e-Participation: Promoting dialogue and deliberation between institutions and civil society

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Abstract

Information and Communication Technologies (ICT) are increasingly becoming more pervasive of peoples lives, both for individual and collective usage. Hence, it becomes tempting to develop electronic tools that can constitute alternatives to enhance citizenship, in particular tools that can be used in the context of societal debates of public policies.

This thesis explores the conditions to deploying electronic based public participation methodologies and online ICT based participatory processes within public policy processes. It reflects on the challenges, promises and motivations of using ICT to promote dialogue and deliberation among institutions and the civil society.

It consists in part of a revision of the techniques and tools commonly used in electronic public participation processes, referring to case studies where these techniques and tools were employed. Special attention was given to cases where the outcome from the public participation process supported a decision process.

The conditions of deployment of e-participation processes in public policy formulation were framed within the concept of quality, specifically in the concept of “fitness for purpose”. An electronic tool was designed and implemented, not only featuring dialogue components, but also collaborative ones, as response to some of the identified challenges.

Based on the review of e-participation tools and the preliminary usage of the tool developed, a protocol for quality assurance of e-participation tools is offered.
As tecnologias de informação e comunicação (TIC) encontram-se cada vez mais presentes no nosso quotidiano, tanto para o uso individual como colectivo. Como tal, torna-se atractivo desenvolver ferramentas electrónicas que possam constituir alternativas para promover a cidadania.

Esta tese explora as condições para a implementação de metodologias de participação pública electrónica e de processos de participação suportados pela internet em processos de decisão pública.

Consistindo em parte na revisão de técnicas e ferramentas frequentemente usadas em processos de participação pública electrónica, referindo casos de estudo onde essas técnicas e ferramentas foram empregues, dando-se especial atenção aos casos onde o processo participativo suportou o processo de decisão.

As condições para o uso de processos de participação electrónica na formulação de políticas foram enquadradas dentro do conceito de qualidade, especificamente no conceito de “fitness for purpose”. Em resposta a alguns dos problemas identificados, uma ferramenta electrónica foi desenvolvida e implementada, apresentando não só componentes de dialogo, mas também componentes colaborativas.

Tendo como base o uso preliminar desta ferramenta e uma revisão das ferramentas normalmente usadas em processos participativos electrónicos, é proposto um protocolo para a garantia de qualidade para ferramentas de participação electrónica.
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Overview

In the last two decades we have witness a growing concern in creating the conditions for citizens to get involved in policy and decision-making processes and a need to create and develop new tools that could facilitate a wider public engagement in participatory processes. At the same time, Information and Communication Technologies (ICT) are becoming more common on people’ lives, “leading to changes in the way humans interact within the society and the way societies involve individuals In decision and policy making processes” (De Marchi et al., 2001a). ICT can be seen as a mean through which the publics are extending their rights to intervene in societal issues (e.g. web 2.0 developments: forums, blogs, podcasts, e-petitions, etc.) and therefore, tools that can enhance and encourage such engagement may help with the already existing normative and regulatory principles of inclusive governance.

This thesis is focused on the theme of electronic public participation (e-participation) and on the challenges that result from using ICT on public participation processes. It consists of a revision of the techniques and tools used in e-participation process focused in promoting the dialogue and deliberation between institutions and the civil society, referring to case studies where these techniques and tools were employed. Special attention was given to cases where the outcome from the public participation process supported the decision process.

It is expected that the outcome from this thesis will be the systematisation of electronic public participation, mentioning its challenges and promises, along with the creation of guidelines for e-participation venues based on literature and case studies.

Figure 1.1 represents schematically the methodology adopted in this work. The fist step consisted of a bibliographical review of the concepts related to public participation. Based on this review the importance of involving civil society in decision making processes, as well as the main challenges posed to that involvement were assessed. A set of principles of good practice are presented in order to tackle those challenges. Based on this review a typology for public participation is also offered.

The second step consisted of the review of the literature related to e-participation and of the links between face to face and online engagement. The main challenges, along with the main advantages of online engagement are examined. A review of the techniques and technologies that can be implemented in order to enable e-participation initiatives was also done, describing case studies where these techniques and technologies were
used. This review helped also to classify the different tools and techniques based on the level of engagement they allow in decision making processes.

Having in mind the insights arising from this review, a new tool focused on providing new means to actively involve society in public policy making was developed: "b-involved". In order to assess the “fitness for the purpose” of this new tool, a set of quality assurance guidelines was developed.

![Bibothical Review](image)

**Figure 1.1** – Adopted methodology.

Based on the methodology adopted, this thesis was organised into six chapters:

Chapter One provides a brief introduction to public participation and to the use of ICT in participatory processes, referencing the conditions that provided and requested the genuine involvement of citizens in the decision making process.

Chapter Two introduces public participation, presenting the policy making process, the levels of public engagement and the importance of engaging with the citizens. The critics and challenges raised to public participation are discussed, as the principles that should be taken into account in order to tackle those challenges. The final section of this chapter addresses the different phases of the participatory process.
Chapter Three is focused on e-participation and on the use of online technologies to promote and support public participation. It aims at making the connection between public participation and e-participation. The overall objectives of e-engagement are described, along with its challenges and advantages. Furthermore, it is presented and evaluated a list of techniques and technologies that can be used in online engagements, mentioning case studies where these techniques and technologies were implemented. It is also discussed the design of e-engagement systems and the issues associated to it.

Chapter Four introduces b-involved, a multimedia online platform designed specifically to support remote and distributed deliberation sessions. The main features of the platform are described, as future on-going developments.

Chapter Five describes the quality assurance guidelines developed to assess the “fitness for the purpose” of e-participation tools developed in the context of online citizen engagement in complex decision making issues, describing how these guidelines were implemented during the development of b-involved.

Chapter Six presents the final conclusions and recommendations from this research.
Introduction
1. Introduction

The democratic turn occurred in the last two decades raised new concerns about the authenticity of democracy, challenging existing institutions and models of democracy (see for instance Dryzek, 1990; 2000; Bohman, 1998). Modern politics needed to renew public trust, and a new shared framework of believes and interactive links between state institutions and civil society¹ was required. Democratic legitimacy came to be seen in terms of the ability or opportunity for civil society to participate in effective deliberation on the issues requiring collective decisions (Dryzek, 2000).

Europe started to see herself emerged in a Democracy crisis. The participation of citizens in formal democratic processes such as voting or joining parties decreased, while factors like globalisation and individualisation increased even more the distance of citizens to the state and its institutions (Westholm, 2002).

In order to wider the democratic process, making it more transparent, inclusive and accessible, Governments started searching for new ways to interact and relate with the citizens. Indeed, we have witness a growing concern to create the conditions for citizens to get involved in policy and decision-making processes; in Europe, this is seen through regulation and emerging inclusive governance styles (e.g. CEC, 2001a; CEC, 2001b; CEC, 2003) (De Marchi et al., 2001b). Public participation becomes an attractive strategy not just for policy improvements, but also for bringing back discontented citizens to the political mainstream (Bishop and Davis, 2002).

Additional to the social and institutional momentum behind wider public participation, there has been also a growing endeavour to explore the conditions for effective participation in decision and policy making (Guimarães Pereira et al., 2005a). The spread of recent alarming controversies issues such as genetically modified foods, BSE or nanotechnology, associated with an increased access to a higher education and the development of new research methods helped shifting the relationship between science and society changing the traditional “trust us, we’re experts” relation (Chopyak and Levesque, 2002).

As science becomes deeply involved in complex issues involving technology related policy problems that crucially affect public health and welfare, where “facts are uncertain, ¹ For the purpose of this thesis, the term civil society refers broadly to individual citizens and to the formal and informal associations and networks in society, which exist outside the state. For a review and analysis of the concept of civil society under the different perspectives of deliberative democracy, see for instance Hendrinks (2002a).
values in dispute, stakes high and decisions urgent", (Funtowicz and Ravetz, 1993) it also becomes more and more incapable to provide univocal interpretations and to agree upon practical policy recommendations (Funtowicz, 2001; De Marchi et al., 2001a). The perspectives and knowledge of the publics gain higher relevant and, the involvement of those being affected or affecting such policies becomes a condition sine qua non for legitimacy, trust and overall better quality for policy formulation processes (De Marchi et al., 2001a).

A gradual awareness of the need to consider new tools for public engagement that enable a wider audience to contribute to the democratic debate is also developed. High stakes issues require extended decision making processes and it is almost unavoidable that the concepts of the information society and electronic governance together with the practical deployment of new Information and Communication Technologies (ICT) become driving forces of these processes (De Marchi et al., 2001b; Guimarães Pereira et al., 2005b). Hence, promoting and enabling citizen participation in policy making activities – e-Participation – is seen as an essential element of e-Democracy (Elliman et al., 2006).

ICT become increasingly more pervasive of peoples lives, both for individual and collective usage, turning into the mean by which the publics are extending their rights to intervene in public life (e.g. web 2.0 developments: forums, blogs, podcasts, e-petitions, etc.). Just as ICT had profound effects upon the ways that people work, shop, bank, find news and communicate with friends and families, so they will establish new channels to connect citizens to previously remote institutions of governance (Coleman and Gøtze, 2004). Therefore, it would be arguable that there may be a valuable potential means to implement participatory processes through this media.

The rise of ICT offers a possibility of a different environment for public communication which is interactive, relatively cheap to access, unconstrained by time or distance, and [hopefully more] inclusive (Coleman and Gøtze, 2004). ICT becomes the means to ensure that those that affect or are affected directly or indirectly by the issues are involved in the debate and, more importantly, possibly sharing responsibilities in the solution (De Marchi et al., 2001a).

As Hagen (2000) states, “computer technology is not an independent force working for the better or worse of democracy, but it is amplifying other political trends or reinforces

---

2 Issues where, typically, facts are uncertain, values in dispute, stakes high and decisions urgent (see for instance, Funtowicz and Ravetz, 1993).

existing institutions […] A comparison of different national contexts shows how specific political institutions and cultural trends shape various concepts of digital democracy”.

Although ICT can provide powerful tools for strengthening government-citizens relation, technology is only an enabler, facilitating existing, or in some cases, new methods of engagement. In order to engage citizens in policy-making, governments need to inform and promote active citizenship (OECD, 2001). And clearly, as Noveck (2004) points out, the mere right to participate does not ensure successful democratic practice.

Per se, ICT do not constitute a tool to implement engagement of citizens in public policy making and solve the problems that democracy and active citizenship face today; they may be instrumental and to be operational they have to be tailored to the political, economic and organisational contexts where their application is sought (Coglianese, 2003; Coleman and Gøtze, 2004). As Gualtieri (1998) notes, “there is a temptation to believe that the information revolution is by its nature profoundly democratic” because of other social and technological revolutions in the past from printing to television; yet as the author points out, these innovations have "contributed to the evolution of democracy over the centuries, but none, in and of itself, was a driving or determining force for positive change." The “significant progress depends less on technology and more on social and cultural development, government priorities, political will and the structure of institutions” (Gualtieri, 1998).
Public Participation
2. Public Participation

“Public participation could radically improve our quality of life. It can contribute to creating more active citizens, help manage complex problems in public service design and delivery, help build the new relationships and shifts of power and resources required for 21st century governance, and develop individuals’ skills, confidence, ambition and vision” (Involve, 2005).

Public participation can be considered as the “cornerstone of democracy” (Roberts, 2004) by allowing citizens to exercise their basic rights. However, it raises an ambivalence on the role that citizens can and should have in their governments. On one side, the indirect participation approach confines the participation of citizens to the election of representatives (for instance by voting) for the government intuitions and therefore does not delegate any authority to citizens or allow them to directly influence the formulation or implementation of a public policy. On the other side, the direct participation approach, promotes a more active role for citizens, allowing them to participate fully in the political, technical and administrative decisions that affect them by involving them directly in the design of policies: “Citizens are viewed as an integral part of the governance process and their active involvement is considered essential in the substantive decisions facing a community” (Roberts, 2004).

This thesis will focus on the approach of public participation as a mean to educate, promote deliberation and empower the citizens in the decision making process: the direct participation approach.

2.1 Policy Making Processes

Policy making processes can be considered as a cycle of activities comprising the preparation, evaluation and implementation of a policy, and where the results can be re-incorporated into the policy design (see for instance, Howlett and Ramesh, 1995; OECD, 2004).

The overall process can be separated into five distinct stages (Figure 2.1):

1. **Agenda Setting**: Stage where a problem or need which can be addressed by public policy is identified and defined.

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4 Policy making processes is a whole field of research and activity. It is out of our scope to go deeper in this subject. Hence, the definition provided is a working definition that suits the argument developed in this thesis.
2. **Analysis:** Clarification of the challenges and opportunities associated with an agenda item in order to produce a draft policy document. This can include gathering evidence and knowledge from a range of sources including citizens and civil society organisations; understanding the context such as the political context for the agenda item; develop a range of options and perform a cost benefit analysis for each one.

3. **Policy Creation:** Point where the policy document is produced and adopted. This involves a variety of mechanisms which can include formal consultations, risk analysis, or undertaking pilot studies.

4. **Implementation:** Development of supporting legislation, regulations, guidance, delivery plans and resource allocation.

5. **Monitoring:** Evaluation and review of the policy in action, research evidence and views of users. In this stage there is the possibility to loop back to stage one and modify the policy based on the experience gained.

**Figure 2.1** – Policy making cycle (Source: Adapted from OECD, 2004).

Although a participatory process can be implemented at any stage of the policy cycle, until now, public participation has been mainly confined to the **Analysis** stage, where the
public is invited to express their preferences over a pre-determined set of options (Sommer, 2007). This is often the case of regulatory frameworks where public participation is required such as the Environmental Impact Assessment European Directive (see EEC, 1985; EC, 1997). The *Agenda Setting* stage, which is the phase that present the greatest opportunity for the public to influence the entire policy making process, by expressing their real concerns and issues, is in reality the one where the publics are given less opportunities to participate.

Table 2.1 gives an insight on the influence and role that a participatory process can have when implemented on each different stage of the policy making cycle.

<table>
<thead>
<tr>
<th>Policy Stage</th>
<th>Role of Public Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agenda Setting</td>
<td>Can help define needs, express desires, scoop issues and weight alternatives (including doing nothing).</td>
</tr>
<tr>
<td>Analysis</td>
<td>Can provide expert and experimental knowledge into the policy by expressing preferences in available options.</td>
</tr>
<tr>
<td>Policy Creation</td>
<td>Can help bring governmental decisions to public analysis and debate.</td>
</tr>
<tr>
<td>Implementation</td>
<td>Can help assess the potential impact of legislations and regulations by testing the feasibility of implementation plans and identifying resources in the community.</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Can help define criterions for success and can support the review of evaluation reports.</td>
</tr>
</tbody>
</table>

Source: Adapted from Sommer, 2007.

2.2 Engaging With Citizens

Relations between governments and citizens exist at all levels of government, from policy-making to delivering and consuming of public services, being more evident at local and regional level due to problems of scale. It is possible to find examples of public participation initiatives in areas such as education, health, social services, justice,
environment, economics and community development (OECD, 2001; Roberts, 2004). Two of the most widely accepted typologies of relationships between governments and citizenry are the ones developed by the Organisation for Economic Co-operation and Development (see OECD, 2001) and by the International Association for Public Participation (see IAP2, 2000).

The typology presented by the OECD (2001) in the report "Citizens as Partners" is based on three distinct stages where the influence that citizens can exercise on policy-making raises from information to active participation (Figure 2.2). The three levels are:

**Information**  
One-way relation in which government produces and delivers information for use by citizens. It covers both "passive" access to information upon demand by citizens and "active" measures by government to disseminate information to citizens. Examples are access to public records, official journals, and government websites.

**Consultation**  
Two-way relation in which citizens provide feedback to government. It is based on the prior definition by government of the issue on which citizens’ views are being sought and requires the provision of information. Examples include comments on draft legislation, and public opinion surveys.

**Active participation**  
Relation based on partnership with government, in which citizens actively engage in the policy-making process. It acknowledges a role for citizens in proposing options and shaping the policy dialogue — although the responsibility for the final decision or policy formulation rests with government. Examples are open working groups, and dialogue processes.

![Figure 2.2 - OECD levels of public participation (Source: OECD, 2004).](image)

Alternately, the "spectrum of public participation" presented by the IAP2 (2000) consists of a five level typology as described in Figure 2.3.

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5 The "Ladder of citizen participation" developed by Arnstein (1969) is considered as one of the first typologies of relationships between governments and citizenry (see Appendix B).
The typology proposed and adopted in this thesis had as reference both models previously presented, and intends to address some of what we consider as limitations. It is composed by three levels of public participation (Figure 2.4) where citizens have an increasing role and influence in decision making:

- **Consultation**: Two-way relation where official initiatives by government institutions allow stakeholders and citizens to contribute with their opinion on specific issues. The goal is to obtain feedback from the citizens on analysis, alternatives and/or governmental decisions.

- **Collaboration**: Relation based on partnership with government, in which citizens actively engage in the policy-making process, ensuring that their concerns are understood and considered. Citizens are involved in the development of alternatives and in the identification of the preferred solution.

- **Empowerment**: Share of power and responsibility between the government and citizens in the selection of the final decision in the policy process.
Figure 2.4 – Levels of public involvement.

The model developed does not consider “Informing” as a level of public participation and gives special emphasis to “Empowerment”, by raising it above the other levels, as the ultimate objective of public participation.

Although the delivery of balance and objective information to citizens is an important step in establishing the conditions for a deliberative dialogue and for an informed decision, by itself, it is not a process through which citizens are engaged in decision making processes. “Informing” is a one way relationship between citizens and their governments, where citizens are simple receivers of information, not being provided with the means to actively express their opinions, desires and concerns. Since informing does not imply any type of involvement from citizens or gives them the possibility to influence decisions, we do not consider it as a form of public participation.

In here we are highlighting “Empowerment” since it is only at this level that the actual potential of public participation is unleashed. When working at this stage, citizens are not only provided with the opportunity to exercise their knowledge at the service of policy making, but they are also allowed to share power with decision makers.

Looking closer at the 3 stage model proposed by the OECD, it is possible to realise that even when citizens are considered to have an active role in interacting with the
government, the outcomes that they provide are only regarded as opinions and recommendations since, as it is stated in the OECD (2001) report, “the responsibility for policy formulation and final decision rest [always] with the government”. Therefore, it is reasonable to argue that the citizens are never truly empowered in the sense that they cannot assure their influence of the end result of a decision making process but only possibly try to influence it. Even though we agree with this report when it states that the influence citizens can have “is no replacement for applying formal rules and principles of democracy – such as free and fair elections, representative assemblies, accountable executives, a politically neutral public administration, pluralism, respect for human rights” and that the processes of public participation “complement and strengthen democracy as a whole”, we support the inclusion of a stage of public involvement (as it is presented in the typology of IAP2 (2000)), especially if we focus on a local level, where governmental institutions share they power and responsibility with citizens in reaching decisions within the policy process. Under this scenario, citizens helped by the government, deliberate on the proposals at hand deciding among themselves what the best options to implement are. The government takes the role of informing the citizens and the responsibility of implementing the outcomes from the deliberation.

The idea of participation rests with the expectation that citizens can have a voice in policy making. This implies the acknowledgement by governments that citizens have the right to influence the decisions that affect their lives (Bishop and Davis, 2002). It is not only a question of promoting more and better public participation, but also of making it meaningful.

The case of Porto Alegre, in Brazil (see Box 2.1), is a good example how a municipality shifted and shared part of its powers with the citizens by allowing them to deliberate and decide where part of the municipality budget could be spent.

**Box 2.1 – Orçamento Participativo: The case of Porto Alegre, Brazil.**

When, in January 1989, the “Partido dos Trabalhadores” (Labour Party) took over the administration of Porto Alegre, a new modality of municipal government was installed. It was based on an institutional innovation aimed at guaranteeing public participation in preparing and carrying out the municipal budget, hence in the distribution of resources and definition of investment priorities. This new measure, which became known as “participatory budgeting” was the key to the success of the municipal government.

(Continued)
The participatory budget implemented in Porto Alegre is a form of public government that counts with the direct participation of the citizens in the different phases of budget preparation and implementation. It is a community process based on a set of institutions that sustain the citizen’s participation in the decision making process of the municipal government and on tree major principles:

− All citizens are entitled to participate
− Participation is governed by a combination of direct and representative democracy rules and takes place through regularly functioning institutions whose internal rules are decided upon by the participants;
− Investment resources are allocated according to an objective method based on a combination of "general criteria" (substantive criteria established by the participatory institutions to define priorities) and "technical criteria" (criteria of technical or economic viability as defined by the executive and federal, state, or city legal norms) that are up to the executive to implement.

The capacity for citizens to set the agenda is high once they are able to decide about their neighbourhood priorities and where the municipal budget should be allocate.

The goal of the participatory budget is to establish a sustained instrument of joint management of public resources through shared decisions on the allocation of budgetary funds and of government liability concerning the effective implementation of such decisions. Promotes the interaction between citizens and allows them to have an immediate return of their involvement, giving them the confidence and incentive to continuing participating.

Although the final budget has to be approved by the municipal authority and the Ministry of Finance before its implementation, the citizens pressure and support to the process, ensures that their decisions are carried on.

The success of this case has inspired several other cities in South America and elsewhere in the world and nowadays there are many other municipalities carrying out similar processes.

Source: De Sousa Santos, 1998; Smith, 2005.
2.3 Reasons to Engage

One could argue that involving citizens in decision making through public participation initiatives is a right thing to do and citizens have the right to be heard in the decisions that affect them; yet other types of motivations can be argued for governments to promote engagement with the relevant publics:

- Citizens’ participation in policy formulation and decision making can reduce conflict and provide the basis for better, long lasting and wiser policy making. When engaged, citizens become aware of the different issues at stake and of the competing points of view surrounding those issues (OECD, 2001; Lukensmeyer and Torres, 2006), recognizing very often the others views as legitimate (Innes and Booher, 2004). At the same time, it ensures a more effective policy implementation, as citizens were involved in its development and are well informed.

