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1.   Introduction

OBRA is a Coordination Action financed by the European Commission, which was carried out between November 2006 and October 2008. The project aimed at assessing the feasibility of creating an Observatory for long-term governance on radioactive waste management in Europe.

The project consortium was constituted by 10 partners from 7 European countries, which represented national Waste Management Organizations (4), research institutions (2), universities (2), small and medium-sized enterprises (1) and non governmental organisations (1).

The project addresses the information needs on waste management of five categories of potential stakeholders: (1) local communities, through improvement of the access to information, knowledge and expertise support, (2) academic and research community, through multidisciplinary education and a networking platform, (3) European Commission, with new approaches to governance at a European level, (4) implementers, by increasing communication and transparency (5) public in general by raising public awareness.

This report describes the activities carried out and the results obtained, and it is structured as follows. Section 2 provides an overview of the project activities carried out for each Work Package (WP). Section 3 shows the main results obtained, and focuses on the vision and the strategy established for the Observatory. It also provides a feasibility assessment from a socio-political, economic and technical point of view and a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), as well as the results of the trial course organized in the framework of the OBRA project. Finally, Section 4 is dedicated to the conclusions and the possible way forward.

2.   Outcomes

OBRA aimed at defining the vision and strategy of the Observatory, as well as testing the efficacy of the pilot training package as a mechanism for the transfer and dissemination of knowledge to local and regional stakeholders on radioactive waste management.

The feasibility study which was launched at the end of 2006, included the following components:

• An analysis of interest and expectations regarding such a mechanism at European level and a preliminary definition of the vision and strategy;

• Definition of an outline vision: mission, targeted users, geographical and thematic scopes;

• A national diagnostic study with Swedish and Finnish local communities and academia to evaluate needs of information and means to access the information;

• A synthesis of the various existing European observatory mechanisms;

• Evaluation of potential activities on some key governance related topics: siting of a deep geological disposal as part of a pilot training programme;

• Proposal for an implementation scenario (organisational structure, provisional planning, detailed budget...).
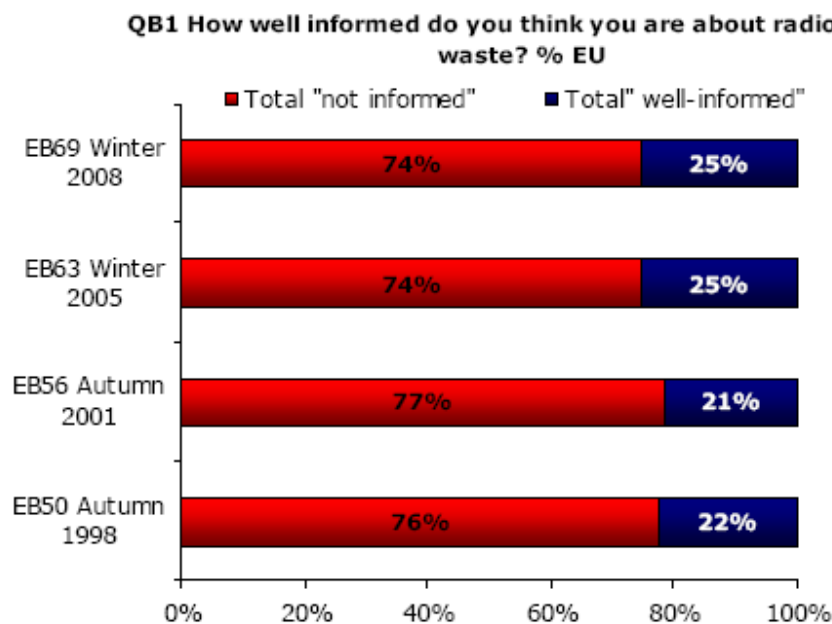
The definition of the strategy of the Observatory was a long process, which was gradually developed throughout the activities described in Section 2. In this section, the main results of this process are presented. First of all, some background information is provided, arguing the socio-political need of an Observatory on radioactive waste governance. Secondly, some conclusions on the vision and the strategy of the observatory are discussed. Thirdly, a feasibility analysis and a SWOT analysis of the Observatory are performed, using the inputs that the project partners provided during the last project meeting. Finally, the results of the pilot training course run as part of the OBRA project are discussed.

2.1 The need for an Observatory

Work Package 1 "Setting the baseline" undertook, as part of its activities, a review of different governance models (Deliverable D1.1, see Section 2.1). This review mostly revealed that limited progress has been made towards the constitution of an authoritative yet independent platform as a resource for information and exchange. Experiences show that such a platform is of special interest in the early stage of a repository process when national/regional structures of information and exchange as well as the roles of key players and their interaction with stakeholders are still developing. A European Observatory could become a platform for systematic information provision and coordinated dialogue where diverse points of view can come together without being dominated by a particular institutional mandate. For these reasons, the participants of the Creative Workshop (see Section 2.2) showed high interest in the idea of implementing a platform on governance of radioactive waste management at the European level.

As shown in the last Eurobarometer (EC, 2008) 74% of the European citizens do not considered themselves well informed on radioactive wastes. It is interesting to note that, in spite of the increasing amount of information generated by the media, environmental NGOs and international institutions, this share is lower than in 1998 and 2001 (see Figure 1).

Figure 1 Results of 2008 Eurobarometer for the question: "how well informed do you think you are about radioactive waste? % EU

QB1 How well informed do you think you are about radioactive waste? % EU

■ Total "not informed" ■ Total" well-informed"

	Not informed	Well-informed
EB69 Winter 2008	74%	25%
EB63 Winter 2005	74%	25%
EB56 Autumn 2001	77%	21%
EB50 Autumn 1998	76%	22%

Source: Eurobarometer Survey (2008)

The results found by Vahteristo (2008) confirm the Eurobarometer results: 46% of the university students surveyed affirmed that they needed much more information on radioactive waste management and 37% that they needed rather much more information.

The need for comprehensible and reliable information is also strongly felt by local communities. For example, a survey conducted by Kurki (1995) in three Finnish municipalities that were candidates for the siting of the final disposal facility shows that 53% of the respondents claimed found it difficult to gather reliable information on radioactive waste management. 50% of the local decision-makers considered the issues related with radioactive waste management so complex that it is extremely difficult for lay people to build an informed opinion on that.

Furthermore, Hautakangas (1997) found through 19 interviews in the same municipalities that local communities felt the need for neutral information, because the two main sources of information, the nuclear energy companies and the anti-final disposal groups, were seen to disseminate only partial information with a political objective.

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Finally, a study from Viinikainen (1998) on the social impacts of final disposal from the viewpoint of inhabitants in four municipalities chosen for site investigation underlines the need for integrated and organized information. Almost all interviews explained that they felt that much information on final disposal was available, but it was in many cases unstructured, not easily understandable and not neutral.

These results show that having the information potentially available through the internet and the media does not necessarily mean to really have it at one's disposal. In order to make it functional and exploitable, information needs to be systematized and interpreted.

This distinction is explained by the general model of information use of Choo (1998), which distinguishes three stages in the process of information use:

1) Information needs

2) Information seeking (purposefully searching for information) and

3) Information use (selection of information in order to use it).

Sharing knowledge and information is a key step for improving the governance of radioactive wastes at local, national and regional levels. For this reason, the OBRA project was carried out in order to explore the usefulness of tools for better systematisation of information, greater transparency and independence. Thus, OBRA proposes the development of an observation mechanism for analysing the governance radioactive waste management in Europe. The role of the Observatory will be to gather process and "translate" information in lay terms, in order to help different groups of stakeholders and interested citizen to pass through these three phases – information needs, information seeking and information use. The Observatory will convert the huge amount of information potentially available into usable knowledge for different groups of social actors.

Work Package 2 "Strategic Elements of OBRA" provided a forum for the participants in the project and other interested stakeholders to assess the need for an Observatory and to develop a shared proposal for such Observatory. The main issues discussed during the

Creative Workshop held in Vuojoki in February 2007 were related to the vision and mission of the Observatory, the development of mechanisms for knowledge transfer, interdisciplinary training and education, as well ways to increase interaction among experts and local and regional communities.

