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The IPPA Knowledge Base
Version 1

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Foreword

The core aim of the IPPA project is the establishment of arenas where stakeholders can join together to increase their understanding of the issues involved in radioactive waste disposal and of their respective views. The project is not limited to national programmes but includes also the multi-national context, as issues such as Environmental Impact Assessment and the Espoo Convention, the regional repository option and implementation of the Aarhus Convention will be examined. The project also investigates how negotiations on compensation and added value can be implemented at the local level.

The IPPA project is structured in six work packages dedicated to specific areas of research and implementation. Work Package 1 ("Taking stock of research results - Mapping prerequisites for implementation") provides participants with information and overview of theoretical achievements and practical experiences, from research and national programmes, which should be valuable when organizing activities and arenas for participation and transparency. It will develop a knowledge base of approaches for the involvement of stakeholders in dialogue on contentious issues based initially on international experience and subsequently on learning from the IPPA project itself. This Deliverable is the first step in developing the Knowledge Base, and will itself be further improved during the next 18 months of the project, and informed by the lessons learnt in WP2.

IPPA is a project under the European Atomic Energy Community's Seventh Framework Programme FP7/2007-2011. Its objectives, work programme and results are presented, and all open deliverables will be made available for downloading on the dedicated project website www.ippaproject.eu. The project website will remain available after the end of the project for at least five years.

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1 Introduction

The core aim of the IPPA Project is to establish arenas where stakeholders can meet to increase their understanding of the issues involved in radioactive waste disposal and also to understand their respective views on these issues. The overall structure of the project is both to take stock of existing research results about public participation processes and other experiences of the implementation of such processes, and to evaluate and provide feedback from the implementation activities in IPPA to the existing knowledge and research. In IPPA the development of the "knowledge base" is being undertaken in WP1 whereas the final evaluation and feedback is being undertaken in WP5.

Whilst recognizing that individual participation processes need to develop their own evaluation criteria based on process specific aims and objectives, the ARGONA project and general academic research has concluded that there is a need for a knowledge base which a "customer agency" could consult to identify possible approaches and techniques that would be suitable for use with any necessary adaptation to national and local circumstances.

Guidelines proposed in Deliverable 22 of the earlier ARGONA project (http://www.argonaproject.eu/project-deliverables.php) support the selection of approaches and methods for public participation including "how to get started" and some basic approaches. However, the hands-on support that could be gained from a well developed knowledge base is lacking, which was also noted in the Guideline report "*Unfortunately, however, there is as yet no easily available knowledge base that can be consulted to identify possible approaches and techniques that would be suitable for use in a particular situation.*" (Päiviö Jonsson *et al*, 2010). It is this knowledge gap that IPPA WP1 aims to address.

There are a number of EU Directives and corresponding national legislation measures that require public participation to take place, for example as part of Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) processes. Even if the EU Directives leave it up to the individual countries to determine the manner in which the public is to be consulted, their very existence stresses the importance placed upon participation. In some countries, EIA consultation provides a major participation mechanism. In addition to such legal requirements there are international conventions, such as the Aarhus Convention[1], that also require public participation. In parallel with or as part of these processes that may be required by law, other participation processes (sometimes called "arenas") can be organised as voluntary initiatives, even if they in principle could also be institutionalised to a greater or lesser degree. Examples of these initiatives include the RISCOM process and the partnership model (see for example NDA, 2007 and NEA, 2009). The RISCOM process involves the use of certain specific tools, most notably the RISCOM hearing and structured dialogue. The process is based on an agreement between stakeholders participating in the RISCOM reference group which designs a tailored

[1] The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters was adopted on 25th June 1998 in the Danish city of Aarhus at the Fourth Ministerial Conference in the 'Environment for Europe' process.

process to improve clarity and mutual understanding (see for example Andersson *et al*, 2004 and Andersson and Wene, 2006).

Legally mandated and voluntary processes often use specific tools (sometimes called "instruments") in their implementation. Examples of such tools are internet consultations, focus groups, consensus conferences and stakeholder panels.

The focus of this initial review is on the voluntary initiatives as opposed to those required by legislation etc. Often a number of different tools can be used within a certain participation process, which may itself be used to fulfil legislative requirements, such as EIA legislation.

The aim of this initial WP1 Deliverable is to therefore to take a step in building a Knowledge Base of tools for participation. In order to do this, a number of engagement processes concerned with contentious issues, involving the use of different tools, have been examined.

An important part of the IPPA project is the implementation of the RISCOM model in the Czech Republic, Poland and Slovakia, and the implementation of the RISCOM or some other process for public participation in Romania and Slovenia. The RISCOM process builds on a formal Reference Group Agreement and has a tailored hearing format and a structured dialogue as central "tools".

IPPA participants in these countries are therefore the intended users of this initial version of the Knowledge Base, as it will provide input to these activities. However, as other tools than those described here may also be used, experience of these will be also used to enrich the overall Knowledge Base during subsequent development in WP 1. In Year 3, it will feed into the development of the 'Toolbox' that will be developed in WP 5.3. It is therefore in itself an example of an iterative learning process. The Deliverable is intended to provide background to the basic requirements for successful participation and introduces a range of tools that might be appropriate.

Chapter 2 provides a background to public participation derived from earlier research, and describes generally agreed preconditions for successful public participation processes. In addition, five levels of participation are described within a Participation Ladder derived from the Arnstein Participation Ladder (Arnstein, 1969) and subsequent models. Even where there are generic elements of good public participation much depends on its objectives, contextual framework and procedural context. These aspects are also addressed.

Chapter 3 presents short overviews of the case studies, together with descriptions of the participation tools used. This has involved summarizing the key points of the individual case studies in an Assessment Template, and presenting the review in a comprehensive spreadsheet. The Assessment Templates are included as Annex 1 to the Deliverable.

Chapter 4 introduces the spreadsheet presenting the Knowledge Base with examples of its use included as Annex 2.

Chapter 5 lists the references that have been used to develop this Deliverable.

2 Background to the Knowledge Base

2.1 Preconditions for successful public participation processes

Experience in the study of public participation processes has shown that no matter which type of involvement method is chosen, certain principle preconditions, outlined below, have to be considered to reduce the risk of failure. These preconditions should ideally be applied during the design of the process and development of the framework or at the very least considered during its implementation.

In contrast to these preconditions for public participation *processes,* which are valid for all types of public involvement irrespective of the selected approach and the way in which it is implemented, the specific properties of the participation *tool*s used will vary (see Section 3.3).

Examples of the preconditions identified as being necessary for development of good public participation processes have been described in a range of projects dealing with public participation, including COWAM, ARGONA, RISCOM II, OBRA, TRUSTNET, RISKGOV, CETRAD, EUROPTA and CARL, as well as in the relevant literature e.g. French (2010), OECD (2001), Öko-Institut (2007), Renn (2008).

The analysis in the OBRA project, a Coordinated Action under the 6th FP EURATOM "Management of Radioactive Waste" (Kallenbach and Brohmann 2007), consolidated the results of several of these projects, namely TRUSTNET, COWAM, RISCOM II, RISKGOV, CETRAD and CARL. The analysis forms the basis of the preconditions listed below, which also incorporate other sources.

As the approaches to participation differ widely within the projects considered in this current review, we have sought to identify those preconditions which appear to be common to each, and have grouped them under the following headings:

- Overarching principles for good public participation processes,
- Principles of the organisational framework.

1. Overarching principles for good public participation processes
A successful public participation process should be guided by the following overarching principles, which can be understood as examples of democratic ideals, intended to ensure a fair, transparent and acceptable process, capable of the production of useable and tolerable outcomes:

a) Legitimacy of the process and of the decisions;

b) Clarity of the level of influence the public have in the process

c) Following the aim of fairness so that all parties and the public in a broader sense benefit from the cooperation;

d) Ensuring transparency of the process;

e) Enhancing quality of decision making;

f) Supporting positive economical, ecological and societal development of the region affected by the planned measures/installations.

g) Accompanying evaluation of the process

2. Principles of the organisational framework

A successful process requires an adequate organisational framework to set the rules for the cooperation and, when relevant, the interaction between participants at the national and regional level, so as to ensure that appropriate resources are available and to provide a common understanding of the roles and responsibilities of the different actors. Furthermore it is very important to provide clarity on how the results of the public participation will feed into the formal decision making procedure. There needs therefore to be:

a) A supporting national policy and framework setting;

b) Strong interaction between the national and the regional governance level;

c) Institutionalised cooperation based on:

   i. An agreed target and common understanding of perspectives and goals amongst all the actors;

   ii. A regular working practice assuring the integration of all relevant stakeholders with clear accountabilities;

   iii. Inclusive working methods assuring integration of all relevant issues;

   iv. Professional coordination of the whole process (e.g. by an institution or an intermediary) ensuring focusing on the issue and transfer of results.

d) Sufficient resources (finances, personnel, knowledge, time) for all necessary activities and all stakeholder groups

e) Integration of the public participation process into the formal decision-making procedure;

f) Transparent roles and responsibilities of all actors – in general – and a clear definition of the specific stakeholders' roles in the decision-making process.

2.2 A Modified Participation Ladder

In order to structure the identification and description of the types of tools that have been used for stakeholder involvement in the different case studies examined in the first stage of WP1, we have developed a variation on the Arnstein Participation Ladder (Arnstein, 1969), building on subsequent work by the Netherlands Environmental Assessment Agency (MNP, 2008). The structure used hereinafter is referred to as the '*Participation Ladder*' and is illustrated below in Table 1.

Table 1: Levels of Participation and examples of tools suitable for each level, based on a modification of the Arnstein Ladder (MNP 2008)

	Level of participation	Public participation tools (examples)
Interactive	Joint decision making	Citizens' juries
	Collaborate	Citizens' juries, Scenario workshops, open-space conferences, Citizen advisory groups/ committees, Group decision support, Mediation Forum, Regional Dialogue Forum, Local Partnership, Roundtables
	Consult /Exchange	Interactive workshops, Focus Groups, Delphi method, Future workshops, Group model building, Working Groups, Consensus Conferences, Citizens' Panels, RISCOM Process, RISCOM Hearings, Structured Dialogue, Foundation Workshops, Expert Group
Non-interactive	Listen	Feed back channels, Public Comments, Consultations, Public meetings, Surveys
	Inform	Presentations, Fact sheets, Websites, Open houses, Drop-in sessions

Description of the Participation Levels

The five levels of participation illustrated in the Participation Ladder differ in the extent to which the public[2] is involved. The particular degree of involvement for each level is described below ranging from low to high. The levels of participation are classified as non-interactive or interactive. The non-interactive levels are limited to one-way communication whereas the interactive levels comprise activities involving two-way communication. This results in different ways of organising the participation, which can vary from simple to complex. Another difference between the levels concerns the frequency of participation activities. Some levels require continuous involvement so that the public can provide regular inputs whereas in other levels the public is not involved regularly but only at one time or on limited occasions.

These levels are not rigidly defined, however, and some tools can be placed in more than one level of the Participation Ladder (citizens' juries, for example), depending on the degree of interaction designed into the process and the degree of decision-making responsibility assigned. Public presentations, surveys etc. can often generate immediate responses where none were initially anticipated or requested.

[2] The descriptions here use the term 'public' for all kinds of interactive or non-interactive exchange with the implementer of a tool, whether the participants are Experts, Decision Makers or the General Public.

In the following description the term "implementer" is used for the party that is implementing the participation tool. The implementer can be either a facility operator or the responsible authority, or can in some instances even be some other actor or process mediator. This depends on who is responsible for the implementation of the decision-making process or of specific tools within such a process.

Non-interactive:

- **Inform**: Selected information is provided by the implementer to the public in order to assist them in understanding the problem, alternatives, opportunities and/or solutions under consideration. The implementer decides what information is provided. The public can assess the suitability of the available information in terms of their own requirements, but they have no opportunity to make a contribution to the discussion as no such tools are foreseen. The communication is therefore limited to one way from the implementer to the public. Information can be provided continuously (e.g. through a website which can be accessed whenever required) or on certain occasions (e.g. through a presentation given at a public meeting). The degree of organisation required is low. The initiative for action lies with the implementer. Agreements with the public are not required. For more details see IAP2 (2007) and OECD (2001).

- **Listen**: The implementer listens to the public feedback on analysis, alternatives and decisions and receives complaints, protest and criticism. There is however no discussion of the different points of view expressed. The relationship is two-way (the implementer informs, the public comments) but on a very limited level that excludes direct communication between the parties involved. The implementer has to provide feedback options, which can be either continuous (e.g. providing the possibility of leaving a comment on a website) or on certain occasions (e.g. receiving complaints/comments at a public meeting). The degree of organisation required is low. For more details see OECD (2001).

Interactive

- **Consult/Exchange:** The public is asked to discuss the problem with the implementer and to add their ideas and concerns, in order to develop an overview of existing arguments and perspectives. There is an exchange of information and arguments with the aim of understanding the concerns of the public so that they can be reflected in the decision making, but the public are not actively involved in the formulating of alternatives. The implementer does however provide feedback on how the public input has been considered in any subsequent decision. There is therefore two-way communication. The frequency of involvement is however limited to specific occasions (e.g. at a public hearing in an EIA process). The degree of organisation required is higher than in the non-interactive activities because there needs to be a platform or arena where public and implementer can meet and discuss.

- **Collaborate**: Here, the public are able to formulate propositions and recommendations. They take an active role in generating new ideas, developing alternatives and identifying the best solution to a problem. The responsibility for the (final) decision, however, rests with the planning / operating organisation with regard to the consideration of solutions within their project or with the authority with regard to the approval or licensing of the applied project (in a stepwise manner). They also provide feedback on the extent to which the public's

recommendations have been considered. The public are actively engaged throughout the process and are asked to provide regular input. The communication is therefore two-way, both from the implementer to the public and from the public to the implementer. This level of participation requires a high degree of organisation because of this need for continuous collaboration. Formal agreements between the implementer and the public are required to describe the processes to be used. For further details see IAP2 (2007) and OECD (2001).

- **Joint Decision-Making**: The public is empowered to take part in the final decision-making. The decision-making responsibility is therefore shared. Joint decision-making requires continuous co-operation between implementer and public with agreed rules for the participation. Thus the degree of organisation required is very high.

2.3 Procedural Context and Legal Requirements for Participation

This report deals with tools that can be used within processes of participation, and begins to develop a knowledge base for them. However, before dealing with the tools themselves it is worthwhile to reflect further on the processes within which they are used.

The levels of participation presented in the Participation Ladder in Section 2.2 can generally be ascribed not only to participation tools but also to the whole process into which these tools are embedded. The decision on the level of participation that is intended and the degree of influence to be offered within a particular process should be taken in the early planning stage and should be made explicit, as it considerably influences the framing of the process. Among other aspects, the following should be considered in this context.

The "higher up" on the ladder a process or a tool is, the more active the participants become in terms of collaboration, and the more directly they may influence decision making. Stakeholders thus take on a higher degree of responsibility and accountability. This may be a motivating factor for some stakeholders who seek a high degree of influence on the planning or realisation of the respective project.

However, a participation process which places a high degree of responsibility on stakeholders may also prove to be an obstacle to broad involvement of all relevant stakeholder groups. Experience shows that for example a municipality or local government body may consider it more important to be independent of developers or implementers during the siting of a disposal site or other contentious facility, or during a particular development. Also, NGOs may sometimes hesitate to take part in participative processes that have too great a collaborative element as they may feel this can reduce their independence. Regulators too may hesitate to participate in a process that has a direct influence on decision making, or one with very close collaboration, given the need to ensure their independence from the licensee and regulatory requirements concerning decision making.

When beginning a public participation process it is therefore crucial that the overall framework and objectives are clear to all participating stakeholders. A stakeholder wishing to start a participation process should make him/herself aware of different

approaches and define his/her own purpose with the process in order to be able to choose the best approach. This means clarification of the objectives of the process – for example if it is only to inform, to build consensus, or to enhance awareness and clarity. Furthermore, is the aim only the identification of issues, being advisory in a decision making process (DMP), to be a formal part of the DMP, enhancing the quality of a long term DMP, to build awareness and clarity in a political DMP, etc.?
How participation should be organized also depends on the phase of the decision making process, who is the organizer and various cultural and institutional factors. From the results of the ARGONA project (see www.argonaproject.eu) we also know that stakeholders often need a 'safe space' for their involvement, for example in those cases when they prefer not to form a partnership with the implementer and strive for shared solutions. Another core element that was clarified in ARGONA is that processes of participation and transparency should link to existing political decision making structures, including representative democracy.