- Public participation initiatives are considered to address problems such as lack of trust among the citizens in governance institutions and perceptions of weak legitimacy (Elliott et al., 2005) by promoting mutual understanding and giving citizens the chance to learn about and understand policy plans, make their opinions heard and, provide inputs into decision making (OECD, 2001; Lukensmeyer and Torres, 2006).

- Public participation promotes a stronger democracy by unveiling governments more transparent and more accountable. It strengthens the relationships between governments and citizens, it deepen the citizens ownership of problems and solutions and encourages a more active citizenship in society (Carson and Gelber, 2001; OECD, 2001).

- Citizen involvement through policy deliberation develops the highest human capacities and fosters an active, public-spirit moral character (Roberts, 2004). It does so by cultivating the skills of argumentative dialogue, active listening and problem solving in citizens, changing effectively their behaviours, political attitudes and skills of citizenship (Roberts, 2004; Lukensmeyer and Torres, 2006). The civic capacity of a society grows and participants become more knowledgeable and competent, believing more in their ability to make a difference (Carson and Gelber, 2001; Innes and Booher, 2004). Thus, through genuine and credible participation, people are able to realise their potential.
2.4 Critics and Challenges

However, the idea of bringing citizens into the decision making process is not viewed by all as a necessary step. Below are some of the critics raised to the involvement of citizens in decision making processes, and where appropriate possible counter arguments to these critics are offered. Those that criticize public participation processes state essentially that:

- It increases rather then decreases conflict between institutions and the citizens (English in Charnley and Engelbert, 2005). Too much citizen involvement heightens political conflict and leads to a disequilibrium that destroys the social stability. In addition, there is no guarantee that the common interest and the benefit of the whole is addressed or protected. What is more likely is an emotional fragmentation that ends up polarizing people without any mechanism that bring them back together (Barber in Roberts, 2004).

   As counter-argument, it can be said that the creation and raise of thrust between all the parties involved is critical step in the reduction of conflict. Without trust it is extremely difficult and costly to get the work done and arrive at an outcome by which all the participants can live with (Lukensmeyer and Torres, 2006).

The consideration of the perspectives of all the parties who will be affected, directly or indirectly by the governance process in an environment of dialogue and equal share of information ensures that the conditions for a more reasonable and ultimately more practicable and just outcomes are present (Lukensmeyer and Torres, 2006). It allows governments to gain wider sources of information, perspectives and potential solutions, improving the quality of the decisions reached (OECD, 2001).

- It is inefficient and unviable once it increases rather then decreases the cost of making and implementing policy decisions (English in Charnley and Engelbert, 2005). Public participation is too expensive, too time consuming and too arduous to try “to get everybody in the act and still get some action” (Cleveland in Roberts, 2004).

   It is correct that public deliberation can be costly and time consuming with all the planning associated, facilitations needed, staff involved and resources required. It is an arduous process that requires information, thoughtful examination of all the issues, knowledge about the basic elements of the problem, listening to everyone perspectives, understanding of the consequences and relationships in the
tradeoffs associated with different policies, etc. But these costs have to be compared and balanced with the benefits gained from a successful participatory process or even with the costs of not having any type of public deliberation (Roberts, 2004; Lukensmeyer and Torres, 2006), especially in issues of great controversy.

Successful public involvement can reduce future costly litigations and minimize project delays, as well as be a source of innovative ideas and approaches (Lukensmeyer and Torres, 2006; Roberts, 2004). By involving citizens in the assessment of needs and solutions, and identifying troublesome issues early, citizens will feel involved in the decision and their support will be sustained over time, even if their preferred alternative is not selected, reducing the risk of future litigations and avoiding the revision of decisions, thereby reducing significantly costs (O’Connor et al., 2000). This also help prevent ambiguous problems where judgment criteria are difficult to establish and solutions are valued-based and cannot be taken just based on reasoning and analysis, from becoming real crises in the future (Roberts, 2004).

Public participation processes are also considered to have an “educative function” (Mansbridge in Luskin and Fishkin, 2003) by enhancing participants’ level of knowledge about the issues under discussion. Furthermore, it builds civic capacity and, over the long term, helps to increase of the general levels of civic engagement and political participation (Luskin and Fishkin, 2003; Lukensmeyer and Torres, 2006).

Hence, as Roberts (2004) states “unless these long-term costs are factored in, the counterargument can easy be made that the dilemma of time [and money] is more of an issue for those who want to retain their administrative prerogatives rather than build a community of citizens who need to learn how to make hard choices in a resource-constrained world”.

- Citizens do not have the required knowledge to be involved in technical and scientific issues and get too emotionally involved in the problems to be solved (Folk in Charnley and Engelbert, 2005). They are either “too passionate and selfish or too passive and apathetic” (Stivers in Roberts, 2004). Decisions involving complex issues need to rely on a more refined and expert judgment (in Roberts, 2004).

Considering the multiple dimensions existing in a decision making process, relying only upon expert or elite perspectives can be limiting. Renn et al. (1993)
argue that experts are often restricted in their assessment and confined to the
general factors neglecting frequently local information and details.
The type of information provided by citizens is, in its nature, different from the
one provided by technical experts (see for instance, Glicken, 1999)6, contributing
often to complement and enhance the one provided by technical experts
(Charnley and Engelbert, 2005). Citizens have a good sense of their needs, and
uncovering their knowledge through deliberation can contribute to the formation
of valuable policy information that could otherwise be overlooked or neglected
(Renn et al., 1993; Lukensmeyer and Torres, 2006). This information can
contribute with new and important perspectives to the decision making process,
helping reframe the policy problems (Glicken, 2000; Hendriks, 2002b). Furthermore, it allows decision makers to understand the concerns of the public,
making them more sensitive to those concerns in the implementation process
(O’Connor et al., 2000).

The engagement of citizens with experts may result in a productive dialogue,
where information will not only be transmitted and shared, but also developed. By involving those that are affecting or are affected by the issues at stake, it is being ensured the inclusion of relevant perspectives, skills and experiences in the
decision making process and, therefore developing the conditions for the creation
of new, contextualized and robust knowledge (Guimarães Pereira et al., 2005b). The quality of the new knowledge is assured and maintained by an “extended peer community” (see Funtowicz, 2001), which consists not only of experts with some form or another of institutional accreditation, but by all those with a desire
to participate in the resolution of the problem.

− Citizens are too apathetic about politics and are not interested in getting involved in time consuming deliberations. They are too busy making a living and supporting their families that only relative few of them, when given the opportunity to participate, really take the advantage of doing it (Almond and Verba in Roberts, 2004).

When citizens are requested to consider complex policy issues, many of them feel intimidated and discouraged from participating because they believe they lack the knowledge and competence to do it. For these citizens, it can be a challenge to

6 Glicken (1999; 2000) argues that information can be divided into three types: cognitive, experimental and
value based. While the information presented by experts (e.g. scientists) is usually based on technical expertise
and involves factual arguments (Cognitive knowledge), the information provided by citizens is essentially based
on common sense, personal expertise (Experimental Knowledge) and perceptions of social value (Value Based
Knowledge).
be requested to think thoroughly about political issues when they never did it (Coleman and Gøtze, 2004; Roberts, 2004). However, when they feel that the outcomes of the participatory process will affect them, or that they have some experience or expertise in the issues in discussion, they feel interested in participating and get involved.

Inviting everyone to the table as coequals in a learning process, and giving them the tools and resources they need to be successful is one of the greatest challenges of direct participation (Roberts, 2004) for those that participate and those who organise it. However, citizens often expressed appreciation for having the opportunity to be directly involved in the policy matters that they considered to be relevant and important (Roberts, 2004) finding the experience stimulating and informative (Abelson et al., 2003).

It should also be noted, as Coleman and Gøtze (2004) points, that the objective of deliberative exercises “is not to create a permanently deliberative citizenry, but to generate civic discussion around those issues where citizens do have real concerns, knowledge and relevant life experiences”. Moreover, it is in their right to be engaged in the decisions that touch their lives (Barber in Roberts, 2004).

When involved in a participatory process, citizen’s expectations are too high and often they feel frustrated with the outcomes of the process.

Having deliberated about a set of policy issues, citizens are likely to be disappointed if their efforts and recommendations are not taken into account, being outweighed by others considerations such as budgetary limitations, political party ideologies, legal constrains or cultural motives (Coleman and Gøtze, 2004).

In order to avoid this, participants need to know, from the very beginning of the participatory process, what is the aim and purpose of the process, what is expected to be achieved and what they can and cannot influence (De Marchi et al., 1998). “Frustration arises from unclear objectives or exaggerated claims as to the importance of the public’s input [...]. Citizens participation should be guaranteed by clear standards, setting out their rights and reasonable expectations” (Coleman and Gøtze, 2004).

The involvement processes is counter-democratic once it increase the influence of special interest groups (in Charnley and Engelbert, 2005) further marginalising those who normally already feel excluded.
One of the principles of a participatory process is to include the perspectives of everyone who might be affected, directly or indirectly, by the outcomes of the process, including the perspectives of those who feel they have something to say. This includes involving groups, which normally are excluded, such as minorities, remote communities, people with disabilities, seniors and youth, etc. (Innes and Booher, 2004; Involve, 2005). If this is guaranteed, along with the assurance that all participants are treated equally, by having the same information and the same opportunity to be heard, the influence that each group can have in the final outcomes can be the same. "The best 'technical' solution cannot be implemented if the process of decision making is perceived as unfair or biased" (Renn et al., 1993).

Each participant must perceive the connection between the contributions and the final outcomes and, furthermore, whatever the implementation is, the motivations and justifications must be explicit.

It is evident that stronger and better efforts need to be made in order to promote public participation and put aside past bad public participation experiences. Quoting Roberts (2004): "for those who remain sceptical about the benefits of direct citizen participation, especially its deliberative version, they owe it to themselves to observe at least one of these occasions in action. Many who witness them are awed by the fundamental wisdom of people, who, when given the chance, are able to rise to the occasion and publicly deliberate about the common good".

2.5 Principles of Good Practice in Engagement Activities

In order to tackle the issues presented in Section 2.4 and ensure that public engagement is as genuine as possible, the adoption of the following principles is encouraged. Although these principles by themselves do not ensure a successful participatory process, they are a starting point for meaningful and effective engagement.

**Inclusiveness:** The process must ensure the participation of all stakeholders who have an interest in the topic at hand or who would be affected by the outcomes of the process as well as all the citizens who feel themselves they have something at stake, including “hard to reach” groups such as minorities, people with disabilities, seniors, young people and socially mobile professionals (Dialogue by Design, 2007).

**Trust:** Trust is a condition *sine qua non* for the development of an effective and successful partnership between all the members of a participatory process (De Marchi et al., 1998). Without the creation of an environment of trust around the participatory
process, it will be more difficult to achieve a consensus among all participants and to reach an outcome by all parties can abide. The creation of this “environment of trust” is related to the fulfillment of many of the other principles described in this section.

**Equality**: All the participants share the same right to be heard and to be part of the deliberation process and therefore must be treated equally. Privileged status, whether it is based on expertise, money or position, do not apply and do not give some participants the right to control the agenda or the outcomes, especially when the solutions are based on values and not science (Roberts, 2004). All opinions should have the same serious consideration and receive prompt and respectful replies (O’Connor et al., 2000).

**Transparency**: By promoting a transparent, open and clear engagement, it is being ensured that the process is trustable and that any suspicions the citizens might have regarding the sponsors of the process and their motivations are eased. This implies that the process is open to the wider public and that they can see what is going on and how decisions are being made. The release of information regarding the procedures of the process such as the selection of participants, decisions negotiations and minutes of the meeting increases the trustiness of the public (Rowe and Frewer, 2000). The purpose and aim of the process must also be clear from the very beginning, as what participants can and cannot influence (De Marchi et al., 1998). Transparency also implies that all participants have all the information they need in a comprehensive and balance format, and that they know where there is uncertainty or flaws in the information provided (Coleman and Gøtze, 2004; Dialogue by Design, 2007).

**Independency**: The participatory process should be conducted in an independent and balanced way. Hence, the organisers should not only be independent but also be seen as independents by the participants and wider public (Rowe and Frewer, 2000). Furthermore, also the participants should have no affiliation with the sponsoring body of the event. “Independent participants and facilitators might serve to differentiate true efforts at gaining public input from those instances in which a sponsor simply seeks legitimisation of a decision already made” (Rowe and Frewer, 2000).

**Commitment**: The organisers of the participatory process must be dedicated to the process and show to all the participants and citizens that the engagement has the appropriate priority and resources and that it is a genuine attempt to understand and incorporate other opinions even when they conflict with the existing point of view (Dialogue by Design, 2007). Participants must also be committed and prepared to be engaged, by discussing and debating potential decision options that will allow to arrive to a more reasonable, if not more just and practicable, outcome (Lukensmeyer and Torres, 2006).
**Accessibility:** It should be provided different ways for citizens to be engaged and ensured that no one is excluded through barriers of language, culture or opportunity (Dialogue by Design, 2007).

**Knowledge Sharing:** The process should be involved in an environment of interaction, mutual understanding and respect where the participants are encouraged to debate and learn from each other. They should have an open attitude to the idea that other participants can bring new visions to the dialogue and that their existing ideas can be further improved (De Marchi et al., 2001a). "A deliberative dialogue is not a pro forma exercise to convince the public of a course of action, nor is it a forum for one participant or group to persuade others to agree to a pre-defined proposal" (Lukensmeyer and Torres, 2006).

**Congruency:** For an effective dialogue and, in order to obtain the desire outcomes from a participatory process, it is necessary that the information provided has an internal consistency. The inputs provided must be both internally coherent as a set of statements and externally consistent with the reality they describe (De Marchi et al., 1998).

**Early involvement:** When relevant, citizens should be engaged as early as possible in the policy process and as soon as value judgments become important. In this way, their perspectives, concerns and ways of representing the issues in discussion can be accounted for from the very beginning of the participatory process (Guimarães Pereira et al., 2005a). The process should allow also citizens, if appropriate, as far as the context and process is concerned, to set the agenda, scope and formulate statements. This consents for a greater range of policy solutions to be considered and the chance of their successful implementation is increased (Rowe and Frewer, 2000).

**Accountability:** In the end of the participatory process, it is crucial that participants perceive to which extend they have actually influenced the policy making process. They must be aware how their inputs have been assessed and why their contributions have (or have not) influenced and incorporated the outcomes reached (OECD, 2001; Dialogue by Design, 2007).

**Productivity:** The final goal of any participatory process should always attempt to produce or improve “something”. If the outcomes from the participatory do not add anything new to the existing problem, then there is no reason to do it. One of the main complains about public participation is that they often are simply “used to legitimate decisions or to give an appearance of consultation without there being any intent of acting on recommendations” (Rowe and Frewer, 2000). The process should always search to have a genuine impact on policy making and reflect citizens input.
**Responsiveness:** The process must envisage a response from an institutional body and ensure the participants "that their voice will be taken seriously and that things can be changed" (Dialogue by Design, 2007). This response can be a change in a specific policy or just a reaction from a governmental institution. If by any motive it cannot be assured the response expected from the participants this must be communicated to them as soon as possible. To ensure an impact on policy making and program development, decision makers and other relevant authorities in the issue under discussion should be part of the process (Lukensmeyer and Torres, 2006).

### 2.6 Participatory Process

Even though public participation has become an essential element in public policy decision-making, for most people, public participation is understood as methods and techniques such as focus groups, citizen’s juries, public meetings, etc. (Involve, 2005).

However public participation is not only about the methods and techniques used. These are only an element in the process. In fact, their effectiveness is determined by the planning that precedes the method applied and by the way results from such action are handled and linked with the decision making process (Involve, 2005). Each method has already embedded specific objectives, expected outcomes and contextual conditions.

Public participation advocates a process of several steps (Figure 2.5) where the goal is to involve and ultimately empower citizens in the decision-making process. Typically, a public participation process incorporates the following steps (see for instance, Involve (2005) guidebook "People & Participation"):  

1. Identify the Scope  
2. Clarify the Purpose  
3. Analyse the Context  
4. Select the Participants  
5. Define the Outputs  
6. Set the Outcomes  
7. Prepare the Venue  
8. Institutional Response  
9. Evaluate the Process

Although the participatory process is presented here as a sequence of steps, in reality all the steps are connected and dependent on each others: it is an extremely interactive and dynamic process. For instance, while the issues are being clarified, it is also necessary to
consider who to involve, what budgetary and time constraints exist, how decisions will be made, and so on (DPC, 2003).

Figure 2.5 – Participatory Process phases.
2.6.1. Identify the Scope

The scope represents the ambit in which the participatory process will act. The goal is to clarify what are the boundaries of the public participation process in a sense of what can really be achieved in practice with the initiative.

It should be analysed if the participatory process is appropriate, hence evaluate if there is an active interest from the citizens in getting involved and if it is possible to achieve something significant with the initiative. The level of involvement (i.e. inform, consult, empower, etc.) expected from the citizens should also be defined (Involve, 2005), as the stage, or stages, in which the participatory process will act in the policy making process.

2.6.2. Clarify the Purpose

The purpose defines what the participatory process is about and why it is being done. It reflects the nature of the issues under consideration, clarifying what is and what is not under discussion (DPC, 2002).

It is important that all involved in the process, both participants and decision-makers have knowledge and understanding of the issues under consideration (DPC, 2003); hence the purpose must be clear and easy to understand. Once established, it can serve as a reference point throughout the process. It ensures that the public institutions have the right means to provide outcomes, not causing false expectations to the citizens. It also helps citizens to know if they are interested in getting involved in the participatory process or not (Involve, 2005).

2.6.3. Analyse the Context

The conditions that put into action the participatory process and the framework in which it is inserted compose the context.

Understanding the context is important to ensure that the participatory process (Involve, 2005):

- Links with other relevant activities occurring at the same time;
- Is receptive to the participants needs;
- Incorporates previous experience and learns from the past;
- Does not duplicate other activities;
- Progresses quickly and is relevant.
Box 2.2 – Factors likely to affect the success of a participatory process.

**Decision-makers**

- Interest, commitment and/or involvement of key decision-makers in the process;
- The decision-making process and how the participatory process fits into (e.g. timing).

**Participants**

- Sectors of society which are unlikely to participate but which would add value to the process if they did;
- Existing relationships between key participants including relationships with facilitators and relevant decision-makers;
- Different experience in public participation of the participants: those with more experience, skills and confidence might dominate the proceedings;
- Cultural diversity of participants: may affect, for example, people’s willingness to meet all together and/or affect the way different participants are used to debate in public with others;
- Language barriers: might be necessary to provide interpreters to ensure all the participants you need are present;
- Any barriers related to people working together (e.g. gender barriers).

**Other Participatory Processes**

- Outcomes of past participatory exercises on the same project/programme;
- Relevant on-going and/or planned activities which may cover the same subject area, the same geographical area and/or the same participants.

Source: Adapted from Involve, 2005.

### 2.6.4. Select the Participants

A public participation process must be inclusive and therefore should involve all the relevant public in the decision-making process in a common framework where all are interacting and influencing one another (Innes and Booher, 2004).

The relevant public will vary with the issue, as the interest and capability of various groups to contribute to a participatory process will depend upon the topic at hand (Elliott et al., 2005). The basic idea is to involve those that are important for the process,
including those who feel themselves they have something at stake and, at the same time, assure that no one is excluded by accident or lack of care (Involve, 2005). Special attention must be given to groups who may feel excluded, namely minorities, remote communities, people with disabilities, seniors, youth, etc. The interests of all participants must be address during the process and they must be treated equally (Innes and Booher, 2004). Failing to comply this might seriously affect the legitimacy and credibility of the participatory process.

It is possible to consider different types of groups of participants according to the role they represent during the process (see for instance, Involve, 2005; Elliott et al., 2005):

- **Stakeholders or Social Actors**: Those that feel they have a stake in the issue, either being affected by any decision or being able to affect that decision. These may be organisational representatives (e.g. NGOs, businesses, etc.) or individuals.

- **Citizens**: Wider public/society who may have a right and interest in being involved. The incorporation of citizens in the process allows the inclusion of local knowledge in the process and brings the process toward the communities (Innes and Booher, 2004).

- **Experts**: Professionals with the education and skills on the issue at stake.

- **Policy Makers**: Individuals who will take up the outcome of the process. The involvement of policy makers from the very beginning of the process will increase the likelihood of their support of both the process and the outcome. Having such a link also increases the perceived value of the initiative among the citizens, experts and the media (Elliott et al., 2005). Therefore it is recommended to involve policy makers as much as possible in the process that they are intended to participate.

The type of information that each group of participants can provide to the participatory process is in its nature different and therefore it is important to identify which groups of participants will be involved and how. Knowing the participants and their relationship to each other and with the issues under discussion is relevant and beneficial in understanding their background, their knowledge and their potential influence (DPC, 2003). Understanding the social dynamics at play and the establishment of a common ground for dialogue helps minimising the likelihood of problems (Glicken, 2000).
2.6.5. Define the Outputs

During a participatory process it is expected that activities like workshops, meetings and presentation are organised and that materials such as reports, leaflets, posters, videos, animations and/or interactive applications are produced (see for instance, Guimarães Pereira et al., 2001). These tangible products of the participatory process that do not fully address the final goal of the process represent the outputs. As it is important to plan what are the outputs of the process in order to choose the right participatory method and to help the participants know how the outputs can contribute in achieve the overall goal; it is also important to plan how they will be used, so they do not get lost as the process progresses (Involve, 2005; Dialogue by Design, 2007).