D2.1 "Working document on long-term mission, objectives and strategy of OBRA including scope, content and approaches for access to information and expertise" proposed the development of the Observatory as a central point of reference for knowledge acquisition for stakeholder groups, experts and the general public in the decision making related to the siting process". The draft document was discussed during the Kick-off Meeting and was used as working document during the Creative Workshop.

The Creative workshop aimed at bringing stakeholders together in order to integrate potential users of the platform, their views and needs in the early development stage. About 40 people from 29 organisations and 14 different countries attended the workshop, which provided an opportunity for networking and exchanging information and opinions.

The Creative Workshop was organized as follows. Firstly, the participants were asked to sketch their views on the role of the Observatory in a short questionnaire, in order to have a first overview of their expectations before attending the workshop. Secondly, the participants were divided in four working groups that had been composed by taking into consideration a) participants' expectations with regard to the role of the Observatory obtained from questionnaire, b) their stakeholder group. The groups were asked to prepare a vision and mission statement on the basis of the working document (D2.1). Thirdly, in order to establish a strategy for the setting up of the Observatory, the members of the working groups were asked to discuss a) the topics that the Observatory should address, b) the type of training needed, c) how to structure knowledge communication and d) the type of knowledge to be transferred.

Within this WP, Task 2.3 resulted in the Master thesis undertaken by Ms. Elisa Vahteristo from Posiva on a practical approach for the pilot Observatory (Deliverables D2.2 and D2.3). The results of the thesis were mainly based on a) a literature review on attitudes

towards nuclear energy and information needs in Sweden and Finland (the two most successful European countries in radioactive waste management); b) five semi- structured interviews with Swedish university professors of different social and environmental disciplines; c) Three group discussions with university students, followed by a survey to 41 students (22 of which participated in the group discussions). The thesis gave some insights on the contents that the Observatory should treat in order to meet the information needs of the different groups of stakeholders, as well as the preferred modalities of information transfer (see Section 3).

Besides the master thesis, Task 2.3 consisted in the preparation of a strategic report on the Observatory by Amphos, with the support of Posiva and ITC (D2.4). D2.4 took into account the results of the Creative Workshop and described the main decisions on the common vision and strategy of the pilot Observatory and included information on the Trial Training and Interactive package (explained in detail in D3.2).

2.2 Vision

A first step to assess the feasibility of the Observatory from the socio-political and strategic point of view was to better define the vision that different stakeholders could have of such a platform. Central aspects of the vision statement for the Observatory resulted from the results of WP1 and WP2 and included the following elements:

- To meet stakeholders' information needs;

- To facilitate communication and understanding between involved stakeholders;

- To assist decision making on local/ regional levels;

- To avoid intractable conflicts, increase mutual understanding and quality of the decisions.

In addition, the review[1] of different European observatories[2] in the field of social and political sciences shows that the role that an observatory can play include the following elements:

- To serve as a platform for sharing current practices and trends, innovative practices and indicators of change regarding radioactive waste management;

- To monitor and evaluate the available information at European level;

- To utilise experience from across Europe to provide evidence-based advice to national policy makers and other stakeholders;

- To serve as a dissemination mechanism and a tool to promote transparency and acceptability.

Taking into account these points, it was established that the Observatory can become a source of information on radioactive waste management and an independent platform that supports communication and mutual understanding of stakeholders and experts. The following vision statement summarises the vision that can consistently be derived from the explanations above:

> *The Observatory should become a central point of reference for knowledge acquisition, discussion and exchange on radioactive waste management for stakeholder groups and experts over Europe.*

Thus, the objectives of the Observatory will be:

- To gather a multidisciplinary approach regarding radioactive waste management by bringing together technical and scientific expertise with the knowledge held by stakeholder groups and the public in general;

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[1] This review was elaborated by the coordinator and made available to the partners as an internal paper "The European Observatory for long term governance on radioactive waste management in Europe" (2008).
[2] The analysed observatories were the following: Observatory of European SMEs, The European Observatory on Demography and the Social Situation, European Employment Observatory, European Observatory on Health Systems and Policies, European Observatory of Biotechnology, The European Observatory of Violence in Schools, European Observatory of Mountain Forests, European Observatory on Homelessness.

- To acquire the necessary knowledge to participate in an informed way to the governance of radioactive waste management;

- To develop a network for knowledge and experience sharing;

- To observe, compare and analyse stakeholder needs and governance practices of nuclear waste management in Europe;

- To build the information resources to support long term collaborative partnership;

- To provide a way for collecting and providing information on radioactive waste, taking in consideration context-specific aspects;

- To disseminate information regularly on governance and decision making processes in an understandable and accessible fashion.

Finally, the questionnaire distributed during the Creative Workshop (see Section 2.2) showed that most participants (76 %) envisioned the Observatory to hold a collaborative role, i.e. an institution that would be able to work side by side with stakeholders and taking decisions on the direction together. This role was preferred with respect to a possible expert role (an institution that would show direction) and a pair of hands role (an additional resource to implement governance processes).

2.3 Strategy

Once the vision and objectives of the Observatory have been set up, the second step was to assess the technical feasibility by exploring different elements of a strategic roadmap. The information needs that the Observatory could cover were deeply discussed in D2.3 "Thesis". In addition, discussion by the members of the consortium and interested parties in three meetings (the Creative Workshop, held in Finland in February 2007; the Prague meeting, held in October 2007 and the final meeting held in Barcelona on 16 and 17 September 2008) provided valuable inputs for assessing the technical feasibility of the development of the Observatory strategy. The main results of this process are reported here.

2.3.1 Development of the Observatory through phases

The development of the Observatory could be undertaken through different phases. The contents and issues addressed should gradually increase, according to the needs and

expectations expressed by stakeholders and the means at disposal. Table 1 shows the possible phases of the Observatory.

Table 1 Phases of the Observatory

1ST PHASE: Data collection, networking and the initial Observatory
In a first phase, the Observatory will be initially established at a trial, as a virtual platform and will focus on collection and structuring of a range of information on radioactive waste management. In this phase, the Observatory will systematise and organise knowledge on national policies and governance experiences at local and regional levels.   In addition, the Observatory will also facilitate networking among potential users. The main categories of users, e.g. waste agencies, experts, local communities, etc., will be mapped in order to create a reference pool of contacts.
2ND PHASE: Analysis of information and users' experience
In a second phase, the contents and topics addressed by the Observatory will be further elaborated by focussing on needs and expectations specifically reported by stakeholders. In this regard, a wide range of stakeholders will be contacted in order to analyse their information needs and expectations and relate them to the developing functionality of the Observatory. Stakeholders will provide feedback on the developing virtual platform set up by the Observatory website in the first phase.   In addition, the Observatory will provide active training on radioactive waste governance, using the experience gained through the trial training and communication interactive package.
3RD PHASE: Establishing a Long-term Observatory and The Way Forward
In a third phase, activities will be undertaken in order to guarantee a firm foundation for the future for the Observatory. Therefore, the independence and functionality of the Observatory will be analysed.   Agreements with external resources for information provision on a regular basis will be developed and the financing and management of the Observatory will be analysed and developed.

2.3.2   Scope and topics addressed by the Observatory

The scope and the topics of the Observatory were identified on the basis of the needs of information and training from stakeholders, as defined in D2.3 "Thesis: Stakeholders' information needs on radioactive waste management". In particular, the Obra Thesis (D2.3) came to the conclusion that:

- ✓ On average, local residents require very basic information in lay language, which is easy to understand;
- ✓ Local decision makers seem to be concerned about effects to local economy. They need information that could predict the future effects and local attitude, in order to use as arguments in the policy arena;
- ✓ The information needed by professors should have high academic credibility;
- ✓ Radioactive waste management was not a very familiar subject to most of the students and therefore they need basic information on that.