Another ARGONA conclusion was that to some extent institutional settings already exist that can be used for the purposes of participation and transparency. There is a high degree of freedom within much current legislation for participation and transparency initiatives and improvements. Participation is defined widely and there are normally no limitations or restrictions that hinder increased participation and transparency, at least as far as they do not directly interfere with formal decision making. Participation offers opportunities to make improvements within and beyond the existing legislative framework. On the other hand, when such legislative frameworks do not exist, it is not necessary to wait for them to be introduced before something can be done, as there are many informal processes and tools available, as demonstrated here and elsewhere.

3 Development of the Knowledge Base

Development of this initial version of the Knowledge Base has been undertaken in a step-wise process, namely:

- Identification of suitable case studies
- Selection of tools from the case studies
- Description of the properties of the tools used
- Development of the Knowledge Base and presentation of the results in a spreadsheet format.

3.1 Identification of suitable case studies

The development of the initial version of the Knowledge Base is based on experiences gained in a number of case studies in which a range of participatory tools have been used in situations where contentious issues have been addressed. Although IPPA is primarily concerned with issues surrounding the management of radioactive wastes, there are examples in the literature of participatory processes outside the nuclear industry from which lessons can be learned concerning the benefits and/or pitfalls associated with various tools.

The Case Studies (and tools employed) that have been used in the development of the initial Knowledge Base are as follows:

- **The enlargement of Frankfurt Airport in Germany (#1)**

Plans for the enlargement of the airport in Frankfurt have given rise to a great deal of public protest. Regional stakeholders were therefore involved in a "Regional Dialogue Forum" to confirm the measures for protecting the public that were identified in an earlier 'Mediation Process' and to supervise their implementation in the licensing procedure. The work resulted in a number of recommendations, some of them enshrined in a memorandum that was signed by most of the parties involved.

- **Closure of the former Asse LLW repository in Germany (#2)** (2 tools)

As part of the procedure developed for the closure of the former Asse LLW repository, which addresses a number of problems caused by brine inflow and instability, a "Citizens Advisory Group" was established, consisting of regional level stakeholders from the fields of politics and administration, together with environmental groups and citizens' initiatives, as well as representatives of the relevant ministries and the operator. The Advisory Group is in turn supported by an Expert Group.

- **The enlargement of Vienna Airport in Austria (#3)**

In order to discuss the different alternatives concerning the enlargement of Vienna Airport in a transparent way and to avoid public protest, a "Mediation Forum" was initiated by the operator at an early stage of the procedure. In the Mediation Forum, regional stakeholders could engage in discussions aimed at finding agreed and acceptable solutions. The results of the Mediation Process were enshrined in a contractual agreement between all of the involved parties.

- **Site selection for final disposal for LLW and ILW in Belgium (#4)**

Following the decision by the Belgian Government that local stakeholders must be involved in the site selection procedure for a final repository for LLW and ILW, "Local Partnerships" were established in three communities which had previously declared their interest in participating as a candidate site.

- **The expansion of the Tauern highway in Austria (#5)**

In the past, the expansion of the Tauern highway gave rise to a great deal of public concern, leading to a temporary cessation of the construction work in the 1980s. However, some years later the plans to construct additional tunnel tubes were reactivated, due to fire-related safety aspects in the existing tunnel. Following the decision to conduct the work and the agreement of the route, working groups were established to involve the public. As the process was already in an advanced stage, it was not possible to discuss alternatives, so the discussions focused on measures for environmental protection.

- **The UK CoRWM Public and Stakeholder Engagement Process (#6)** (2 tools)

The Committee on Radioactive Waste Management (CoRWM) was established in 2003 as part of the Managing Radioactive Waste Safely process, initiated by the UK government following the results of the Citizens' Panel held in 1999 and other public discussions. CoRWM's remit was to examine the technical and social issues concerning the management of all higher-activity radioactive wastes in the UK, with comprehensive involvement of all stakeholders, including experts and the general public. CoRWM was to make recommendations to government regarding a technically sound and socially acceptable way forward.

- **The GM Nation Consultation in the United Kingdom (#7)** (3 tools)

In 2002 the Agriculture and Environment Biotechnology Commission (AEBC) suggested to the UK government that there would be benefit in conducting a public debate about the issue of possible commercialisation of Genetically Modified (GM) crops in the UK. The AEBC recommended a core programme with two main elements. The first would be a series of grass roots debates in local communities, stimulated by a specially made film and other material and linked to regional and national events involving representatives from local groups. Public views emerging from these events would be reported, and synthesised and assessed by independent professional experts. The second would be a research component based on a series of discussion groups, involving members of the public, to give more depth of analysis and to act as a "control" to test the information coming out of the set-piece debates.

- **The UK Citizens Panel and Consensus Conference on Radioactive Waste (#8)**

Following the failure of an earlier siting process for a repository for long-lived low and intermediate level radioactive wastes in the UK, the implementing organisation, NIREX, and the Natural Environment Research Council, provided funding in 1999 for the establishment of a Citizens' Panel. The Panel's remit was to focus on the effective and publicly acceptable long-term management of all nuclear waste in the UK, concentrating particularly on intermediate and high level waste, culminating in a Consensus Conference held in public. The UK government published a public consultation 'Green Paper' on waste management in 2001. The Panel was reconvened to prepare and submit a response, based on the earlier experience.

- **The mobile phone project of the Swedish Radiation Protection Authority (SSI)) (#9)**

The third generation (3G) of cellular phones caused much discussion in Sweden. The time table and the level of ambition in terms of access to the system all over the country were agreed at the highest political level at an early stage in its introduction. This however caused opposition and controversy as there were concerns over radiation risks from the aerial masts. Resistance groups emerged, and there were municipalities wanting to establish zones free from masts. In 2005, industry, authorities, municipalities and critical groups agreed to form a joint Transparency Forum using the RISCOM Model. The stakeholders agreed on a structure to approach the problem and on the format and contents of a series of three seminars that followed this.

- **Application of the RISCOM Model in the Czech Republic (#10)**

At the end of 2005, areas at six sites were selected in the Czech Republic for geological and borehole surveys and for further characterization as part of the site selection programme for deep geological repository for spent nuclear fuel. Many communities protested against these developments, resulting in a *de facto* moratorium. When this was about to expire, it was realised that a neutral platform for discussion among a broad spectrum of stakeholders was needed, that was acceptable to all participants. In order to provide such a platform, components of the RISCOM Model were applied, with the active involvement of a range of stakeholders, including local and general communities. The first major event of the RISCOM application in the Czech Republic was a public hearing on the site selection process, held in May 2009.

Several of these case studies have involved the use of a range of tools, each of which has been separately assessed.

The West Cumbria Managing Radioactive Waste Safely (MRWS) Partnership that is currently deliberating in the United Kingdom has undertaken two rounds of public consultation to date, and will embark on a third and final round later in 2011. These utilise a range of engagement tools but not all these activities have been evaluated as to their effectiveness. It is possible that the experience gained could be included in the learning to be included in subsequent versions of the Knowledge Base later in WP 1 and incorporated into the development of the Toolbox in Year 3 under WP 5.3.

In order to carry out the evaluation of the tools, an Assessment Template has been developed in collaboration with the participants of WP 1. The Template contains a range of information describing the tool, its context within the overall process represented by the Case Study, other information which assesses its usefulness against a range of issues and criteria and identifies the source of the information (see Annex 1). The data collated in the Template for each tool has then been used to populate an interactive spreadsheet which allows each tool to be mapped against the 13 properties described below in Section 3.3. Information has been taken from the relevant literature.

The Template therefore serves as a summary overview of the decision making or participation process in which the particular tool was used, and is the source material for the initial version of the Knowledge Base that forms the body of this first

Deliverable. The Assessment Templates for the case studies identified above are presented as Annex 1.

3.2 Tools used in the Case Studies

Various public involvement tools have been used in each case study described above. In total this results in a wide range of different tools that are suitable for consideration by other IPPA participants. According to the focus of this study, those tools which facilitate an interactive approach (see the Participation Ladder in Section 2.2) have been preferentially selected for further assessment. We have not evaluated all available tools here, but have concentrated on those used in the range of contentious issues covered in the case studies, in order to present a range of experiences. Further development of this introductory Knowledge Base will continue during the IPPA project, and together with learning from the implementation activities undertaken in WP 2 will form the basis of the Interactive Toolbox planned for development in year 3 as part of WP 5.3.

The following list presents an overview of those tools which have been analysed, consisting of a short summary of the main characteristics of each, based on an existing definition, for the more commonly used techniques, with reference to the relevant literature, or describes the most relevant features of those developed specifically in the context of a particular case study. More detailed descriptions of the use of the different tools in the context of the respective case study are provided in the Templates (see Appendix 1). The tools that have been evaluated (with the relevant case study identified) are presented in Table 2 below:

Table 2: Overview of the properties of the tools used in the case studies

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
Regional Dialogue Forum	Enlargement of Frankfurt airport (Germany)	The Regional Dialogue Forum is based on various characteristics of mediation tools, [3]where representatives of the public and other stakeholders and the operator or decision-maker work together in a continuous cooperation fixing the rules for their cooperation in a memorandum or a contract. An important characteristic is that there is neutral party or chairman who helps the stakeholders reach agreements. (www.peopleandparticipation.net)	In this case the results of the participation were partly enshrined in agreements signed by all members. Within the Forum, working groups consisting of delegates of the involved stakeholders were established in which in-depth discussion of specific topics took place. These groups fed their results into the General Assembly, which was responsible for preparing final recommendations.

[3] Mediation tools in general are described in more detail following this table.

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
Citizen Advisory Group	Closure of Asse Repository (Germany)	Composed of representatives of the public interest with the aim of ensuring broad representation and providing a forum for ongoing consultation (OECD, 2001). The results of the participation are normally formulated as recommendations (NEA 2004 and www.people.andparticipation.net).	The Citizen Advisory Group here consists of ± 30 stakeholders who meet regularly with representatives of the implementer and the authorities, with the latter having only observer status. The aim of the Group is to inform the public and communicate their concerns to the implementer and the authorities, in order to enable them to consider them in their decisions.
Expert Group	Closure of Asse Repository (Germany)	In an Expert Group independent experts (some of them nominated by particular stakeholders) discuss and critically monitor an implementer's ongoing work. The members of the group discuss proposed activities and draft decisions, produce written expert opinions and share their views with and give advice to stakeholder groups involved in the process.	In this case, members of the group include experts nominated by stakeholders.
Mediation Forum	Enlargement of Vienna airport (Austria)	Based on the characteristics of mediation tools, a Mediation Forum consists of a group of stakeholders who actively work together with the operator. The aim of the collaboration is to discuss different options for realising the project and to find a solution acceptable to all parties. The Forum is led by a mediation team and operates according to an agreed Code of Conduct www.peopleandparticipation.net	In this case, the Forum consisted of more than 50 stakeholders. The results of the discussions were enshrined in either legally binding contracts or simpler signed agreements. For in-depth discussion of specific topics, Working Groups consisting of delegates of the involved stakeholders were established, which fed their results in the Forum, which was responsible for preparing the final recommendations.
Local Partnership (General Assembly)	L/ILW repository siting (Belgium)	Local partnerships are usually based on a contractual agreement between the local community and the Government or project implementer, and have sometimes	In Belgium, local partnerships were established to actively involve local stakeholders in the discussion of alternatives and the development of the best solution. The local

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
		involved the creation of legal entities. These partnership agreements usually also provide the community with resources (funding) to facilitate their engagement (NDA 2007). Several elements have been part of community partnerships relating to radioactive waste management internationally. These include some or all of the mechanisms to enable communities to volunteer, withdraw if they wish, establish working groups to establish proposals and negotiate community benefits (NEA 2004).	partnerships provided detailed proposals to the implementer/decision maker. Detailed discussions took place in working groups which focused on several specific topics. The local partnerships were coordinated by two full time project managers, responsible for administration and communication. Guidelines for collaboration were agreed between the stakeholders and the implementer.
Working Groups	Expansion of Tauern Highway A10 (Germany)	In a Working Group, around 5 to 15 stakeholders or experts focus on a specific topic. Their aim is to discuss this in detail in order to create new ideas, develop alternatives or identify the best solution to a particular problem. Their results are then presented either directly to the operator/decision maker or to other stakeholder groups for final conclusions to be drawn.	
Citizens' Panel	CoRWM Citizen' Panels (UK)	A Citizens' Panel is intended to be a representative consultative body and is typically used to identify priorities and to consult on specific issues. In reality, panels are rarely demographically representative of the public and very few ensure that members represent a cross-section of political or social attitudes. Potential participants are generally recruited through	Between 2003 and 2006, CoRWM organised 4 different Citizen's Panels in different regions of the UK to consult members of the public and obtain their opinions and views and their reactions to the committee's initial short-list of possible waste management options. Although participants were randomly selected, members of NGOs, journalists, local councillors and those with family members in the nuclear industry were

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
		random sampling of the electoral roll. Once citizens agree to participate in a panel, they will be invited to, participate in a rolling programme of research and consultation which can often involve regular surveys and, where appropriate, further in-depth research such as focus groups and workshop. www.peopleandparticipation.net	excluded. The Panels were reconvened later in the MRWS process to allow participants to comment further on CoRWM's detailed recommendations by being able to question experts either individually or together.
Roundtables	CORWM Nuclear Site Roundtables (UK)	Here, representatives of different views or interests come together to make decisions on an equal footing. In some cases these may last for several days, and tend to be best used at the beginning of a process to identify broad policy approaches (NEA 2006).	CoRWM held 8 roundtables close to existing UK nuclear sites over a 3 week period in 2006. The intention in this case was to gain insight into the affected public's views on the way that CoRWM had performed its work, and to feed into an overall assessment of the results. It was therefore used somewhat later in the process than normally.
Foundation Discussion Workshops	GM Nation (UK)	A workshop normally involves a group of interested or invited stakeholders who meet together on a single occasion to explore specific issues or learn particular techniques.	These were held as the first events in the GM Nation debate. The methodology employed inviting groups of up to 20 people with no prior knowledge of the issues to meet for around 3 hours and discuss their reactions to and concerns about the GM issue. The meetings were taped and the outcomes used to develop topics and issues for subsequent debate in later meetings (below). After the events participants were asked to respond to a series of questions in order to help in development of so-called 'stimulus material' for later use.
Tiered Meetings	GM Nation (UK)		These meetings were based on the material developed from the earlier Foundation Discussion Workshops (above). They were designed to

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
			initiate the public debate and develop feedback to government on public views about GM. Some meetings were professionally facilitated whilst others consisted of presentations and Q and A sessions, or were simply local meetings based on a toolkit supplied to interested members of the public. The intention was to gain insight across a range of stakeholders.
'Narrow but Deep' Focus Groups	GM Nation (UK)	Here, small groups of invited or recruited persons discuss a theme or proposal and provide insight on their values, concerns and perspectives (NEA 2006).	As is the normal case, these particular meetings involved a carefully selected representative cross section of the UK public, to act as a control on the Tiered Meetings (above) where participants had expressed interest in the issue. Following meetings in which they were introduced to the 'stimulus material' from the Foundation Discussion Workshops (above), participants were invited to research the issue privately for up to a week, after which they were interviewed at a second meeting to see if their views had changed.
Consensus Conference	Discussion on Radioactive Waste (UK)	A forum at which a Citizen's Panel (see above), or group of invited members of the public, can question experts on a range of issues of their choice (www.peopleandparticpation.net). These are usually organised at a national level, usually by a neutral organisation. A small group of volunteer citizens is chosen to be representative of the public at large, or, to represent a spectrum of viewpoints. They meet for several weekends to learn about the dialogue issue and to question relevant experts. The citizen participants then produce a report	In 1999 a Citizens' Panel questioned a number of 'experts' (or 'witnesses'), which it had selected, on the issue of radioactive waste management through a range of pre-determined questions. The Panel then assessed the responses, discussed the issues raised, and reported its conclusions at a press conference. The Panel represented a genuine cross-section of the public who gave their opinion on the issues. None of the Panel members had had any significant prior involvement in the area of radioactive waste management. The whole process (other than the preparation of the report), took place

Tool	Case Study	General Description (with reference to the Literature (if applicable)	Specific Comments on the use in this Case Study (if relevant)
		with their conclusions and recommendations, to be delivered to public decision makers (NEA 2006).	in front of an audience of interested persons. The Panel's report was circulated to key-decision makers in the government and industry and to other interested parties.
RISCOM Process This is not a tool in the meaning of the word used in this report, but a more long term process aimed to create clarity and structure in complex and controversial issues. It is presented here for the sake of completeness.	SSI mobile telephone project (Sweden) and Application of the RISCOM model (Czech Republic)	The RISCOM Process has been referred to as a "safe space", where the purpose is not to reach consensus and shared solutions but only to create clarity and understanding. Therefore, it should be possible for all possible stakeholders to take part in the process.	The RISCOM Process is based on an agreement between stakeholders participating in the RISCOM reference group, which designs the process, aiming to improve clarity and mutual understanding. This was done in both case studies, although the actual implementation differed due to budget and other constraints. In both case studies major stakeholders were sitting around the same table for the first time, discussing controversial issues. The SSI project had three seminars as core elements, following the structured dialogue format. The seminars had a gradually increasing amount of stretching, supported by various means such as group work, expert group with prepared questions, a well prepared moderator etc. In the Czech Republic, the hearing format with stretching was implemented to a limited degree by a stakeholder panel, supported by a professional moderator.