Also, some outputs have intrinsic value regardless of whether they contribute to the overall outcomes. For instance, organizing a workshop can create the opportunity to strengthen the relationships between the participants, independently of the outcomes (Involve, 2005).

The outputs can be seen as a mean to achieve the final objective of the participatory process.

2.6.6. Set the Outcomes

The overall results and impacts of the participatory process represent the outcomes. It is the clear statement of what exactly came out from the process. Different methods are designed to produce different types of outcomes; therefore identifying the desired outcomes helps identify which methods are most likely to deliver those outcomes. Examples of outcomes include (see for instance, DPC, 2002; Involve, 2005):

- Get feedback on a policy;
- Agreement on a purpose and direction of a project, program or policy;
- Establish service priorities;
- Identification of issues, benefits and drawbacks;
- Explore community needs and wants;
- Identify shared ground;
- Gain public support;
- Resolution of conflict;
- Reach a consensual agreement;
- Policy change;
- Scenarios generation;
- Shared assessment of alternatives;
- Promote behavioural change.
2.6.7. Prepare the Venue

This is the phase where the participatory process is planned and factors like timings, costs, methods/techniques and deliverables are evaluated and/or considered.

Methods and Techniques

In order to enhance the participation aspect in all the phases of a participatory process, from planning to evaluation, different techniques have been developed and adapted. The choice of the method or technique to implement depends on the aim and context of the participatory process. While one method may be appropriate in a certain situation, a different method may be more suitable in other circumstance. Multiple methods and techniques can be combined and adapted to suit the purpose of a particular process. An effective approach is to use one method to complement another or use hybrid techniques of traditional methods (see for instance, De Marchi et al., 1998; Guimarães Pereira et al., 2001; Guimarães Pereira et al., 2005a). If different innovations are able to increase and deepen citizens’ participation, the combination of different methods has the potential to improve significantly the effectiveness of citizens’ involvement in decision making. (Saward in Smith, 2005).

The chosen method(s) should incorporate all the relevant participants in a framework of collaboration, interaction and dialogue where the interests of all co-evolve to a common interest (Guimarães Pereira et al., 2005a). The challenge is to decide which method, or combination of methods, will involve the right participants and deliver the expected outcome within the available time and budget (Dialogue by Design, 2007).

After the public participation event, the results should be present to the participants as well as to the sponsoring body. The conclusions reached must be transparent, easy to understand and supported by evidence.

Box 2.3 - General steps in developing and implementing a public participation method.

1. Recruit a project team.
2. Define the purpose and goals of the strategy.
3. Determine the scope and focus of a public involvement process.
4. Understand the legislative, legal, jurisdictional and social context for the issue and any decision(s) to be made.
5. Determine who should be involved and why.
6. Understand the time frame and process for decisions.
7. Design the plan (choosing one or multiple methods).
8. Assemble the funding.

(Continued)
9. Set adequate timelines and other resources required to make the process work.

10. Recruit participants.

11. Promote the event.

12. Implement the plan.

13. Evaluate the process and results.

14. Produce and disseminate the final report.

Source: Elliott et al., 2005.

Looking at the existing literature, it is possible to verify that the number of methods and techniques useful to be used in a context of public participation is high. The methods and techniques describe below (Table 2.2) are just a sample of what is being used and the fact that one method or technique is not listed here, does not means it is not advisable to be used. The list presented here does not meant to be exhaustive, but merely representative of possible approaches. For more information on the methods listed here, or for more information on other methods and techniques, it is recommend the consultation of the following resources:

- Beyond the ballot: 57 democratic innovations from around the world, by Smith (2005)
- Participatory Methods Toolkit: A practitioner’s manual, by Elliot et al. (2005);
- People & Participation: How to put citizens at the heart of decision-making, by Involve (2005);
- Dialogue by Design: A Handbook of Public Stakeholder Engagement, by Dialogue by Design (2007);

Table 2.2 – List of public participatory methods.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st Century Town Meeting</td>
<td>Forum that brings together thousands of people at a time (up to 5000 per meeting), to deliberate about complex public policy issues in smaller face-to-face groups. Neutral and balanced background material are used to inform and promote the discussion, and experts and policy makers are present to participate in the discussion. Through the combination of keypad polling, groupware computers, large screen projection, teleconferencing and other technologies, participants are able to simultaneously participate in the small group discussion and contribute to the collective knowledge of the large</td>
</tr>
</tbody>
</table>
group. Hence, the results from all the small groups are shared with the entire group and reported to the decision makers.

This method was developed by AmericaSpeaks.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizens Jury</td>
<td>Independent forum of 12-24 randomly selected citizens (referred as &quot;jury&quot;) where they are asked to examine and discuss an important issue of public policy. Participants are supplied with background materials and have the possibility to listen and question experts (often referred as “witnesses”) in the related field on what should be done about the issue. The jurors go then through a process of deliberation where they weight the different points of view and render a final decision about the best course of action. A citizen’s report is produced stating the final decision and recommendations. This report is presented to the sponsoring body (e.g. local authority) which is required to respond either by acting on it or by explaining why disagrees with it.</td>
</tr>
<tr>
<td></td>
<td>Method developed by the Jefferson Center.</td>
</tr>
<tr>
<td>Citizens Panels</td>
<td>Large group of demographically representative citizens used to assess public preferences and opinions (e.g. identify local service needs). Potential participants are generally recruited through random sampling of the electoral roll or by door-to-door recruitment. Once they integrate the Citizens Panels, they are requested to participate in surveys at intervals over the course of the membership and, when appropriate, in further in-depth research as Focus Groups. The techniques most common used include questionnaires and telephone polling. Panel members should be aware of what is their role in the panel, what is expected from then and how frequently will they be consulted.</td>
</tr>
<tr>
<td></td>
<td>This method evolved from Opinion Pools and market research.</td>
</tr>
<tr>
<td>Consensus Conference</td>
<td>Representative panel of 10 to 30 citizens that meets over the course of several weekends in the assessment of a socially controversial topic. During the Consensus Conference, the citizens’ panel engages a set of experts in question and answer sessions that are open to the public. The citizens’ panel is responsible for deciding the key aspects</td>
</tr>
<tr>
<td></td>
<td>(Continued)</td>
</tr>
</tbody>
</table>
of the debate, including the selection of experts and the choice of questions. Before the conference, it is given time to the panel to prepare for it, in order to fulfil their role as informed citizens. At the end of the debate, the panel discuss the information presented and produces a report outlining conclusions and recommendations that are presented to key decision makers.

Developed by the Danish Board of Technology.

Deliberative Polling

This method measures what the public would think about an issue if they had the opportunity to reflect on it. In a first stage, participants are polled on the issues at hand. After this, they are invited to gather for a few days to discuss these issues. Balance background materials are sent to the participants and dialogue with experts is engaged. After this deliberation, the participants are asked to answer to the original questions again. The results of the second poll are compared to the first and the opinion change is calculated. These results provide decision makers with a snapshot of how citizens would be likely to respond to an issue if they had the opportunity to become fully informed.

Developed at the Centre for Deliberative Polling at the University of Texas.

Delphi Survey

Iterative survey where each participant is asked to complete a questionnaire and then is given feedback on the whole set of responses. With this new information, participants answer the questionnaire again, however this time providing explanations for any views they might have different from the other participants. These explanations serve as information for the others. In addition, one may change his opinion based upon the evaluation of the new information. This process is repeated as many times as useful. The idea is that the entire group can weigh dissimilar views that are based on privileged and rare information. This method allows exposing all the different options and opinions regarding an issue and the principal pro and con arguments for these positions.

The Delphi method was developed by the Rand Corporation.
<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert Panel</td>
<td>Expert’s panels are particularly appropriate for issues that require highly technical knowledge and/or are highly complex and require the synthesis of experts from many different disciplines. The members of the panel, in addition of having technical qualifications, should be creative thinkers who can bring new viewpoints to the discussion. The aim of the panel is to investigate and study the topics assigned and set forth their conclusions and recommendations in the form of a written report. This method is not designed to actively involve the wider public.</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>Process where a skilled moderator leads a small group of participants (4 to 12 persons) through a semi-structured discussion in order to obtain information about their perspectives and preferences regarding the issue in discussion. Participants are allowed to question each other and to elaborate upon their answers. This creates an environment favourable for the exploration and generation of creative ideas. After the event, the research staff analyses the outcomes of the session and produces a report that is send to all the participants for appraisal, and afterwards to the sponsoring body. Focus groups were developed in the private sector as a market research tool.</td>
</tr>
<tr>
<td>Issue Forums</td>
<td>Forum involving variously sized groups of citizens who are gather to discuss public matters. The participants are provided with framed background materials and skilled facilitators guide the discussion. In the end of the forum group members are polled and the results of the poll are made available to decision makers. This method was developed by the National Issues Forums and the Kettering Foundation.</td>
</tr>
<tr>
<td>Open Space Technology</td>
<td>Event that allows unlimited numbers of participants to form their own discussions around a central theme. Each participant has the possibility to organise and be responsible for running a session about a topic he consider relevant to the central theme. When no more topics are proposed, the participants sign up for the sessions they wish to take part and gather at the time and place (room) designated by the organiser of the session. At the end of each</td>
</tr>
</tbody>
</table>

(Continued)
session, a report is done and made available to all the participants. This method creates highly dynamic discussions and it is good at generating enthusiasm and commitment to action.

Open Space Technology was created in the mid-1980s by organisational consultant Harrison Owen when he discovered that people attending his conferences showed more energy and creativity during the coffee breaks than the formal sessions.

| Participatory Strategic Planning | Consensus-building approach that enables a community or work group to articulate together how they would like their community or organisation to develop over the next few years. It is a four stage process where in the first; the group determines their vision for the future of the community. Afterwards, the group identifies the obstacles and constrains that prevent them from reaching their vision. In the third stage, the group agrees on the strategy that will help them reach their goal. The fourth stage is focused on planning the implementation of the strategy defined previously. Each stage uses a consensus workshop process guided by a trained and experience facilitator.

Developed by Institute of Cultural Affairs. |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario Building Exercise</td>
</tr>
<tr>
<td>The World Café</td>
</tr>
<tr>
<td>(Continued)</td>
</tr>
</tbody>
</table>
participants around the room the conversations at each table are "cross-fertilized" with ideas from other tables. In the end of the process, the main ideas are summarized in a plenary session and follow-up possibilities are discussed.

The World Café methodology was written by Juanita Brown and David Isaacs in 1995.

Source: Adapted from Elliott et al., 2005; Involve, 2005; Smith, 2005; Lukensmeyer and Torres, 2006.

The variety of existing methods and their range of applicability make it impossible to indicate which method works best in which situation. As previously mentioned, the choice of method depends on the context and one should have in mind that different situations might require different methods since the outcomes will be different. In short, there isn’t a method that is adequate to all situations. While some methods are good at building relationships and finding shared ground, others are good at identifying existing wants and needs (Involve, 2005; Smith, 2005).

In order to assess the key characteristics of the various public participation methods and understand what they have to offer, Rowe and Frewer (2000) propose a framework based on a set of criteria by which different participatory methods can be evaluated. According to the authors, “the evaluation of methods tends to be limited to ad hoc suggestions and criticisms about the advantages and disadvantages of the various techniques and the lack of a clear framework for criticism makes it difficult to compare and contrast their relative merits”. This framework tries to provide a mean by which the different methods can be evaluated, in different contexts and situations, in a systematic and methodologically way using indicators other than cost effectiveness, resource allocation or other substantive outputs (Frewer et al., 2001; DPC, 2002).

The criterions elaborated (presented in Table 2.3) can be divided into two types: acceptance criterions, which are related to the effective design and implementation of a method; and process criterions, which are related to the potential public acceptance of the method (Rowe and Frewer, 2000).
### Table 2.3 – Evaluation Criteria

<table>
<thead>
<tr>
<th>Acceptance Criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Representativeness</strong></td>
<td>Participants should comprise a broadly representative sample of the affected population.</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td>The participation process should be conducted in an independent (unbiased) way.</td>
</tr>
<tr>
<td><strong>Early involvement</strong></td>
<td>Participants should be involved as early as possible in the process, as soon as value judgements become salient or relevant.</td>
</tr>
<tr>
<td><strong>Influence</strong></td>
<td>The output of the process should have a genuine impact on policy.</td>
</tr>
<tr>
<td><strong>Transparency</strong></td>
<td>The process should be transparent so that the relevant public can see what is going on and how decisions are being made.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource accessibility</strong></td>
<td>Adequate financial, human and technical resources are required if the process is to be effective. Participants must have access to all the resources they require in order to successfully fulfil their task, namely information resources (e.g. summaries of the pertinent facts); human resources (e.g. access to experts, scientists, decision analysts); material resources (e.g. computers, projectors, whiteboards); and time resources (enough time to deliberate and reach a conclusion).</td>
</tr>
<tr>
<td><strong>Task definition</strong></td>
<td>The nature and scope of the participation task should be clearly defined.</td>
</tr>
<tr>
<td><strong>Structured decision making</strong></td>
<td>The participation exercise should provide and use appropriate mechanisms for structuring and displaying the decision making process.</td>
</tr>
</tbody>
</table>
Cost effectiveness

The procedure should in some sense be cost effective from the point of view of the sponsors. It must combine the best solution based on the desiderate outcomes and on the resources available, whether these resources are money or time.

Source: Adapted from Rowe and Frewer, 2000; Frewer et al., 2001.

These criterions tackle some of the principles of good public engagement described earlier in Section 2.5 and try to address key questions in the development of effective methods of public participation.

The idea is that, if the organisers find that with the chosen method they cannot meet a particular requirement or a criterion then that method, in principle, is not appropriate for the particular context of the exercise. Not every criteria needs to be evaluated for every public participation method. The organiser should decide which ones are more relevant and appropriate for each case (Frewer et al., 2001). In Appendix C is possible to find a detailed guideline on the evaluation framework proposed by Rowe and Frewer (2000).

**Moderation and Facilitation**

Independently of the public participation method chosen, the moderator (or facilitator) plays an essential role in the participatory process. He is the person responsible for helping the participants, as a group, search for innovative solutions and agreements that incorporate everyone's points of view. To do this, the moderator encourages full participation, promotes mutual understanding and cultivates shared responsibility (Kaner et al., 1996). The moderator should act as impartial as possible, not taking sides or expressing strong points of view during the process, promoting a fair, open, and inclusive procedure. The development of a trust relationship between those who organise and facilitate participatory venues, in whatever method they are based is a condition *sine qua non* for participatory initiatives to be credible and for people to engage on them (Guimarães Pereira et al., 1998).

---

7 In Section 3.6 the relevance of moderation in participatory processes, is further discussed namely in e-participation engagements.

8 For the purpose of this thesis, we make no distinction between the role of the moderator and the facilitator.
Box 2.4 - Roles of the moderator.

**Encourage full participation:** The moderator should have the capacity to help everyone feel heard, by creating the necessary space for quiet members to participate and by reducing the incident of premature criticism.

**Promote mutual understanding:** The moderator should help the participants realise how important it is to understand the points of view and perspectives of others, and how this can be used to reach long lasting solutions.

**Foster inclusive solutions:** The moderator should help the participants search for innovative solutions that incorporate or reflect everyone’s points of view.

**Teach new thinking skills:** It is up to the moderator to help the participants to turn problems into solutions by showing them new ways of addressing the problems.

Source: Adapted from Kaner et al., 1996.

For Justice and Jamieson (1999) there are three fields of knowledge where the moderator should have basic knowledge: adult learning, group dynamics in decision making, and process consultation. These are seen as critical corollaries to effective group facilitation. Moreover, for an effective moderation, the moderator should also have basic skills in:

- Designing structured activities and processes;
- Listening, paraphrasing, observing, clarifying and elaborating;
- Interpreting verbal and no verbal behaviour;
- Drawing people out;
- Confronting others;
- Balancing participation and managing differences;
- Collaborating with others;
- Project management;
- Meeting management;
- Logistics management.

---

9 See, for instance, Justice and Jamieson (1999) for a more complete discussion on how these fields of knowledge can help a moderator to effectively moderate a group.
2.6.8. Institutional Response

Each participatory process should always try to trigger an institutional response. It can be a change in a specific policy or just a reaction from a governmental institution.

If by any reason an institution cannot react the way it is expected, this need to be clarified as soon as possible with the participants. Failing to comply with the expectations of participants after they have invested their time and energy in the process creates mistrust and can seriously undermine future participatory attempts (Involve, 2005). Frustration arises when the objectives are unclear or exaggerated claims are made of the importance of the participatory process (Coleman and Gøtze, 2004).

Participants should be aware of what the outcomes of the process were, how they were achieved and how they will be implemented (DPC, 2002). It is essential to establish a clear link between the participatory process and the institutional response.

2.6.9. Evaluate the Process

The evaluation consists on the assessment of the participatory process, not only in terms of what was achieved (outcomes), but also how the overall processes performed.

It allows the organisers of the process to know if they achieved their participation goals, what they acquire by using a participatory approach and how they can involve more effectively the citizens and improve future processes (Charnley and Engelbert, 2005). This ensures that mistakes from previous participatory processes are not done in future.

During this review, the perspectives of all those involved in the process - including whoever is leading the process, decision-makers and participants, ought be included (Involve, 2005). This way, the organisers have the possibility to find out how satisfied where the participants with the method(s) used and whether if they felt that the process genuinely allowed them an opportunity to contribute. “After all, there is no point in employing even the most sophisticated engagement method if the process gets in the way of participants giving their views or produce responses that cannot be used” (Dialogue by Design, 2007).

The evaluation process can be carried out using a variety of techniques which includes questionnaires, interviews, focus groups or citizen’s panels. Table 2.4 shows a list of key questions the review process should address.
### Table 2.4 – List of key questions.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
</tr>
</thead>
</table>
| Purposes      | • What were the original objectives and purposes?  
• Where they achieved?  
• If not, why not?                                                                                                                             |
| Methods       | • What methods and techniques were used?  
• Did they achieve the desired results in terms of level of participation and type of response?  
• Which methods worked best for which types of participants?  
• Did the process go according to the intended timetable?  
• Did the process meet the standards of good practice in participatory working?  |
| Participation | • Was the level of participation appropriate?  
• How many people participated?  
• Did all key stakeholders participate?  
• If participation was intended to be representative, was this achieved?  
• If it was intended to reach several different groups, was this achieved?  
• What efforts were made to reach under represented groups?  
• What methods were used to encourage participation? Did they work?  
• Did the process meet explicit and implicit the demands of the participants?  
• The level and range of response from the participants legitimized the exercise?  
• What comments were made by the participants about the participatory process?  |
| Results       | • Was appropriated what was produced and organised?  
• How easy were they to analyze and interpret?  
• What was the format of the final report?  
• Were the results communicated to the participants? How?                                                                                   |
<p>| Outcomes      | • What was achieved during and after the process?                                                                                                                                                      |</p>
<table>
<thead>
<tr>
<th>What has changed or will be changed as a result of the participatory process?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ways in which the responses from the process were dealt were appropriate and effective?</td>
</tr>
<tr>
<td>Was there a sense of shared ownership of the process and outcome?</td>
</tr>
<tr>
<td>Was there a commitment to implement the outcome?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>The time allocated into the process was enough?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were the costs as expected?</td>
<td></td>
</tr>
<tr>
<td>Were the results worth the money?</td>
<td></td>
</tr>
</tbody>
</table>

| Lessons | What should be done differently next time? |

e-Engagement
3. e-Engagement

“[The internet] has the potential to bring together large numbers of people in a form of civic dialogue. It can also provide immense stores of information for people to access and interact with. Importantly, if universal access is achieved, it allows those with few resources to have equal opportunities for political debate and involvement” (Blumler and Coleman, 2001).

As mentioned in the previous section, the relationships between existing institutional arrangements and civil society are undergoing profound transformations. Governments are trying to respond adequately to the increasingly number of issues and problems that are continuously being raised by a technical, economic and social changing society, while citizens are requesting to be heard and to have a more active role in the policy making process, creating new meanings and expectations for “citizenship” (see for instance, Jasanoff, 1990; Funtowicz and Ravetz, 1993).

The use of Information and Communication Technologies (ICT) offers a new variety of opportunities for public participation. From the access of information to its discussion, passing through e-voting and e-petitioning, ICT is emerging as a mean for institutions to experiment innovative and enhanced forms of engaging and involving the citizens (Macintosh, 2004; Lukensmeyer and Torres, 2006; Ferguson et al., 2007a). By giving individuals and groups a relatively inexpensive and fast way of communicating, ICT can add new voices and reinforce existing points of view in the democratic debate (Gualtieri, 1998).

The internet is presented as the main ICT mechanism, accessible through an increasing number of channels where PCs, both at home and at public locations, mobile phones and the interactive digital TV have a central role (Macintosh, 2004). It is a powerful medium for searching, selecting and integrating the vast amounts of information held by governments, as well as presenting the results in a form that can be immediately used by citizens (OECD, 2004). In reality, the internet allows much more than this. Through the internet it is possible to involve a large number of citizens in an environment of deliberative dialogue. Therefore, it can also be a medium for engaging the publics more widely in the decision making process, going beyond just witnessing of the process (Blumler and Coleman, 2001). The advent of the internet also allowed governments to treat citizens as singular individuals: “not only can citizens be provided with public services on an individual basis, but the opinions of individuals in relation to such services can be collected, acknowledge and responded to” (Smith, 2003).
e-Engagement is a term used to refer to the use of ICT in enabling and supporting the active participation of citizens in the decision making process. The principle of e-engagement is collaborative, based upon engaging with people, rather than using them or talking at them (Macintosh et al., 2005).

In the remaining of this chapter we will continuous to emphasise the deliberative aspect of public participation, focusing now on the use of ICT, and of the internet, to extend and deepen citizens’ engagement with government institutions in policy issues.