Since the topics related to the radioactive waste management are many, it is not feasible to address them all simultaneously during the development of the Observatory. Therefore, the results of the OBRA project pointed out that the priority topics should be related to the siting phase, when national implementing agencies have selected their waste management concept and start screening potential sites for disposal. As stated in D2.3, the governance process concerning the siting of nuclear facilities is considered by local residents and local decision makers as the main topic to address their information needs.

2.3.3 Means for accessing the information

The thesis "Stakeholders' information needs on radioactive waste management" (D2.3) states that professors in social and environmental studies would prefer web-based services such as an e-inventory summarizing and synthesizing the on-going research, library, database with definitions and a virtual network or discussion forum. Additionally, as students mentioned the university as their primary source of information, their information needs could be covered by providing courses dealing with radioactive waste management. Other information channels considered by people actively seeking for information are in the first place internet, but also articles in newspapers and magazines, educational television programmes and newsletters.

In this regard, the creation of a user-oriented information system should be treated in a way that they are meaningful to the users (Dervin & Nilan, 1986 as in Vahteristo, 2008). Therefore, it was considered advisable to design a virtual platform of the Observatory in an

attractive and highly user friendly manner aiming to interface as much as possible with the requirements of stakeholders with regard to access to information.

In this regard, the Observatory should become a central point of reference of knowledge acquisition for stakeholders actively seeking for information instead of promoting information among stakeholders not actively searching for information.

2.3.4   Customers and end users

The results of the OBRA project point out that the Observatory should not focus specifically on the general public neither should it actively promote its involvement. The reason is the high level of resources that the Observatory would need to do that and the language constrains existing among the general public of different European countries.

The customer of the Observatory is a person interested in governance of radioactive waste management, including public authorities at local and regional levels, residents of local communities affected by a decision on nuclear facilities, NGOs, implementers, experts and other end-users like media. In particular, residents of local communities and local authorities will be targeted with special emphasis by the Observatory from the beginning. However, as pointed out by Vahteristo's thesis (D2.3), the potential interest of other groups of stakeholders needs to be further investigated.

2.3.5   Structure and independence of the Observatory

Most studies analyzed in Vahteristo (2008) underline the need of local stakeholders for impartial and neutral information, expressed in layman terms (Corporate Image, 2007; Kurki, 1995; Hautakangas, 1997; Viinikainen, 1998). The need for neutrality also emerged during the interviews with professors (Vahteristo, 2008), who suggested to gather information from people with different opinions (proponents vs. opponents). It is also interesting to note that the professors questioned the reliability of information found on the internet. Therefore it is important that the documents disseminated through the Observatory are obtained from independent sources of information (scientists, international organisations, etc.) and pass through a peer-review process, which incorporates also the non-experts into the review (van der Sluijs et al. 2005 as in Vahteristo, 2008). Finally, the
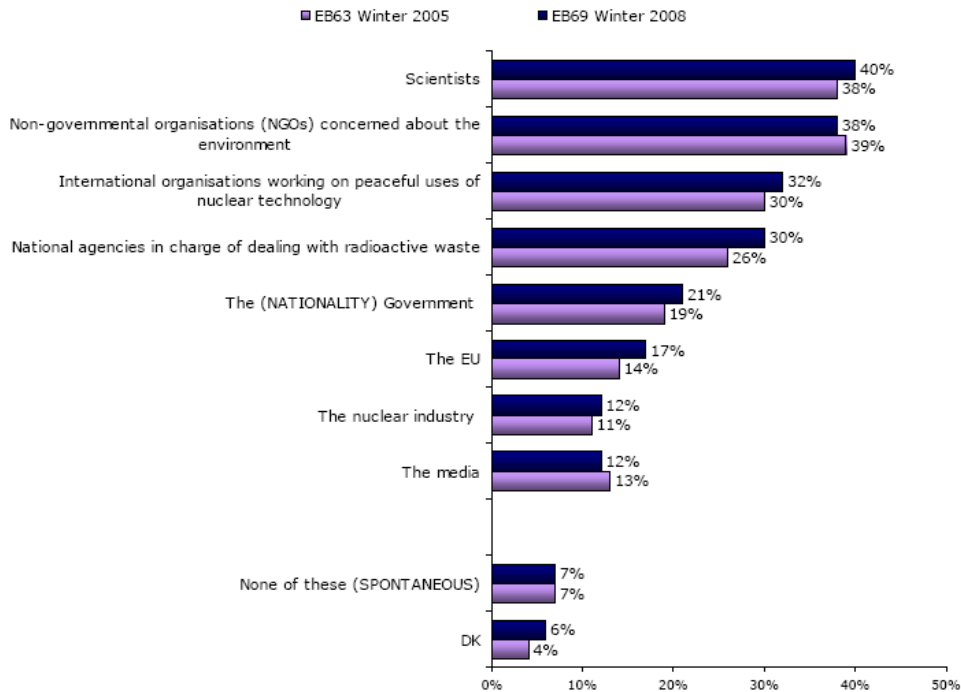
interviewed professors suggested to make the affiliation and values of the authors explicit, in order to increase transparency.

In order to guarantee neutrality and independence, the Observatory should engage different stakeholder groups in its activities from the beginning. One way of achieving this could be using representatives from different stakeholder groups as members of a board overlooking the activities of the Observatory. This would also facilitate the marketing of the Observatory to possible end users (Vahteristo, 2008).

Another important point in the Observatory's strategy is the definition of the sources of information. In Eurobarometer 2008, when asked who Europeans would trust on the issue of radioactive waste management, 40% of the respondents indicated scientists, 38% environmental NGOs and 32% international organisations working on peaceful uses of nuclear technology (see Figure 2).

Figure 2 Results of 2008 Eurobarometer for the question: "which of the following, if any, would you trust to give you information about the way radioactive waste is managed in (OUR COUNTRY)? (MULTIPLE ANSWERS POSSIBLE) &EU

QB8 Which of the following, if any, would you trust to give you information about the way radioactive waste is managed in (OUR COUNTRY)? (MULTIPLE ANSWERS POSSIBLE) % EU

■ EB63 Winter 2005   ■ EB69 Winter 2008

Scientists	40% / 38%
Non-governmental organisations (NGOs) concerned about the environment	38% / 39%
International organisations working on peaceful uses of nuclear technology	32% / 30%
National agencies in charge of dealing with radioactive waste	30% / 26%
The (NATIONALITY) Government	21% / 19%
The EU	17% / 14%
The nuclear industry	12% / 11%
The media	12% / 13%
None of these (SPONTANEOUS)	7% / 7%
DK	6% / 4%

Source: Eurobarometer Survey (2008)

In order to meet the information needs, the Observatory should therefore set up some kind of collaboration with universities and international organizations, such as the EU and the IAEA.

2.3.6   Language

In a first phase, the language of the Observatory will be English. Additionally, some reports and information may be in other languages, concerning country specific topics. In the future it may be decided to use also other languages to reach a wider audience. Nevertheless this aspect will depend on funding possibilities.

2.3.7   Virtual platform

The feasibility analysis led to the idea that the first step towards building a European Observatory for Long-term Governance on Radioactive Waste management in is to set up

an internet based virtual platform**.** The virtual platform will consist of an attractive and highly user-friendly web site to interface with all type of stakeholders and provide them with an easily usable and independent database, as well as with an information exchange mechanism.

This website will place the collected information at the disposal of a wide range of social actors. The website will serve to widely disseminate to different parties all knowledge gathered in the field of governance of radioactive waste in Europe in an efficient and cheap way.

The following model has been suggested for the virtual platform of the Observatory. The first phase is to gather data, the second is to analyse it and develop an interactive database available on the internet through the provision of a contact point, the third and simultaneous to the former would be to extend the network of contacts and finally, the provision of a pool of facilitators who may run workshops on decision-making and organise training courses.