Table 2 indicates that some of the tools described from the case studies are well established approaches for public participation which are used in many contexts e.g. Focus Groups or Citizens' Panels. These methods are well described in the literature (see references above). Other tools like e.g. the Regional Dialogue Forum were created for a specific context and some were used as general methods for gaining public insight or obtaining their views. Understandably the literature does not provide common descriptions of those tools. However, most of the specific tools are based on the characteristics of well established techniques.

Some of what are described in Table 2 as tools, such as the Local Partnership and the RISCOM Process, are strictly processes or approaches, in which a number of tools may be used together or in conjunction.

The RISCOM Process, for example, contains certain integrated tools, most notably the RISCOM Hearing and Structured Dialogue with 'meaningful levels of debate'. The hearing format, called stretching, is tailored for the purpose of clarification of so-called 'factuality' and validity of the claims made by stakeholders, and of their authenticity, which form the three corners of 'the RISCOM triangle' (Andersson *et al*, 2004). The detailed format of the hearings is developed in agreement between the stakeholders. Their understanding of the issues and of their respective points of view increases, which in turn improves the quality of dialogue and decision making processes. A hearing format proven to work well is to have a well prepared independent group of experts, well-informed about the RISCOM process, as leaders of the stretching, and an independent moderator for the entire hearing.

For an efficient dialogue about complex issues it is beneficial to have a structure of the issue agreed on between the parties in the dialogue. In the RISCOM Process this means identification of relevant levels of discussion and dealing with them separately. Levels can range from specific technical details in the safety analysis to site selection and selection of disposal method to broader questions such as the overall waste management strategy. Having such a structure of the dialogue increases its efficiency and contributes to the clarification. In the RISCOM Process, hearings can be organized separately on different levels in agreement between stakeholders.

The Regional Dialogue Forum, Mediation Forum and the Local Partnership (General Assembly) differ slightly in their approaches and implementation, but all of them can be characterised as *Mediation Tools*, with the following common characteristics:

- Representatives of the public and other stakeholders on one side, and the operator or decision-maker on the other, work together in continuous cooperation, enshrining the rules for their cooperation in a memorandum or contract.
- The aim is to find jointly agreed solutions.
- At the end of the process the results can be formalised in different ways e.g. often in signed agreements or a contract, or as recommendations with less force.
- An important characteristic of the tools used in a mediation process is that there is a neutral party or chairman who helps the representatives of the public and the operator to reach agreements. This person should have a good reputation in these matters and be accepted by all the parties involved and by the wider public.
- The cooperation process is coordinated by one or two full time administrators. Additional professional support for the process is also possible if required.

For further information see:
http://www.peopleandparticipation.net/display/Methods/Mediation

3.3 Properties of the Tools

In order to assess the usefulness of the various tools used in the selected case studies, it is necessary to evaluate them in terms of a range of representative properties.

Examination of the literature has allowed us to develop a set of 13 properties that encompass learning from a number of sources. The main resource here has been the criteria used previously in the development of the RISCOM methodology, based on Hunt *et al.* (2000) and which were adapted further in ARGONA to assess a number of participatory processes (Richardson *et al.*, 2009).

The properties are divided into 3 main groups:

1. **Instrumental**

Instrumental properties are those concerned with enhancing the quality of decision-making, finding acceptable outcomes and the integration of these into a legitimate process.

- Use of the tool assists in production of acceptable/tolerable outcomes
- There is a clear definition of the issue
- The results feed into or can be incorporated in a formally prescribed decision-making process
- The tool enhances the quality of decision-making

2. **Procedural**

Procedural properties are concerned with the conduct of the process, for example whether it provides conditions that assure equal rights for all participants.

- Transparency
- Legitimacy
- The presence of a deliberative environment
- There is equality of access
- There is the ability and freedom to speak (stakeholders are not bound by disciplining nature of the event, the process does not dictate roles)
- Inclusiveness (the tool allows inclusion of all relevant/appropriate entities, capture of inappropriate interest groups is avoided/ representative of different views and groups of stakeholder)

3. **Constitutive**

Constitutive properties refer to the benefits implied by participation, such as for example the development of understanding and capacity building.

- The tool assists in the improvement of trust and understanding between participants/reduction of conflicts
- There is development a sense of shared responsibility and common good
- The tool assists in capacity building/ learning

4 Presentation of the Results

Whilst the Assessment Templates record the important information concerning the individual tools and their implementation within the various case studies, it is necessary to present the results of the assessment in terms of the suitability of the tool to the objectives of that process, and to begin to build the framework for the subsequent iterative learning planned for later stages of WP 1. This is intended to culminate in the development of the 'Toolbox' in WP 5.3 in Year 3 of the IPPA project.

A basic spreadsheet has therefore been developed to present the information from the screening of the tools via the Template. When fully populated with the gathered information, each of the tools can be mapped against the 13 properties that have been identified above as relevant. The tools are also mapped against their position in the Participation Ladder presented in Table 1.

At this stage, the mapping is intended to illustrate to a user of the spreadsheet which of the tools evaluated are suitable for particular, albeit fairly general, objectives. The user is then able to examine details of the background to the implementation of the tool in various situations as represented by the different case studies where it was used, including any pitfalls that were encountered or major points that should be borne in mind. It is not the purpose, at this stage, to offer a method of tool selection, rather it is to indicate the types of tools that exist and provide some examples of how they have been implemented. It is the selection methodology that will be developed based on the iterative learning from other IPPA activities and finalised in WP 5.3 as the 'Toolbox'.

The complete Knowledge Base is available as an electronic document consisting of a number of worksheets that break down the information on each tool into the following areas:

- **Basic Information**

This associates each tool with a description in terms of its main features, the number of people who were involved, the level of decision making (whether it was national, regional or local) and the frequency and timescales over which the tool was used. The references from which the information was gathered are also given. In addition, there is potential for this information to be expanded later by including, for example, some idea of relative cost.

- **The Issue in Question**

This describes the phase and formal framework of the decision making process as well as the purpose of the process and identifies any other tools that have been used.

- **Stakeholder**

Combinations of different Stakeholders involved are given; Experts, Decision Makers and/or Public, differentiating between two types of expert, a scientific expert (ESci) or an expert for organisation(s) (EOrg). The worksheet includes details of each type within that combination, as well as the particular selection process.

- **Suitability of the Tool**

This worksheet assesses the suitability of each tool by mapping the properties against the identified objectives. The information displayed can be refined by applying filters on any desired column. The objectives of each tool within the context of the overall process are listed as discreet entries in this worksheet. This allows each objective to be mapped to the appropriate property group (Procedural, Instrumental or Constitutive) and relevant property.

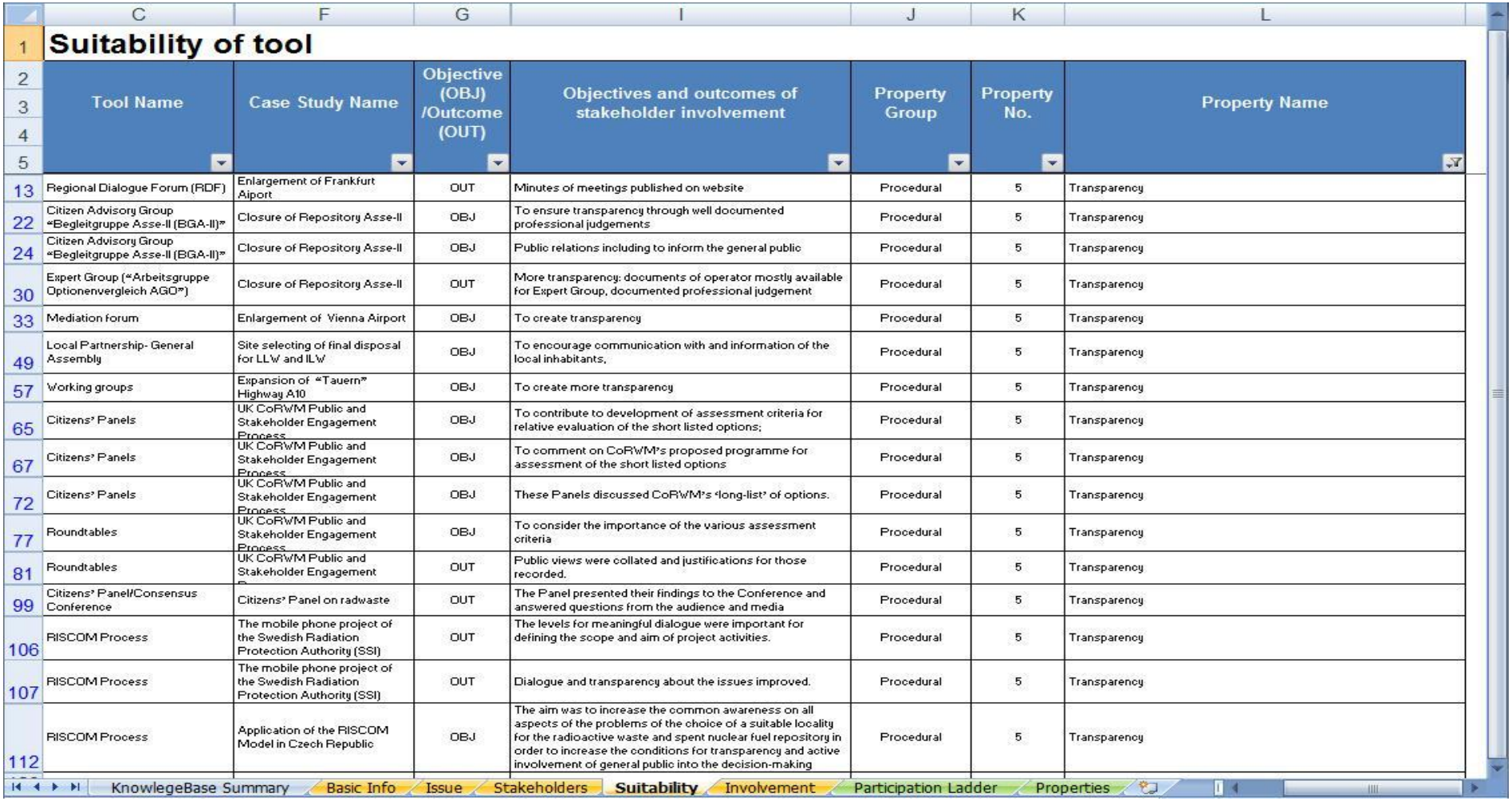
- **Involvement**

This worksheet describes the purpose of Stakeholder involvement, the type of participation (which relates to the index of the Participation Ladder), the tool(s) used, and an overview of the implementation pitfalls and points to consider.

The final two worksheets display the Participation Ladder developed here and the list of properties of the tools from Section 3.3, mapped against the equivalent criterion used in RISCOM II (Andersson *et al* 2004). Given that each tool is mapped to one or many properties through its objectives, the tool can also be mapped to the equivalent RISCOM II criterion.

By applying a range of filters on any of the columns of data in the worksheets "Stakeholders", "Suitability" or "Involvement", the user can refine the information displayed to find tools of interest. Figure 1 illustrates the results returned by a user interested in finding all tools associated with the property "Transparency". This was achieved by applying a filter on the "Suitability" worksheet.

Annex 2 describes in further detail the structure of the Knowledge Base spreadsheet and how to navigate the different worksheets. A number of examples demonstrate how filters can be applied as well as the results a user should expect to return by following them.



	C	F	G	I	J	K	L
1	**Suitability of tool**						
2 3 4 5	Tool Name	Case Study Name	Objective (OBJ) /Outcome (OUT)	Objectives and outcomes of stakeholder involvement	Property Group	Property No.	Property Name
13	Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	Minutes of meetings published on website	Procedural	5	Transparency
22	Citizen Advisory Group "Begleitgruppe Asse-II (BGA-II)"	Closure of Repository Asse-II	OBJ	To ensure transparency through well documented professional judgements	Procedural	5	Transparency
24	Citizen Advisory Group "Begleitgruppe Asse-II (BGA-II)"	Closure of Repository Asse-II	OBJ	Public relations including to inform the general public	Procedural	5	Transparency
30	Expert Group ("Arbeitsgruppe Optionenvergleich AGO")	Closure of Repository Asse-II	OUT	More transparency: documents of operator mostly available for Expert Group, documented professional judgement	Procedural	5	Transparency
33	Mediation forum	Enlargement of Vienna Airport	OBJ	To create transparency	Procedural	5	Transparency
49	Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OBJ	To encourage communication with and information of the local inhabitants,	Procedural	5	Transparency
57	Working groups	Expansion of "Tauern" Highway A10	OBJ	To create more transparency	Procedural	5	Transparency
65	Citizens' Panels	UK CoRWM Public and Stakeholder Engagement Process	OBJ	To contribute to development of assessment criteria for relative evaluation of the short listed options;	Procedural	5	Transparency
67	Citizens' Panels	UK CoRWM Public and Stakeholder Engagement Process	OBJ	To comment on CoRWM's proposed programme for assessment of the short listed options	Procedural	5	Transparency
72	Citizens' Panels	UK CoRWM Public and Stakeholder Engagement Process	OBJ	These Panels discussed CoRWM's 'long-list' of options.	Procedural	5	Transparency
77	Roundtables	UK CoRWM Public and Stakeholder Engagement Process	OBJ	To consider the importance of the various assessment criteria	Procedural	5	Transparency
81	Roundtables	UK CoRWM Public and Stakeholder Engagement	OUT	Public views were collated and justifications for those recorded.	Procedural	5	Transparency
99	Citizens' Panel/Consensus Conference	Citizens' Panel on radwaste	OUT	The Panel presented their findings to the Conference and answered questions from the audience and media	Procedural	5	Transparency
106	RISCOM Process	The mobile phone project of the Swedish Radiation Protection Authority (SSI)	OUT	The levels for meaningful dialogue were important for defining the scope and aim of project activities.	Procedural	5	Transparency
107	RISCOM Process	The mobile phone project of the Swedish Radiation Protection Authority (SSI)	OUT	Dialogue and transparency about the issues improved.	Procedural	5	Transparency
112	RISCOM Process	Application of the RISCOM Model in Czech Republic	OBJ	The aim was to increase the common awareness on all aspects of the problems of the choice of a suitable locality for the radioactive waste and spent nuclear fuel repository in order to increase the conditions for transparency and active involvement of general public into the decision-making	Procedural	5	Transparency

KnowlegeBase Summary | Basic Info | Issue | Stakeholders | **Suitability** | Involvement | Participation Ladder | Properties

Figure 1: An extract from the worksheet "Suitability" using "Property Name" to filter for the property "Transparency"

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Annex 1: The Assessment Templates

This section replicates the Assessment Templates used to assess each of the case studies and their respective tools.