We continue here to adopt the levels of public engagement considered in Section 2.2, adapting the terminology for online environments:

- **e-Consultation**: Two-way relation where official initiatives by government institutions allow stakeholders and citizens to contribute with their opinion, either privately or publicly, on specific issues. The goal is to obtain feedback from the citizens on analysis, alternatives and/or governmental decisions.

- **e-Collaboration**: Enhanced two-way relationship based on the partnership between government and citizens. It acknowledges an active role of all stakeholders and citizens in the policy-making process, ensuring that their concerns are understood and considered. Citizens are involved in the development of alternatives and in the identification of the preferred solution, although, the responsibility for the final decision rests within the government;

- **e-Empowerment**: Share of power and responsibility between the government and the citizens in the decision of the most advantage solution for the policy process.

### 3.1 Objectives

Available literature indicates that e-participation initiatives can be used to broaden and deepen the democratic process, making it more transparent, inclusive and accessible (see for instance, OECD, 2001; Macintosh et al., 2005). Its main objectives are given as:

- Reach and engage a wider audience to enable a broader participation;
- Support participation through a range of technologies that accommodate the different and diverse technical and communicative skills of citizens;
- Provide relevant information in a format that is both more accessible and more understandable to the target audience in order to allow a more informed participation;
- Enable deeper contributions from citizens and support deliberative debate;
- Facilitate the analysis of contributions;
- Provide relevant and appropriate feedback to citizens, and ensure openness and transparency in the policy making process.

Furthermore, it can be said that e-participation presents itself as a new means to engage civil society by providing new and innovative spaces for public engagement, and by creating new opportunities for citizens to participate in decision making processes.

### 3.2 Online Policy Deliberation

Public engagement can be described as deliberative when it encourages citizens to examine, discuss and weigh competing values and policy issues, requesting them to perform a judgment on the alternatives instead of just choosing one: “deliberative engagement is [...] preference-forming rather than simply preference-affirming” (Coleman and Gøtze, 2004).

The ideal of deliberation is of public reasoning and consensus, requiring citizens to go beyond their self-interests and orient themselves to the common good (Bohman, 1998). It is based on the principle that citizens can actually change their preferences when faced with the arguments and position of others (Shulman et al., 2002) hence, creating the conditions for reaching a legitimate decisions which “everyone can accept” or at least “not reasonably reject”.

The concept of using online citizen engagement to promote and support policy deliberations is not new. There are already a number of initiatives from government institutions that are innovatively using the internet to provide citizens with the capacity to participate and influence decision making. However, as Ferguson et al. (2007a) state, effective citizen deliberation “is not as simple as putting up a website and sending out an email inviting people to 'have a say'”. We cannot expect that technology by itself will solve the problems of active citizenship and participation, as well as government accountability and authenticity (Shulman et al., 2002). Actually, the introduction of online public engagement into policy deliberation has little to do with technological innovation and more with a new thinking on how to improve the democratic process. As Gualtieri (1998) acknowledges, "the democratizing potential of the ICT will only be realised if accompanied by other important changes, some of which are really achievable, while others will require profound changes in the way we govern ourselves". These include:

- The advent of a new technically literacy generation of positions of power;
Improved technologies for interactivity, synthesis and feedback;
Higher priority and greater political will on the part of decision makers to better link the public to the decision making process in a substantive way;
Greater desire on the part of the public to participate actively in the policy process.

In order to dispel the myth that technology by itself can solve the problems of democracy, Macintosh et al. (2005) present us the concept of e-methods\textsuperscript{10}. The argument is that the tools for online engagement, alone, cannot be seen as the solution to enhance public participation and achieve a stronger democracy but, must be considered as an integrant part of an overall participatory process. “Technologies are cultural products and only work or fail within political, economic and organisational contexts. [...] e-methods recognises that e-engagement entails a range of practices, techniques and technologies which do not comprise inherent ‘solutions’, but must be integrated into a broader adaptation of government-citizen relationship-building” (Macintosh et al., 2005). Although technological issues have importance in the success of an online public engagement; social, cultural, political and organisational issues encompass a greater weight (Gualtieri, 1998).

\textbf{Box 3.1} – What online participation can and cannot do.

<table>
<thead>
<tr>
<th>Online participation can help governments to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>− Make existing policy and services fit better with people’s experiences and needs;</td>
</tr>
<tr>
<td>− Navigate future uncertainty by tapping peoples’ knowledge and experience to design better policies and services;</td>
</tr>
<tr>
<td>− Focus the public’s good will and knowledge on big, complex problems that need local solutions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Online participation can help people to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>− Understand the purposes and processes involved in designing and delivering policies and programmes;</td>
</tr>
<tr>
<td>− Enhance accountability for the results of policies and programmes;</td>
</tr>
<tr>
<td>− Contribute to improving policies and services affecting them;</td>
</tr>
<tr>
<td>− Create communities around issues they see as important;</td>
</tr>
</tbody>
</table>

\textsuperscript{10} See Appendix D for a more detailed description of the e-methods approach developed by the authors.
Feeling they can contribute and that government acknowledges and values their input.

Online participation cannot:

− Make decisions for accountable Ministers and State servants;
− Be the only mean of reaching out to people - many may not have access to the Internet;
− Be just about government - it is about creating a two-way conversation.

Source: Adapted from Sommer, 2007.

3.3 Challenges and Constraints

Engaging with citizens in policy making, as seen before, is a sound investment in the promotion of better governance and stronger democracy. While new ICT and the internet in particular, offer new and innovative opportunities for promoting and improving citizen engagement in policy making, they also raise new challenges for governments.

e-participation is a complex field, shaped by many factors from a variety of disciplines. The challenges and barriers of e-participation are, therefore, also diverse and can include from, for instance, political-strategic issues, organisational issues (covering also legal aspects), public value issues, social issues, socio-economical issues, socio-technical issues, technological issues and deployment issues (Wimmer et al., 2007).

Below is presented a list of the main challenges and concerns that e-engagement initiatives face. It should be pointed that many of the concerns raised are based on the assumption that ICT based processes are intended to replace “real” public involvements initiatives, instead of these “virtual” opportunities being regarded as alternatives and complements to existing methods. Other critiques are similar to those usually seen in for public involvement in policy making in general (see Section 2.4) and not arising from the particular usage of ICT. Nevertheless, theses concerns should not be mistreated and can be seen as reference points where e-engagement initiatives can improve public participation. After all, as Zavestoski et al. (2006) points, the “unreflexive” (and nondeliberative) use of the internet as a public participation mechanism will only serve to reproduce rather than mitigate the same problems that make public decision making so debatable.
Although it is possible to find in the literature other concerns and barriers (e.g. Coleman and Gøtze, 2004; OECD, 2004; Pratchett et al., 2005), the most commonly challenges referred to are outlined here:

- **Institutional scepticism**

  Some policy makers are fearful that online public engagement might comprise a threat to effective policy making and good governance. They see online participation as undermining the system of representative democracy and sidelining them from their role as interpreters of the public voice (Coleman and Gøtze, 2004; Sommer, 2007).

  The solution is not for elected representatives to reject public engagement as a challenge to their legitimacy, but to use public engagement as a way of strengthening the authenticity and the quality of their representative mandate, by developing more informed, publicly supported policy options (Glickin, 2000; Coleman and Gøtze, 2004). After all, public participation in general and, also online participation, can improve the quality of policy making by allowing citizens to deliberate on the issues that concerns them and by allowing them to provide feedback to their representatives before the final decision is taken. Hence, we would argue that public engagement is not replacing the role of elected representatives, but complementing it.

- **Representation and legitimacy**

  A question raised in any e-engagement initiative, and in the use of online spaces for citizen participation, is of how representative the results are. It is typically argued that not enough citizens are involved, being left out of the discussion because they do not have the access, skills, or motivation necessary to participate in these forums (in OECD, 2004). Politicians are also concerned about participants and active minorities seeking to undermine representative government by claiming unique legitimacy and speaking on behalf of other citizens, achieving this way an influence far beyond their number (in Coleman and Gøtze, 2004).

  In e-engagement initiatives, the issue of representativeness can be related, not only with the type of online technology used, but also with the format in which it was implemented. If governments are concern with representativeness, the solution can pass by implementing other types of technologies or by re-designing existing methods or techniques in order to accommodate the random selection of
demographically participants. For instance, the implementation of an e-Panel (see section 3.5.1) can allow governments to promote online deliberation among a representative sample of the population.

- **Citizen’s expectations**

As pointed out in Section 2.4, one of the biggest challenges of public participation is managing citizens’ expectations. With the advent of ICT, this concern takes another dimension. The promises raised by ICT and the expected variety of new opportunities for public participation from its use might set the expectations of citizens too high. If not handled correctly, these excessive expectations can lead to public disappointment and a generalised sense of deception regarding new ICT. Transparency is the mean to avoiding such disappointment: there must be an explicit relationship between the public engagement activity and the policy outcome: “[...] Democracy is not just a deliberative chat; deliberative input must bear some relationship to decisions actually made” (Blumler and Coleman, 2001).

**Box 3.2 – What citizens need to know.**

<table>
<thead>
<tr>
<th>If citizens are to be brought into the decision making process, it is important for them to know:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of information does the government requires from them?</td>
</tr>
<tr>
<td>How much of what they say can they expect to be used by decision-makers?</td>
</tr>
<tr>
<td>How much genuine interaction can they expect to have with politicians?</td>
</tr>
<tr>
<td>In what form, and within what timeframe, can they expect a response to their deliberations?</td>
</tr>
<tr>
<td>How will the consultation engagement be evaluated, and by whom?</td>
</tr>
</tbody>
</table>

Source: Adapted from Coleman and Gøtze, 2004.

- **Scalability**

The internet’s capacity to enable many-to-many discussion is questioned by some, who argue that deliberation is best conducted in face-to-face settings involving relatively small numbers. Essentially, such critiques question the
possibility of genuine deliberation on a large scale (in Coleman and Gøtze, 2004). According to those, in such environment, the opinion of an individual citizen is unlikely to make a difference to the outcome once it can be easily lost in the overall debate.

Coleman and Gøtze (2004) suggest that the problems of scale can be overcome by the possibility of asynchronous online engagement. In the view of the authors, the best deliberative results in an online discussion are often achieved when messages are stored or archived, and commented only after the participants have had time to reflect on them. The moderation and mediation mechanisms are fundamental to the success of mass asynchronous dialogues, but then are rules, procedures and protocols essential to the success of face-to-face debates.

The approach is to design technology to support the management and moderation of inputs of hundred or thousand of participants and to assist citizens to find their way through the amount of contributions, pointing others that share a similar point of view that can be further developed (OECD, 2004; Macintosh, 2006).

**Digital divide**

The digital divide refers to the gap caused by unequal access, lack of proper infrastructure and low adoption of technology, in particular of the internet (see for instance, Servon, 2002; Warschauer, 2003).

Initially characterised by policy makers and the media as the gap between the “haves” and “have-nots” regarding the access to internet (see for instance, Compaine, 2001; Servon, 2002), proposed solutions and policies to address it where focused essentially on the problem of access, having little effect.

Rather than just being a binary divide, the digital divide embeds a complex set of factors. As Warschauer (2003) notes, meaningful access to ICT comprises more than merely providing computers and internet connections, and factors such as content, language, literacy, education and institutional structures should also be taken into consideration.

Servon (2002) presents the interaction of the following factors as a reason why certain groups remain unable to participate fully in the information society:
- **Market forces**: Although computer prices have dropped steadily in the last years, the price of maintaining them, to purchase software, to buy peripherals and to pay for monthly internet access still makes them a luxury for many low income families.

- **Unequal investment in infrastructure**: Private companies investments in infrastructures in done essentially in the areas that most likely will yield high returns. Hence, the investment in high-end telecommunications infrastructures is much lower in poor urban areas and rural regions than it is in wealthier areas.

- **Discrimination**: Those who are already marginalised have fewer opportunities to access and use computers and the internet. For instance, schools in low income areas are much likely to provide quality access, training and content that schools in wealthier districts.

- **Insufficient policy efforts**: Existing public sector attempts to address the technology gap demonstrate a failure to understand the complexity of the issue. Policy makers’ efforts where focused essentially on access, addressing the problem narrowly and incompletely.

- **Culture and Content**: The shape of ICT tools and the landscape of the internet must reflect the needs and interests of diverse populations in order to attract a diverse group of users.

Research conducted by Foley et al. (2002) goes a little further and highlights socio personal factors such as levels of interest, awareness, understanding and acceptance of ICT also as important barriers to the adoption of ICT by socially excluded groups.

It is evident that not everyone has the means and skills to use technology and, if care is not taken when employing ICT in e-participation initiatives, rather than helping bridging citizens and strengthen the democratic process, the effect might actually be the opposite and wider even more the existing gap. However, the solution to the problem of digital exclusion does not lie in abandoning the internet as a tool for democratic engagement and deliberation but encompasses the creation of new opportunities for reaching those excluded of the information society. As Jarboe mentions (cited in Warschauer, 2003), in order to promote the inclusion of marginalised groups it is necessary to “focus on the transformation, not the technology”.
It is unquestionable that in order to shrink the digital gap it is necessary to provide alternative means of access. However, it must also be unquestionable that activities as raising awareness and providing training and the development of basic ICT skills also present an important role in widen the use of digital technologies.

- **Information Quantity and Quality**

The online engagement of hundred or thousands of citizens can increase significantly the quantity of comments received by governments. This creates a new challenge for governments: the management and analysis of the information received, and the rapid feedback to citizens.

Although an increase in the quantity of information received can also mean a greater variety of comments and, consequently an increase in the overall quality of information, the opposite can also happen: that only few of the comments received contribute in fact with new and unique information to the process and governments face the arduous task of finding these relevant comments. On the other hand, if commentary is homogeneous, it gives also indications of general shared consent.

Lukensmeyer and Torres (2006) argue that "the quantity of public input and its quality are functions of the thoughtfulness and diligence of the process through which engagement is sought". When designing online deliberation and consultation processes, a great care has to be given to the entire process of collecting and mining of information. “Through better structured processes, online tools can be used to gather meaningful and useful input from the public without overloading the administrative process” (Lukensmeyer and Torres, 2006).

- **Evaluation**

As governments started increasingly to developed e-engagement initiatives on policy related matters, the need to learn from these experiences also increased. In order to avoid past mistakes and to improve current and future e-participation initiatives, its important for governments to understand and assess the benefits and impacts of applying technology to the decision making process, and to realize whether such electronic engagement meets the citizens and governments objectives and expectations (OECD, 2004; Macintosh, 2006).
However, as Macintosh and Whyte (2006) note, rigorous evaluations of e-participations initiatives are hard to find. Despite the growing of academic literature on e-participation, few are the papers that demonstrate the use of evaluation approaches in practice and that discuss and propose methodological frameworks of evaluation.

The evaluation of e-engagement on policy making is a complex research question for a number of reasons (OECD, 2004):

- The effectiveness of traditional offline consultation and deliberation is itself not clear;
- In order to make a rational assessment, the points of view of both neofuturists and dystopians\(^{11}\) have to be put aside;
- Political, technical and social evaluation perspectives have to be taken into account.

Considering also that it is difficult, to some extent, to assess the impact of e-engagement initiatives on policy making in a stand alone context, “their influence on government work needs to be judged in comparison to the impact and success of existing offline [and online] engagement tools” (OECD, 2004).

The lack of an accepted framework on how to assess the impact of e-engagement initiatives is one of the biggest setbacks in evaluating and analysing the democratic participation and its effects on policy by different initiatives. The evaluation criteria presented by Rowe and Frewer (2000) (see Appendix C) or the e-methods approach defended by Macintosh et al. (2005) (see Appendix D) can both serve as an evaluation framework of e-engagement initiatives and set the standards for a common evaluation methodology.

The list of key questions presented in Table 2.4 of Section 2.6.9, complemented with the list of evaluation issues suggested in Appendix E, can also be used as guidelines by practitioners in the review and evaluation of e-participation processes while there isn’t a generally accepted framework for evaluation.

Like any other consultation or public participation process, when designing and conducting an e-participation exercise, serious thoughts have to be given to the

\(^{11}\) Wilhlem in OECD (2004) refers to neofuturists as those who champion the new technologies without considering the socio-economic constraints barriers on their success and dystopians as those who are too quick to criticise technologies.
methodology, the quality of the discussion and comments, the audience and target group of the exercise, and to where the different types of communication are best used (OLT, 2001).

Box 3.3 presents some general guidelines that could be taken into account when designing an e-engagement process. Some of the points presented will be further discussed in Section 3.6.

**Box 3.3 – Guidelines for a successful e-engagement initiative.**

1. **Start planning early**
   Start planning the e-engagement process early on. Define what information should be provided to the target group, and in what format. Decide how long the exercise should be run, who will be responsible for it and how the input received will feed into existing timetables for decision-making.

2. **Demonstrate commitment**
   Ensure leadership and visible commitment to the e-engagement process at the highest level and communicate this clearly from the outset. Explain the purpose of the exercise (e.g. scoping new policy issues, developing draft legislation, evaluating policy implementation), where the results will be published and how they will be used.

3. **Guarantee personal data protection**
   Guarantees for the protection of personal data must be provided for participants in online engagements. The implications for personal data protection will vary with the form of data collection chosen (e.g. anonymous submissions, online registration or password access for restricted groups).

4. **Tailor your approach to fit your target group**
   Identify the participants whose opinions are being sought (e.g. general public, experts, youth) and adapt the online exercise to their capacities and expectations (e.g. language, terminology). Provide additional support to enable participants with special needs (e.g. physical disabilities, social exclusion) to participate.

5. **Integrate online exercises with traditional methods**
   Consider the use of traditional methods in association with the online process (e.g. public roundtables plus dedicated websites). An approach based on multiple channels is likely to be more successful in reaching and engaging citizens than reliance upon a single medium.

(Continued)
6. Test and adapt your tools
Before launching the e-engagement exercise, ensure that the tools chosen (e.g. software, questionnaires) have undergone pilot testing. Adapt the tools on the basis of feedback from participants and identify promising ICTs for future initiatives (e.g. mobile phone messaging).

7. Promote your online exercise
Invest adequate effort and resources to ensure that potential participants are aware that the e-engagement exercise will be launched and know how to take part (e.g. press conferences, advertising, links to websites, emails). Identify external partners who could help raise awareness and facilitate participation (e.g. NGOs, business associations).

8. Analyze the results
Ensure that sufficient time, resources and expertise are available to provide thorough analysis of the input received in the course of the online exercise. The use of closed or multiple choice questions will allow for automatic processing, while free text replies will require a far greater investment in human resources. Such considerations should be taken into account from the outset when designing the process.

9. Provide feedback
Publish the results of the e-engagement initiative as soon as possible and inform the participants of the next steps in the policy-making process. Ensure that participants are informed of how the results were used in reaching decisions.

10. Evaluate the e-engagement process and its impacts
Process evaluation aims to identify the main problems encountered, whether the process reached the target group and the level of participant satisfaction. Evaluating the impact of a public participation process requires an estimation of whether participants’ input had an identifiable impact on the content of the final policy decision. Evaluation results should be communicated widely and may, in turn, prompt fruitful public debate on the benefits and drawbacks of online deliberations.


3.4 Advantages
Online technologies offer some new and unique characteristics which can improve and widen the involvement of citizens in public policy making. The ability of web-base technologies to both “timeshift” (make content available at any time) and “placeshift” (make content available anywhere) is presented as one of the major advantages of web-
base technologies. This ability associated with the fact that online tools are becoming cheaper, easier to use and less demanding in terms of computer requirements, create a new role of opportunities for citizens to find, follow and contribute more easily to the debates that really concern them personally.

According to relevant literature (e.g. Gualtieri, 1998; Blumler and Coleman, 2001; OECD, 2001; Ferguson et al., 2007a), the mains advantages of online technologies can be pointed as their ability to:

- **Transcend time**: The use of online technologies in public participation makes it possible for participants to discuss over extended periods of time (hours, days weeks or months), lengthening the potential window during which the debate can occur. This gives time for a reflective deliberation and space to develop evidence and argumentation.

- **Transcend place**: Through the use of online technologies, public participation can be open to all citizens, regardless of their geographical location. They can also allow the organisation of venues that otherwise would not take place due to budget constrain or people availability. Localised issues can also be given an international exposure, while international stories can be given a local angle.

- **Provide new forms of interaction**: Web-based technologies allow the combination of different types of information in different media forms. Policies and issues can be presented in a more attractive and engaging way using various media, such as audio or video, instead of just written material. The information can then be easily linked and supported by other materials allowing more interactivity and choice for the user in how to receive it and react to it. However, special care needs to be taken in order to assure that the use of these media will not exclude a specific group, such as those with impaired vision.

- **Organise information**: Digital technologies have the capacity to handle contributions from large number of people whereas traditional methods have difficulty in doing this. Moreover, they allow the effective organisation of information in different ways at same time. For instance, it is possible to use simultaneously support hierarchies, such as site maps, and associative structures, such as indexes and cross-links, even with low level of information. This allows governments to provide and organise information in new, user-friendly ways.
- **Connect citizens:** Online technologies can provide the means to connect citizens around a common issue. Blummer and Coleman (2001) state that although online engagements usually tend to begin by being only focused on a local issue, they tend to develop into a broader network, involving both online and offline connections between a range of people who would not have otherwise met and discovered what they shared. Also politicians, who might not otherwise interact directly with citizens, often find themselves in a position of unusual political relationship with people who had traditionally formed part of their passive audiences.

- **Lower participation costs:** By allowing remote and distributed e-participation sessions to take place, online technologies can lower the associate costs of public participation, such as:
  
  - Accommodations and travel costs;
  - Fees and stipends (e.g. experts and citizens compensations);
  - Cost of renting the event site;
  - Cost of provisions during the event (e.g. coffee breaks and meals).