Figure 1. Model of the virtual platform of the Observatory
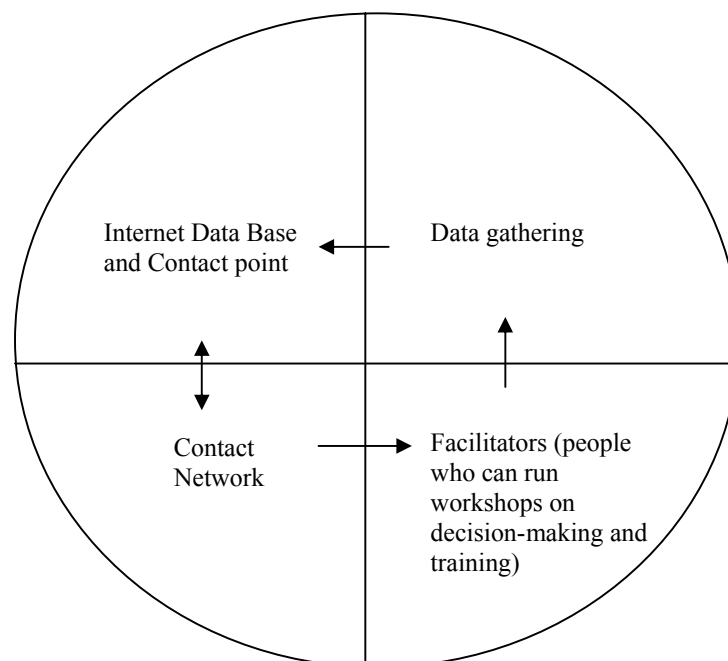
2.3.8 Funding

One of the main pillars to address when evaluating feasibility is economic feasibility. Based on the experiences of the observatories reviewed (see Section 3.3) and as a result of the discussions undertaken during the project, several possibilities for funding the Observatory can be considered. In general, two options appear feasible, which are not mutually exclusive:

1. Direct financing by a relevant European Commission Directorate, like DG Energy and Transport (DG TREN), which would have the advantage of assuring its independency and providing the European-wide approach of this mechanism;

2. Partnership among national licensing and regulatory authorities, governments, municipalities, enterprises and experts.

However, for the purpose of this project, an economic feasibility study, comparing total project costs and benefits of the proposed mechanism, has not been undertaken. Long-term observatories are crucial for European scientists, governmental bodies and the European Commission to maintain a high level research that was developed through past and present framework programs and to allow continuous observation of parameters related to governance of nuclear issues. An early conception of the Observatory is difficult to be developed exclusively from scratch, unless co-financing is obtained.

3.   Feasibility analysis

On the basis of a background document summarising the preliminary results of the project, some of the speakers and participants in the Barcelona final meeting were asked to provide their views on the feasibility of the Observatory. They represented different categories of social actors (e.g. implementer, university, local community) and different geographical regions.

The feasibility analysis for the Observatory addressed the following questions:

1. Technical feasibility:

- ✓ Would there be a sufficient critical mass of social actors (in terms of number and diversity) to actively participate in the Observatory?
- ✓ Offers / Requirements: If so, what can you possibly offer/require to the Observatory in terms of knowledge, organisation, information, resources…?
- ✓ Advantages and disadvantages of the Observatory

2. Socio-political feasibility:

- ✓ Is there a social and political need for such an observation mechanism?
- ✓ Would there be interested users?
- ✓ What would you find useful for the interests of your organisation and the national priorities in your country?

3. Economic feasibility:

- ✓ Would it be more feasible to have an Observatory financed by the European Commission or by the end-users?
- ✓ What would be the financing mechanisms

3.1.1   Technical feasibility

First of all, open access, user- oriented, reliable and unbiased information will be needed for setting up the Observatory. In this respect, a large amount of information is already

available. For example, all Waste Management Organisations already have a lot of information. The Observatory should provide information on case studies, both on best practices and failures. Furthermore, information should be provided in two levels (in scientific and lay language), and experts should assist in interpretation and dissemination of technical information. The Observatory should provide access to literature and reviews, by means of contacts to university departments and experts.

The Observatory will need flexibility, in order to be able to develop new communication strategies. Different information channels should be used, such as training, site visits, etc. Furthermore, the Observatory should focus on providing an excellent service of organization and provision of information, rather than carrying out research itself. The Observatory should develop a "methodology" or criteria for the shared and published information.

In order to do that, a national and international network should be ensured, which could provide information sources, technical information and experiences. At this respect, availability of experts and experienced people will be crucial and will involve time constraints. The network set up with OBRA already has scientific, technical basis and experience. Some of the OBRA partners have already expressed their willingness to participate in the construction of the Observatory.

Secondly, a balanced representation of the stakeholder categories should be ensured, especially as regards diversity and number of stakeholders. The difficulty of establishing a real exchange and not only one-way communication was underlined. In this sense, contacts with local communities should be, and in part have already been, established. In addition, the management of the Observatory could be initially undertaken through dynamic working groups rather than by a steering committee.

Thirdly, it is necessary to establish a virtual platform in order to disseminate the available information. The documents should be written in English, at least in an initial phase. However, the main documents should be translated to national languages. It was suggested that a legal model for the Observatory (e.g. association, cooperation, etc.) should be found and that management could be entrusted to a host organisation.

Fourthly, the Observatory will be built in consecutive phases. In order to guarantee its functioning, a governing board and a staff will be appointed. It will be important to ensure that enough human resources and technical equipment are available to run the Observatory.

Fifthly, it was observed that the issues addressed by the Observatory should be properly framed and should deal with siting of geological disposal. The objectives of the Observatory should be further discussed, and in particular, it should be decided if the aim will be to reach consensus or to put on the table controversies and plurality of views. One of the possible topics to address is the technical aspects of governance processes. Finally, it will be important to correctly address uncertainties.

3.1.2 Socio-political feasibility

From a socio-political point of view, the Observatory was seen as feasible because of the need of information on radioactive waste management of local communities. In particular, the need for an integrated and organized knowledge base and dialogue forum was detected. The feasibility of the Observatory will be assured by the participation of a wide range of stakeholders and their similar level of interest and support. Furthermore, in order to make the Observatory feasible from a socio-political point of view, there should be enough interested institutions that could give inputs and support an evaluation committee.

Local communities should be involved in the decision-making process in the siting phase. However, at the time being the interest in participation is higher than space available for discussion and involvement in decision-making processes. One may observe sometimes that politicians are not enough informed on radioactive waste management, but it is not clear whether they are really willing to learn in order to modify the decision-making process. In this sense, the Observatory could favour local community information and involvement in decision-making, as well as the interaction with policy-making at the national and European level. For this reason, it is important that access to the Observatory will be easy for end-users.

It will also be important to assure quality, possibly through validation by experts (peer review) on stakeholder discussions. Objectivity could be pursued by including a plurality of point of views.

In addition, the feasibility of the Observatory will result from the possibility of presenting different schemes, concepts and approaches, providing examples for potential roles of communities, in order to illustrate that many countries deal with similar issues.

In this sense, the Observatory will encourage development and coordination of communities and favour the establishment of monitoring programmes, with the aim of stimulating confidence building. In this way, citizens could take part in acquiring sociological monitoring and control data, and could feel as controllers of situation.

In order to make the observatory feasible, it will be defined who the end-users will be, and what the added value for RWM agencies, local communities and other possibly interested stakeholders is, such as, for example, communication, greater appropriation of issues by stakeholders; exchange of experiences at EU level, etc. In addition, the expected use by local communities will be analysed.

The establishment of a Observatory could also present difficulties from a socio-political point of view, because it may be difficult to get all the societal players involved, and also because radioactive waste management is a sensitive issues to be addressed and it is very much country specific. One of the participants observed that even though there is a need for information, in practice different stakeholders and persons have many different strategies for finding information. For this reason, it was suggested that the best way to proceed could be to identify some important stakeholders (e.g. local community only) and address them.

3.1.3 *Economic feasibility*[3]

In order to make the Observatory economically feasible, it will be crucial to ensure sufficient funding for a long time. One of the participants suggested that financing for at

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[3] One of the participants observed that it should be referred to "financial aspects" (funding), and not "economic feasibility", because the Observatory will not generate resources.

least five years should be pursued, in order to guarantee stability and give the possibility to look for future funding in the meanwhile.

It was underlined that the cost estimation and funding should be transparent, and that the Observatory should pursue independent and balanced financial sources. The amount of necessary financing depends on the number of topics the Observatory wants to address.