Assessment Template 1 Case study: Enlargement of Frankfurt Airport, Tool: Regional Dialogue Forum

<table>
<tr><th colspan="5">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Enlargement of Frankfurt Airport</td><td colspan="2">Form Completed By: Anne Minhans, 15.04.2011</td></tr>
<tr><td>Country</td><td colspan="2">Germany</td><td>Tool</td><td>Dialogue Forum</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="4">• The phase of the decision making process: Enlargement of the airport Frankfurt licensed in Dec. 2007, Start of construction Jan. 2009
• The formal framework of decision making process: Enlargement of Frankfurt Airport required a regional planning procedure (Raumordnungsverfahren) (done in 2002) and a licence based on the “plan approval procedure” (from Sept 2003 till Dec. 2007). Since 1998 involvement of public besides the formal process: from 1998 till 2000 “Mediation Process”, from 2000 till 2008 “Regional Dialogue Forum” (RDF), after 2008 Forum Airport and Region (Forum Flughafen und Region) (FFR)
• Purpose of public involvement /objectives of the process: early involvement and consideration of public concerns, to gain acceptance, to avoid conflicts.
• (Further tools that are used): Websites, different printed media, press information, interviews, public meetings, question round with experts, Citizens Information Office, accompanying scientific support through external experts, project teams within RDF</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td>National</td><td></td><td colspan="2"></td></tr>
<tr><td>Regional</td><td>x</td><td colspan="2"></td></tr>
<tr><td>Local</td><td></td><td colspan="2"></td></tr>
</table>

	Description			Tool(s) Used	Short Overview of Implementation/Outcome
Purpose of Stakeholder Involvement Relative to Involvement Ladder Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome	Interactive	Joint Decision-making			• **Who is implementing the tool?** Proposed by Mediation Process, established by parliament ("Landtag") and Cabinet of Hesse, funded one half each by Fraport AG and the State Hesse, administrated by State Chancellery • **Objectives and outcome: a) objectives:** to discuss the development of Frankfurt Airport and the effects for the region Rhein/Main (environment, job situation, traffic increase, noise pollution); to accompany the implementation of outcomes of the earlier Mediation Process in the formal decision making process, to concretise the agreements of the Mediation Process, to continue the work of the Mediation Process on those topics which have not been finalised, to create win-win situations, to develop long term perspectives for the region **b) outcomes:** RDF-recommendations especially suggestion of measures to reduce the noise pollution so called "Anti-Lärm-Pakt" and demand of prohibition of flights at night; Common statement of operator (Fraport AG), representatives of industry, the chairman of RDF and the parliament of Hesse to implement the proposed measures for noise reduction ("Anti-Lärm-Pakt"), the license limits the number of flights at night <u>in general</u>: some hints for trust building e.g. comparatively few objections were made in the formal process, public showed relatively high trust in RDF in relation to noise reduction measures, but signature of common statement accompanied by a lot of protest from public and some citizen initiatives, no evaluation of the process • **Frequency and time required:** start: 2000; end: 13th
		Collaborate	x	Regional Dialogue Forum (RDF)	
		Consult / Exchange			
	Non-inter-active	Listen			
		Inform			

					June 2008, meetings every two months • **Pitfalls:** Two environmental groups laid down their mandates to show their protest against the agreement • **Points to consider:** Stakeholders not willing to renounce the right to file a lawsuit in the formal process, RDF can commission experts for special topics, decision who will be commissioned has to be done in full agreement
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**	
	Experts		1 as scientific support, 1 as moderator and administrator		
	Decision Makers		Fraport AG- (operator), representatives of industry, representatives of trade union, Affected Cities and Communities	RDF in total 33 members, selection partly based on former Mediation Process, balance between those who are for and against the enlargement of the airport	
	Public		Environmental Groups, Citizen Initiatives, Churches		

Literature:

Öko-Institut e.V. (2007): SR 2524 Anforderungen an die Gestaltung der Öffentlichkeitsbeteiligung im Endlagerauswahlverfahren- Kurzberichte zur Analyse der Großvorhaben Teil B des Abschlussberichts Konzept zur Ausgestaltung der Öffentlichkeitsbeteiligung.

Regionales Dialogforum (RDF): Archive des Regionalen Dialogforums see: http://www.forum-flughafen-region.de/service/archiv-des-regionalen-dialogforums/ (accessed 12.04.2011)

Assessment Template 2 Case study: Closure of Repository Asse-II, Tool: Citizen Advisory Group "Begleitgruppe Asse-II (BGA-II)"

<table>
<tr><th colspan="5">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Closure of Repository Asse-II</td><td colspan="2">Form Completed By and Date: Anne Minhans 15.03.2011</td></tr>
<tr><td>Country</td><td colspan="2">Germany</td><td>Tool</td><td>Citizen Advisory Group</td></tr>
<tr><td>Issue in Question
Short Description of Context
Include Start/End Dates of Process</td><td colspan="4">• From 1965 till 1978 radioactive waste was disposed in the Asse-II repository operated that time as a research mine. But it faces several problems e.g. the danger of flooding in case of an increasing brine inflow and the danger of a collapse due to the instabilities caused by disaggregation and conversion. In 1997 it was decided to close the mine. Since 2009 three options for closure were discussed namely the backfilling, the internal relocation of the waste packages and the retrieval of the waste packages.
• The phase of the decision making process: In the beginning of 2010 the operator (since 2009 Federal Office for Radiation Protection-BfS) has chosen the retrieval as the favoured option for closure involving the stakeholder in the decision. Presently the feasibility of the chosen option is checked for which the operator needs further investigations on-site. The approval for these investigations is expected soon. The final decision for the closure option will be done with regards to the outcomes of the investigations.
• The formal framework of decision making process: Since 2009 Closure under German Atomic Energy Act which requires a "Planfeststellungsbeschluss" including later a formal public involvement, public involvement process at present stage is informal initiated End of 2007 from responsible authorities (Federal Ministry for the Environment-BMU, and Ministry for the Environment of Lower-Saxony – NMU, Federal Ministry of Education and research -BMBF)
• Purpose of public involvement /objectives of the process: not defined
(Further tools that are used): Website, different printed media, information center, Info Mobil, Public meetings, interviews (all mainly initiated by operator) , Expert Group "Arbeitsgruppe Optionenvergleich (AGO)" with the aim to support the Citizen Advisory Group BGA-II</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td>National</td><td></td><td colspan="2"></td></tr>
<tr><td>Regional</td><td>x</td><td colspan="2"></td></tr>
<tr><td>Local</td><td></td><td colspan="2"></td></tr>
</table>

	Description			Tool(s) Used	Short Overview of Implementation/Outcome
Purpose of Stakeholder Involvement Relative to Involvement Ladder Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome	Interactive	Joint Decision-making			• **Who is implementing the tool?** Initiated by responsible authorities (BMU, NMU, BMBF), sponsored by BMU, Citizen Advisory Group organised by administrative district Wolfenbüttel, • **Objectives and outcome**: **a)objectives:** superior objectives of the Citizen Advisory Group BGA-II: to bundle regional interests, to bring the discussion on a more objective level, to accompany the decisions of the responsible ministries, to gain trust and acceptance, to ensure transparency through well documented professional judgements, to make sure that the requirements of the Atomic Energy Law are considered, public relations including to inform the general public **b)outcomes**: closure under Atomic law decided, regional interest strongly bundled, discussion more objective, trust improved • **Frequency and time required:** approx.7 meetings a year with the all members of the group, plus more meetings of the members with voting power Pitfalls: growing separation of voting members of the Citizen Advisory Group BGA-II and the ones without voting power, interaction between recommendations of Advisory Group and formal decision making process not regulated, rules of
		Collaborate	x	Citizen Advisory Group "Begleitgruppe Asse-II (BGA-II)"	
		Consult / Exchange			
	Non-inter-active	Listen			
		Inform			

				participation not sufficiently agreed.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts	x	5 without voting power	4 selected by the Citizen Advisory Group, 1 (KIT) selected by BMU
	Decision Makers	x	10 plus 6 observers without voting power	Voted representatives of the affected region (e.g. 2 representatives of district administration, 4 representatives of different political parties, 4 majors of nearby villages) Representatives of the operator (1 BfS, 2 Asse GmbH) and the responsible authorities (1 BMU, 1 BMBF, 1NMU) have an observatory status without voting power
	Public	x	5 (including 2 environmental groups) -sometimes more visitors without voting power	In discussion with responsible authorities, voted representatives and active citizens initiative, partly self claiming e.g. one environmental group

Literature:

Öko-Institut e.V. (2009): SR 2603 Unterstützung des BMU im Verfahren zur Stilllegung des Forschungsbergwerkes Asse II,

Abschlussbericht zum 31.12.2008, Darmstadt, 25.06.2009.

Öko-Institut e.V. (2011): UM09A03203 Evaluation des Beteiligungsprozesses im Verfahren zur Stilllegung der Schachtanlage Asse II Abschlussbericht zum 28.02.2011 ENTWURF, Darmstadt 26.01.2011

Assessment Template 3 Case study: Closure of Repository Asse-II, Tool: Expert Group ("Arbeitsgruppe Optionenvergleich AGO")

<table>
<tr><th colspan="5">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Closure of Repository Asse-II</td><td colspan="2">Form Completed By and Date: Anne Minhans, 11.04.2011</td></tr>
<tr><td>Country</td><td colspan="2">Germany</td><td>Tool</td><td>Expert Group</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="4">• From 1965 till 1978 radioactive waste was disposed in the Asse-II repository operated that time as a research mine. But it faces several problems e.g. the danger of flooding in case of an increasing brine inflow and the danger of a collapse due to the instabilities caused by disaggregation and conversion. In 1997 it was decided to close the mine. Since 2009 three options for closure were discussed namely the backfilling, the internal relocation of the waste packages and the retrieval of the waste packages.
• The phase of the decision making process: In the beginning of 2010 the operator (since 2009 Federal Office for Radiation Protection-BfS) has chosen the retrieval as the favoured option for closure involving the stakeholder in the decision. Presently the feasibility of the chosen option is checked for which the operator needs further investigations on-site. The approval for these investigations is expected soon. The final decision for the closure option will be done with regards to the outcomes of the investigations.
• The formal framework of decision making process: Since 2009 Closure under German Atomic Energy Act which requires a license based on the "plan approval procedure" including formal public involvement. The public involvement process at present stage is informal, initiated End of 2007 from responsible authorities (Federal Ministry for the Environment-BMU, and Ministry for the Environment of Lower-Saxony – NMU, Federal Ministry of Education and research -BMBF)
• Purpose of public involvement /objectives of the process: not defined
• (Further tools that are used): Website, different printed media, information centre, Info Mobil, Public meetings, interviews (all mainly initiated by operator) , Citizen Advisory Group BGA-II</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td>National</td><td></td><td colspan="2"></td></tr>
<tr><td>Regional</td><td>x</td><td colspan="2"></td></tr>
<tr><td>Local</td><td></td><td colspan="2"></td></tr>
</table>

<table>
<tr><td rowspan="6">Purpose of Stakeholder Involvement

Relative to Involvement Ladder

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome</td><td colspan="3">Description</td><td>Tool(s) Used</td><td>Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="3">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td rowspan="6">• Who is implementing the tool? Initiated by responsible authorities (BMU, NMU, BMBF), sponsored by BMU, project leader Karlsruhe Technology Institute (KIT) commissioned by BMU
• Objectives and outcome: To support the Citizen Advisory Group BGA-II, to accompany critically the closure of the repository/the work of the operator
• Frequency and time required: monthly meetings
• Pitfalls: sometimes too late with their statements, then not appropriate consideration of their comments in the process possible, interaction with Citizen Advisory Group not formally agreed, interaction with formal process not clear, unclear how and who will fix the topics to deal with.
• Points to consider: The Expert group can commission other experts for support to specific topics.</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
<tr><td>Consult / Exchange</td><td>x</td><td>Expert Group (“Arbeitsgruppe Optionenvergleich AGO”)</td></tr>
<tr><td rowspan="2">Non-inter-active</td><td>Listen</td><td></td><td></td></tr>
<tr><td>Inform</td><td></td><td></td></tr>
<tr><td rowspan="4">Type of Stakeholders Involved</td><td colspan="3">Grouping</td><td>Numbers Involved</td><td>Selection Process (Self: Random Etc.)</td></tr>
<tr><td colspan="2">Experts</td><td>x</td><td>7</td><td>4 selected by Citizen Advisory Group “Begleitgruppe Asse-II”, 3 from KIT</td></tr>
<tr><td colspan="2">Decision Makers</td><td>x</td><td>Number not defined, all with observatory status</td><td>Representatives of the operator (BfS, Asse GmbH) and the responsible authorities (BMU, BMBF, NMU) have an observatory status without voting power</td></tr>
<tr><td colspan="2">Public</td><td></td><td></td><td></td></tr>
</table>

Literature:

Öko-Institut e.V. (2009): SR 2603 Unterstützung des BMU im Verfahren zur Stilllegung des Forschungsbergwerkes Asse II,

Abschlussbericht zum 31.12.2008, Darmstadt, 25.06.2009.

Öko-Institut e.V. (2011): UM09A03203 Evaluation des Beteiligungsprozesses im Verfahren zur Stilllegung der Schachtanlage Asse II Abschlussbericht zum 28.02.2011 ENTWURF, Darmstadt 26.01.2011

Öko-Institut e.V. (2011)b: UM09A03203 Evaluation des Beteiligungsprozesses im Verfahren zur Stilllegung der Schachtanlage Asse II Kurzbericht: Auswertung der Befragung der Arbeitsgruppe Optionenvergleich (AGO) Darmstadt 26.01.2011

Assessment Template 4 Case Study: Enlargement of Vienna Airport, Tool: Mediation forum

<table>
<tr><th colspan="5">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Enlargement of Vienna Airport</td><td colspan="2">Form Completed By and Date: Anne Minhans, 19.04.2011</td></tr>
<tr><td>Country</td><td colspan="2">Austria</td><td>Tool</td><td>Mediation forum</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="4">• The phase of the decision making process: In 1998 the operator “Flughafen Wien AG” announced its plan to build a third runway at Vienna Airport in its “Masterplan 2015”. Knowing that the public would protest against it, the operator sought a way to realise the project by a transparent decision making process with the involvement of the relevant stakeholders. Therefore the operator commissioned a Mediator who together with a preparation group of 12 people should find out, who are the relevant stakeholders and develop a concept for the public participation process. The work of the preparation group concluded in the decision to start a Mediation process.
• The formal framework of decision making process: The enlargement of Vienna Airport requires a license and an EIA procedure, Mediation process ended in obliging agreements signed by the most of the parties of the Mediation forum. The public participation process was structured in 5 phases: 1) preparation phase in 2000, 2) start of Mediation process- contracting and structuring Jan 2001 until April 2001 3) identification of relevant topics (apr. 2001 till feb.2002 4) developing basics for the decision making process, negotiation of contract concerning actual measures (“Teilvertrag). 5) evaluation of “Teilvertrag” and negotiation of other relevant topics end 2005: signed contracts.
• Purpose of public involvement /objectives of the process to find in a fair procedure common agreed solutions which limits the impacts of the flight traffic for the affected public to an acceptable level, to work on and sign a Mediation contract in which the found solutions will be fixed in an legally binding way, to implement appropriate procedure and controlling instruments to assist and ensure the implementation of the agreed solutions
• (Further tools that are used): Website, Press conferences, public meetings, Citizens Information Office, working teams working on different topics, project steering group to coordinate the work and interaction between the Mediation forum and the working groups, from 2005 on Dialogue Forum to control the implementation of the outcomes of the mediation process, accompanying scientific support of the mediation process.</td></tr>
<tr><td rowspan="2">Level of Decision-Making</td><td>National</td><td></td><td colspan="2"></td></tr>
<tr><td>Regional</td><td>x</td><td colspan="2">But of national importance because it the high importance of the infrastructure project</td></tr>
</table>

Tick as Appropriate, and Include Details	Local			
Purpose of Stakeholder Involvement Relative to Involvement Ladder Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome	**Description**		**Tool(s) Used**	**Short Overview of Implementation/Outcome**
	Interactive	Joint Decision-making		• **Who is implementing the tool?** Initiated by operator, "Flughafen Wien AG", Decision for Mediation done in an preparation group, coordinated by Mediation team, funded 60% by "Flughafen Wien AG" and 20% by Governements Vienna and Niederösterreich • **Objectives:** *see above under purpose of public involvement* and to create transparency and chances for dialogue, to gain acceptance • **Outcome:** in 2003 a contract concerning the certain actual measures ("Teilvertrag"), in 2005 most parties of the mediation process signed a legally not binding common agreement summarizing the solutions plus several legally binding contracts, outcomes will feed in the EIA procedure • **Frequency and time required:** from 2001 till 2005: 15 meeting of the Mediation forum plus 49 meetings of Steering Committee plus several meetings of the different working groups • **Pitfalls** some parties didn't sign the common agreement and contracts (reasons for not signing were mostly because those partiers were not convinced about the necessarily of the third runway and the different opinions about the prohibition of flights at night), some citizens initiatives laid down their mandate during the process • **Points to consider:** at the start of the mediation process no important decision had been done so far, discussion was not limited to certain aspects but the process was open, decisions can only be done in the mediation forum in full agreement of all parties, the mediation forum agreed on a code of conduct,
		Collaborate	x	Mediation forum
		Consult / Exchange		
	Non-inter-active	Listen		
		Inform		

	Grouping		Numbers Involved	Selection Process (Self: Random Etc.)
Type of Stakeholders Involved	Experts		Mediation team (3persons) as leader of the mediaton forum	Commissioned by operator
	Decision Makers		Operator "Flughafen Wien AG" (3), representative of industry: Austrian Airlines (2), Austro-Control (2) Representatives of provincial governments Vienna and Niederöstereich, representatives of political parties, Environmental Advocacy Offices Vienna and Niederösterreich	selected by preparation group, in total 55
	Public		Neighbouring committees (representatives of 8 affected communities and city Vienna), Bezirksvorstehungen, reginal and international Citizen Initiatives (approx. 8) and Associations (2), representative of economic chamber of trade and industry, tourism association and others	

Literature:

Öko-Institut e.V. (2007): SR 2524 Anforderungen an die Gestaltung der Öffentlichkeitsbeteiligung im Endlagerauswahlverfahren- Kurzberichte zur Analyse der Großvorhaben Teil B des Abschlussberichts Konzept zur Ausgestaltung der Öffentlichkeitsbeteiligung.