Also, as mention previously, the necessary software to host and support e-participation events are becoming cheaper and less demanding in terms of hardware requirements.

Nevertheless, the implementation of e-participation processes and the use of online technologies should desirably be done in parallel with offline participatory processes and both should complement and support each other.

### 3.5 Technologies for Online Engagement

e-Participation is a field which is rapidly evolving as seen by the growing number of public participation initiatives innovatively using technology to engage citizens in policy making (see for instance, Smith, 2005; Ferguson et al., 2007b; O’Malley et al., 2007). Furthermore, these examples demonstrate how technology can be applied as a mean to provide citizens with the capacity to actively influence decision making.

The number of online technologies and tools currently available to government organisations is already high, as the range in which they can be applied in e-engagement initiatives. Therefore it is important to select the right model of participation for the right situation and outcomes. Furthermore, the choice of the online technology should also account the support and enhancement of the normal offline policy making process.
Research developed by Wimmer (2007) characterised different commonly used tools in e-participation initiatives into three distinct groups (see Appendix F). The classification presented here was inspired by the author’s work, though a new designation of the groups and arrangement of certain tools is proposed.

The goal of this new characterisation is, firstly to establish a clear distinction between e-participation techniques and online technologies (or tools) and; secondly to divide and classify the different online tools and technologies according to the active role they can enable users in an e-participation initiative.

Under this classification, while an e-participation technique entails the implementation of a structured methodology which is associated to the use of one or more online technologies or tools, online technologies or tools refer to the technology (or tool) itself that can be used under the context of e-participation.

Hence, the proposed classification is based on the following groups:

- e-Participation Techniques;
- Enabling Technologies;
- Support Tools.

### 3.5.1. e-Participation Techniques

Online techniques used to address the citizens. It presupposes a methodology specifically developed for public engagement and the use of one or more online tools.

**e-Focus Groups**

Like face-to-face focus group (see Section 2.6.7 - Table 2.2), online focus groups, or e-focus groups (see Lobo and Guimarães Pereira, 2005; Rosa et al., 2006a; 2006b; 2006c; 2007), are small group discussions about a pre-defined issue. Each session has at least one moderator and several participants who meet in a virtual room that offers the means for an online informed debate.

When invited to participate in an e-focus group session, participants are given a username and a password to access a secure website on which the e-focus group will occur. During the session, every participant can see the responses of the others, and they are asked to respond to these views as well as to the initial question posed by the moderator. In addition, the moderator can ask new questions as the discussion develops, in order to look into areas of particular
interest, or to gain further information on new topics that participants introduce to the discussion. In this way, a real-time, dynamic discussion develops between the moderator and the participants, just as would be the case with a face-to-face focus group.

Initially e-focus groups were base essentially on chat room technology (Sweet, 1999), however, today, online venues evolved from simple chats to fully multimedia platforms incorporating audio and video, allowing file sharing, displaying users statistics and offering several collaborative features like whiteboards.

**Online Surgeries**

Online surgeries are online chat sessions specifically designed to support elected representatives in the engagement with the citizens they represent. The online chat sessions are run as special events which take part on a particular day, at a scheduled time, usually over an hour. Both parties connect into the session on the selected day and time, and deliberate on the issues of interest in their local area. A receptionist manages the process (ICELE, 2008a).

**Box 3.4 – Case Example: Linking up young people with politics in Kingston upon Thames (United Kingdom).**

**Description**

In April 2003 the Hansard Society ran a series of pilot MP Cyber Surgeries which appealed to different constituents to those who attend offline surgeries or write to their MP (Member of Parliament). To follow on from these successful pilots, they proposed a trial targeting young people to investigate using online technology to increase political engagement and make it easier to access their elected representatives.

**Methodology**

Secondary schools in Kingston upon Thames were approached to take part in the online surgery trial, as part of their citizenship programme. The preparation for five online surgeries (occurring from September 2004 to March 2005) was then taken. Local representatives were recruited to take part in the surgeries and were provided with phone training from the Hansard Society. At a minimum there were two levels of government for each surgery: local (Continued)
councillor and an MP or a Greater London Assembly member.

Prior to the surgery, a workshop was held with students to raise their knowledge about Councillors and MPs, and to help them brainstorm questions to ask during the surgery. Profiles of the representatives were distributed either during the workshop or on the day.

Students gathered around computers on the scheduled day, and entered their name and question or topic into an online chat screen. Their request was sent to Hansard Society staff (in their offices) that helped them articulate their question within the chat environment, and transferred them to an appropriate representative (who was accessing the chat from their home, work, council office or electorate office). Once transferred, the student/s and elected representative had a private one-on-one chat about diverse issues including graffiti, drugs, voting, careers, etc. After the discussion, students could be transferred to another politician.

The transcripts of the discussion were available to students immediately after the chat and were afterwards analyzed to provide understanding of the content and quality of the deliberation in the online surgeries. In addition, surveys were conducted with the students before and after the surgery, and with the politicians and teachers after the surgery. The surveys questioned their knowledge and views about politics, level of democratic engagement and use of computers.

**Achievements**

The online surgeries provided young people with an opportunity to directly raise a range of issues they were concerned about, or interested in, with their elected representatives. By referring to the representatives’ profiles, students could tailor their questions to specific representatives which resulted in a more meaningful debate. In its turn, the surgeries provide councillors with the direct contact with young people within an environment that the young people feel comfortable with. They provided an opportunity for councillors to talk with young people about key policy issues affecting young people, and to hear the issues that young people are most concerned about. It aided councillors to be more informed of the concerns of the younger constituents in their region and events in their community.

Source: Robertson, 2005.
e-Panels

An e-panel consists of a randomly selected set of recruited participants who have agreed to give their opinion on a variety of issues on a regular basis using the internet as the communication channel (see for instance, Göritz et al., 2002).

An e-panel works by bringing together several tools of online participation such as discussion forums, deliberative polling tools, expert online chats and e-consultation specific software, along with the capability for panel members, if required, to connect with each other, deliberate, form alliances and create action campaigns (ICELE, 2008b).

For instance, online surveys or quick polls can be used to collect and analyse rapidly the opinion of the panel over an issue. However, these tools do not allow the interaction between the panel members and, normally, the responses of each member will not be available to the others.

If governments require an increasing level of participation from the panel, the use of online discussion forums or online chats can enable the discussion and deliberation between the panel members, with each other and with the decision makers’.

Box 3.5 – Case Example: Sustainable Development Commission Panel (United Kingdom).

Description

The Sustainable Development Commission (SDC) is “the government’s independent watchdog on sustainable development”, reporting to the Prime Minister and the First Ministers of Scotland and Wales. Its aim is to put sustainable development at the core of government policy through advocacy, advice and appraisal.

To inform its work, the SDC established a stakeholder e-panel (http://www.sd-commission.org.uk/pages/sd_panel.html) in September 2006. So far has recruited nearly 600 members, and aims to recruit further 400 by 2008. Participants are selected for their interests and expertise, rather than as representative members of the public.

In one of the last online consultations undertaken, the SDC engaged with its
stakeholder panel through a pilot online consultation entitled “Redefining Progress” that aimed at advising the government. The consultation covered the following themes:

- What should progress mean?
- Economic growth as progress;
- The concept of wellbeing;
- Defining and measuring wellbeing;
- Wellbeing use and implications in policy making;
- Government’s role in shaping progress.

**Methodology**

During the consultation “Redefining Progress”, there were three structured panel sessions (running for three weeks each) and a simultaneous open forum.

In the first session, panel members were required to answer a number of open-ended questions, which focused broadly on defining progress and wellbeing. Panel members were entitled to give one answer to each question but they were not obliged to do so.

Before taking part the second session, participants were allowed to read a summary of contributions made by panel members during the first session. Afterwards, they were asked to comment on these and asked a further set of questions on measuring wellbeing. In the second session, a deliberative forum ran alongside the panel. Its purpose was to allow participants to discuss areas that had not been raised in the consultation questions.

In third and final session, participants were asked to review the points raised in the previous session. At this stage, they were also asked to evaluate the consultation process.

Registration was required prior to participation and was limited to panel members. SDC staff facilitated the discussion, but the website design and panel recruitment were undertaken by a third party external provider, Dialogue by Design, who developed the consultation with the SDC. Dialogue by Design also collected feedback on panel members’ experience of the consultation, focusing on its clarity and the design of the website.
Achievements

The structure implemented in the consultation allowed for a broader range of relatively in-depth views to be discussed and, having a defined group helped to create the conditions for an engaged and interactive community between the participants and the SDC staff. Also, as panel members meet online, a greater numbers of participants could be brought together more regularly than if the initiative was done offline.

A report outlining the main findings from the e-panel was produced. This report aimed at:

- Provide recommendations to the government;
- Inform the position of the panel to the Whitehall Indicator Group on wellbeing indicators;
- Advise on wellbeing policy across government departments.

Source: Ferguson et al., 2007b; SDC, 2006.

e-Petitioning

e-Petitioning systems are internet based application which allows the posting of petitions online and where other citizens can show their support by signing them in (see for instance, McMahon, 2004). A well designed e-petition contains a thought of the rationale of the petition, the name of the owner, the opening and closing dates, and a list of the supporters. The greater the number of signatures the more likely the e-petition is to be considered and to have an impact (Involve, 2008a). Hence, the authenticity of the signatures should be checked but as e-petitions only have the informative role of present an issue to the government, opposed to the role of presenting an issue that will become legally binding, the level of confirmation does not need to be high (Macintosh et al., 2005).

Additional features can be used to enhance the quality of e-petitions and the transparency of the process (see for instance, Macintosh et al., 2002). The incorporation of an online discussion forum can allow users to voice their support or concerns about the e-petition or, the summarisation of the user statistics can provide an idea of the number of signatures and their geographic locations based on postcodes.
In practice, the e-petition service provides an opportunity to open up democracy to citizens who might not otherwise engage and allows members of the public and councillors to review the outcomes of petitions that have been submitted. The power of the petition is a growing agenda but of yet there is no requirement to act (ICELE, 2008c).

**Box 3.6 – Case Example: 10 Downing Street e-Petitions (United Kingdom).**

**Description**

The Downing Street website was set up to provide the public with information about the role and activities of the Prime Minister (PM).

Gradually, the functionality of the site developed from performing a purely information-provision function, to allowing users to engage in more interactive ways. These developments included the creation of an e-Petitioning system ([http://petitions.pm.gov.uk/](http://petitions.pm.gov.uk/)).

The Downing Street e-Petitions system allows citizens to create and sign petitions on the website, giving them the opportunity to reach a potentially wider audience and to deliver the petition directly to Downing Street.

**Methodology**

The service allows any UK citizen to create a petition and collect signatures via the website. Any citizens can view and sign any current petitions, and see the Government response to any completed petitions. When a petition reaches more than 200 signatures by the time it closes, a response from the Government is sent by email to the author.

All the petitions that are submitted to the website are accepted, as long as they are in accordance with the terms and conditions imposed by the system. The aim is to enable as many people as possible to make their views known. The principal reasons for rejecting petitions so far have been obscenity, potential to cause offence, libel or duplication.

To ensure transparency, any petition that cannot be accepted will be listed, along with the reasons why. A list of rejected petitions is available on this website. If a petition is rejected, petitioners are given a chance to reword their petition.
Achievements
Since its launch in November 2006, the ePetitions site has proved to be a highly popular innovation, helping people communicate with Government and with the Prime Minister’s Office. ePetitions has become a part of the landscape of debate in the UK.

Over 29,000 petitions have been submitted, of which over 8,500 are currently live and available for signing, over 6,000 have finished and 14,601 have been rejected outright. There have been over 5.8 million signatures, originating from over 3.9 million different email addresses.

Source: 10 Downing Street, 2008a; 2008b.

Box 3.7 – Case Example: Scottish Parliament e-petitioner system
(United Kingdom).

Description
The Scottish Parliament e-petitioner system (see http://epetitions.scottish.parliament.uk) was launched in February 2004, providing citizens with a means to voice concerns through formal processes of Parliament.

Petitioning is a simple and straightforward means of democratic participation and citizens have long used this mechanism as a means of raising issues of concern with their elected representatives. In developing an e-petition system the Scottish Parliament is using technology to a rich historical tradition of political engagement with which citizens can easily identify, lowering the time and space barriers to participation, as well as providing greater accountability by establishing a transparent process whose results are published online.

Methodology
e-Petitioner draws on the familiarity of the petition format and builds it into an accessible and transparent political process. A key factor to this process is that once the e-petition has been submitted the petitioner continues to have an active participatory role. First, in terms of being able to respond to comments made on the discussion forum; an e-petitioner is able to deliberate issues raised by a petition with a wide range of citizens. Second, an e-petitioner may
have the opportunity to come and give evidence to the Public Petitions Committee in support of his or her petitioner. Third, a petitioner may provide further written evidence by e-mail or in writing to the Committee. Fourth, the petitioner may have the opportunity to respond to issues raised by the Committee’s investigation of the petition. Finally, the petitioner may also be called to give evidence to a subject committee to which the Public Petitions Committee has referred a petition.

Achievements

In its first 12 months, e-petitioner attracted 20,812 signatures and 639 discussion comments, on 45 e-petitions. e-Petition impacts included getting issues debated in Parliament, getting other public bodies to take action, and changing draft legislation.

The e-petitioner system has made a real and beneficial contribution to public participation in the Scottish Parliament’s decision-making. The impact of the Scottish Parliament system may be judged in terms of the evident willingness of the PPC and Parliament to innovate. More specifically it has been assessed in terms of:

- the views of the Scottish Parliament’s members on how well the system has met its objectives;
- petitioners’ perceptions of the effectiveness of e-petitions they have raised;
- the views of other citizens on the system’s value, particularly those who have signed e-petitions;
- third-party reports, for example in the media and in academic publications.

The issues raised through e-petitioning are issues that are important to citizens, and are evidently addressed through local authority decision-making. e-Petitions were raised on, for example, road crossings, telecoms masts, and Post Office closures. The e-petitioning pilot has increased transparency in part by formalizing the process for handling petitions for the first time. The publication of the site and its associated guidelines on petitioning makes both the process and the petition outcomes more visible. The added visibility applies to paper as well as e-petitions, since paper petitions that are presented at Council meetings are also listed on the e-petitioner page.
Finally, the impact of e-petitioning is especially evident in the extent of interest in the system from other Parliaments and legislatures.


**e-Deliberative Polling**

e-Deliberative Polling combines online deliberation in small discussion groups with random sampling (see for instance, Iyengar et al., 2003). A diversity of tools can be used to support the e-deliberative polling process, namely online surveys, discussion forums and chats.

As in the traditional approach to deliberative opinion polling (see Section 2.6.7 - Table 2.2), participants are randomly assigned to small groups which deliberate for around two hours per week over a four week period. During this period, participants have the possibility to question specific experts and policy makers on the issues under deliberation. At the end of the period, the (post-deliberation) opinions of citizens are surveyed.

Compared to traditional online discussion forums that tend to attract like-minded citizens, the selection process of an e-deliberative polling ensures that deliberations reflect a diversity of perspectives (Smith, 2005).

**Box 3.8 – Case Example: Urban gulls in Bristol (United Kingdom).**

**Description**
From 7th January 2005 to 24 February 2005, the Bristol City Council launched an online deliberative pooling to assess if the City Council should introduce strong measures to control the population of urban gull in Bristol in response to the increasing number of complaints about the gulls’ behaviour.

**Methodology**
The Bristol City Council used the software eDecide from Community People to present a series of opposing arguments from a pest control expert and from The Royal Society for the Protection of Birds (RSPB).

Participants were asked to answer the Yes or No question “Should Bristol City Council introduce measures to control the gull population in Bristol?” and (Continued)
accordingly with their response they were presented with three arguments, prompted by the answer, but arguing in the opposite point of view. This ensured that both sides of the debate were presented to the participants, encouraging a more informed consultation.

Participants were presented with this choice throughout several rounds and only their last choice as recorded as their view on the issue. At the end of the process, participants could view the results of the poll. It was also possible to take part in an online discussion and pose questions and arguments to the experts.

**Achievements**

According to the official results, 116 citizens participated in the initiative, where 56% voted yes and 44% voted no.

The main points raised in support of the proposal were:

- Introduce by-laws to prevent people feeding gulls and to better control businesses who leave out food;
- More research into gulls’ food sources is needed;
- The council should extend the proposal to control the pigeon population;
- The council should consider subsidizing the installation of netting and other measures to prevent gulls nesting on roofs.

Source: Askbristol, 2005; Bristol City Council, n.d.; O’Malley et al., 2007.

**e-Consultation Software**

Web applications designed explicitly for consultation purposes which allow a stakeholder to provide background information on an issue and ask a group of citizens their opinion, by means of answering to specific questions or by submission of open comments (Involve, 2008b).

The implementation of e-consultation specific software’s can take different forms. Complex methodologies involve the use of structured templates and of applications designed to simulate the face-to-face methods used in facilitated workshops. Different templates can be used, for example, to allow participants to
brainstorm ideas, identify issues, prioritize solutions, or comment on consultation documents (Involve, 2008b).

This type of software specifically designed for e-consultation initiatives makes it possible for participants to comment the issues in detail and, for those organising the process to collect the responses immediately and to present the results back to participants in a quickly, comprehensively and transparently way.

**Box 3.9 – Case Example: Royal Borough of Kensington and Chelsea (United Kingdom).**

**Description**

This e-consultation project addressed the citizens of the Royal Borough of Kensington and Chelsea had two main goals. Firstly, Kensington and Chelsea wanted to get the views of the community and key stakeholders on their strategy for Implementing Electronic Government, which, at that point, had not been widely consulted on. This included getting people to think about e-enabled government and how it might affect services and service users.

Secondly, the e-consultation offered an opportunity to evaluate the potential of the internet for improving this type of detailed consultation process. The intention was to see whether using online technologies would increase the number of people taking part in consultation, and whether it would help to make it more of a two-way process. The project was evaluated both from the council’s point of view and from the perspective of the participants, with a view to developing a model for using the internet in the consultation process in future.

**Methodology**

Local people were invited to take part through the Borough’s Residents’ Panel (a group of about 1400 residents representative of the local community) and through community and voluntary organisations, and local businesses. Key stakeholders, for example, from the health authority and police, and council staff, were also involved. In total 246 people participated in the consultation.

Participants were encouraged to make use of free internet facilities and support available in local libraries. Hence, the minority without home internet access could still take part. Altogether about 30 people on the Residents’ Panel opted (Continued)
to use library facilities and 18 went on to contribute their response in this way.

The Borough worked with a consultancy, Dialogue by Design, to produce a wide-ranging web-based consultation process for the public. A model was adapted to get people involved in a difficult topic, and the website was intended to make the e-consultation process as accessible as possible to people with little experience of using technology or the internet.

Two sessions were included:

− For the consultation on the Implementing Electronic Government Strategy, registered participants were able to log in to the site as many times as they liked over a ten-day period, read the consultation text and respond to a series of questions. They could then re-read and amend their responses up until the closing date. They were contacted via email during this period to remind them about deadlines and to update them on how many people had responded. Phone and email help lines were provided for help with any problems.

− In a second session the participants could see the results of the consultation online. They could view individual responses, grouped by question and by theme, and could download a summary of the results. In the end, they could give views on the consultation process itself.

**Achievements**

The results showed that the members of the public are willing and able to participate in well-structured online discussion, even when the topic is complex. The consultation results have led to significant changes in the e-government strategy, with more emphasis being placed on social inclusion.

Information was obtained from everyone taking part, not just the more vocal or visible. This information could also be fed back to the people who had contributed, encouraging their sense of ownership of the process and making it clear that the information they provided was being used. The window of time during which consultees could participate was increased, allowing better quality, more thought-out contributions. And the widening of opportunities to take part helped to avoid certain groups suffering from participation overload. Over 90 per cent of those taking part said that they would be happy to participate in similar consultations in future.
The Project proved that e-consultation can make a significant contribution to the consultation process, though it is unlikely to replace traditional methods until more people have access to the technology.


**Decision-Making Games**

Decision making games typically allow users to view and interact with animations that describe, illustrate or simulate relevant aspects of a policy decision making issue. Users can be presented with a graphical representation of a place or situation and various options that, when selected, change the representation in some way to simulate the effect of real life decision making.

The overall design of the game is important, as it has to be visually attractive and entertaining whilst being realistic and informative. The content, level of difficulty and types of interfaces are dependent on the target audience (Macintosh et al., 2005).

Decision-making games are in general designed for individuals rather than groups of players and as such any responses to quizzes or questionnaires that form part of the game are not shared with the others participants, being transmitted only to the “game owner”. Nevertheless, it is possible to have also multiplayer games where the participants adopt roles and characters that are represented online as cartoon like figures. Participants have then to decide and select, in co-operation or competition, the best course of action (Macintosh et al., 2005).

**Box 3.10 – Case Example: Demgames (United Kingdom).**

**Description**

The Demgames ([http://www.demgames.org/](http://www.demgames.org/)) project has been developed as part the Office of the Deputy Prime Minister’s Local e-Democracy National Project, exploring how digital technology can be used to engage people in democratic processes.

In the website is possible to find 3 different games that aim to inform young people about key aspects of the UK political process in a fun interactive way (ODPM, 2004). The games are:
- **Captain Campaign**

  The basic premise of the game is for players to set up their own campaign on either a community, local or national issue and then face a number of core challenges associated with the campaign trail: for example working out a fund-raising strategy or taking part in a town hall debate.

  The game has been designed to help young people understand in depth the different types of activities and considerations involved in campaigning on issues, and how they can become an active citizen.

  In particular, it emphasizes that in this key component of modern democracy an advocate must compete with people who oppose his or her view when trying to influence decision-makers. It also highlights the importance of communicating well with politicians and the public.