An agreement should be found on financing mechanisms and participants. Different ways of assuring economic feasibility were discussed, both to initially set up the Observatory and to run it in the long run. One option could be to prepare a proposal for the next FP7 Euratom open call. Another possibility that was discussed was asking the European Directorate-General for Energy and Transport and/or the Directorate-General for Research for direct financing, possibly combined with an annual fee paid by interested stakeholders (e.g. Ministries of Regional Development). In addition, it was suggested to ask for financing from different organizations (on voluntary basis), such as for example the implementing organizations. A possible partnership among national & regulatory authorities, municipalities and enterprises was suggested as another option. In addition, it was also recommended to look for national funding for developing national materials. Finally, a subscription for end users may be another option to provide the Observatory with the necessary financing.

4. Swot analysis

A SWOT (Strengths- Weaknesses- Opportunities- Threats) analysis has also been undertaken in the framework of the OBRA project and was discussed during the final workshop, which was held in September 2008 in Barcelona (see Section 2.5). The analysis was not only undertaken by the partners of the project representing the different stakeholders (i.e. radioactive waste management agencies, academia and experts, local communities), but it was also collected from the participants at the workshop. In addition, participants were asked to give their opinion on the feasibility of the Observatory from an economic, socio-political and technical point of view, based on a background document previously distributed (draft of Deliverable 4.11).

¡Error! No se encuentra el origen de la referencia. Table 2 shows the number of analyses collected. In Section 3.5 and 3.6 of this document the main results are reported.

Table 2 Number of questionnaires collected during Barcelona final meeting (September 2008)

	SWOT analyses	Feasibility analyses
Speakers	7	4
Participants	5	6
Total	**12**	**10**

4.1.1 Strengths

The main strengths of the Observatory can be divided into three categories.

1. Exchanging experiences and networking.

One of the most important strengths of the Observatory will be the possibility of establishing a network of knowledge, information and experience sharing, favouring connectivity among interested stakeholders and assuring flexibility. In this sense, the Observatory will favour capacity building and mutual learning among different geographical regions and categories of stakeholders, improving the stakeholder involvement in the decision-making processes and consequently the radioactive waste governance.

2. Organization and interpretation of available information.

The Observatory will be a useful platform to organize and interpret available information. One of its strengths is the availability of much information on radioactive waste governance, as well as of many experienced people, both in practical and technical issues. It has been suggested during the project that one of the strengths of this mechanism is also the possibility of performing risk assessments and disseminating and reviewing information produced at different levels regarding radioactive waste.

3. Independence and neutrality.

Another strengths of the Observatory will be the objectiveness, independence, plurality, multi-laterality, multi-disciplinarity and transparency, as well as the possibility of offering independent studies. The wide spectrum of perspectives will guarantee credibility of information (which should be balanced, unbiased and reviewed). One of the speakers suggested that credibility would be further strengthened by the European "label".

Other issues.

An strength of the future Observatory is the clear need from end-users, a newly awakened interest in the field of governance of nuclear matters and a good timing. In this respect, one of the speakers considered as one of the strengths the option of personal assistance of experts for the stakeholders. The Observatory could be, according to one participant, simple to set up and not too expensive. It should be seen as a reference point (always present and available).

Finally, one of the participants sees as one of the strengths the involvement instead of the "acceptance" approach that the Observatory should have. In other words, stakeholder involvement should be pursued at an early stage of the decision-making process, and not once the decision has been taken. The objective should be to improve the governance process and not to obtain acceptance from the stakeholders on decisions already taken. However, an agreement on this topic was not reached during the Barcelona workshop, and further debate will be necessary.

4.1.2   Weaknesses

The main weakness associated with the Observatory can be divided into four categories.

1. Funding.

On of the most important weakness of the Observatory is the difficulty of finding short and long term financing in order to set up and maintain it for a long period. In this respect, one of the speakers observed that it may be difficult to convince advanced programmes, such as for example the Swedish and Finnish ones, to pay a fee for sharing information with less advanced programmes. It was also observed that activities beyond passive data provision would require major resources, as well as continuously updated information.

2. Credibility.

The financing issue is strictly correlated with the independence, which could potentially be questioned if the main financer has a strong interest in radioactive waste management. Maintaining credibility, neutrality and independence may be a problem. It may be difficult to ensure the quality and updating of the information, and the correct translation from technical/scientific language to lay language, especially because of the large amount of available information. The necessary updating requires reliable sources of information, which could be difficult to find. The variety of interests of the potential interested users and promoters could make it difficult to cooperate and remain objective.

3. Language.

Language is one of the weaknesses of the future Observatory. In many countries, English is not understood by lay population. Furthermore, cultural differences may make cooperation and understanding difficult. Some of the participants underlined the need for translation of key documents in national languages. However, this operation would require additional funding and time (with the consequence that end-users would receive less up-to-date information).

Human resources.

Another weakness of the Observatory could be the difficulty in establishing a well balanced governing board to lead the Observatory and finding competent staff to run it, with social and technical skills. It is crucial to have enough human capacity and organisation for running the Observatory in the long run.

Other issues.

Lack of involvement of the European Commission and national governments is one of the possible weaknesses of the Observatory. Another weakness may be represented by the difficulty in managing context-specific issues, because the participating countries could have different information needs. Another possible weakness is the possibility of not to being able to provide a clear message and the possible loss of focus. Furthermore, the implementation in stages may cause a loss of interest of users if in the first stage not enough data on a wide range of topics are collected.

Finally, during the project, the issue of whether focusing on radioactive wastes is too narrow and whether it should be broadened up to nuclear matters has been discussed, with no final agreement. This could be an issue for further investigation. .

4.1.3 Opportunities

The main opportunities of the Observatory can be grouped into four categories.

1. Work done and existing networks.

The Observatory could benefit from the work already done in the field of radioactive waste governance, both as a result of R&D projects and practical experiences. Furthermore, a network of different categories of European stakeholders and experts of different disciplines has already been established, providing different points of views and experiences. This shared international knowledge and common appraisal could be used to provide evidence-based advices to policy-makers and a training ground, besides supporting decision making.

The experiences collected could be used to widen views on governance patterns in order to choose the suitable ones for different nations and disseminate positive examples. This

possibility will be particularly valuable for countries scarcely experienced in governance. The number of experiences done could give the opportunity to carry out a meta-study to explore principles of governance and to develop practices which could have a wider user. Hence, the work already done could allow to establish a pilot study to show practical implementation and check its usefulness with a range of users. In this context, the OBRA project can be seen as another opportunity, which allowed to already setting up a network of experts potentially interested in establishing an Observatory.

The chance of direct accessing the reports of all stakeholders also represents an opportunity for the future Observatory, as well as the possibility of cooperation with international organisations. The experiences done and the network of potentially interested stakeholders could constitute an opportunity to integrate lessons from other problem areas.

Finally, the Observatory will constitute an opportunity to share knowledge, a forum for debate, a learning tool and a source of inspiration.

2. Other nuclear activities.

European "nuclear renaissance" may be an opportunity for the Observatory, as well as the activities organized in the framework of the European Nuclear Energy Forum (ENEF). In addition, linking the Observatory's activities with other nuclear activities could represent an opportunity for the Observatory (e.g. nuclear power plant siting). The Aarhus Convention is also an opportunity for the Observatory, since it establishes the right of public participation in decision-making in environmental matters.

3. Increased interest in society.

The increased interest of social scientists in governance processes, participatory democracy, social impacts assessment and methodology also represents an opportunity for the Observatory.

Other issues.

Finally, the previous successful experiences from other European observatories can be seen as an opportunity, since they can provide positive examples, as well as suggestions on how to organize and manage the Observatory.

4.1.4 Threats

Some of the already mentioned weaknesses were also seen as threats (i.e. difficulty in finding financing on a short and long term, language diversity, possibility of misunderstanding, differences among national contexts). Other threats that were mentioned include:

1. Manipulation and negative publicity.

A threat that the Observatory could face is linked with the possibility of manipulation by people with a strong positive or negative interest in nuclear energy or even of external deliberate damage to the Observatory's image. At this respect, in order to avoid accusation of lack of independence, the Observatory should be managed carefully and guarantee objectiveness.