Fakultät für Interdisziplinäre Forschung und Fortbildung

ÖGUT et.al:: Symposium „Environmental Mediation in Europe" New Methods in Conflict Resolution and Participation, Tagungsband 22/23.11.2001, Vienna www.environ-mediation.net

Homepage Mediationsverfahren Flughafen Wien: Viemediation.net see under http://www.viemediation.at/jart/prj3/via-mf/mforum.jart (accessed 19.04.2011)

Homepage Wiener Umweltanwaltschaft see under: http://wua-wien.at/home/index.php?option=com_content&id=47&task=blogcategory&Itemid=85#ergebnisse_des_mediationsverfahrens (accessed 19.04.2011)

Assessment Template 5 Case Study: Site selecting of final disposal for LLW and ILW, Tool: Local Partnership- General Assembly

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Site selection for final disposal of LLW and ILW</td><td colspan="3">Form Completed By and Date: Anne Minhans, 10.05.2011</td></tr>
<tr><td>Country</td><td colspan="2">Belgium</td><td>Tool</td><td colspan="2">Local Partnership- General Assembly</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: After the failure of earlier trials the Belgian government decided in 1998 to concentrate the site selection process on nuclear and volunteering sites and to involve the relevant Stakeholder in the process. Therefore local partnerships were initiated by ONDRAF at sites which were willing to volunteer. In total 3 local partnerships were created during the site selection phase: STOLA in Dessel from 1999 till 2005, from 2005 continued as STORA, MONA in Mol from 2000 ongoing and PaLoFF in Fleurus-Farciennes from 2003 till 2006. Based on the proposal of the local partnerships the Belgian government selected Dessel as the site for final disposal for LLW and ILW on 23rd of June 2006.
• The formal framework of decision making process: Each local partnership signed a memorandum with ONDRAF. The local partnership has to agree on a concept for the final disposal which is developed by the local partnership and the operator ONDRAF. The municipal council has to approve it and then Belgian government decides finally which site will be selected. For further work a license and EIA is required.
• Purpose of public involvement /objectives of the process: Local Partnership had the mission to study the possibility of hosting a LILW repository and to develop an integrated project proposal. The objective was to involve the public directly in developing both the facility design and a socioeconomic package for their area in order to gain acceptance for the project.
• (Further tools that are used): Homepage of ONDRAF and the Local Partnership, Newsletter, Press information, Presentations, Executive Committee and different working groups of the local partnership</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td>X</td><td colspan="2"></td></tr>
<tr><td rowspan="2">Purpose of Stakeholder Involvement</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td>Interactive</td><td>Joint Decision-making</td><td></td><td></td><td colspan="2">•Who is implementing the tool? Implemented and funded by ONDRAF</td></tr>
</table>

Relative to Involvement Ladder Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome		Collaborate		General Assembly of Local Partnership	•**Objectives:** STOLA: to develop an integrated disposal integrating both technical (concepts, safety, environmental and health requirements) and social implications (socio-economic added value and ecological preconditions), to conduct research in the field of radioactive waste, to be a forum for structured project negotiation and local consultation, to encourage communication with and information of the local inhabitants, •**Outcomes:** The local partnership provoked some changes to the generic design of the ONDRAF/NIRAS basic proposals. Voting of the general assembly of the local partnership and the municipal council indicated local acceptance: In Dessel voting of the general assembly of the local partnership and municipal council in full agreement, in Mol big majority of general assembly for final disposal (27) with 4 contra and 1 abstention and in the municipal council with only 2 abstentions) •**Frequency and time required:** STOLA: in total 190 meetings in 4 and a half years •**Pitfalls:** public was not included in phase of problem identification, Local Partnership PaLoFF in Fleurus-Farciennes ended in 2006 because the municipal council of Fleurus did not approve the proposal. •**Points to consider:** methods for involvement of the public developed by university of Antwerp and Liege, throughout the process the universities acted as neutral monitors and advise, each member of the General Assembly of the local partnership plus ONDRAF signed a memorandum which fixed the formal rules of the cooperation, two fulltime project coordinators were funded, process was open, no important limitations on the concept to be developed, but search focused on nuclear sites, Local partnerships of Dessel and Mol (which is still affected because the site selected is in direct neighbourhood) were continued after
		Consult / Exchange			
	Non-inter-active	Listen			
		Inform			

				the site selection.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts			
	Decision Makers		ONDRAF, (regional authorities and administrations with observatory status partly involved)	in total ±30, After wide consultation within each community, a proposal composition of their local partnership was drafted by the accompanying universities of Antwerp and Liege
	Public		Municipal council, municipal administrators, representatives from social and cultural organisations, environmental organisations and from economic organisations, project coordinators	

Literature:

Öko-Institut e.V. (2007): SR 2524 Anforderungen an die Gestaltung der Öffentlichkeitsbeteiligung im Endlagerauswahlverfahren- Kurzberichte zur Analyse der Großvorhaben Teil B des Abschlussberichts Konzept zur Ausgestaltung der Öffentlichkeitsbeteiligung, Darmstadt

NEA/OECD (2010): Partnering for Long-term Management of Radioactive Waste - Evolution and Current Practice in Thirteen Countries, Paris.

NEA/OECD (2003): Public Information, Consultation and Involvement in Radioactive Waste Management - An International Overview of Approaches and Experiences, Paris.

Homepage of STORA: www.stora.oeg (accessed on 10th May 2011)

STOLA (2004): Belgians low-level and short-lived waste: Does it belong in Dessel? An integrated disposal project with technical and social implications – Choosing a sustainable solution

Assessment Template 6 Case Study: Expansion of "Tauern" Highway A10, Tool: Working groups

IPPA WP1: Case Study Overview			
Case Study	**Expansion of "Tauern" Highway A10**	**Form Completed By and Date:** Anne Minhans, 18.04.2011	
Country	Austria	**Tool**	Working groups
Issue in Question Short Description of Context Include Start/End Dates of Process	• The expansion of the Tauern highway A 10 includes the construction of second tunnel tubes for the tunnels "Katschbergtunnel" and "Tauerntunnel". The first tunnel tubes were planned and constructed in the 1970ies, but due to protest and objection of the public and the neighbouring communities, the work for the second ones stopped in the mid 1980ies. After a fire in the "Tauerntunnel" in 1999 the plans for the second tunnel tubes were restarted. • **The phase of the decision making process:** The expansion of the Tauern highway A 10 was decided long before the public was involved, construction for second tunnel section of both tunnel started in May and July 2006. The construction of Katschbergtunnel ended in April 2009 and the one of the Tauerntunnel in April 2010. After the reconstruction of the first tunnel tube the full operation is expected for June 2011. Measures for environmental protection including noise reduction measures planned to be ready till 2020. (Due to geological problems (landslides) the environmental protection measures agreed in the public participation process could not be implemented, but an alternative had to be planned. Construction planned to start in 2013, planned end 2015) • **The formal framework of decision making process:** Division in different construction sections , each needs a license, at the time when the public participations started it was not clear whether an EIA procedure is required for the project or not, involvement of public on a informal level for the construction section "Zederhaus" from 1999 till 2004 • **Purpose of public involvement /objectives of the process:** to develop and assess "scenarios" (As the decision to enlarge the highway was already done and the route of the highway was already fixed, alternative routings were not discussed, but the discussion with the public focussed only on measures for environmental protection and smaller changes in the implementation), to gain acceptance in the region, to solve the existing conflicts • **(Further tools that are used):** Press information, different printed media, public meetings, regional forums in which the broader public was informed about the work in the working groups, Advisory Committee ("Beirat") with members of the working groups to control the implementation of measures decided in the local working groups		
Level of Decision-	National		

Making Tick as Appropriate, and Include Details	Regional				
	Local		x		
Purpose of Stakeholder Involvement Relative to Involvement Ladder Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome	**Description**			**Tool(s) Used**	**Short Overview of Implementation/Outcome**
	Interactive	Joint Decision-making			•**Who is implementing the tool?** Initiated by operator ÖSAG/ASFINAG with support of provincial government Salzburg and Kärnten and Environmental Advocacy Office Salzburg •**Objectives:** to agree on measures for environmental protection including measures for noise reduction, to gain acceptance •**Outcomes:** Operator presented its ideas and asked the public for their suggestions, these ideas were then discussed and measures for environmental protection were decided in the working group, joint decision on measures for noise reduction, agreements for environmental protection measures were signed by participants. Measures checked in an EIA procedure success of public participation: discussions brought on a more objective level, more transparency, increasing understanding for each other •**Frequency and time required:** in total approx.60 meetings •**Pitfalls:** Discussion was limited to environmental protection measures, neither the decision for the expansion nor the routing was discussed with the public •**Points to consider:** implementation of the outcomes of the for public participation controlled by the set up Advisory Committee ("Beirat"), Working groups were involved in decision which expert will be commissioned
		Collaborate			
		Consult / Exchange	x	Local working groups	
	Non-inter-active	Listen			
		Inform			
Type of Stakeholders Involved	**Grouping**			**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts			Technical experts to support	Technical experts for the communities funded by the

			the communities regional planning bodies, external planer of the operator,	government 25 external planer of the operator
	Decision Makers		Representatives of provincial government ("Landesregierung") Salzburg and Kärnten operator ÖSAG/ASFINAG Environmental Advocacy Office Salzburg,	Working groups in 7 affected communities with 10 to 25 members in each group
	Public		8 representatives of affected communities, Citizens of affected communities	

Literature:

Öko-Institut e.V. (2007): SR 2524 Anforderungen an die Gestaltung der Öffentlichkeitsbeteiligung im Endlagerauswahlverfahren- Kurzberichte zur Analyse der Großvorhaben Teil B des Abschlussberichts Konzept zur Ausgestaltung der Öffentlichkeitsbeteiligung.

ÖGUT et.al:: Symposium „Environmental Mediation in Europe" New Methods in Conflict Resolution and Participation, Tagungsband 22/23.11.2001, Vienna www.environ-mediation.net

Assessment Template 7 Case Study: UK CoRWM Public and Stakeholder Engagement Process, Tool: Citizens' Panels

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">UK CoRWM Public and Stakeholder Engagement Process</td><td colspan="3">Form Completed By and Date: PJR 20th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">United Kingdom</td><td>Tool</td><td colspan="2">Citizens' Panel</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: Information gathering and recommendation generation; 3rd PSE stage
• The formal framework of decision making process: Committee established as Stage 1 of MRWS process
• Purpose of public involvement /objectives of the process: Assistance to CoRWM in development of recommendations to government
• (Further tools that are used): Citizens Roundtables; Expert Workshops; MCDA processes</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>X</td><td colspan="2">The committee was mandated to develop recommendations to government on waste management options, using a range of methods to elicit public views</td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td></td><td colspan="2"></td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td rowspan="2">Who is implementing the tool? CoRWM, with facilitation provided by independent consultants from the University of Lancaster.</td></tr>
<tr><td>Collaborate</td><td></td><td>Reconvened Citizens' Panels</td></tr>
</table>

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome		Consult / Exchange		Initial Citizens' Panels	**Objectives and outcome:** Overall, the Panels were intended to contribute to CoRWM's option short listing process; to contribute to development of assessment criteria for relative evaluation of the short listed options; to develop perspectives on ethical issues; and to comment on CoRWM's proposed programme for assessment of the short listed options. The Panels were reconvened to gain citizens' inputs into the assessment of the short listed options developed by the committee and to undertake what was referred to as a 'holistic assessment' of the shortlisted options at the end of the second reconvened Panel sessions. The first Panels were intended to be consultative, allowing CoRWM to understand concerns amongst the public, introduce participants to the issues and explore their views, and prepare them to assist in the options assessment exercise at the second Panel sessions, which were decision-making, as participants were able to decide on the validity of CoRWM's output. These Panels discussed CoRWM's 'long-list' of options. In the reconvened Panels, which discussed the CoRWM 'short-list' of options, there was interaction with specialists conducted in 'parents evening' style, with pairs of citizens having fifteen minute meetings with each of the specialists in turn.
	Non-inter-active	Listen			
		Inform			

					This was followed by an afternoon session conducted as a chaired specialist panel, with citizens addressing questions to individual specialists or to the whole specialist panel. Prior to meeting with the specialist, the citizens had prepared questions that they wished to ask and review sessions were structured into the programme. A set of weightings was obtained from each Panel, although there were great differences between the weightings from different Panels. Indeed, one CoRWM member felt the deliberations at one of the Panels were likely to be of no use to the overall process, such were the anomalous views expressed. There was useful information gained in terms of the ethical approaches to waste management, discussed in separate groupings at each Panel. **Frequency and time required:** Both sets of 4 Panels took place over 2 days of a weekend. The first set was in April/May 2005 and the second set in October/November 2005. **Pitfalls:** At the second set of Panels, not all specialisms were represented at each location, for example, one had no NGO and two had no geologists. In the latter cases the industry representative spoke on their behalf, which many did not like. The Panels were regarded by some,

					including the facilitators, as lacking adequate information on the process of 'swing weighting' of options, and several participants had difficulty, some becoming frustrated or even hostile. The second Panels were not provided with details of the MADA process already carried out by groups of experts due to the tight CoRWM timetable. Again, many felt this was a significant failing. **Points to consider:** Participants at the initial Panels felt that much more notice should be given for subsequent events, and that there should be more details of the terms of reference. Also, to better understand the issues, experts should be available, especially a geologist. Finally, they needed more information prior to the next event. Some of the participants in the second set of Panels felt the experts represented entrenched views and were perceived by many as biased. Many felt the 'parents evening' session was more valuable than the open panel sessions.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**	
	Experts		5 were included at the second set of panels but it was not possible to have a representatives of each specialism at each Panel	Intention was to have representatives in appropriate specialisms, including disposal, regulation, storage, NGOs and independent academics. Not possible in practice.	
	Decision Makers		2-3 CoRWM members at each Panel, who acted as experts in	Members selected with suitable expertise and availability	

			the first set	
	Public		16 at each initial Panel; approx 12 at each of the second reconvened set	Members of anti-nuclear groups, people with household members working in the nuclear industry, local councillors, and journalists, were excluded from recruitment. Others were found to cover all ranges of age, sex and occupation. Each panel was representative of a regional area of the UK (N England; S England; Wales; Scotland).

Literature:

Lancaster University (CSEC, IEPP) 2005: Citizens' Panel Summary Report. CoRWM Public and Stakeholder Engagement Phase 2. CoRWM Document Number: 1205.1. June 2005

Lancaster University (CSEC, IEPP) 2005b: Citizens' Panel (Second Meeting) Summary Report. CoRWM Public and Stakeholder Engagement Phase 3. CoRWM Document Number: 1532. December 2005

Assessment Template 8 Case Study: UK CoRWM Public and Stakeholder Engagement Process, Tool: Round Tables

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">UK CoRWM Public and Stakeholder Engagement Process</td><td colspan="3">Form Completed By and Date: PJR 20th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">United Kingdom</td><td>Tool</td><td colspan="2">Round Tables</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: Information gathering and recommendation generation; 3rd PSE stage
• The formal framework of decision making process: Committee established as Stage 1 of MRWS process
• Purpose of public involvement /objectives of the process: Assistance to CoRWM in development of recommendations to government
• (Further tools that are used): Citizens Panels; Expert Workshops; MCDA processes</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>X</td><td colspan="2">The committee was mandated to develop recommendations to government on waste management options, using a range of methods to elicit public views</td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td></td><td colspan="2"></td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td rowspan="2">• Who is implementing the tool? CoRWM, with activities managed by independent consultants from the Environment Council</td></tr>
<tr><td>Collaborate</td><td></td><td>Round Tables</td></tr>
</table>

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome		Consult / Exchange			• **Objectives and outcome:** Part of the process of scoring a shortlist of management options; To understand judgments on scores by a group of experts using the Multi-Criteria Decision Analysis (MCDA) process; To consider the importance of the various assessment criteria; to explore participants' own views on option preference and to agree nominees from each sector for the next round of engagement. The outcome of the meetings was an appreciation of the public view on the way that CoRWM had undergone option assessment. This was to feed into the 'holistic assessment' to be carried out later. Public views were collated and justifications for those recorded. In general, participants valued the opportunity to be involved and were supportive of the process. • **Frequency and time required:** Eight Roundtables were held around the country between 20 January and 9 February 2006. The locations were deliberately selected to be close to existing nuclear sites. • **Pitfalls:** There was a perceived lack of non-technical people, with NGOs and the regulator also regarded as not sufficiently represented. • **Points to consider:** Asking lay people to apply
	Non-inter-active	Listen			
		Inform			