  When playing the game, young people learn about:

  - the different types of issues that affect different levels of government;
  - the tasks involved in running a campaign e.g. poster design, fundraising, debating, lobbying;
  - the different considerations / issues involved in running a successful campaign e.g. the need for different skill-sets.

- **Councillor Quest II**

  The basic premise of the game is that players are put in the position of a councillor for the day and have to complete various tasks throughout the day.

  The idea of the game is to help young people understand the role of councillors in every day life, and give them an idea of the kind of decisions they have to make. The different kinds of tasks included in the game are: dealing with mobile phone theft in the local bus station, sorting out problems with a local night club, and addressing issues at the local school.

  The game underlines the fact that councillors are servants of their local
community and that their job is ultimately to keep electors happy. It also shows that councillors act within time constraints and must make good decisions in dealing with a wide range of local issues.

When playing the game, young people learn about:

- the role councillors play in local democracy;
- the dilemmas and issues of councillors’ everyday life;
- the kinds of skills and personal values that makes a good councillor.

- Money Manager (not described here)

**Methodology**

Each game is supported by a teachers’ resource pack (available on the Demgames website) describing an activity that allow schools teachers to integrate the game in their lessons. The idea is to run each activity as the first half of a citizenship lesson, while the second half of the lesson should be getting the students to play the associated game.

To reach the widest possible audience the games were made available online at [www.demgames.org](http://www.demgames.org) and also on CD. Moreover, Money Manager is also playable on compatible mobile phones.

**Achievements**

One of the features of the games is that they can be customized by individual organisations themselves through a dedicated user interface. To date, around one in four UK local authorities have done it. The games have also spread across the world, being taken on and promoted in countries such as Greece, Hungary and New Zealand. Web statistics show the site to have received usage from every single country in the developed world. The CD's have been distributed to local authorities and schools, and the games have consistently formed a key part of local democracy week for many UK authorities.

In terms of site usage, the site has had over 1.5 million unique users since its launch in October 2004, making it one of the most popular sites to come out of the entire Local e-Democracy National Project. A similar approach to learning through online gaming mechanisms has since spread across government, being
adopted by UK government departments such as DEFRA (e.g. www.myabodo.com).

Source: ODPM, 2004; Delib, n.d. a; Delib, n.d. b; ICELE, 2008d.

Box 3.11 – Case Example: Bristol Budget Simulator (United Kingdom).

Description

Budget Simulator (http://www.budgetsimulator.com/) is an online consultation tool developed by Delib to encourage citizens to interact with the budget decision-making process. It takes them through the different stages of the budgeting process and allows them to allocate budget resources and experience the outcomes of their decisions.

The Budget Simulator is designed to provide an easy introduction to complex council financial information, which needs to be understood before participants can make an informed response.

Methodology

From 8th February to 30th April 2006, the Bristol City Council invited members of the public to take part in a budget review that included the webcast of the council’s budget meeting, an online discussion forum and the Budget Simulator.

The simulator allowed participants to review the data by department. The role of each department was explained in brief including priorities for the forthcoming years and an example was given to provide guidance on costs for particular services. The participants were able to amend each department’s budget by increments of 5% and were then invited to comment on their proposed changes. Potential participants were told that the exercise would not influence the budget for 2006–2007 but would be taken into account for future budgets.

Achievements

Although this exercise had no influence in the final budget, it allowed its participants to understand key budget issues and the Bristol City Council to gather informed views on budget priorities.

Source: O’Malley et al., 2007.
**e-Voting**

e-Voting, under the context e-participation, refers to remote internet voting or voting via mobile phone, using a secure environment for casting and counting the votes.

Since this thesis mainly focus on citizen’s deliberation, the advantages and disadvantages of e-voting, along with its technological issues, will not be addressed.

### 3.5.2. Enabling Technologies

Technologies or tools extensively used in e-participation initiatives as part of an e-participation technique or as a complementary mean to address the citizens. These include:

**Online Chats**

Online Chats are internet applications that enable a pre-selected group of people to have a discussion on a specific issue. During the chat session, users are encouraged to write their opinions and thoughts which appear immediately on the others’ participants screen. Although chat rooms have been typically text based, they are starting to offer the possibility of video and audio broadcasts.

Usually participants are specifically invited to contribute to the discussions, but normally anyone can observe the proceedings online even if they cannot contribute. Alternatively, they can refer back to the chat since the information is available online after the event (Involve, 2008c).

Chat sessions are also characterised for being time specific (all participants must joint the session at a specific time) and time limited (usually lasting one hour at most).

Online chats offer its participants unique online experiences once they allow real time interaction and discussion, at a very low cost. In an engagement context, chats provide the opportunity for live question and answer sessions between experts or government personnel and participants, and also the opportunity for peer-to-peer interaction within communities. As such, they can help participants to understand better the perspectives of others (Macintosh et al., 2005).
Chat rooms can also have a “moderator” assisting the participants and controlling any disruptive behaviour.

**Box 3.12 – Case Example: Minister Van Boxtel Webchats (Netherlands).**

**Description**

In his role as the Minister for Inner City Problems and Integration of Minorities, and the member of the Dutch Government whose task it is to think about democracy, Minister Van Boxtel worked closely with the Institute for the Public and Politics (IPP) to create an inclusive and interactive online consultation: for six months from October 1999, Minister Van Boxtel participated in a series of live chats and web discussions.

**Methodology**

The live chats were with the Minister, a senior broadcaster, a moderator, and a typist. During the web discussions, the moderator was the medium through which the participants communicated with the Minister. It provided selected questions for the Minister’s attention to which he replied. The moderation meant that the Minister only saw those questions that the moderator considered relevant during the web discussions. However, the live chat sessions were set on an unmediated platform in which remarks, jokes and questions were all shown to him.

The web discussions had four categories of participants: the moderator, the politician, individual citizens (anonymity was possible) and civil servants. In these discussions, civil servants were mandated to participate as experts on a topic, thus bringing them out into the open.

A summary was available on the website each week to allow people who had joined in the middle of a debate to be aware of the issues at hand. It also provided a general idea of the arguments and comments already raised.

**Achievements**

It was estimated that approximately 50 people participated in the three debates that ran consecutively each month and there were about 200 messages. During the live chat there was twice the number of questions that the Minister could deal with: 40 to 60 questions could be tackled in an hour.

(Continued)
Some of participants did not have a participatory role, just showing interest in the initiative and in the issues raised.


**Box 3.13** – Case Example: 10 Downing Street Webchats (United Kingdom).

**Description**

The Downing Street website was set up to provide the public with information about the role and activities of the Prime Minister (PM).

Gradually, the functionality of the site developed from performing a purely information-provision function, to allowing users to engage in more interactive ways: for example, by taking virtual tours, or submitting and signing petitions. These developments also included the availability of webchats (http://www.number-10.gov.uk/output/Page11249.asp).

**Methodology**

Senior government ministers and officials were invited by The Office of the Prime Minister to utilize the webchat facility to discuss policy areas related to their work. However, all the webchats hosted had no direct policy impacts, providing essentially an opportunity for citizens to ask questions, and for these to be answered collectively by an appropriate government representative.

The webchats are publicly advertised and members of the public are invited to pre-submit questions, which are moderated by Downing Street staff prior to the webchat. Anyone is able to participate and view the webchats. The members of the public who have submitted questions (or simply wish to spectate) are invited to visit the website at a pre-set time to view the answers to submitted questions. A transcript of the chat is archived on the site for reference.

**Achievements**

Until today, forty-two webchats have been organised with government ministers and officials focusing on varied issues and topics.

However, several uses criticized the format of the webchat, questioning it in terms of quality and interactivity, stating it is not truly clear if ministers and
officials have genuinely participated. The webchats would have perhaps been more accurately described as an opportunity to “ask an expert”, rather than a webchat with the “real time” deliberative associations that the term usually carries.

Although the format might need to be developed, as an initial pilot exercise Downing Street should be positive about the webchat experience and confident about the reception of similar activity in the future.

Source: Ferguson et al., 2007b.

**Online Discussion Forums**

Asynchronous web-based applications for online group discussions where users can exchange open messages around specific issues. It usually shows a list of topics people are concerned about, and users can pick a topic, see a “thread” of messages, reply and/or post their own messages. Normally discussion forums are open and anyone can read the comments. However, users usually have to be registered in order to post and reply to comments.

Because members may miss replies in threads they are interested in, many discussion forums offer e-mail notification feature, which users can subscribe to be notified of new posts in a thread.

When used in e-engagement initiatives, discussion forums have the potential to support interaction, thought, deliberation, debate and allow for a full discussion. They are, therefore, potentially useful for the development of complex policy. However, staff time and skills are required to moderate, support and facilitate such discussions, as well as the discourse analysis skills to analyse contributions and produce reports (Macintosh et al., 2005).

Typically e-engagement initiatives based on discussion forum technology taken one of two forms (Macintosh, 2004):

- **Issue based forums**, i.e. organised around policy issues that have been formulated by policy makers, interest groups or experts, and presented as the heading of one or more discussion threads. Responses are sought in order to gauge opinion or solicit ideas. Position statements, links to topic-related websites and other background information may also be presented.
• Policy based forums, i.e. organised around themes/issues that relate directly to a draft policy that is meant to address these, and where discussion threads are intended to solicit responses from those affected. Participants might be encouraged to submit alternative ideas and suggestions but the format implies that what is being sought is an indication of how far the participants agree (or not) with the proposals, and why.

Discussion forums differ from online chats in that forum participants do not need to be online simultaneously to receive or send messages and that the discussion is usually extended over longer periods, such as of days or weeks rather than hours.

**Box 3.14 – Case Example: Democracy Project (Denmark).**

**Description**
In 2000 the County of North Jutland launched the Digital Administration programme, within which the Democracy Project was included. The task of the Democracy Project was to create an electronic forum for the democratic dialogue among citizens and politicians, with a particular aim towards November 20, 2001: the next County Council Election Day.

The objective of the Democracy Project was to make visible the decisions made at a regional political level, and to involve citizens in the process of decision making. The County Council also wanted to reach first-time voters who were known to show a low turnout.

**Methodology**
Citizens, politicians and first-time voters were invited to take part in the project. The guidelines for the design of the project were created in focus group meetings with adult citizens, politicians and first-time voters. Here, the groups were asked to define their requirements for a web site representing democracy in North Jutland. The essential conclusions reached in these sessions were that the dialogue between citizens and politicians should be a central element of the web site. The citizens wanted “to get to know the politicians” and to be involved in political planning at an early stage of the process.

Also, it was agreed that this was not intended as a place for municipal or
county officers to provide answers to citizens’ problems; rather it should accommodate an open debate between citizens and the politicians.

The web site (http://www.nordpol.nja.dk/) was therefore structured with a discussion forum as the central element, including also:

- A presentation of candidates and lists (produced by the politicians personally);
- A chat room (enabling young people to chat with youth politicians and front-runners);
- A calendar of political arrangements and dates of relevance to the elections;
- News sites, where the daily news was available from the regional broadcasting station;
- A quiz with prizes to win;
- An info page with information on the elections and the public sector;
- A search function.

**Achievements**

The final result of the project was a very lively and well-visited web site with a good dialogue among citizens and politicians. During the project period of 10th September to 20th November, the website had 23000 visitors and 450 contributions to the debate.

The reason for http://www.nordpol.nja.dk/ being so well visited and used to such a degree is partly to be found in the extensive involvement of users, in particular the candidates for the county council who received comprehensive and repeated information about the project, and partly in the profiling potentials of participating and providing information.

Source: Nordpol.dk, n.d..

**Box 3.15 – Case Example: Communities and Local Government Forum (United Kingdom).**

**Description**

Communities and Local Government was created on May 5, 2006, to promote community cohesion and equality. It also has responsibility for housing, urban
regeneration, planning and local government.

The online discussion forum (http://forum.communities.gov.uk) was set up to enable those with an interest in local government to discuss a number of related issues, to respond to set consultations and to exchange ideas about best practice amongst peers.

Initially launched as the “local: vision” forum, the site was set up for those with an interest in the Local Government White Paper. The forum was re-launched in July 2006 to incorporate discussions on a broader range of departmental policies. These included:

- Core Cities, Smaller Cities and Larger Towns;
- New Firefighters’ Pension Scheme – options and implementation;
- Sites for Gypsies and Travellers;
- Achieving Building Standards;
- New Look Local Government Pension Scheme;
- City Development Companies;
- Local Government White Paper – Implementation;
- Commission on the role of local councillors;
- Cave Review of Social Housing Regulation;
- Commission on Integration and Cohesion;
- Future of the 2008 Fire and Rescue Service National Framework.

Most of these discussions have fed into specific consultations. In some cases, a follow-up (post-consultation) discussion has been started to provide feedback to participants and enable further debate.

**Methodology**

The communications division coordinated the forum, but policy teams were given ownership of particular topics. Most topic spaces had a core participant base in mind but, any member of the public could register and get involved.

Pre-moderation was used to ensure that posts did not contravene the site’s terms and conditions, but this often resulted in a delay between submitting comments and seeing them published. This made some participants reluctant to post; some worried that pre-moderation was jargon for “censorship” even though the difference was explained on the site. Others simply found that the time lag reduced the quality of their user experience. Nevertheless, users were
positive about the role the moderators could play in preventing polarisation of opinion, keeping discussion on-topic and managing disruptive participants.

Achievements

The Communities and Local Government forum is the closest any department has ever come to having and sustaining a truly departmental public forum. Overall, users were positive about their experience of the forum and of the engagement online in a general sense.

The low-commitment nature of the website appealed to those who wanted to see what others were saying without being obliged to contribute. For many, the ease and openness of online engagement was the biggest advantage: people could look at the website at their own convenience and observe the unfolding discussions, possibly even tracking the way that their own contributions had in some way influenced policy decisions. However, the informality of forum deliberations, combined with a perceived disconnect between citizens and policy officials, led some users to worry that online deliberations would not be valued as highly as offline submissions. Some participants also claimed that policy members did not provide enough feedback or stimulate discussion sufficiently, this despite a concerted effort on the part of moderators to be visible and to contribute regularly. The highest number of posts for a user was 17; while the highest number of posts for a moderator was 26.

Source: Ferguson et al., 2007b.

Box 3.16 – Case Example: The Citizen’s Forum (Slovenia).

Description

The Citizen’s Forum (www.e-participacija.si) has been set up to involve Slovene citizens, civil society and representatives at the European Parliament (MEP’s) in a deliberative online dialogue concerning the future of the Europe. Topics include moderated consultations regarding the EU policies (energy, social affairs, etc.) and debates involving current EU issues (euro currency, EU constitution, etc). Reports are commented by MEPs prior to being presented at the European parliament and sent to the media and the Slovenian National assembly.

(Continued)
Methodology

The Citizen's Forum communication concept is oriented towards the online involvement of all Slovene citizens, both internet users and digitally excluded. The forum has been publicly promoted both through internet (websites and email) and traditional media (newspapers and radio).

Complementary online and real-time debates have been scheduled in order to overcome the digital divide and technical determinism and to encourage the participation of everybody (approximately 50% of Slovene households do not have internet access). Slovenian citizens without internet access are able to participate in some online debates through ePoints set up by the Centre for eDemocracy and the European Parliament Information Office for Slovenia. These one day ePoints in the capital of Ljubljana and the city of Žalec use portable computers and enable all interested citizens to take an active part in the scheme.

The forum was technically established by the Centre of Electronic Democracy (CED) at the Institute of Ecology using the communication concept developed in collaboration with the Faculty of Social Sciences (University of Ljubljana). The European Parliament Information Office for Slovenia (EPIOS) provided media promotion of the forum, assumed the communication process and fostered the Citizen's Forum involvement in decision-making by facilitating and encouraging Slovene members of the European Parliament to initiate online debates and consultations. CED moderates and administers the forum, publishes invitation messages, background documents and consultation questions (occasionally prepared by the MEP's). It also prepares evaluations and reports on all the processes. The final reports are published online and forwarded to the MEP's (who present them in the European Parliament), mass media and the Committee on EU Affairs at the National Assembly.

The feedback paper (in case a debate or consultation is initiated by the MEP) referring to the citizens' messages is also published and available to public commenting. Public promotion of the forum is carried out simultaneously by the EPIOS, the CED and the MEP's.

Achievements

Since July 2006, seven public debates and consultations regarding EU issues have already taken place in the Citizen’s Forum. Three of them (“The future
European social model”, “The future of the EU energy policy” and the “United against cancer” campaign) were initiated by the Slovene members of the European Parliament.

More than 240 contributions have been posted so far by 215 registered citizens and NGO’s, and thousands of internet users have visited the forum and received information on the debates (7400 internet users visited “The future of EU energy policy” consultation; 4800, “The future European social model” debate; 4000, the “Introduction of the Euro currency in Slovenia”, and 3300 users visited “United against cancer”).

A total of eight interim and final reports have been prepared by the moderating team, and two feedback analyses from MEP’s regarding the citizens´ views and suggestions are published on the forum. All these reports are available online.

Although some political (wider involvement of the MEP’s and more transparent presentation of the citizens´ views in the European parliament) and technical issues (web 2.0 upgrade) still have to be improved, the Citizen’s Forum has clearly strengthened the communication between Slovenian citizens and their representatives in the European Parliament, resulting in an increased MEP’s interest to initiate public debates by themselves and to seek public reflection, opinion exchange and co-creation on their policy proposals.

Source: ePractice.eu, 2007b.

**Virtual Communities Portals**

Virtual communities can be defined as online spaces where a group of people with common interests and practices can meet to communicate regularly in an organised way (Ridings et al., 2002). Participants are associated to the community by a notion of membership, whether formal or informal, which allows them to recognize each other when online. Virtual communities are also characterised for fostering the development of personal relationships among its members and for establishing a sense of place and belonging.

When building a community online, the following design principles should be taken into account (Kim, 1998):

- Establish a clear purpose and define the target audience
• Create a distinct mixture of public and private gathering places organised around particular interest. This helps visitors and newcomers to quickly find the conversations and content that they are looking for.

• Create member profiles that evolve over time. One of the first obstacles when creating a virtual community is getting people to register. This barrier can be removed by asking new members minimal information at registration (for instance, just the name and email address), and afterwards offering them the opportunity to create a progressively more detailed profile as their participation deepens.

• Promote effective leadership and hosting. Good hosts’ welcome new members, keep discussions on-topic, and deals with any disorderly behaviour.

• Define a clear-yet-flexible code of conduct. Handling conflict can be difficult, emotionally draining, and highly contextual: what appears to be friendly, competitive teasing to one person may be perceived as harassment by another. Therefore it is crucial to establish community standards that describe what is acceptable and unacceptable. After all, when handled correctly, it is conflict that keeps the community alive and interesting.

• Accommodate a range of roles. Every community includes people who are at different stages of the membership. Accordingly to their level within the community (newcomer, regular user or administrator) they can have different increased access to system-level facilities. For instance, regular members can be allowed to customise mailing list or host web pages while newcomers no.

• Facilitate member-created subgroups. A sign of a thriving community is in the presence of member created subgroups with their own identity.

• Organize and promote cyclic events. For many people, communities are associated with the host of regular meetings and events.

• Interact with the real world. Events that reinforce social identity should be celebrated and, when appropriated, real life meetings should be organised.
Box 3.17 – Case Example: Netmums (United Kingdom).

**Description**

Netmums ([www.netmums.com](http://www.netmums.com)) is a web-based network for mothers with young children in the United Kingdom. It is run on a voluntary basis by mothers for mothers and has 150,000 members, 40% of whom are from low-income families. The network is not a charity but describes itself as a "social enterprise with third sector values".

Although there is a lot of information available for parents at the national level, Netmums claims that it is unique in providing local information. Their use of ICT revolves around a central website that branches off into micro-sites and forums – all designed, built and maintained by the network itself, providing an effective and sustainable service. Although Netmums would be interested in exploring new technologies, they are conscious that even their online tools may not be at the cutting-edge, they are accessible to all its members no matter what the quality of their computer or speed of their internet connection.

In 2005 the government proposed to make several changes to the regulations around employment rights and maternity. With many of its members regularly expressing concerns about the employment choices available to them, Netmums decided it was necessary to take this opportunity to raise the wider concerns, and to describe the vast range of issues facing mothers trying to balance home and work. From 12-18 May 2005, Netmums conducted an online survey of 4,000 mothers of young children.

**Achievements**

As a result of this specific initiative, a report was produced providing an account of the survey and the findings generated. This was submitted in response to the DTI’s consultation, Work and Families: Choice and Flexibility. In her response to the survey the Minister for Women and Equality, Meg Munn, said "Thank you for your report on your recent survey, ‘the Great Work Debate’, which has fed into the DTI’s Work and Families consultation on Choice and Flexibility. This helps to give us an insight into the day to day issues that parents are dealing with in their everyday lives".

Source: Ferguson et al., 2007a.
**Wikis**

The term wiki is used to describe a website which allows multiple authors to create and edit the content of the web pages collaboratively. Wikis can be used to allow participants to edit and contribute to documents, developing shared knowledge or commenting on existing ideas and proposals. Every Wiki has a “recently updated” section which lists the recent edits, time and name of user (Involve, 2008d). An RSS feed allows staff to monitor the use of the Wiki and filter out any inappropriate use or to seek and add definitions where required (Henderson, 2006).

Users are normally asked to register beforehand as members of the Wiki, providing a name and any other information they consider appropriate, although they can use the Wiki as a guest and remain anonymous (Henderson, 2006; Involve, 2008d).

The main advantages of the Wiki are (Henderson, 2006):

- Cheap to set up and run;
- Quick and easy to update;
- The latest version can be accessed from anywhere (as long as there is an internet connection);
- People can make enquiries anonymously;
- The collaborative feature means definitions can be provided by the most appropriate people (i.e. by the experts in that specific field);
- RSS feed enables effective monitoring;
- Its possible to reviews past changes and revert to previous versions if necessary.