2. Overestimation.

The possibility of generating too many expectations is also a threat. In this respect, favouring unrealistic expectations on the range of information, political developments, compensation offers, etc., could have as a consequence a general loss of trust in national processes.

3. Lack of institutional support.

The lack of interests of national programmes is also a threat. In this moment, energy policy is seen as a priority by national governments, which implies the need of making decisions quickly. This hurry could be a disadvantage for the development of the Observatory's project, which is a slow and step-by-step process.

Other issues.

Even though the actual European nuclear renaissance may be seen as an opportunity for the Observatory, it was also listed among the threats, because it could provoke a counter-reaction.

In addition, one of the participants saw as a threat the possibility that the Observatory become a complaining form, where those discontented with some aspect of radioactive waste management could give publicity to their protests.

Furthermore, some are concerned about a possible low interest of users and the general public, which contrasts with the need of a long term commitment of the stakeholders. It was also observed that there could be duplication of the existing institutions or information systems.

Another worry is the excess and homogeneity of available information, which could make it difficult to be focussed and effective.

5. Results of the training course

One objectives of OBRA is to evaluate ways of providing access to information for communities that are, or might be, affected by radioactive waste management projects. As explained in Section 2.3, a two-days training course was organized in order to test the training package developed in the framework of OBRA (D3.1). Experience and feedback from the participants provided a valuable basis for the further development of training packages within the Observatory, and were discussed in D3.2.

In the framework of OBRA it was only possible to develop and test a small subset of the required materials and techniques. A fully implemented Observatory would need to expand the range of materials available to users. The information package developed for the Trial Course only focussed on one topic of wide concern within the EU and on a small selection of means of delivering information on this topic. The topic selected was the development of a geological repository for long-lived and higher activity radioactive wastes – an area where there is already a spectrum of both positive and negative experience of local community communication and interaction. This workshop was intended to act as a trial of two mechanisms for providing participants with access to information and experience, using geological disposal of radioactive waste as the basis:

✓ a 'classical' approach to technical information, based upon what was intended to be regarded as <u>accessible documentation and presentations</u>, backed up by <u>access to experts</u> who could answer all types of question about every aspect of geological disposal in an informal context;

✓ <u>A role-play exercise</u>, on siting a geological repository in the imaginary country of Erewhon, which allowed to assess the impact of different stakeholder views. The role-play put the user in the place of different stakeholders faced with responding to a proposed geological disposal project and endeavouring to find a solution.

The experience of the workshop was very valuable in testing the approaches used. It was intended to receive feedback principally from community representatives or their expert advisers but, in the event, less than one third of the participants fell into this category. The

remaining participants came from NGOs, academia or RWM organisations. Whilst this spread resulted in very useful discussion, input and comments, the results are not considered to be wholly representative of likely community reactions. Nevertheless, a large number of exceptionally valuable pointers were received, which will make the construction and testing of more developed information transfer tools more achievable.

Some key recommendations emerging from the trial, which should influence the establishment of an OBRA observatory and the way it is structured, are:

✓ All of the information access mechanisms were useful but they need to be part of a wider spread of materials that would include brochures, FAQ answers, visual materials and interactive activities;

✓ Materials should be accessible by the internet and some of the higher-level materials must be available in several languages;

✓ Further exploration of community concerns would be valuable to help develop FAQ answers, although many of these concerns will inevitably be community-specific;

✓ A layered structure of information would be appropriate when developing an internet-based information access tool. In addition, clear 'route guidance' should be built-in at the top level, aimed at different types of user;

✓ Route guidance should lead to every type of supporting documentation – including very technical information. It should be sufficiently flexible to guide a user, for example, to simple discussions of the hazards or radioactivity or to complex documents on materials corrosion;

✓ Arrangements would need to be made with data providers to allow open (non-commercial) access to documents, so far as possible. The use of automatic links to other sites would be valuable;

✓ Given the overall objective of allowing access to independent information sources, the Observatory would need to provide clear advice to users would on the status of the

sources being accessed so as to identify possible biases. This would not be an easy task;

✓ Role-play exercises are clearly of considerable interest and value. One aspect was tested at this workshop, but other critical steps in decision-making for RWM facilities were also identified for the future, including the important issue of stakeholder negotiation. Providing 'mock' experience of this could be vital for affected communities;

✓ A goal that could not be tested at this early stage of observatory development was evaluating how a local expert adviser would use the information to work with a community;

✓ An observatory would need to be kept up-to-date, which would require a significant resource input. There are clear overlaps with experiences gained from siting and living with other environmentally sensitive, non-nuclear facilities that could provide extremely valuable analogues for communities. Including this information would be a major task;

✓ The networking aspect of an observatory was tested only by direct interactions at a workshop. Efficient means of facilitating networking among remote users of a web-based system would need to be developed. The value of workshops for an observatory was clear and direct access to other communities and to experts is essential.

6. Impact

OBRA contributed to the improvement of governance in the field of radioactive waste management, by identifying information needs and possible mechanisms to favour information exchange among experts and potentially interested groups of social actors. In addition, OBRA can constitute a reference model to improve governance also in other environmentally sensitive issues.

OBRA sets the basis for the creation of the Observatory on long-term management of radioactive wastes, which will improve the knowledge base of local and regional communities. Giving more information to local and regional communities will enable them to be involved in the decision-making processes, thereby improving European governance. In addition, exchanging information about experiences in other countries will allow to define good practices, improving the quality of the decision-making processes in the European regions. The Observatory will allow national and local governments to better understand the point of view of local communities and other groups of stakeholders, including their concerns and their information needs.

In addition, OBRA contributed to training in the field of radioactive waste management. The impact of the training course consisted not only on the knowledge gained by participants, but also on the experience made by the experts in the preparation and development and in the feedbacks obtained from the participants. As a result of the Trial Course, the training package can be improved in the future and then can be further used in other similar activities.

The impact of OBRA was amplified by the creation of a network of institutions interested in improving governance of radioactive wastes, which are willing to collaborate in the future on these issues.

7. Conclusions and way forward

The results obtained by OBRA showed that the creation of an Observatory for long-term governance of radioactive wastes could significantly contribute to improve governance on this sensitive issue. Furthermore, OBRA activities brought to the conclusion that the creation of an Observatory is feasible from a technical, economic and social point of view. For this reason, the Observatory can become a central point of reference for monitoring, disseminating and sharing information and practices regarding radioactive waste management in Europe. In addition, the Observatory will serve as a European contact point, allowing people needing information to contact with those willing to provide it

The vision and strategy of the Observatory were developed through a) discussion among partners, who are knowledgeable in the radioactive waste management arena, b) information obtained from stakeholders and community members addressing their concerns and information needs, c) the review of experiences and results from European governance projects, d) the review of different observatories currently operating in Europe.

With regards to the production of a training and interactive package, the trial workshop allowed to get some inputs on how to improve the materials included in the training package prepared for WP3 (D3.1). In particular, it was suggested to produce a wide variety of materials, ranging from technical information to disseminating instruments (e.g. brochures, FAQ answers, visual materials and interactive activities). They should be aimed at different types of users. The materials should be accessible by the internet in a layered structure and should be at least in part translated to various European languages. Role-play exercises were considered useful, and should be further developed, e.g. in the field of stakeholder negotiations. In addition, it was suggested to incorporate in the training package experiences from other environmentally sensitive, non-nuclear facilities. Finally, favouring networking among different types of stakeholders is crucial to improve governance, and training courses can be an efficient mean for that, besides networking among remote users of a web-based system.

Developing all key elements required to eventually build up the Observatory will entail to move from the theoretical concept of the vision and strategy of the Observatory developed during the OBRA project to practice.