					MCDA was an innovative and bold intiative. Circulation of adequate briefing prior to the events was seen as an area that should be improved. They were conducted shortly after similar meetings involving experts, but the results from those were not actually available in time to be circulated.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**	
	Experts				
	Decision Makers		Several CoRWM members	Those available to attend	
	Public		167 in total (8 meetings)	Invitations were sent to local stakeholders from all sections of the community around existing nuclear sites in the UK	

Literature:

Perret, A 2006; Summary report of the Nuclear Site Stakeholder Round Table meetings. Run from 20 January 2006 - 9 February 2006. CoRWM Report No. 1656, 16th March 2006

Assessment Template 9 Case Study: GM Nation, Tool: Foundation Discussion Workshops

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">GM Nation #1</td><td colspan="3">Form Completed By and Date: PJR 18th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">UK</td><td>Tool</td><td colspan="2">Foundation Discussion Workshop</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: initial information gathering in 2002 prior to main debate in summer 2003
• The formal framework of decision making process: Government interested in understanding public reactions prior to decisions on licencing GM crops
• Purpose of public involvement /objectives of the process: to identify, using methods which focus on grass roots opinion, the questions which the public has about GM issues, avoiding as far as possible the polarisation that has characterised so much of the discussion to date. To provide information to government on how questions raised by the public have shaped the course of the debate, including on the scientific, economic and other aspects of GM.
• (Further tools that are used): Focus groups;</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>X</td><td colspan="2"></td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td></td><td colspan="2"></td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td colspan="2" rowspan="2">• Who is implementing the tool? Consultants employed by the Agriculture and Environment Biotechnology Commission on behalf of government
• Objectives and outcome: to elicit lay framings on</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
</table>

<table>
<tr><td rowspan="4">Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome</td><td rowspan="3"></td><td>Consult / Exchange</td><td></td><td>Foundation Discussion Workshops</td><td rowspan="4">GM-related issues in an attempt to generate resources for later in the process. This involved efforts to establish a baseline understanding of current attitudes, allow the public to frame the issues, allow the public to help shape the debate and ascertain how best to engage the public in the debate. The report of the meetings was used to develop a series of ‘Framework Questions’ which were circulated at subsequent GM Nation events. In addition, a pack of ‘stimulus material’ was also assembled by asking participants to express ‘model answers’ after the event.
• Frequency and time required: 9 separate meetings, each lasting 3 hours.
• Pitfalls: there were concerns regarding Transparency in terms of whom the sponsors were and the way in which information was distributed.
• Points to consider: Meetings were audio taped, and a cartoonist made ‘live’ drawings during the meeting, which also involved the use of games to elicit responses Questionnaires given out at the end of the workshop, asking for people’s views on GM before leaving.</td></tr>
<tr><td rowspan="2">Non-inter-active</td><td>Listen</td><td></td><td></td></tr>
<tr><td>Inform</td><td></td><td></td></tr>
<tr><td rowspan="4">Type of Stakeholders Involved</td><td colspan="2">Grouping</td><td>Numbers Involved</td><td>Selection Process (Self: Random Etc.)</td></tr>
<tr><td colspan="2">Experts</td><td></td><td></td></tr>
<tr><td colspan="2">Decision Makers</td><td></td><td></td></tr>
<tr><td colspan="2">Public</td><td>18-20 in nine separate meetings, each lasting 3 hours</td><td>8 groups of non-interested people selected plus one group specially selected of those classed as ‘very interested’</td></tr>
</table>

Literature:

Larry Reynolds and Bronislaw Szerszynski, with Maria Kousis and Yannis Volakakis (2007). The role of participation in a Techno-Scientific Controversy. Work Package 6_GM Food. Participatory Governance and Institutional Innovation [PAGANINI], Contract No. CIT2-CT-2004-505791. Deliverable Number 16

Understanding Risk (2004). An Independent Evaluation of the GM Nation? Public Debate about the Possible Commercialisationof Transgenic Crops in Britain, 2003. Understanding Risk Working Paper 04-02

Assessment Template 10 Case Study: GM Nation, Tool: Tiered discussion meetings

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">GM Nation #2</td><td colspan="3">Form Completed By and Date: PJR 18th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">UK</td><td>Tool</td><td colspan="2">Tiered Discussion</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: Main public debate phase in summer 2003
• The formal framework of decision making process: Government interested in understanding public reactions prior to decisions on licencing GM crops
• Purpose of public involvement /objectives of the process: to identify, using methods which focus on grass roots opinion, the questions which the public has about GM issues, avoiding as far as possible the polarisation that has characterised so much of the discussion to date. To provide information to government on how questions raised by the public have shaped the course of the debate, including on the scientific, economic and other aspects of GM.
• (Further tools that are used): Focus groups;
The meetings reviewed here took place in June and July 2003</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>X</td><td colspan="2">Tier 1: Professionally facilitated</td></tr>
<tr><td colspan="2">Regional</td><td>X</td><td colspan="2">Tier 2: managed in partnership with local authorities</td></tr>
<tr><td colspan="2">Local</td><td>X</td><td colspan="2">Tier 3: Organised locally with no facilitation</td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td colspan="2" rowspan="2">• Who is implementing the tool? Consultants employed by the Agriculture and Environment Biotechnology Commission on behalf of government.</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
</table>

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome		Consult / Exchange		Tiered discussion meetings	• **Objectives and outcome:** Facilitated discussions (supposedly) based on stimulus material from Foundation Workshops, although Tier 3 meetings were generally 'self-organised' and did not always, if at all, have professional facilitation. Tier 1 meetings intended to kick-start the public debate and feedback opinion to government. Tier 2 meetings were traditional, with presentations followed by Q&A sessions Tier 3 meetings tended to be discussions based on the 'toolkit' of material • **Frequency and time required:** One-off meetings lasting around 3 hours. Tier 1: 3 in England, one each in Wales, Scotland and N Ireland. Tier 2: regional and county-level (organised in partnership) meetings -40 in all. Tier 3: local discussions (using a 'toolkit' of information) meetings -629 in all. • **Pitfalls:** The evaluation scored issues like 'early involvement' poorly, as many participants felt decisions had already been taken or that little notice would be taken of their comments. Many had no idea how participants had been selected • **Points to consider:** use of facilitators not possible
	Non-inter-active	Listen			
		Inform			
Type of Stakeholders Involved	**Grouping**			**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts				
	Decision Makers				
	Public			Tier 1: 200-400 Tier 2: >1,000 Tier 3: >1,000	All participants were effectively self-selecting

Literature:

Larry Reynolds and Bronislaw Szerszynski, with Maria Kousis and Yannis Volakakis (2007). The role of participation in a Techno-Scientific Controversy. Work Package 6_GM Food. Participatory Governance and Institutional Innovation [PAGANINI], Contract No. CIT2-CT-2004-505791. Deliverable Number 16

Understanding Risk (2004). An Independent Evaluation of the GM Nation? Public Debate about the Possible Commercialisation of Transgenic Crops in Britain, 2003. Understanding Risk Working Paper 04-02

Assessment Template 11 Case Study: GM Nation, Tool: 'Narrow but Deep' Focus Groups

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">GM Nation #3</td><td colspan="3">Form Completed By and Date: PJR 18th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">UK</td><td>Tool</td><td colspan="2">Focus Groups</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: part of public debate in summer 2003
• The formal framework of decision making process: Government interested in understanding public reactions prior to decisions on licencing GM crops
• Purpose of public involvement /objectives of the process: to identify, using methods which focus on grass roots opinion, the questions which the public has about GM issues, avoiding as far as possible the polarisation that has characterised so much of the discussion to date. To provide information to government on how questions raised by the public have shaped the course of the debate, including on the scientific, economic and other aspects of GM.
• (Further tools that are used): Focus Groups and Discussion Workshops;
The meetings reviewed here took place in June and July 2003 in parallel with the Tiered meetings (see template #2)</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>x</td><td colspan="2"></td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td></td><td colspan="2"></td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td colspan="2" rowspan="2">• Who is implementing the tool? Consultants employed by the Agriculture and Environment Biotechnology Commission on behalf of government.</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
</table>

<table>
<tr><td rowspan="4">Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome</td><td></td><td>Consult / Exchange</td><td></td><td>‘Narrow but Deep’ Focus Groups</td><td rowspan="4">Objectives and outcome: These groups were intended to act as a control on the other activities. In the first meeting they were exposed to the GM Nation stimulus material; between the two meetings participants were encouraged to collect more information, and kept a diary to record their thoughts; they were then asked in a questionnaire whether their opinions had changed. Many participants felt that the discussion was too late in the decision making process on GM, but did feel that notice would be taken of their comments. The findings were used to develop an overall final report by the sponsoring organisation, the Agriculture and Environment Biotechnology Commission (AEBC).
Frequency and time required: 10 different groups were convened, and each met twice over a two week period.
Pitfalls: The consultants noted a great lack of initial knowledge as to exactly what GM means, although this improved with the provision of extensive material to participants, including cartoons from the earlier Foundation Workshops (Template#1) etc. and the diary exercise between the 2 sessions.
Points to consider: In selecting a broad cross section of ‘uninformed’ public, the lack of knowledge of the issue can limit the usefulness of the outcomes. Reconvening the same group following a period of ‘research’ was a useful process. It is important to explain how the results of the process will be used.</td></tr>
<tr><td rowspan="3">Non-inter-active</td><td>Listen</td><td></td><td></td></tr>
<tr><td>Inform</td><td></td><td></td></tr>
<tr><td></td></tr>
<tr><td rowspan="3">Type of Stakeholders Involved</td><td colspan="2">Grouping</td><td>Numbers Involved</td><td>Selection Process (Self: Random Etc.)</td></tr>
<tr><td colspan="2">Experts</td><td></td><td></td></tr>
<tr><td colspan="2">Decision Makers</td><td></td><td></td></tr>
</table>

	Public		77 in 10 meetings	Specifically selected to represent a cross-section of the uninvolved public

Literature:

Larry Reynolds and Bronislaw Szerszynski, with Maria Kousis and Yannis Volakakis (2007). The role of participation in a Techno-Scientific Controversy. Work Package 6_GM Food. Participatory Governance and Institutional Innovation [PAGANINI], Contract No. CIT2-CT-2004-505791. Deliverable Number 16

Understanding Risk (2004). An Independent Evaluation of the GM Nation? Public Debate about the Possible Commercialisation of Transgenic Crops in Britain, 2003. Understanding Risk Working Paper 04-02

Corr Willbourn Research and Development (2003). Qualitative Research on a series of Reconvened Group Discussions for the "Narrow but Deep" Strand of the GM Public Debate.

Assessment Template 12 Case Study: Citizens' Panel on Radwaste, Tool: Citizens' Panel/Consensus Conference

<table>
<tr><th colspan="6">IPPA WP1: Case Study Overview</th></tr>
<tr><td>Case Study</td><td colspan="2">Citizens' Panel on Radwaste</td><td colspan="3">Form Completed By and Date: PJR 19th May 2011</td></tr>
<tr><td>Country</td><td colspan="2">United Kingdom</td><td>Tool</td><td colspan="2">Citizens' Panel/Consensus Conference</td></tr>
<tr><td>Issue in Question
Short Description of Context Include Start/End Dates of Process</td><td colspan="5">• The phase of the decision making process: Initial discussions following earlier policy failure
• The formal framework of decision making process: Informative, not policy making as such
• Purpose of public involvement /objectives of the process: This was intended to inform policy makers about the views of the general public, but then to close out debate
• (Further tools that are used): A Consensus Conference was held at the end of the process</td></tr>
<tr><td rowspan="3">Level of Decision-Making
Tick as Appropriate, and Include Details</td><td colspan="2">National</td><td>X</td><td colspan="2">This was intended to feed into development of a new radwaste management policy</td></tr>
<tr><td colspan="2">Regional</td><td></td><td colspan="2"></td></tr>
<tr><td colspan="2">Local</td><td></td><td colspan="2"></td></tr>
<tr><td rowspan="3">Purpose of Stakeholder Involvement
Relative to Involvement Ladder
Tick as Appropriate and</td><td colspan="2">Description</td><td>Tool(s) Used</td><td colspan="2">Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="2">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td colspan="2" rowspan="2">• Who is implementing the tool? Consultants acting on behalf of the UK government and UK Nirex
• Objectives and outcome: The Citizens' Panel was set up to "focus on the effective and publicly acceptable</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
</table>

Describe Tools Used, with Short Overview of Implementation and Outcome		Consult / Exchange		Citizens' Panel/Consensus Conference	*long-term management of nuclear waste in the UK, both civil and military, concentrating particularly on intermediate and high level waste.*" A Consensus Conference was held at the end of the period. During the first two days of the Conference heard brief witness presentations, followed by further discussion and debate between the Panel and witnesses. Members of the audience were able to submit written questions throughout these two days. On the third day, the Panel retired behind closed doors to write a report on their conclusions and recommendations. On the final day the Panel presented their findings to the Conference and answered questions from the audience and media. Key figures from government, industry and environmental groups were invited to respond to the report. The Panel and the associated Consensus Conference was successful in raising the profile of the issues around radioactive waste management as well as being able to get the participants to deal with a contentious and difficult subject matter in a considered way. The Panel was reconvened to present a response to the Green Paper in 2001. • **Frequency and time required:** Before the
	Non-inter-active	Listen			
		Inform			

				Conference the Panel was provided with balanced background information. The Panel attended two preparatory weekends. The Conference was a four-day event, open to a wide audience. • **Pitfalls:** The 'experts' that were selected were somewhat problematic. It was difficult to find independent views, either pro-nuclear or anti-nuclear. That said, the remit was limited and did not allow discussion of new build issues. The debate was limited by this framing. In addition, it was felt by some observers that the briefing weekends were biased; the panel members were not able to develop an alternative management strategy to the one presented (deep disposal) and the sponsors used the outcome (a report) to close off further public debate prior to policy development. **Points to consider:** An essential aspect of a Citizens'Panel is the use of an overasight group formed with the agreement of interested stakeholders, with the remit of ensuring balance and fairness in the information presented and the conduct of the process.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts		5-10	Selected by the panel, on the advice of the organisers
	Decision Makers		-	

	Public		15	Four thousand people, selected at random from the national electoral register, were invited to take part, without knowledge of the subject to be discussed. 120 people responded expressing their interest. Of these, 70 responded again when told the topic, and 16 were selected at random (one dropped out)

Literature:

PeopleandParticipation.net (undated): Consensus Conference on radioactive waste management

UK CEED 1999: The Consensus Conference Main Report (only available at UK CEED website)

Wallace, H 2001: The issue of framing and consensus conferences. PLA Notes 40, February 2001

Assessment Template 13 Case Study: The mobile phone project of the Swedish Radiation Protection Authority (SSI), Tool: RISCOM Process

IPPA WP1: Case Study Overview			
Case Study	**The mobile phone project of the Swedish Radiation Protection Authority (SSI)**	**Form Completed By and Date: Kjell Andersson Date: 2011-06-28**	
Country	Sweden	**Tool**	RISCOM Process
Issue in Question Short Description of Context Include Start/End Dates of Process	• **The phase of the decision making process:** The third generation (3G) of cellular phones caused much discussion in Sweden. The timetable and the level of ambition in terms of access to the system all over the country were agreed at the highest political level at an early stage in its introduction. This however caused opposition and controversy as there were concerns over radiation risks from the masts and telephones. Resistance groups emerged, and there were municipalities wanting to establish zones free from masts. National regulations were in question and municipalities had a problem with principles for permits for antennas and base stations. • **The formal framework of decision making process**: A large number of Swedish authorities were responsible for different parts of mobile telephone systems. Of central importance at the time of the project was the Swedish Radiation Protection Authority (SSI), now merged with SKI to form the Swedish Radiation Safety Authority (SSM), which gives regulations and guidelines for non-ionizing radiation, often based on recommendations by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Also in focus at the time of the project were municipalities that have the task to authorize permits for building masts and base stations. • **Purpose of public involvement /objectives of the process:** The aim of the project "Transparency Forum for mobile telephones" was to improve the dialogue regarding the exposure for radiofrequency electromagnetic fields in Sweden, with special focus on the development and roll-out of the third generation mobile telephone system (3G) including mutual understanding of the roles of different stakeholders.		

