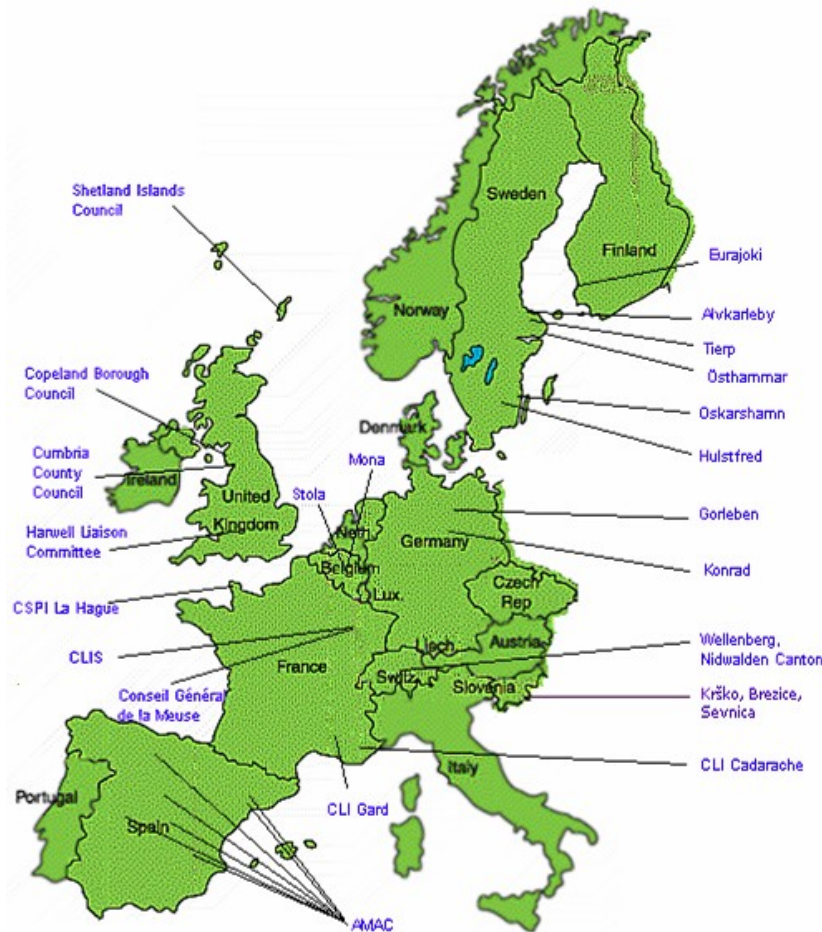


Fig. 2. The Extent of the COWAM network

“COWAM-2”

The COWAM-2 project is being funded as a shared cost project under the 6th EURATOM Framework Programme and builds on the success of the initial COWAM project. Its objectives are to contribute to actual improvement of the governance of radioactive waste management (RWM) in order to address the issue of geological disposal in Europe, by:

- better understanding and addressing societal expectations, needs and concerns as regards radioactive waste decision-making processes, notably at local and regional levels, taking advantage of past and ongoing experiences (successful and unsuccessful) in RWM in European countries;
- increasing societal awareness of and accountability for RWM at local, national and European levels, creating the conditions for an improved dialogue among representatives of civil society and traditional public and private RWM stakeholders;

- developing guidance on innovative democratic RWM governance and integrating local, national and European levels of decisions as well as the key non-technical and technical dimensions;
- developing best practice regarding sustainable decision making processes that is recognised as fair and equitable by all levels of stakeholders (local, national and European) as well as consistent over time frames of relevance to RWM;
- contributing to progress in general in the governance of RWM in Europe.

COWAM-2 is aiming at broad involvement of players from civil society (with significant representation of local communities, elected representatives, and NGOs, as well as social and natural scientists from outside RWM institutions) together with the traditional players in the field such as implementer, public authorities, experts and waste producers. COWAM-2 specifically addresses the objectives stated in the EURATOM FP6 Work Programme “to better understand what influences public acceptance and develop guidance for the improved governance of geological waste disposal”. Building on the results of the initial COWAM project, RISCOM-II, and work conducted by the NEA’s FSC (Forum of Stakeholder Confidence) and other relevant experiences, the project will enlarge the base of experience in the field by providing a critical analysis of past and current RWM decision-making processes.

COWAM-2 work programme will be developed through four thematic work packages on:

- implementing local democracy and participatory assessment methods;
- influence of local actors on the national decision-making process;
- quality of decision-making processes;
- long-term governance

Another three work packages will provide common services – integration, networking and management. The activities in the four thematic packages will be carried out in close partnership between experts and stakeholders, with the latter participating in the orientation of research as well as the checking and reviewing of results both at work package and overall project level. This innovative process will ensure that the work package activities remain consistent with the overall COWAM-2 objectives and that they address in practical terms stakeholders’ concerns. Third parties will contribute funding for stakeholder participation and the organisation of seminars.

The 36-month project is again co-ordinated by Mutadis Consultants, Paris, and the multidisciplinary consortium consists of 19 organisations from nine European countries (seven EU Member States, of which two are New Member States, one Candidate Country and Switzerland). The consortium encompasses European research and expertise from the natural and social sciences. The stakeholder participation will include some 40 different institutions, including traditional RWM players who have expressed an interest and numerous representatives from localities around Europe, some having already participated in the initial project. The total budget is some €2.4M, of which half is provided by the Framework Programme. More details can be obtained from the project Website (16).

“TRUSTNET”

A fourth project on societal issues that received funding through the EURATOM Framework Programme was entitled “Concerted Action on the Governance of Hazardous Activities”, commonly referred to as TRUSTNET. This developed innovative and practicable approaches to risk governance in Europe, in contexts where nuclear and other hazardous activities give rise to social concerns, and employed a pluralistic and interdisciplinary network of regulators, stakeholders and experts. The original project was funded under the radiation protection part of the 5th EURATOM Framework Programme, but TRUSTNET has since been “adopted” by the (non-nuclear) Community Framework Programme in the specific area entitled “Science and Society” and relabelled TRUSTNET-in-Action. More details are available on the project and Framework Programme Websites (17) (18). The fact that this project was viewed as relevant to risk governance in a wider context is an indication of the importance of the work being carried out and the success of the original project in dealing with this issue.

CONCLUSIONS

Some simple conclusions can be drawn about the Community legislation in the area of public information and involvement in the decision-making processes related to the management of radioactive waste. Basically, through the Directives on Environmental Impact Assessment that have been significantly reinforced by the changes to Community legislation that follow on from the Aarhus Convention, the concerned public must be informed about any plans, programmes or projects that could impact on their environment. Importantly they must also be given adequate opportunity to participate in the decision-making process. If they do not get the requested information or are not given opportunity to participate in the decision-making process, they have the right to take the matter before the courts. Radioactive waste management facilities, including storage and disposal facilities, are all covered by this legislation and these requirements. All those responsible in some way for management of radioactive waste in the European Union should familiarise themselves with these important pieces of legislation or run the serious risk of legal challenges and possible lengthy delays in their projects.

Research projects within the EURATOM Framework Programme are providing practical and important feedback regarding radioactive waste governance issues and the roles and aspirations of stakeholders, especially those from local communities and in issues such as siting of facilities. There is a high degree of co-ordination between the various initiatives, both between projects in the EURATOM programme and with external forums such as the FSC managed by the OECD/NEA, and the collective results of these initiatives are helping to define and promote good practice in the area of public communication and involvement in all decision-making processes dealing with the siting of controversial facilities.

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