As regards the way forward, the first step in the creation of a European Observatory would be to establish a web-based virtual platform to make the Observatory visible without further delay. Starting the implementation of the Observatory as a tangible website will help to market the Observatory to interested stakeholders, facilitating the following implementation steps. This pilot Observatory will be showed and marketed to stakeholders and at the same time it will be improved throughout the input from them.

The importance and difficulty of guaranteeing the legitimacy, neutrality and independence was often highlighted. In this regard, it was suggested that a way to provide legitimacy to the Observatory could be presenting it as a tool settled and maintained by the research community. In addition, stressing the openness of the Observatory and inviting people to participate could enhance the perception of the Observatory as an inclusive and credible tool. Trust could be obtained by showing in an open and transparent manner the uncertainties currently existing in the radioactive waste management arena.

As regards contents, a high amount of information regarding radioactive waste management, including that generated by OBRA, is currently available and can be used. However, a review process will be needed in order to assure trustworthiness and comprehensibility of information by lay people. In order to do that, a well balanced review panel, including a wide range of stakeholders, should be established. Among the topics that the Observatory could address, the problems associated to the siting process were indicated as the most interesting.

It was also considered an important point to provide information in a lay language and prepare some background documentation for people not informed on nuclear issues.

Furthermore, project partners agreed on the fact that, even though OBRA already carried out research on the stakeholders' information needs and the possible support that the Observatory could receive from them, more research on these topics is needed. The

Observatory project should go step by step, and the feasibility should be more deeply analyzed. In this regard, the contacts made throughout the development of the project could provide a good basis to obtain this information.

For this reason, OBRA's partners agreed on creating a Pilot Observatory in the framework of a research study, such as suggested in the OBRA II proposal. The research would consist, among other activities, of contacting a wide range of stakeholders to identify their needs and expectations regarding the Observatory. In this way, the Observatory could provide more specific and demand-driven services.

Success for the creation of the European Observatory on Long-term Governance for Radioactive Waste Management relies on three main conditions:

- A sustainable and strengthened network of stakeholders, willing to share information and knowledge on radioactive waste management;
- Continuous attention for the satisfaction of the members through permanent exchange of best practice, sharing knowledge platforms, internacional networking via EC-projects and appropriate communication tools (web-sites, events, etc.)
- Adaption of the network to national levels and looking at the variety of profiles of siting processes.

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REFERENCES TO INFORMATION SOURCES WITHIN THE OBRA-PROJECT

WP	Deliverable	Date of delivery
1	D1.1 "Descriptive overview of governance models"	December 2006
1	D1.2 "Performance indicators"	December 2006
2	D2.1 "Working document on long-term mission, objectives and strategy of OBRA including scope, content and approaches for access to information and expertise"	January 2007
2	D2.2 "Draft thesis and working paper"	July 2007
2	D2.3 "Thesis"	April 2008
2	D2.4 "Report on the common vision and strategy of OBRA, including background information for the training and interactive package"	July 2008
3	D3.1 "Interactive training Package"	May 2008
3	D3.2 "Assessment report on the interactive training package: lessons learned and way forward"	June 2008
4	D4.1 "OBRA website"	April 2007 (updated afterwards);
4	D4.2 "Communication Action Plan"	January 2007
4	D4.3 "Strategy for using and disseminating knowledge"	February 2007
4	D4.4 "Virtual forum on the OBRA website"	April 2007 (updated afterwards)
4	D4.5 "Report on raising public participation and awareness"	February 2007
4	D4.6 "Project Presentation"	January 2007
4	D4.7 "General Poster"	January 2007
4	D4.8 "Joint Newsletters with CIP and ARGONA"	January 2007
4	D4.9 "Governance web portal jointly with CIP and ARGONA"	January 2007 (updated afterwards)
4	D4.10 "Brochures and Flyers of OBRA"	January 2007

Annex 1 – SWOT Analysis

Speakers

Strengths	Weaknesses
✓ Network of knowledge and experience sharing ✓ Organisation, monitoring, interpretation of available information ✓ Organisation and standardization information systems ✓ Data enhancement ✓ Common language ✓ Meet stakeholders information needs ✓ Plurality ✓ Transparency ✓ Exchange of experiences between regions ✓ Capacity building and mutual learning ✓ Involvement in decision making process. ✓ Improvement of governance of radioactive waste management at European level	✓ Neutrality and independence ✓ Difficulties in managing context-specific issues ✓ Maintenance of the platform ✓ Difficulties in finding 'providers' ✓ A common language (English) not understandable for the lay population ✓ Establishment of a well balanced governing board to lead the Observatory ✓ Find competent staff to run the Observatory.
Opportunities	**Threats**
✓ Results from R&D projects on governance ✓ European and international cooperation among a diversity of stakeholders and among experts ✓ Diversity of experiences in stakeholders engagement ✓ Stakeholders support long term collaborative partnerships ✓ Marketing of the Observatory to end users building on the stakeholders integrating the Observatory. ✓ To utilize the experience across Europe to provide evidence-based advice ✓ Previous successful experiences from other European observatories	✓ - Difficulty in finding financing ✓ Duplication the existing institutions or information systems ✓ Focus on other priorities at national and European level ✓ Long term commitment from stakeholders ✓ Accessibility of internet ✓ Heterogeneous current information ✓ Low interest of users and the general public.

Strengths	Weaknesses
✓ Diversity of actors. Objectiveness ✓ Experiences. Practical knowledge ✓ Interested user. Feasibility ✓ European experts. Technical knowledge	✓ Lack of involvement of governments ✓ European Commission skepticism ✓ Communication skills (social/technical) ✓ Many interests? ✓ Languages ✓ Financial sources
Opportunities	**Threats**
✓ ENEF ✓ Nuclear renaissance ✓ Aarhus convention	✓ Nuclear renascence. Anti reaction ✓ National decisions. Energy debate

Strengths	Weaknesses
✓ Independency ✓ Multi-laterality ✓ Connectivity	✓ Launching and maintenance ✓ Funding (possible fee?) ✓ Neutrality
Opportunities	**Threats**
✓ Shared-international-knowledge ✓ Common appraisal ✓ Training ground	✓ Complaining form ✓ Overestimations ✓ Manipulation

Strengths	Weaknesses
✓ Information exchange ✓ Independent studies ✓ Assessment of risks	✓ Funding ✓ Variety of interests
Opportunities	**Threats**
✓ Open to different stakeholders ✓ Promotes networking ✓ Support to decision making	✓ Possibility of misunderstanding ✓ Language problems

Strengths	Weaknesses
✓ Comprehensive database covering wide spectrum of perspectives ✓ Credibility of information (balanced, unbiased, reviewed) – additional value of EU „label" ✓ Flexibility (networking), ✓ Option of „personal assistance"	✓ What is balanced information (e.g. implementor x local +national NGO's x communities, regional authorities)? ✓ Implementation in stages: Risk of loosing of interest of users if in the first stage not sufficient amount of data covering wide range of topic is collected ✓ Necessity of updating – funding +reliable sources of information ✓ Need of national language
Opportunities	**Threats**
✓ To widen views on governance patterns for choice of suitable ones for different nations (lack of experience, positive examples) ✓ Increase of interest of social scientists in governance processes, participatory democracy, social impacts assessment and methodology etc.	✓ Unrealistic expectations (range of information, political developments, compensation offers etc.) => loosing trust in the national process

Strengths	Weaknesses
✓ Independence ✓ Multidisciplinary ✓ Newly awakened interest	✓ Short an long term financing ✓ Human capacity and organisation for running the observatory in the long run ✓ Waste might be a too narrow area
Opportunities	**Threats**
✓ Development of practices which could have a wider use ✓ European exchange of experiences ✓ Meta study to explore governance principles	✓ Not proper analysis of users and their needs ✓ Maintenance ✓ Large differences in needs in different countries ✓ Language problem

Strengths	Weaknesses
✓ Huge amount of available information ✓ Many experienced people available ✓ Time is perfect ✓ Clear need from end-users	✓ Language ✓ Cultural differences ✓ Lack of will in national programmes to do this collectively or use it ✓ Activities beyond passive data provision (eg.WS) require major resources ✓ Why should advanced programmes pay for less-advanced?
Opportunities	Threats
✓ Links to other nuclear activities (eg. NPP siting)	✓ National programmes will 'go it alone' ✓ No funding emerges ✓ Careful management or accusations of lack of independence ✓ Could get bogged down in social sciences research