<table>
<tr><td></td><td colspan="5">• Further tools that were used: The project had three seminars as core elements, following the RISCOM structured dialogue format. The seminars had a gradually increasing amount of stretching (thus approaching the RISCOM hearing format), supported by various means such as group work, expert group with prepared questions, a well prepared moderator etc.</td></tr>
<tr><td rowspan="3">Level of Decision-Making

Tick as Appropriate, and Include Details</td><td colspan="3">National</td><td>X</td><td></td></tr>
<tr><td colspan="3">Regional</td><td></td><td></td></tr>
<tr><td colspan="3">Local</td><td></td><td></td></tr>
<tr><td rowspan="6">Purpose of Stakeholder Involvement

Relative to Involvement Ladder

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome</td><td colspan="2">Description</td><td></td><td>Tool(s) Used</td><td>Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="3">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td rowspan="5">• Who is implementing the tool? In 2005, industry, authorities, municipalities and critical groups agreed to form a joint Transparency Forum using the RISCOM Model. SSI funded the project, an SSI employee was chair person and SSI drafted meeting minutes. A group of consultants including RISCOM models developers were involved in a working group.
• Objectives and outcome: The stakeholders agreed on a structure to approach the problem and on the format and contents of a series of three seminars that followed this. The levels for meaningful dialogue were important for defining the scope and aim of project activities.
Dialogue and transparency about the issues improved, and knowledge and understanding of roles improved among participants. A certain lack of clarity as regards roles and responsibilities of different actors was revealed. The project</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
<tr><td>Consult / Exchange</td><td></td><td>RISCOM Hearing</td></tr>
<tr><td rowspan="2">Non-inter-active</td><td>Listen</td><td></td><td></td></tr>
<tr><td>Inform</td><td></td><td></td></tr>
</table>

				challenged, and contributed to a change of, established traditions of very limited external dialogue characterizing some agencies. An independent evaluator believed it was important to find ways to sustain the process that had been initiated through the project. • **Frequency and time required**: It took about six months from when the project idea was born to the first reference group meeting. Then a one year project followed with frequent reference group meetings and the three seminars, with increasing level of stretching. • **Pitfalls:** Only a limited part of the foreseen project could be carried through due to a lack of funding. This was because only SSI funding, and no industrial shared funding, was accepted by the participants. • **Points to consider:** SSI, as the driver of the project, has in practice a special responsibility to maintain continued dialogue and to actively demonstrate that it has listened to other actors. The evaluator believed SSI should act to create some kind of forum for continued dialogue, drawing on the experience from Transparency Forum.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**
	Experts		Researchers in academia and other research institutes. Experts to SSI.	About 10

	Decision Makers		Swedish Radiation Protection Authority (SSI), a number of other Swedish authorities responsible for regulations and guidance. Two municipalities	About 10
	Public		NGOS critical to 3rd generation of mobile telephone systems, telephone producers, network providers, one parliament member, individual citizens	Reference group members were about 20. About 100 participants by open invitation in national and local media.

Literature:

Hedberg, B., Andersson, K., Hyrke, L., and Mjönes, L. Transparency Forum for mobile telephones – Development of third generation of mobile telephones in Sweden , SSI report 2007:15 (in Swedish)

Salino, P., Faugert, S., Eduards, K. and Segerpalm, H. Transparency Forum – Evaluation of the conduct an effects of the project Transparency Forum for Mobile Telephones". Faugert & Co Utvärdering, Report to SSI, February 2006 (in Swedish)

Hedberg, B. and Andersson, K., Transparency Forum for mobile telephone systems - A risk management project VALDOR Symposium, Proceedings pp. 686-593, Stockholm, June 2006.

Andersson, K. and Wene, C-O. The RISCOM Model in practice - recent experiences from new areas of application. VALDOR Symposium, Proceedings pp 686-593, Stockholm, June 2006.

Assessment Template 14 Case Study: Application of the RISCOM Model in the Czech Republic, Tool: RISCOM Process

IPPA WP1: Case Study Overview			
Case Study	**Application of the RISCOM Model in the Czech Republic**	**Form Completed By and Date: Kjell Andersson 28th June 2011**	
Country	Czech Republic	**Tool**	RISCOM Process
Issue in Question Short Description of Context Include Start/End Dates of Process	• **The phase of the decision making process:** At the end of 2005, areas at six sites were selected in the Czech Republic for geological and borehole surveys and for further characterization as part of the site selection program for deep geological repository for spent nuclear fuel. Many communities protested against these developments, resulting in a de facto moratorium. When this was about to expire, it was realised that a neutral platform for discussion among a broad spectrum of stakeholders was needed, that was acceptable to all participants. In order to provide such a platform, the RISCOM Model was applied, involving the active involvement of a range of stakeholders, including local and general communities. • **The formal framework of decision making process:** The fundamental basis for radioactive waste management in the Czech Republic is formed by the Atomic Act and regulations of the State Office for Nuclear Safety. According to the Act the state is responsible for the safe disposal of all radioactive waste. To ensure the related activities took place, the Radioactive Waste Repository Authority (RAWRA) was established in 1997. The long-term policy of the state is formalized in a basic strategic document "Concept of Radioactive Waste and Spent Nuclear Fuel Management in the Czech Republic". According to the Concept, construction of a deep geological repository for the direct disposal of spent fuel and other high-level waste is considered the only realistic option for a final solution based on the current state of knowledge. Two suitable sites should be selected before 2015 and included in area development plans. After a confirmatory underground laboratory, construction of the repository should be started after 2050, with operation targeted for 2065. • **Purpose of public involvement /objectives of the process:** According to the RISCOM Reference Group Agreement, the principal aim was to increase the common awareness on all aspects of the problems of the choice of a suitable locality for the radioactive waste and spent nuclear fuel repository in order to increase the conditions for transparency and active involvement		

<table>
<tr><td></td><td colspan="5">of general public into the decision-making process. Attention would also be paid to providing the general public with the possibility to inspect the project activities and the results obtained.
• Further tools used: In parallel with the RISCOM Process, three different meetings, called Focused Science Shop, Consensus Panel and Interaction Panel were held. They differed in terms in terms of the objectives and character of the meetings and selection of participants more than in the conduct of the meetings. For example, the Focused Science Shop was held to increase awareness amongst the public of actual and potential effects of radioactive and toxic wastes and to clarify questions and uncertainties that people might have in this field and in the Interaction Panel it was discussed if and how stakeholders should be involved in the process of formulating the safety case. Even if these meetings were not formally part of the RISCOM Process, they can be seen a support activities that took place within the same context of dialogue in the Czech Republic.</td></tr>
<tr><td rowspan="3">Level of Decision-Making

Tick as Appropriate, and Include Details</td><td colspan="3">National</td><td>X</td><td></td></tr>
<tr><td colspan="3">Regional</td><td></td><td></td></tr>
<tr><td colspan="3">Local</td><td></td><td></td></tr>
<tr><td rowspan="5">Purpose of Stakeholder Involvement

Relative to Involvement Ladder

Tick as Appropriate and Describe Tools Used, with Short Overview of Implementation and Outcome</td><td colspan="2">Description</td><td></td><td>Tool(s) Used</td><td>Short Overview of Implementation/Outcome</td></tr>
<tr><td rowspan="3">Interactive</td><td>Joint Decision-making</td><td></td><td></td><td rowspan="4">Who is implementing the tool? The process was part of the ARGONA Project, the Reference Group was chaired by Nuclear Research Institute (NRI), and the working group had representatives of NRI (CR), RAWRA (CR), Karita Research (Sweden) and Wenergy AB (Sweden). The Reference Group had formally 12 members. Meetings and hearing had independent moderators.

Objectives and outcome: The objectives were defined in the Reference Group Agreement as above (purpose). Objectives were achieved but this was only the very first step in a necessary longer term dialogue. For this a number of recommendations were made. For example, it will be important to increase the activities of relevant state institutions in communication with the public and to strengthen the political responsibility. Creating a long-term</td></tr>
<tr><td>Collaborate</td><td></td><td></td></tr>
<tr><td>Consult / Exchange</td><td></td><td>RISCOM Process (with RISCOM Hearing and Structured Dialogue)</td></tr>
<tr><td>Non-interactive</td><td>Listen</td><td></td><td></td></tr>
</table>

		Inform			conception with clearly defined rules and requirements concerning the process of the deep geological is repository siting is important. It should be prepared on the basis of discussion and consensus of all stakeholders and it should have support in legislation. After the ARGONA project a national working group was formed that had as one of it tasks to propose such legislation. RISCOM proved to be a very suitable tool for initiation of dialogue among all stakeholders in the area of nuclear waste management and it was recommended to continue the activities that were initiated under the ARGONA project. **Frequency and time required:** About 18 months with 5 Reference Group meetings, including feedback from hearing **Pitfalls:** It is critical to secure the legitimacy of the RISCOM Reference and Working Groups outside the project. Election of members to be transparent. **Points to consider:** ***The hearing format*** with stretching was implemented to a limited degree by a stakeholder panel, supported by a professional moderator. For the future the stretching can further developed. The ***structured dialogue*** format was presented to the Reference Group at the very beginning of the project. However, time constraints limited the amount to which this feature of the model could be implemented. This can thus be done in a more systematic and comprehensive way in future applications which could bring more organization and order into the debate about site selection issues. During the project some form of ***institutionalization*** of the RISCOM process was discussed as a possibility.
Type of Stakeholders Involved	**Grouping**		**Numbers Involved**	**Selection Process (Self: Random Etc.)**	
	Experts		About 5	Invitation to hearing	

	Decision Makers		About 10 from national and local levels	Invitation to Reference Group
	Public		About 70, mostly from communities, NGOs	Open invitation to hearing

Literature:

Vojtechova, H. (2009) Evaluation, testing and application of participatory approaches. Application of RISCOM Model in the Czech Republic. EU Contract FP6-036413. ARGONA Deliverable D14. www.argonaproject.eu

Päiviö Jonsson, J., Andersson, K., Bolado, R., Drottz Sjöberg, B-M., Elam, M., Kojo, M:, Meskens, G., Pritrsky, J., Richardson, Ph., Soneryd, L., Steinerova, L., Sundqvist, G., Szerszynski, B., Wene, C-O. and Vojtechova, H. (2010). Towards implementation of transparency and participation in radioactive waste management programmes. ARGONA Final Summary Report. *Suggested Guidelines for Transparency and Participation in Nuclear Waste Management Programmes.* EU Contract FP6-036413. ARGONA Deliverable D22.

Päiviö Jonsson, J. and Andersson, K. (Eds). *Towards implementation of transparency and participation in radioactive waste management programmes. ARGONA Final Report.* EU Contract FP6-036413. ARGONA Deliverable D23a. .

Päiviö Jonsson, J., Andersson, K., Bolado, R., Drottz Sjöberg, B-M., Elam, M., Kojo, M:, Meskens, G., Pritrsky, J., Richardson, Ph., Soneryd, L., Steinerova, L., Sundqvist, G., Szerszynski, B., Wene, C-O. and Vojtechova, H. (2010). *Towards implementation of transparency and participation in radioactive waste management programmes. ARGONA Final Summary Report.* EU Contract FP6-036413. ARGONA Deliverable D23b.

Annex 2: The Knowledge Base

In order to present the results of the assessment in terms of the suitability of the tool to the objectives of that process, the Knowledge Base has been developed, in the form of an MS Excel 97-2010 compatible spreadsheet. As described in Section 4, the Knowledge Base displays the information on each tool over a number of worksheets.

On opening the Knowledge Base, the user will be presented with a summary worksheet, which briefly describes the content of each worksheet. The user can navigate these worksheets by using the tabs at the bottom of the spreadsheet, or by clicking the worksheet titles given in the summary worksheet (as shown in Figure A2.1).

Each of the tools analysed (Section 3.2, Table 2) have been mapped against both the properties (given in Section 3.3) and their position in the Participation Ladder (Section 2.2, Table 1).

The following examples demonstrate how the Knowledge Base can be used and the possible results that can be obtained. These examples only provide a small insight of the type of results that can be obtained from manipulation of the spreadsheet. The full range of its application is best experienced by using the electronic version of the Knowledge Base spreadsheet.

Example 1 The user is interested in finding which of the tools are suitable for the property "Enhancing quality of decision-making".

The user should access the worksheet "Suitability". By applying a filter on the column "Property Name", the user will restrict the information displayed to only the tools that have been mapped to a particular property or properties.

To apply the filter, the user clicks the downward arrow found at the top of the column "Property Name". A menu will appear as shown in Figure A2.2. Under "Text Filters" there are a number of check boxes, one for each property including one labelled "(Select All)". Initially all the boxes are checked. The user should uncheck the "(Select All)" check box, and check only the box for the property or properties they wish displayed. In this example it is the property "The tool enhances the quality of decision-making", as illustrated in Figure 3. Finally, the user should click "OK" to complete the action and apply the filter.

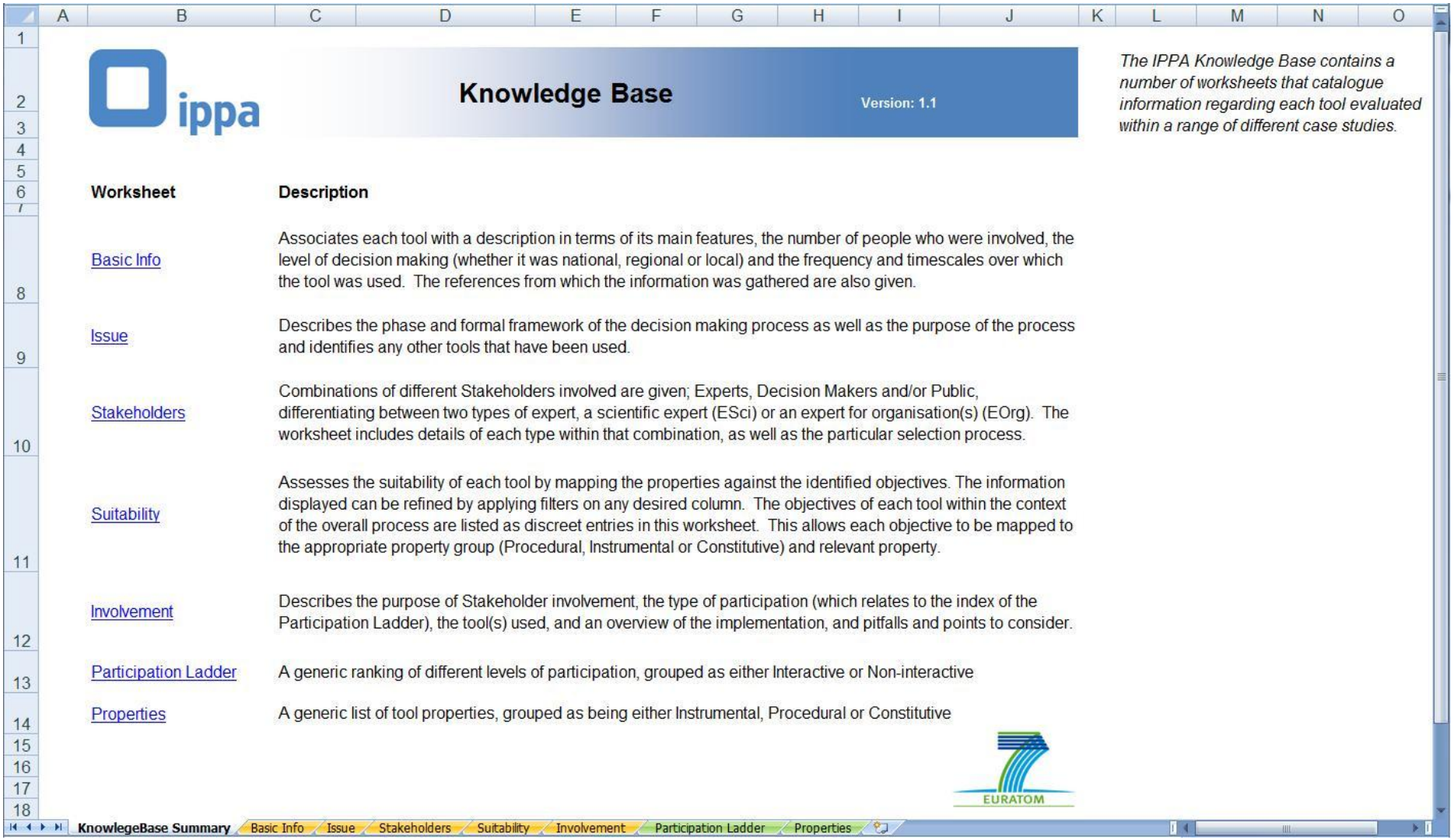
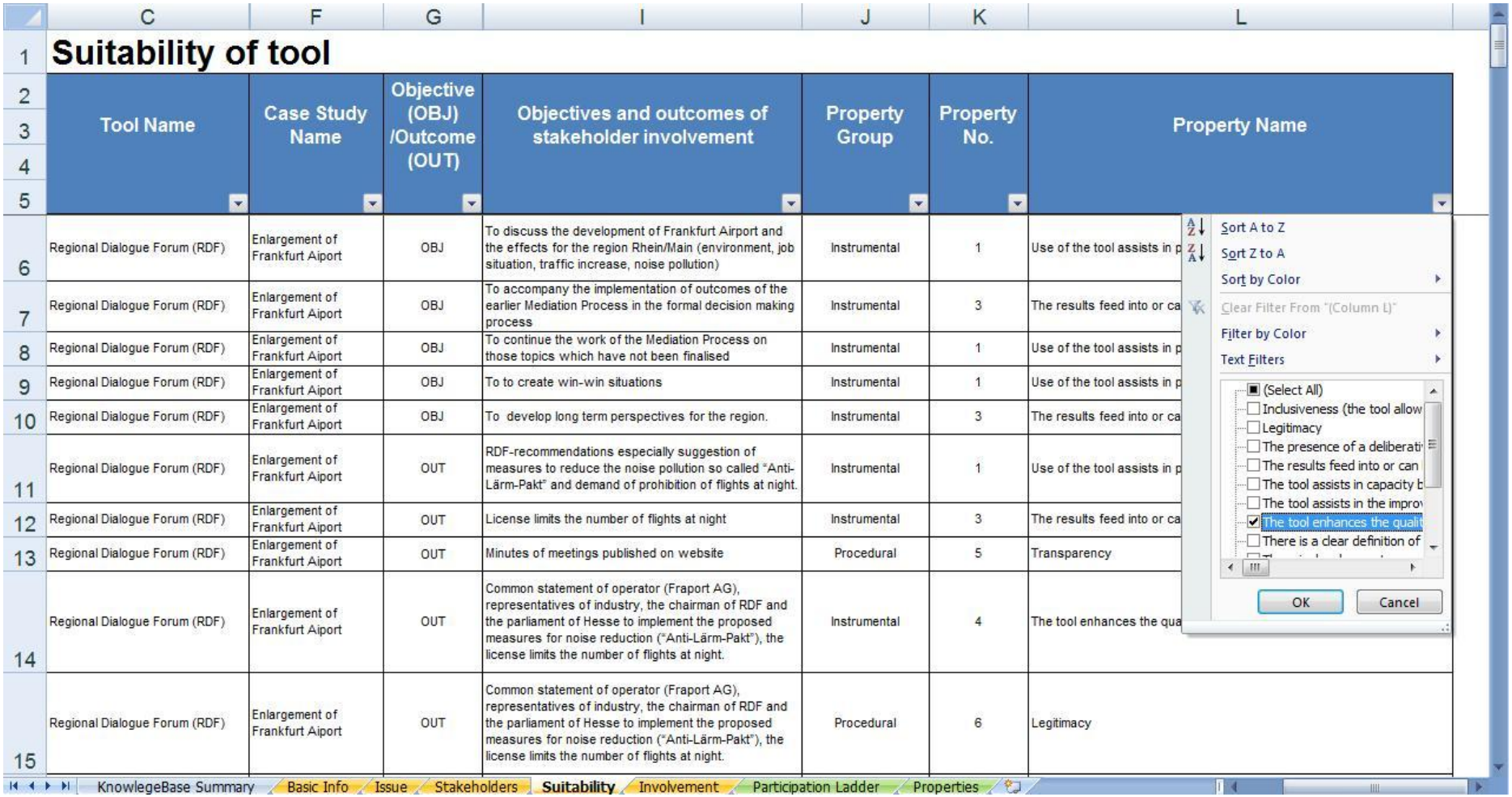