**Blogs**

Blogs are online journals or notice boards where individuals or organisations can provide commentary and critique on news or specific subjects and issues that affect them. They can also function like personal online diaries as dated entries are listed in reverse chronological order (Involve, 2008e).

Blogs provide a quick and informal way to disseminate information to the wider public or specific groups (Involve, 2008e). When written by, and focusing on the experiences of, for instance, councillors, government officials, and community groups, they can help others to understand the different perspectives. They can
provide personalized opinions of how lives are affected by specific policy or lack of it (Macintosh et al., 2005).

Most blogs allow readers to comment on the content so the blog can become the focus for a continued discussion amongst the site visitors. However, the blog is always focused on the author’s point of view (Macintosh et al., 2005).

Authors (bloggers) need to update their blogs on a regular basis, sometimes daily; therefore a strong commitment is needed from them. Without this commitment readers will not continue to return to the blog (Macintosh et al., 2005).

The main attributes than distinguish a blog from a standard website are (Henderson, 2006):

- Easy creation of new pages: the new data is entered into a simple form (with the title and the content of the article) and then submitted;
- Automated templates take care of adding the new article to the main page and to the appropriate date and category based archives;
- Easy filtering of content: articles can be displayed by date, categories and authors;
- The administrator can invite and add other authors, whose permissions and access can be easily defined and managed;
- Users can comment on the blog content very easily;
- Does not require any special knowledge of web languages to use it.

**Box 3.18 – Case Example: Jamie’s Big Voice (United Kingdom).**

**Description**
During the 2005 general election campaign, the homelessness charity, Crisis, was concerned about the lack of attention on homelessness issues. The charity needed a creative communications exercise that would freshen the homelessness issue, get it on the election agenda of the broadcasters and political parties, and encourage public debate.

**Methodology**
Crisis decided to use a blog and invited Jamie McCoy, a 54 year old, ex-homeless, former addict, to become the author. The charity hoped that it would
raise the visibility of their election-based campaigns by blogging, but the method of delivery, via a blog authored by a private individual and on which the public was able to voice its support or criticism, meant that Crisis had to accede a lot of control over the content and its exposure.

**Achievements**

The results of this innovative communication campaign were positive. The blog was picked up by the mainstream press and broadcast media, including The Times and CNN. The presence of the blog encouraged a number of candidates to discuss the issues and visit the site to post their comments. Crisis also felt that their campaign was given extra credibility by placing trust in Jamie to take on the challenge and deliver a running commentary of the election in his own distinct voice.

Nowadays, Jamie still enjoys blogging on homelessness issues and politics in general, and encourages others to view blogging as a useful way of engaging in society.

Jamie blog is available at: [http://jamiesbigvoice.blogspot.com/](http://jamiesbigvoice.blogspot.com/).

Source: Ferguson et al., 2007a.

**Video Conferences**

Video Conferences allow the execution of synchronous online video (and audio) discussions involving a small group of participants. During the video conference, each participant uses his own computer to connect to the session through the internet. The connection is established by a specially designed web based application that is either downloaded and installed on the computer or accessed directly by its internet address.

**Quick Polls**

Quick polls are web-based instant survey. Typically, they allow participants to select one answer from a list of alternatives in response to a simple statement or question. Participants may be asked whether they “agree” or “disagree” with a statement, rate their level of satisfaction with a service or select a top-priority issue. Once the answers are submitted, the current poll results are usually displayed along with relevant numbers or percentages.
In general no personal or demographic information is collected. Therefore it can be difficult to prevent participants from responding more than once unless their Internet Protocol (IP) addresses is tracked. Quick polls are generally employed as light-weight fun e-tools, rather than contributing to any weighty policy debate (Macintosh et al., 2005).

**Online Surveys**

Self-administered questionnaires, supported by a website that features the list of questions which users must answer online. Online surveys can be used to research views, attitudes and experiences of participants either through a sampled approach or through an open invitation to respond. They are commonly implemented around a number of pre-identified close-ended questions, typically with ordered response categories, and some open-ended questions. Responses are usually not revealed to other participants except as statistical totals (Macintosh et al., 2005).

The surveys can be designed to allow elaborate skip patterns through questions, pop-up instructions per question, drop down boxes providing an extensive list of alternative answers, and even alternative designs and plans to choose from. Additional features for participants may also include a progress bar showing participants how far they have travelled through the survey and a facility “to stop and save” the survey so they can complete it at a later time (Macintosh et al., 2005).

Although the costs of the initial survey tool may be high, it has the potential to be adapted and distributed to a large number of people and to research a large number of issues (Macintosh et al., 2005).

Surveys are a practical tool because:

- Present a structured approach for obtaining responses from a range of pre-identified options;
- Allow the collection of quantifiable data that is easy to analyse and understand;
- Require minimum staff time and skill;
- Responses can be automatically transferred to a database so that further analysis and reporting can be carried out.
GIS-Tools

Geographical Information Systems (GIS) have big potential in a customer service environment, particularly for local councils, and potentially national governments (ICELE, 2008e). Mapping tools can be used to bring together a wide range of data sets that usually exist within an organisation and transpose these onto a local map, so geographical queries become simple. From a local government perspective this is very powerful once it allows for previously complex customer enquiries to be handled quickly, accurately and at first-point-of-contact: governments are able to quickly measure the size of a proposed development, or to tell a customer who owns the land opposite their house immediately. However, for GIS mapping tools to work well, it is essential that the data sets used are up-to-date (ICELE, 2008f).

Box 3.19 – Case Example: geoNorge (Norway).

The geoNorge portal (www.geonorge.no) is the national portal for the Norway Digital geospatial infrastructure, a large public partnership comprising all of the important users and producers of geospatial information at national, county and local levels. The portal is the umbrella for a large number of geospatial e-services, making basic geographic information and a variety of thematic information readily available. The information currently provided by the portal enables geospatial information to be used by different communities, including public administration and environmental management bodies. The infrastructure also includes a gateway for distributing the information to non-partners and the private sector.

The portal is based upon state-of-the-art technology. The components involved, the different web services and the catalogues, are all based upon standards. This allows interoperability among heterogeneous partners and distributed solutions. Where this case goes beyond state-of-the-art and provides real novelty, is in the demonstration of so many partners contributing to a national solution with a large variety of content in a real geospatial infrastructure.

The portal has been in continuous development since the opening in 2004, all the time providing more services and more functionality. Currently it is incorporating service chaining and service composition capabilities. This will allow more sophisticated e-government solutions to be provided. One scenario is for instance the situation where an investor or the municipality is making
plans for a new residential area. Using services in the portal, e.g. concerning risk of avalanches, risk of flooding, radiation from the ground (all services already available in the portal) and chaining and/or composing them, the plans can be automatically checked as required by laws and regulations.

The essence of the portal is to build a service oriented infrastructure for geographic information to the Norwegian society, including the provision of a variety of concrete services upon which a number of applications can be built. There is currently between 200-300 different web based services with a national coverage under the umbrella of the portal (i.e., as web services they exist independently of the user interface of the portal, but the portal provides an integration platform and catalogues that allows discovery of which services exist, and additional metadata about the services).

Although this case study is not a clear e-participation initiative, is a good example of the potential services offered by GIS to support governments and public institutions.

Source: ePractice.eu, 2007c.

**Box 3.20 – Case Example: Virtual Cities (Netherlands).**

**Description**

The Virtual Cities project, undertaken by three Dutch towns (Apeldoorn, Helmond and Tilburg) uses virtual world technology (VirtuoCity) to support the participation of citizens in important city reconstruction projects. These virtual cities enable access to the virtual 3D presentation of the city, as it is at present time or as it will be in the future, over the internet with relatively basic computers.

The first city, Helmond, ([www.virtueelhelmond.nl/en](http://www.virtueelhelmond.nl/en)) started communicating via a virtual world as part of a major city centre reconstruction project, directly affecting about 8,000 people. Later on, the application was used for polling the preference for construction of playgrounds for children and to discuss the reconstruction of the city’s marketplace.

The city of Apeldoorn ([www.virtueelapeldoorn.nl](http://www.virtueelapeldoorn.nl)) started using virtual worlds for the same purposes: to elaborate reconstruction plans of a certain neighbourhood and to develop the Caterplein, the local centre for youngsters.
The city of Tilburg ([www.virtueeltilburg.nl](http://www.virtueeltilburg.nl)) strives at a frontline position in the utilisation of ICT in optimizing services rendered to their citizens. After Helmond and Apeldoorn, they decided to develop VirtuoCity as a standard infrastructure for communicating reconstruction projects with the inhabitants.

**Methodology**

Citizens are provided with excellent information and insight in city reconstruction plans, on a 24/7 basis. They are able to evaluate the past (panorama views) with the present (webcam) and the future (plans). People are provided with the possibility to give their feedback in a well-structured way, and in some cases to vote for certain alternatives. While navigating through the world, citizens are provided with all kinds of multi-media information; they can leave their remarks in a forum, vote for alternative designs, and chat with other visitors. A recent breakthrough was the application of online voting in Tilburg, whereby citizens could submit (binding) votes on one of the three designs for the central marketplace.

**Achievements**

Virtual Apeldoorn was recently used to explain and discuss planned changes in a small area of the city. Normally those meeting suffer an atmosphere of resentment. Many people have problems with understanding a spatial design from a paper or vocal explanation. In this case the attendees reacted positive. They felt better informed and taken seriously. They appreciated the possibility to visit the virtual plans from their home and give additional feedback. In conclusion: many more inhabitants are being informed much better, felt taken seriously, and use the option to respond in a structured way.

Based on the experiences with colleague virtual cities, the board of the city of Tilburg took the important political decision to allow the inhabitants to vote for one of three selected alternatives for a new design of the central marketplace ("Heuvel"). The city council decided to execute the design that received the majority of all votes. Within 3 weeks about 14500 visitors looked at the alternative designs, took part in a very interesting chat discussion and/or gave their response in the forum. The construction of the alternative voted by the citizens is currently under preparation.

Source: ePractice.eu, 2007d.
Box 3.21 – Case Example: Virtual flight over the city of Barreiro (Portugal).

Description

In the scope of the project “Participatory Spatial Planning in Europe” (www.pspe.net) and with the purpose of facilitating the processes of decision and public participation, the Municipality of Barreiro developed a “Virtual Flight over the City of Barreiro”.

The virtual flight creates an interactive spatial environment where users can navigate freely through real-time data in realistic virtual scenario. The integration of different geospatial datasets allows users to zoom into detailed geo-referenced data.

The objective of the project was to increase awareness within citizens about the development of their own city and to encourage participation and deliberation on civic issues. Through this method, the Municipality of Barreiro intended to present a more attractive and innovative way to get involved in urban planning and small city-related problems.

Methodology

In the preliminary case-study, the “Virtual Flight over the City of Barreiro” allowed its users to visualize a 3D model of a new projected urban area, which integrated the European urban re-qualification program POLIS. The virtual flight was available to citizens by means of a multimedia kiosk which was present in several events, such as public participation sessions and exhibitions.

Apart from allowing its users to navigate and to zoom in to see the selected areas in detail, the application makes it possible for users to leave their opinion, in the form of a geo-referenced message, using a microphone integrated in the kiosk. These recorded sound files stayed attached to that specific geographic area and could be later listen by other users. The goal was that these messages could be analyzed by technicians and decision-makers within the planning processes.

Achievements

The first results were considered positive, since citizens reactions were optimistic. People were easily involved and showed interested in using the tool.

(Continued)
and in leaving their comments. On the other side, the Municipality, made the
effort to answer instantly to the simpler complains left by the citizens.

The use of this type of applications is useful to:

− Improve the relationship and interaction between governments and
citizens concerning spatial issues
− Re-enforce the community involvement and responsibility
− Raise a better understanding of the scale in some problems.


Groupware Tools

Collaborative software designed to help people get involved in a common task
and to achieve their goals. This can include:

- Desktop sharing / application sharing;
- Collaborative slide presentations with annotation;
- Collaborative whiteboards.

3.5.3. Support Tools

Basic tools essentially used as a mean to provide information to the user or to assist him
in the e-participation process. These include:

Search Engines

Search engines present users the possibility to find and retrieve relevant
information, for instance, from a specific website, usually by means of keyword
searching. Information may consist of web pages, images and other types of
files.

Search engines help to minimize the time required to find information and the
amount of information which must effectively be consulted.

Email

The email is one of the oldest and most used technologies in the internet. It
allows its users to compose, send and receive messages from one another
through the internet. Although sometimes disregarded when considering the best way to approach a new e-participation initiative, the use of the email can still deliver good results if used correctly. For instance, it can provide a direct link into someone’s daily activity (ICELE, 2008g).

**Mailing Lists**

A mailing list is a collection of names and addresses used by an individual or an organisation to send material to multiple email recipients. A website specially designed for this purpose allows the users to subscribe the mailing list.

Any member (and membership is usually moderated by the founder) can send an email to the group. Members can usually choose whether to receive the email immediately, as a daily digest or not at all, in which case they must visit the website to join the discussion. On the website the emails are stored in threads by conversation and date (Henderson, 2006).

**Email Alerts**

Service provided by a website that allows users to register it and to receive an email or a SMS message when there is a new event or new information on the website. Users can be presented with just a general subscription system or, they can be given the opportunity to profile the type of information they are interested in receiving. In any case, the service should also provide the means for users to unsubscribe it or to change the alert configurations.

**Box 3.22 – Case Example: Kirklees alerts (United Kingdom).**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirklees Council launched its “Kirklees alerts” service (<a href="http://www.kirklees.gov.uk/sms/telme/default.asp">http://www.kirklees.gov.uk/sms/telme/default.asp</a>) in April 2005. It allows its users to receive information about jobs, public consultations and planning applications by email, SMS or both. Subscription is free and the council is continually looking for opportunities to extend the range of information on offer. Events around Kirklees and emergency announcements are being considered at the moment.</td>
</tr>
</tbody>
</table>
Methodology

In order to use the alert service, citizens must first register by providing a username and password. Depending on their alert preferences, they will be asked for a mobile phone number or email address. Once registered, the user will receive an email and/or SMS message with an “activation code”. This code is used to verify and confirm the contact details.

The “My alerts” section allows subscribers to choose what information they are interested in receiving. They are also able to choose from a wide range of criteria relevant to the subject. For example, for planning applications the user can specify an application number, the applicant or agent name, a postcode, street, area or an electoral ward. All messages are free.

Achievements

Since its launch, over 2900 citizens have subscribed. The majority of subscribers have signed up to receive email alerts, with 37% choosing to have information sent to them via SMS.

Although this type of service has no impact on decision-making, it provides its subscribers a practical and easy way to be informed of future public consultations events.

Source: O’Malley et al., 2007.

Webcasts

Webcasting is a way of delivering real time or recorded audio and video content over the internet. Users can have the possibility of immediately play the webcast or of downloading it to a computer and play it at a time that suits them (ICELE, 2008h).

They allow citizens to watch and listen in real time to events such as council meetings and committee debates. After the event, the content can be made available for access at anytime as “on-demand” webcasts (ICELE, 2008h). They can also be archived to allow people to view them at a later time. Such archived webcasts can be indexed into stages with “bookmarks” to allow users to navigate them more easily (Macintosh et al., 2005).
There is also the possibility for interaction such as enabling viewers to submit questions to a meeting by email or to comment on proceedings, but they are often non-interactive (Macintosh et al., 2005).

**Box 3.23 – Case Example: Interactive City Council (France).**

**Description**

Active participation and citizens’ involvement in democratic processes are fundamental pillars of the local political life of the city of Issy-les-Moulineaux. The Interactive City Council ([http://www.issy.com/index.php/fr/citoyens/le_conseil_municipal_interactif](http://www.issy.com/index.php/fr/citoyens/le_conseil_municipal_interactif)) allows Issy’s residents to watch and to actively participate in City Council meetings live from the comfort of their living rooms or on the move. The City Council meetings are broadcasted simultaneously over cable network TV and Internet. To take part in the Council meetings, Issy’s residents just have to tune in.

The Interactive City Council had been realized within the framework of Issy’s "Local Information Plan" (Plan Local de l’Information). Under the impulsion of its Mayor, André Santini, the city adopted the Local Information Plan as early as 1996 with the objective to speed up the pace of technology innovation and to transform Issy-les-Moulineaux into a "digital city" at the forefront of e-Democracy and e-Government.

**Methodology**

The City Council meets about six times a year, starting at 18:30h in the evening. The broadcasting of the Council meetings is preceded by a news programme on Issy’s local TV channel, which presents and explains the main items on the Council meeting agenda in a way that allows citizens who are not very familiar with the technical or administrative language used to follow and participate in the meetings. Since a Council meeting can last up to 6 hours, in the forerun of each Council meeting, leaflets informing about the meeting agenda and the estimated time schedule for each item are distributed to every household. Hence, people can just tune in during the period of time in which the Council is discussing the subject they are interested.

The Interactive City Council relies on a multi-channel approach in order to involve as many citizens as possible: The City Council meetings are broadcasted simultaneously on cable TV, on the Internet ([http://www.issy.tv](http://www.issy.tv))

(Continued)
and, since 2006, also on mobile phones. For those who do not have access to these technologies, two public access points stay open late in the evening on the occasion of the Council meetings. Starting at 18:30h, the Council meetings are broadcasted live.

During the City Council meetings, Issy’s citizens are able to intervene by asking questions to their elected representatives via phone (toll-free number) or e-mail and to get an immediate response. Therefore, the citizens of Issy-les-Moulineaux are not only passive observers of the meeting, but active participants.

**Achievements**

Despite the fact that City Council meetings have always been open to the public (as required by law), only few citizens attended the meetings before the creation of the Interactive City Council. Today, 45% of Issy’s households are regularly participating online.

The key factor for its success was an increase in transparency, which improved many citizens’ views of their elected representatives. Never before had so many people attended the Council meetings and very few inhabitants had imagined the extent of the tasks the Council Members are entrusted with.

By promoting and developing a new form of citizenship enabled and empowered by ICT, Issy has succeeded to integrate its citizens into the democratic life and decision-making process of its local community. Today, the City Council meetings are part and parcel of Issy’s local political life. Today, no project sees the light of day without at least one public meeting, and no decisions are made without those concerned being consulted.

Following the example of Issy-les-Moulineaux, other the French cities, among them the cities Paris, Perpignan and Amiens, started broadcasting their City Council Meetings on the Internet.

Source: ePractice.eu, 2007e.

**Podcasts**

Podcasts allow the publishing of multimedia audio files, either radio (voice) or music, on a website. Users can then listen to the podcast on their computer, or
download it onto their MP3 player or other mobile device, and listen to it later (ICELE, 2008i). A podcast is distinguished from other digital media formats by its ability to be syndicated, subscribed to, and downloaded automatically when new content is added, using specific software.

**Web Portals**

Web Portals are websites that provide a gateway to a set of specific information and applications. They allow to present information from diverse sources in a consistent and organised way.

**Box 3.24 – Case Example: ePolitix Portal (United Kingdom).**

**Description**

As the UK’s premier politics website, ePolitix.com ([http://www.epolitix.com/](http://www.epolitix.com/)) aims to improve communication between parliamentarians, constituents and organisations. ePolitix.com was launched in 2000 and is an impartial web portal, publishing balanced reports and providing information without taking sides in the political debate.

**Methodology**

By working closely with parliamentarians across the political spectrum, ePolitix.com offers a range of opportunities for MPs and peers to explain their work. Moreover, ePolitix.com provides the means for the public and other organisations to engage in the political debate and shape the way that policies develop. The portal is divided in:

- **News**

  ePolitix.com provides an impartial, continuously updated news service covering both the main developments in British politics and the parliamentary issues often not covered by other mainstream broadcasters, newspapers and websites. Their coverage focuses essentially on domestic politics, with particular emphasis on events in Westminster. However, they also highlight developments in Scotland, Wales, Northern Ireland and London in addition to UK reaction to international events.

(Continued)
- **Stakeholders**
Stakeholders is the area of ePolitix.com where are hosted public affairs websites for hundreds of organisations. These include campaigning groups, companies, charities, trade and professional associations, trade unions, and government and public bodies.

- **MP Websites**
One of ePolitix.com’s central objectives is to improve the flow of information between parliamentarians and the electorate. This section presents an exhaustive collection of websites from the MPs’ (Members of Parliament). Each website can contain biographical, constituency and contact details, as well as press releases, articles, speeches, images and information about any campaigns being pursued. Alternatively, for those MPs who already have other websites, a direct link is provided. This provides constituents with a quick and easy way to find out about some of the events and activities in their area, and to learn about what their MP is saying about national issues.

- **Blogs**
This section of ePolitix.com provides users with a platform for exchanging views on all the latest political developments. It is also possible to read ePolitix.com analysis of the big political issues, weekly sketches of prime minister’s questions and a round-up of what other political blogs are saying.

- **Interviews**
ePolitix.com frequently conducts interviews with leading representatives of all the main political parties and other key public figures. The aim of these interviews is to discuss in detail both the issues which are top in the political agenda and others which gain little coverage but are important nonetheless.

- **Stakeholders interviews**
These interviews, conducted with senior representatives of ePolitix.com Stakeholders, allow for in-depth discussion of topical and important issues.

- **Legislation**
This section of the website lists all the Bills currently making their way
through parliament. For each specific bill, ePolitix.com provide details of its aims and history, a timetable of its progress through parliament and links to debates and other related proceedings in the official record of parliament.

− **Training**
  This section provides a list of upcoming seminars and courses presented by several institutions.

− **Publications**
  Archive of leading political magazines such as The House Magazine and The Parliamentary Monitor.