Participants

Strenghts	Weaknesses
	✓ Language ✓ Resources needed: people, time, and money, understanding what stakeholders want, how they want it and why. ✓ Different needs in different countries
Opportunities	**Threats**
✓ Provide an international platform. ✓ Pilot study to show practical implementation and check its usefulness with a range of users	✓ Resources- what to provide/analyse information

Strenghts	Weaknesses
✓ Multidisciplinary ✓ Credibility of information ✓ Flexibility	✓ Language problem- necessity to translate, which will demand resources and time (end users will get already older information)
Opportunities	**Threats**
✓ Nuclear renaissance ✓ European exchange of experiences	✓ Country differences – in a lot of aspects (technical, economic, socio-political...) ✓ Funding

Strenghts	Weaknesses
✓ Information overview of RWM ✓ Links to all sources of information ✓ contacts to the "experts" ✓ "independent trainer" and library	✓ The volume of the information and its quality ✓ Language ✓ The scientific language and lay language, who will ensure the quality and update? ✓ Who will pay?→ "independency"
Opportunities	**Threats**
✓ International forum ✓ Different views at one place ✓ Direct contact to the reports of all the stakeholders	✓ Long term governance→ feasible? ✓ Guarantees of Objectiveness ✓ Too much information → difficult to find something

Strenghts	Weaknesses
✓ Reference point- "always present available" ✓ Simple to set up /not expensive ✓ Feeling of 'being connected' ✓ Plural character	✓ Maintenance ✓ Credibility (need for institutional support) based on design/vision ✓ Language problem
Opportunities	**Threats**
✓ Sharing knowledge ✓ Forum for debate ✓ Learning tool ✓ Source of inspiration	✓ Manipulation ✓ Credibility/lack of institutional support ✓ External deliberate damage of "image"

Strenghts	Weaknesses
✓ Additional approach to Governmental approach ✓ involvement instead of "acceptance" approach	✓ not to be able to provide clear message ✓ loss of focus ✓ language barrier
Opportunities	**Threats**
✓ Lessons from other problem areas could be integrated ✓ Cooperation with international organizations ✓ Attract young generations	✓ Not interesting to outside partners ✓ No funding from outside ✓ Sustainability may not be guarantied.

Annex 2 - Feasibility criteria

Speakers

FEASIBILITY CRITERIA
Economic
Sources of Funding: ✓ Next FP7 Euratom open call ✓ Direct financing by the DG ✓ Partnerships among national & regulatory authorities, municipalities, enterprises.   **Focus of funding** ✓ Implementation costs ✓ Running costs
Sociopolitical
✓ Need of local communities to receive information ✓ Interest of local communities in radioactive waste management issues ✓ Supply and demand market in terms of knowledge, organisation, information and resources. ✓ Involvement in the decision making process in the siting phase. ✓ Need for an integrated and organized knowledge base and dialogue forum
Technical
✓ Large amount of available information ✓ Partners willing to participate ✓ Information systems available: virtual platform ✓ Initially a Common language: English ✓ Building of the Observatory in consecutive phases ✓ Governing board leading the Observatory ✓ Staff running the Observatory ✓ Creation of a user-oriented information ✓ Neutral and reliable information

FEASIBILITY CRITERIA

Economic

- ✓ Sufficient funding
- ✓ EU plus annual fees? (Ministry of regional development etc.)
- ✓ Additional resources?

Sociopolitical

- ✓ Availability of information evaluated as sufficient by less than 50%
- ✓ Interest in participation higher than space available for discussion and involvement in decision-making processes
- ✓ Priority for RAWRA – present different schemes, concepts, approaches, provide examples for potential roles of communities to illustrate that many countries deal with similar issues
- ✓ Politicians are not enough informed, but is there will to learn, modify processes etc.?

Technical

- ✓ Diversity and number of stakeholders, balanced representation
- ✓ Networking (contacts of stakeholders), access to literature, reviews (contacts to university departments, experts)
- ✓ Need for unbiased Information – in CR all information evaluated as biased with the exception of media
- ✓ Two levels of information (assistance of experts in interpretation)
- ✓ Research studies and report reviews
- ✓ Need of national language

FEASIBILITY CRITERIA

Economic

- ✓ A long term funding principle has to be found in order to be credible
- ✓ National funding for developing national material

Sociopolitical

- ✓ There is a need, but in practice different stakeholders and persons have many different strategies for finding information
- ✓ For e.g. politicians risk is only one parameter out of hundred
- ✓ Do people want independent information (e.g. politicians, NGOs?

Technical
✓ Difficult to establish exchange and not only one way communication ✓ Flexibility for developing new communication strategies

FEASIBILITY CRITERIA
Economic
✓ Agreed funding mechanism and participants ✓ Subscription for end users? ✓ Project longevity
Sociopolitical
✓ Easy model for users to access the Observatory ✓ Vision of national programmes to direct communities to Observatory as "first port of call" ✓ Locus within (or formal link to) EC
Technical
✓ Open access of information ✓ Availability of experts and experienced people /time constraints ✓ Host organisation to management ✓ Legal model for Observatory (association, cooperation...) ✓ Focus on provision of an excellent service, rather than R&D

Participants

FEASIBILITY CRITERIA
Economic
Sociopolitical
✓ Desire of communities to have information
Technical
✓ Each WMO already has lots of information that could be made available

FEASIBILITY CRITERIA
Economic
✓ from EC ✓ from different organizations (on voluntary basis)
Sociopolitical
✓ To encourage development and coordination of community ✓ Monitoring programmes (people themselves take part in acquiring sociological monitoring and control data), with the aim to stimulate confidence building, local people which feel as controllers of situation
Technical
✓ Scientific, technical basis, experience. ✓ Established communities and contacts ✓ Access to huge information sources, ___

FEASIBILITY CRITERIA
Economic
✓ "Independent" financial source ✓ Long term financial needs providing support to operate it; update it and for the people (committee) working on it
Sociopolitical
✓ Wide stakeholders range within all countries; the similar level of interest of the stakeholders, credible quality, their support to the "evaluation committee"

Technical

- ✓ Sufficient human sources
- ✓ Technical equipment
- ✓ "Methodology" or criteria for the shared and published information.
- ✓ The national and international information sources network

FEASIBILITY CRITERIA

Economic

Sociopolitical

- ✓ Observatory for whom?
- ✓ What is the added value for RWM agencies?
- ✓ What is the expected use by local communities?
- ✓ What is the added value: communication, greater appropriation of issues by stakeholders; exchange of experiences at EU level?
- ✓ Validation by experts (peer review) on discussion by stakeholders?
- ✓ Objectivity -→ V <-- "Plurality"

Technical

- ✓ Observatory on technical governance aspects?
- ✓ Target at consensus and objectivity? Or at putting on the table controversies and plurality of views?

FEASIBILITY CRITERIA

Economic

- ✓ The title should be "financial aspect" (funding), not economic, since we are not generating resources.
- ✓ Long term funding should come from implementing organization
- ✓ The cost estimation and funding should be transparent

Sociopolitical

- ✓ To get all the societal players involved may be a problem
- ✓ Identify some important stakeholders (e.g. local community only) and address them
- ✓ This is very much country specific and a sensitive issue to be addressed

Technical

- ✓ The problem should be properly framed, it should be around siting of geological disposal- uncertainties should be addressed.
- ✓ ___elements should be used, such as training, site visits.
- ✓ Case studies, also failure studies.

FEASIBILITY CRITERIA

Economic

- ✓ Independent/balanced
- ✓ At leas for 5 years to get it stable and look for future funding in that time
- ✓ Amount matched with numbers of topics the observatory wants to address.

Sociopolitical

- ✓ Enough interested institutions that:
  - give input
  - support an evaluation committee
- ✓ Complexity of RWM gov.

Technical