Figure A2.1: Knowledge Summary worksheet, viewed on opening the Knowledge Base. Users can navigate the spreadsheet either via the table at the bottom of the screen or by the titles of worksheets given on the left hand side of the summary.



Suitability of tool

Tool Name	Case Study Name	Objective (OBJ) /Outcome (OUT)	Objectives and outcomes of stakeholder involvement	Property Group	Property No.	Property Name
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OBJ	To discuss the development of Frankfurt Airport and the effects for the region Rhein/Main (environment, job situation, traffic increase, noise pollution)	Instrumental	1	Use of the tool assists in p
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OBJ	To accompany the implementation of outcomes of the earlier Mediation Process in the formal decision making process	Instrumental	3	The results feed into or ca
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OBJ	To continue the work of the Mediation Process on those topics which have not been finalised	Instrumental	1	Use of the tool assists in p
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OBJ	To to create win-win situations	Instrumental	1	Use of the tool assists in p
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OBJ	To develop long term perspectives for the region.	Instrumental	3	The results feed into or ca
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	RDF-recommendations especially suggestion of measures to reduce the noise pollution so called "Anti-Lärm-Pakt" and demand of prohibition of flights at night.	Instrumental	1	Use of the tool assists in p
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	License limits the number of flights at night	Instrumental	3	The results feed into or ca
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	Minutes of meetings published on website	Procedural	5	Transparency
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	Common statement of operator (Fraport AG), representatives of industry, the chairman of RDF and the parliament of Hesse to implement the proposed measures for noise reduction ("Anti-Lärm-Pakt"), the license limits the number of flights at night.	Instrumental	4	The tool enhances the qua
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	Common statement of operator (Fraport AG), representatives of industry, the chairman of RDF and the parliament of Hesse to implement the proposed measures for noise reduction ("Anti-Lärm-Pakt"), the license limits the number of flights at night.	Procedural	6	Legitimacy

Figure A2.2: Suitability worksheet, which maps all the objectives of each tool to one or more of the13 properties. A filter can be applied to only display tools mapped to a particular property by clicking on the arrow at the top of the column "Property Name" and selecting the desired property from the drop down menu.

Once applied, the Knowledge Base only displays those tools and their specific objectives which are suitable for the property "Enhancing quality of decision-making".

Figure A2.3 illustrates an extract of the results that are viewed following this example. The Knowledge Base identifies ten different tools being associated with the property "The tool enhances the quality of decision-making", including two different tools under the case study "Closure of Repository Asse II" and two different tools under the case study "GM Nation". The tool "Tiered discussion meetings" under the case study "GM Nation" maps to this property twice via two different objectives.

This example can be followed to filter the data on any desired property. The user can return the Knowledge Base to display all the data, by re-clicking the downward arrow at the top of the column "Property Name" and either checking the box for "(Select All)" or by clicking "Clear Filter from "(Column L)"". On clicking "OK", the filter is removed and all the data will be displayed.

Example 2 The user is interested in the tools and the associated properties of a particular case study, "Site selecting of final disposal for LLW and ILW".

As with example 1, the user should access the worksheet "Suitability". By applying a filter on the column "Case Study Name", the user will restrict the information displayed to only the tools associated with a particular case study and the properties to which they were mapped. Similar to the method used to apply a filter on the data in example 1, this time the user should select the downward arrow found at the top of the column "Case Study Name". In this example, the user will apply a filter by checking the box for "Site selecting of final disposal for LLW and ILW".

The Knowledge Base shows the tool for this case study is a "Local Partnership – General Assembly" and is associated with nine different properties (Figure A2.4). The property "Use of the tool assists in production of acceptable/tolerable outcomes" is associated to this tool twice, for both an objective and an outcome.

Through examples 1 and 2, it has been demonstrated how the user can filter the data on any number of the columns in the worksheet "Suitability" to explore the data and the association between different properties and tools. If a particular tool is identified to be of interest, the user can refer to the other worksheets for further information, such as the issues and context of a particular tool. Indeed, filters can also be applied to the worksheets "Involvement" and "Stakeholders", as will be shown in example 3.

Tool Name	Case Study Name	Objective (OBJ) /Outcome (OUT)	Objectives and outcomes of stakeholder involvement	Property Group	Property No.	Property Name
Regional Dialogue Forum (RDF)	Enlargement of Frankfurt Aiport	OUT	Common statement of operator (Fraport AG), representatives of industry, the chairman of RDF and the parliament of Hesse to implement the proposed measures for noise reduction ("Anti-Lärm-Pakt"), the license limits the number of flights at night.	Instrumental	4	The tool enhances the quality of decision-making
Citizen Advisory Group "Begleitgruppe Asse-II (BGA-II)"	Closure of Repository Asse-II	OBJ	To make sure that the requirements of the Atomic Energy Law are considered	Instrumental	4	The tool enhances the quality of decision-making
Expert Group ("Arbeitsgruppe Optionenvergleich AGO")	Closure of Repository Asse-II	OBJ	To accompany critically the closure of the repository/the work of the operator	Instrumental	4	The tool enhances the quality of decision-making
Expert Group ("Arbeitsgruppe Optionenvergleich AGO")	Closure of Repository Asse-II	OUT	Comments of Expert Group considered by operator	Instrumental	4	The tool enhances the quality of decision-making
Mediation forum	Enlargement of Vienna Airport	OUT	In 2003 a contract concering the certian acutal measures ("Teilvertrag"), in 2005 most parties of the mediationprocess signed a legally not binding common	Instrumental	4	The tool enhances the quality of decision-making
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	The local partnership provoked some changes to the generic design of the ONDRAF/NIRAS basic proposals.	Instrumental	4	The tool enhances the quality of decision-making
Citizens' Panels	UK CoRWM Public and Stakeholder Engagement Process	OBJ	The Panels were reconvened to gain citizens' inputs into the assessment of the short listed options developed by the committee	Instrumental	4	The tool enhances the quality of decision-making
Foundation Discussion Workshops	GM Nation	OBJ	To ascertain how best to engage the public in the debate	Instrumental	4	The tool enhances the quality of decision-making
Tiered discussion meetings	GM Nation	OBJ	To kick-start the public debate.	Instrumental	4	The tool enhances the quality of decision-making
Tiered discussion meetings	GM Nation	OBJ	To feedback opinion to government.	Instrumental	4	The tool enhances the quality of decision-making
	The mobile phone		Agreement on a structure to approach the problem and			

Figure A2.3: An extract from the worksheet "Suitability" using "Property Name" to filter for the property "Enhancing quality of decision-making"

Tool Name	Case Study Name	Objective (OBJ) /Outcome (OUT)	Objectives and outcomes of stakeholder involvement	Property Group	Property No.	Property Name
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OBJ	To develop an integrated disposal integrating both technical (concepts, safety, environmental and health requirements) and social implications (socio-economic added value and ecological preconditions)	Instrumental	1	Use of the tool assists in production of acceptable/tolerable outcomes
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OBJ	To conduct research in the field of radioactive waste	Constitutive	13	The tool assists in capacity building/ learning
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OBJ	To be a forum for structured project negotiation and local consultation	Procedural	7	The presence of a deliberative environment
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OBJ	To encourage communication with and information of the local inhabitants,	Procedural	5	Transparency
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	The local partnership provoked some changes to the generic design of the ONDRAF/NIRAS basic proposals.	Instrumental	4	The tool enhances the quality of decision-making
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	Each partnership signed a memorandum	Procedural	6	Legitimacy
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	Stakeholder selected after wide consultation in the community	Procedural	10	Inclusiveness (the tool allows inclusion of all relevant/appropriate entities, capture of inappropriate interest groups is avoided/ representative of different views and groups of stakeholder)
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	The municipality has to approve the concept developed by local partnership and the operator and Belgian governement decides on the basis of the proposals	Instrumental	3	The results feed into or can be incorporated in a legitimate process
Local Partnership- General Assembly	Site selecting of final disposal for LLW and ILW	OUT	Voting of the general assembly of the local partnership and the municipal council indicated local acceptance: In Dessel voting of the general assembly of the local partnership and municipal council in full agreement, in	Instrumental	1	Use of the tool assists in production of acceptable/tolerable outcomes

Figure A2.4: An extract from the work sheet “Suitability” using “Case Study Name” to filter for the case study “Site selecting of final disposal for LLW and ILW“, restricting the data displayed to its tool and associated properties.

Example 3 The user is interested in finding which of the tools are associated with at the "Consult/Exchange" level of participation.

The user should navigate to the "Involvement" worksheet. By applying a filter on the column "Level of participation" the user can refine the data displayed to only those tools that were implemented at the desired level of participation. In this example the filter is applied to display tools implemented at the "Consult/Exchange" level of participation. The full set of results given by the Knowledge Base returned nine tools implemented at this level, three of which are from the same case study "GM Nation". Figure A2.5 displays only an extract of these results. The "Involvement" worksheet also gives information regarding who implemented the tool, the pitfalls associated with it and other points to consider.

In a similar way, filter(s) can also be applied to the "Stakeholder" worksheet, to perhaps explore tools that have employed a particular combination of stakeholders. The same method is always used, by clicking the downward arrow on the column of which the user wishes to restrict the data displayed and checking the box(es) for the desired item(s) from the drop down menu.

Tool Name	Case Study Name	Level Index No.	Level of participation	Who is implementing the tool	Pitfalls	Points to consider
Expert Group ("Arbeitsgruppe Optionenvergleich AGO")	Closure of Repository Asse-II	3	Consult/Exchange	Initiated by responsible authorities (BMU, NMU, BMBF), sponsored by BMU, project leader Karlsruhe Technology Institute (KIT) commissioned by BMU	Sometimes too late with their statements, then not appropriate consideration of their comments in the process possible, interaction with Citizen Advisory Group not formally agreed, interaction with formal process not clear, unclear how and who will fix the topics to deal with.	The Expert group can commission other experts for support to specific topics.
Working groups	Expansion of "Tauern" Highway A10	3	Consult/Exchange	Initiated by operator ÖSAG/ASFINAG with support of provincial government Salzburg and Kärnten and Environmental Advocacy Office Salzburg	Discussion was limited to environmental protection measures, neither the decision for the expansion nor the routing was discussed with the public	Implementation of the outcomes of the for public participation controlled by the set up Advisory Committee ("Beirat"), Working groups were involved in decision which expert will be commissioned
Citizens' Panels	UK CoRWM Public and Stakeholder Engagement Process	3	Consult/Exchange	CoRWM, with facilitation provided by independent consultants from the University of Lancaster.		Participants at the initial Panels felt that much more notice should be given for subsequent events, and that there should be more details of the terms of reference. Also, to better understand the issues, experts should be available, especially a geologist. Finally, they needed more information prior to the next event.
Foundation Discussion Workshops	GM Nation	3	Consult/Exchange	Consultants employed by the Agriculture and Environment Biotechnology Commission on behalf of government	There were concerns regarding Transparency in terms of whom the sponsors were and the way in which information was distributed.	Meetings were audio taped, and a cartoonist made 'live' drawings during the meeting, which also involved the use of games to elicit responses Questionnaires given out at the end of the workshop, asking for people's views on GM before leaving.
Tiered discussion meetings	GM Nation	3	Consult/Exchange	Consultants employed by the Agriculture and Environment Biotechnology Commission on behalf of government. Tier 1: Professionally facilitated Tier 2: managed in partnership with local authorities Tier 3: Organised locally with no facilitation	The evaluation scored issues like 'early involvement' poorly, as many participants felt decisions had already been taken or that little notice would be taken of their comments. Many had no idea how participants had been selected	Use of facilitators not possible
					The consultants noted a great lack of initial knowledge as to exactly what GM means, although this improved	In selecting a broad cross section of 'uninformed'

Figure A2.5: An extract from the worksheet "Involvement" using "Level of participation" to filter for the tools implemented at the level "Consult/Exchange". For a full set of results please refer to the electronic version of the Knowledge Base.

Analysis of all the properties associated with the tools shows that some properties are under-represented across the tools and case studies currently analysed within the Knowledge Base. Table A2.1 displays the frequency that each of the 13 properties identified in Section 3.3 are featured in the Knowledge Base together with the number of case studies and tools to which they apply. In some cases, the number of tools is greater than the number of case studies, where there is more than one tool associated with this property under a case study. Similarly, the frequency of each property can exceed the number of tools to which they are associated, where tools are associated with a property via two or more objectives or outcomes.

Table A2.1: The frequency that each of the 13 properties is featured in the Knowledge Base together with the number of case studies and tools to which they apply.

Property	Number of Case Studies	Number of Tools	Frequency of association
Use of the tool assists in production of acceptable/tolerable outcomes	6	7	14
There is a clear definition of the issue	4	4	4
The results feed into or can be incorporated in a legitimate process	9	10	16
The tool enhances the quality of decision-making	8	10	13
Transparency	9	11	16
Legitimacy	7	7	11
The presence of a deliberative environment	6	6	8
There is equality of access	2	2	2
There is the ability and freedom to speak (stakeholders are not bound by disciplining nature of the event, the process does not dictate roles)	3	5	8
Inclusiveness (the tool allows inclusion of all relevant/appropriate entities, capture of inappropriate interest groups is avoided/ representative of different views and groups of stakeholder)	4	4	4
The tool assists in the improvement of trust and understanding between participants/reduction of conflicts	7	8	10
There is development a sense of shared responsibility and common good	3	3	3
The tool assists in capacity building/ learning	5	5	5

This analysis demonstrates that the Knowledge Base is able to highlight its own deficiencies. As well as identifying tools that are associated with particular properties. It can be used to identify the type of tools that could be added in future in order to make it more comprehensive.

With respect to the levels of participation, the tools analysed in the Knowledge Base are all implemented at either the "Consult/Exchange" or "Collaboration" level. Examples of tools at any of the other levels of participation given in the participation ladder have, so far, not been represented.