**Achievements**

In the first three years of activity, ePolitix.com managed to build up a highly influential audience of policymakers, as well as attracting members of the public who are interested in a specific MP or policy issue. It received over seven million hits per month from over 75,000 unique users who increasingly rely on ePolitix.com for fast, comprehensive and authoritative politics news and information.

The portal maintains and hosts over 380 websites for MPs, revolutionizing the way MPs communicate with their constituents. Moreover, the Forum implemented by ePolitix.com created a new and innovative way for organisations to communicate with policymakers. It hosts over 300 specialist public affairs websites for organisations ranging from companies, trade associations, charities to government agencies. The Forum is an excellent means for the Government to assess how key organisations within specific policy sectors view topical policy and legislative issues.


**RSS Feeds**

RSS (Really Simple Syndication) Feeds allow users to keep up to date of changes on websites. When a new entry is added to a website that supports RSS, the RSS feed saves its title, a short abstract and a link to the full content. If a user is subscribed to that RSS feed, he is automatically informed of that new entry. This saves the users from having to manually check their favourite websites for
updates. In order to subscribe to an RSS feed the user needs access to an RSS reader, which manages the feeds and constantly checks for updates. RSS Feeds can also be incorporated into other websites as an automatically updating news feature (Henderson, 2006).

**Online Newsletters**

Newsletters are regularly distributed publications, usually about a main topic that is of the interest of its subscribers. They are used to inform a pre-registered audience of specific news and upcoming events. When a user subscribes to a newsletter service, he begins to receive it periodically in its email account. In some services, the user has the opportunity to profile the type of information he is interested in receiving, in opposite of only being capable to subscribe to the service. In any case, users must be provided with the means to unsubscribe the service or to change their subscription profile.

**Frequently Asked Questions (FAQ)**

List of questions and answers about a particular topic, than in some cases, can be searched using keywords or by inputting a question or statement.

FAQs provide a way to present factual information that can be grouped under questions and answers. A secondary navigation system can be provided to help the search through logical sub-groups in long lists of FAQs. They are typically developed through viewing various log reports of previously asked questions on a specific subject. FAQs on their own are usually not sufficient to communicate the relevance of a complex issue (Macintosh et al., 2005).

Table 3.1 relates the different types of tools present with the level of citizen engagement they allow. However, as discussed in Chapter 3.2, it should be notice that although these tools (and here we address specifically both the categories Enabling Technologies and Support Tools) can provide a powerful mean to strengthen the relationship between citizens and governments, unless they are incorporated as an integrant part of an overall e-participation process they remain nothing more than simply web tools.
### Table 3.1 – Levels of e-engagement and e-participation tools.

<table>
<thead>
<tr>
<th>Level of e-engagement</th>
<th>Tools</th>
</tr>
</thead>
</table>
| e-Consultation        | • Online Surgeries  
                        | • e-Panels  
                        | • e-Deliberative Polling  
                        | • e-Consultation  
                        | • Decision Making Games  
                        | • Online Chats  
                        | • Online Discussion Forums  
                        | • Blogs  
                        | • Quick Pools  
                        | • Online Surveys |
| e-Collaboration       | • e-Focus Groups  
                        | • Online Surgeries  
                        | • e-Panels  
                        | • e-Deliberative Polling  
                        | • Online Chats  
                        | • Online Discussion Forums  
                        | • Virtual Communities Portals  
                        | • Video Conference |
| e-Empowerment         | e-empowerment entails a process where there is a pre-agreement with the institutional body assuring that the outcomes of the e-participation will constitute the final verdict of the decision making process. The techniques presented in this table (especially those mentioned under e-collaboration) have all the potential to be used in e-empowerment initiatives as long as there is the political commitment of government institution. |

#### 3.6 Designing e-Engagement Systems

Reaching and engaging with a wide and diverse audience highlights the importance of designing systems that provide the widest possible accessibility and ease of use (OECD, 2004). This section addresses the general design issues that have to be taken into
account when designing ICT based tools to engage citizens in the decision making process and present suggestions on how to overcome some of these issues. Special attention to online based tools focused on promoting and supporting e-deliberation initiatives is given.

The OECD report (2004) “Promise and Problems of E-Democracy: Challenges of Online Citizen Engagement” asserts that when designing tools and technology to support the democratic practice, both the perspectives of “technology” and “democracy” have to be considered. Hence, from a democratic perspective, it is necessary to comply with guidelines for good citizen engagement (such as the principles presented in Section 2.5) and from a technology perspective, with software best practice for participatory user design. For instance, accessibility, usability and security are widely considered to be critical technological issues in the design of systems and services for the general public. However, as it is noted in the report, these issues, under the controversial nature of governance, can become more complex: “Democratic needs for openness and transparency may conflict with needs for ease of use and simplicity of access. The issues of unequal access to technology and the unequal technical capabilities of citizens demand systems that are simple to use. Similarly the demand for transparency may call for procedures to be streamlined and simplified” (OECD, 2004).

Under this double perspective, the following design issues and trade-offs need to be explored (OECD, 2004):

- Balancing the need for straightforward, anonymous access to systems, with the need to collect personal data for various reasons such as authentication and evaluation;
- Balancing the needs for standard, generic interface features with the need to reflect the expectations of a variety of target audiences;
- Supporting easy and flexible navigation through complex policy issues;
- Deciding how much information should be provided to assist individuals to be adequately informed on issues and so have the competences to contribute;
- Balancing rights of access, privacy protection and security with issues of transparency, accountability and trust.

Hence, the involvement of citizens in decision processes through ICT necessitates skilled design of interfaces which can connect issues with intended audiences, following closely the same principles that sustain new styles of governance: congruency, trust, resources and knowledge sharing (De Marchi et al., 2001a).
If we put aside the concerns about the digital divide and of unequal internet access, along with the democracy perspective mentioned above, and only focus on software issues, the following technical design concerns should be taken into account when designing user friendly e-participation technologies. The list presented here is based on the work developed by Coleman and Gøtze (2004).

- **Accessibility**

Accessibility is used to describe the degree to which a system is accessible by as many people as possible. It serves to highlight if any special measure is necessary to support the access, for instance, of people with disabilities or to address the digital divide.

Although there are many types of disabilities, the following ones have special relevance when using online technologies (Patton, 2001):

- **Visual impairments**: Includes colour blindness, extreme near and far sightedness, tunnel vision, dim vision, blurry vision, and cataracts.

- **Hearing impairments**: Includes partial or complete loss in the ability to detect or understand sounds in general or under certain frequencies. Such person may not be able to hear the sounds or voices that accompany onscreen video, audible help, or system alerts.

- **Motion impairments**: Includes the partial or total lost of certain motor faculties, such as the hands or arms motion. It may be difficult or impossible for some people to properly use a keyboard or mouse. For example, they may not be able to press more than one key at a time, or of accurately move a mouse.

- **Cognitive and language**: Includes dyslexia and memory problems and may cause difficulties for someone to use complex user interfaces.

On the website of the “Web Accessibility Initiative” (http://www.w3.org/WAI/), which is part of the World Wide Web Consortium (W3C), it is possible to find general standard guidelines and recommendations that designers should follow in order to improve the accessibility of the web for people with disabilities.

As for the digital divide, in order to minimise its effects, it is important that the design of the e-engagement system is done to reflect the lowest hardware and
software requirements. People should be able to participate using any internet enabled computer (i.e. PC or Mac) at minimum connection speeds and with any internet browser. The use and implementation of video or audio should also be carefully thought due to the above reasons.

Above all, it is important that the target groups have access to the facilities or to the technology necessary to participate.

For Coleman and Gøtze (2004), since the problems of accessibility can have various shapes, ranging from “the digital divide” to “design for all”, the practical problem is basically one of setting adequate levels for “acceptable losses”, i.e. accepting that it is impossible to include everyone, but also that there will be problems if certain groups are deliberately excluded (for instance, the visually impaired).

- **Usability**

Usability refers to the extent by which a public participation tool can be effectively and efficiently used by the participants with easiness. It is related directly to the clarity by which interactivity was designed.

Usability and clear navigation are important aspects in the design of internet-based systems and therefore when designing e-engagement tools, the different technical skills of the citizens ought to be taken into account. Interfaces should be designed to require the minimal skill from users and, in addition, it should be provided guidance and a good navigation help (Guimarães Pereira et al., 2005a).

The involvement of a cross-selection of the target audience, as early as possible, in the design of the engagement system allows the tailoring of interfaces, ensuring the maximum usability for individuals. Focus groups, user tests sessions and surveys can be implemented to gather user’s feedback and allow software engineers to re-design their applications in order to meet the user’s demands (see for instance, Guimarães Pereira et al., 2005a; Guimarães Pereira and De Sousa Pedrosa, 2005).

A more formal approach is in the use of a “heuristic evaluation” (see Nielsen and Molich, 1990; Nielsen 1994) to find usability problems in a user interface design. Heuristic evaluation involves having a small set of evaluators to examine the interface and judge its compliance with recognized usability principles: the "heuristics" (see Box 3.25). During a heuristic evaluation, each individual
evaluator inspects the interface alone and, only after all evaluations have been
completed, the evaluators are allowed to communicate and have their findings
aggregated. This procedure is important in order to ensure independent and
unbiased evaluations from each evaluator. The involvement of multiple
evaluators improves the effectiveness of the method significantly.

**Box 3.25 – List of usability principles.**

**Visibility of system status**
The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

**Match between system and the real world**
The system should speak the users’ language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. It should follow real-world conventions, making information appear in a natural and logical order.

**User control and freedom**
Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. The system should support the undo and redo feature.

**Consistency and standards**
Users should not have to wonder whether different words, situations, or actions mean the same thing. The same conventions should always be followed.

**Error prevention**
Better than good error messages is a careful design which prevents a problem from occurring in the first place.

**Recognition rather than recall**
Objects, actions and options should be clearly visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

(Continued)
Flexibility and efficiency of use
Accelerators - unseen by the novice user - may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Aesthetic and minimalist design
Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Help users recognize, diagnose, and recover from errors
Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Help and documentation
Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user’s task, list concrete steps to be carried out, and not be too large.


Reliability
Reliability refers to the capacity of an engagement system to perform successfully its purpose and the degree by which it is perceived as trustworthy.

Software reliability is one of the attributes of software quality, along with characteristics such as functionality, usability, performance, capability, maintainability and documentation, generally being considered as the “key factor” in software quality since it quantifies software failures12 (Lyu, 1996).

12 A failure occurs when the user perceives that the program ceases to deliver the expected service (see for instance, Lyu, 1996).
Due to the increasingly complexity of recent software systems, the achievement of a highly reliable software from the users perspectives is a hard and labours task. The following technical methods can and should be applied by developers in order to achieve reliable software systems (see for instance, Lyu, 1996):

- **Fault prevention:** The avoidance of fault\(^{13}\) occurrences through the implementation of general guidelines in the development phase. It includes, for instance, the use of good software design methods, the enforcement of a structured programming discipline and/or the encouragement of writing clear code.

- **Fault removal:** The detection and elimination of existing faults by means of verification and validation. This method relies mostly in software testing techniques (see for instance, Patton, 2001) to remove existing faults. Another practical fault removal scheme which can and has been widely implemented is the “formal inspection”\(^{14}\) (see Fagan, 1976).

- **Fault tolerance:** Capacity to provide, by redundancy, the expected service in spite of faults having occurred or being occurring. It refers to all the techniques necessary to enable a system to tolerate software faults and prevent a system failure from occurring. It includes monitoring techniques, decision verification and exception handling.

- **Fault forecasting:** Estimation, by evaluation, of the presence of faults and of the occurrence and consequences of failures. It involves the formulation of the fault/failure relationship, the understanding of the operational environment, the creation and application of reliability models, the collection of failure data, the analysis and interpretation of results, and the guidance for management decisions (see for instance, Musa et al., 1987).

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\(^{13}\) A fault is uncovered when either a failure of the program occurs or an internal error is detected within the program. The cause of the failure or the internal error is said to be a fault. It can also be referred as a “bug” (see for instance, Lyu, 1996).

\(^{14}\) Formal inspection refers to a structured process focused on finding, correcting and verifying the correction of faults during the various phases of the software development. This inspection process is carried out by a small group of peers and emphasizes the discovering of defects as early as possible in the software life cycle (Fagan, 1976).
When implementing e-engagement systems, one of the key aspects is to assure that the system is adequately designed to deal with the volume of information and data traffic that can result from the e-participation initiative.

- **Security**

Software security is always an issue especially when designing internet based applications. The internet increased both the number of possible attack vectors and the ease with which an attack can be made (McGraw, 2002), making online systems extremely susceptible to the attack of hackers\(^\text{15}\), or of being infected by a virus\(^\text{16}\) or a worm\(^\text{17}\).

However, software security is not only about creating the security mechanisms and features to prevent these attacks. “Software security is a system wide issue that takes into account both security mechanisms (such as access control) and design for security (such as robust design that makes software attacks difficult)” (McGraw, 2004).

As McGraw (2004) notes, security problems are more likely to arise in standard features of the system due to an unexpected fail when under attack than in a specific security feature. Hence, it is fundamental to revisit all phases of system development and ensure that security engineering is present in each one of them. When building software it is not only important to address known problems of software implementations (see for instance, McGraw, 2002) but it is also necessary to assume a carefully development and analysis of the design to counter security risk.

The implementation of software security best practices (see for instance, McGraw, 2004; Potter and McGraw, 2004) helps leverage good software engineering and involves thinking about security in the early stages of the

\(^{15}\) The term hacker is used in popular media to describe someone who attempts to break into computer systems (SearchSecurity.com, 2008a).

\(^{16}\) Program or programming code that replicates by being copied or initiating its copying to another program, computer boot sector or document. Viruses can be transmitted as attachments to an e-mail note or in a downloaded file, or be present on a diskette or CD. Viruses can be benign or playful in intent and effect but usually they are quite harmful, erasing data or causing your hard disk to require reformattting (SearchSecurity.com, 2008b).

\(^{17}\) Worms are self-replicating virus that does not alter files but resides in active memory and duplicates itself. They use parts of the operating system that are automatic and usually invisible to the user. It is common for worms to be noticed only when their uncontrolled replication consumes system resources, slowing or halting other tasks (SearchSecurity.com, 2008c).
software life cycle. At the same time, the measures to ensure that the software behaves properly are being taken.

In the design online engagement system, whenever it is envisaged that the online engagement system will manage vital information such as participants’ personal details or important documents, the implemented security protocols must assure to the users that their privacy is not infringed and that their personal details are not acquired without consent.

- **User Authentication**

  When designing online engagement systems, control features such as user registration and user verification need to be carefully considered and well developed. These features not only serve to proof the user identity but also to prevent access to unauthorised users.

  Usually user authentication depends upon one or more of the following authentication factors (see for instance, Sandhu and Samarati, 1996):

  - Something the user knows, such as a password, a pass phrase, or a personal identification number (PIN);
  - Something the user has, such as an ID card, a security token, a software token, or a smart card;
  - Something the user is, exhibited in a biometric signature such as a fingerprint or retinal pattern, a signature or voice recognition, or other biometric identifiers.

  Authentication methods that depend on more than one factor are usually more difficult to compromise than single-factor methods and therefore, for high security environments, the combination of methods is advisable (e.g. combination of something the user possesses (e.g. a card) with something the user knows (e.g. a PIN)).

  However, in online applications, the most used technique is still a password based authentication (a single-factor method) essentially because of its low cost, easy operation, and simple implementation. Nevertheless, passwords can be surreptitiously observed or guessed, requiring users to change them regularly, to select elaborated ones, and to protect them with care (Sandhu and Samarati, 1996).
In order to assess the different implications of the authentication techniques for the end-user, Furnell (2007) proposes a range of criteria that can be used as guidelines (see Box 3.26).

**Box 3.26 – User authentication guidelines.**

**Mental effort:** The extent to which the technique relies upon the user’s ability to memorise and recall things, and how precise this must be.

**Convenience:** Factors such as the speed with which the user is able to login, and the effort/engagement required to do so.

**Applicability:** Whether the technique will work effectively on desktop, mobile and handheld devices, with differing input mechanisms and screen sizes/resolutions.

**Flexibility:** The ease with which the user can change their authentication credentials in the event of compromise.

**Mutual authentication:** The system must provide a basis for the user to verify the legitimacy of the site, as well as the site to verify the identity of the user. It is useful if the technique can do this implicitly, rather than requiring an additional stage in the login process.


In e-engagement initiatives, a secure login process apart from transmitting an overall sense of security, trust and professionalism to the participants, can also help organisers to control and relate each individual contribution to its real author.

Nonetheless, there can be situations where participants will prefer to be anonymous. This should not be disallowed but, in general, people should be supported to stand forward (Coleman and Gøtze, 2004). In these situations, it is important that all participants feel equal and therefore they all should be anonymous or named. This design decision should be taken from the very beginning of the e-engagement process and should not be left to the participants (Dialogue by Design, 2003). An alternative is to consider the creation of a
dedicated area only for those who need to be completely anonymous, where postings can be made without registration (Coleman and Gøtze, 2004).

In any case, it is always advisable to set up clear engagement rules in advance as to what will be accepted or not, along with a Privacy Policy statement and Conditions of Use (Coleman and Gøtze, 2004; OECD, 2004). It is essential that these give the organisers the authority to remove submissions considered to be offensive (Dialogue by Design, 2003).

- **Updatability**

Updatability refers to the capacity of an online engagement system to dynamically receive new information and material.

As Coleman and Gøtze (2004) note, ongoing deliberations are often a source of new valuable resources such as links, publications, stories, etc. Hence, it is important to incorporate these resources in some type of knowledge database instead of losing them. Participants should have access to a “resource centre” where they could freely upload and download these documents. The content and relevance of the material should however be controlled by the administrators of the systems. The use of a specially designed administration interface can facilitate this process and allow the assignment of certain administrative roles to less technical staff.

The implementation of “What’s New?” webpage can be an important service in maintaining the users updated of new developments and latest information.

- **Customisation**

Nowadays, all relevant community portals and content management systems offer their users personalisation and customisation components that allow them to change the look and feel of the platforms. These components can include features such as configurable themes, colour schemes, customisable menus, and personalized subscription systems, such as announcement newsletters and email alerts. Such features can contribute greatly to the sense of engagement and connectedness.

However, the implementation of such features can also be expensive and counter productive, increasing greatly the complexity of online systems. Hence, the
implementation of customisable and personalisable features should be carefully considered.

- **Readability**

Readability refers to the reading easiness resulted essentially from the writing style. It influences and improves users’ comprehension, retention, reading speed, and reading persistence.

In general, readability is affected by (see for instance, Gray and Leary, 1935):

- **Content**: Certain contents are easier to read and to understand than other. Hence, is important to match the text and information density with the importance of the information transmitted and with the user interest.

- **Style**: Different writing styles have different easiness of read. For higher readabilities, the use of simple and plain English is recommended. Jargon and technical terms should be kept to minimum and when used, should be clearly explained.

- **Design**: In order to facilitate readability, careful thoughts have to be put in the arrangement of the layout, the use of illustrations, the creation of reading and navigation aids, the typeface, and the colour used to transmit the information.

- **Structure**: While too much variation in the text structure can clearly be distracting, the use of bullet lists or bold for marking text can have a positive effect on the readability. The use of clear sentences, short paragraphs and subheadings to aid “scanning” improves greatly the reading.

The bottom line is that information should be transmitted as clear as possible in a format that is understandable by all.

- **Information Management**

The amount of information created or provided in an engagement exercise can be overwhelming. Hence, it is fundamental, both for participants and organisers, to have available tools that allow them to scrutinise this amount of information. The
implementation of search engines can facilitate this task. Another alternative, mentioned by Coleman and Gøtze (2004), is the use of filtering technologies.

There are four kinds of personal filtering tools:

- Profile filtering is the most straightforward approach. The user describes his interests by picking them from a list or entering keywords, and the software rejects anything that does not match the pre-selection. Many news sites have such features;

- Collaborative filtering, also called “social filtering”, compares the likes and dislikes of the user to those of other people in order to predict his preferences;

- Psychographic filtering is similar to the collaborative filtering, except that it predicts the user likes and dislikes based on a “psychographic profile” derived from a questionnaire;

- The Adaptive filtering learns as it goes along, by asking the user to rate the information or by monitoring his actions through the mouse clicks.

Tags\(^\text{18}\) and tag clouds\(^\text{19}\) are another useful way of making user-generated content navigable by helping people seeing connections between their ideas and the ideas of others (Sommer, 2007).

**Channels and interoperability**

The possibility to combine different types of technologies and to use several channels of engagement (i.e. PCs, mobile phones, interactive TVs) makes e-participation a versatile field. However, it must be assured that the various channels of engagement are inter-operable and that they all share resources.

Interoperability is the ability of a system or a product to work with other systems or products without special effort on the part of the customer (SearchSOA.com, 2008).

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\(^{18}\) A tag is a keyword or term associated with or assigned to a piece of information (a picture, a geographic map, a blog entry, a video clip, etc.), therefore describing the item and enabling keyword-based classification and search of information.

\(^{19}\) A tag cloud is a set of related tags with corresponding weights. The weights are represented using font sizes or other visual clues.
For instance, through the use of XML-based remote procedure calls (XML-RPCs) it is possible to let applications access shared resources. A remote procedure call is a way for one computer to call another computer and have it run commands and return the result to the first computer. An example of how XML-RPC could be used to enable more qualified and informed debates would be to offer news feeds into ongoing debates (Coleman and Gøtze, 2004).

**Online facilitation and moderation**

Trust relationship between those who organise and facilitate participatory venues, in whatever method they are based is a *condition sine qua non* for participatory initiatives to be credible and for people to engage on them (Guimarães Pereira et al., 1998). The moderator (or facilitator) must be seen as a reliable and impartial source of legitimacy to the whole process, and participants must be aware of how their contributions will be taken into account.

Coleman and Gøtze (2004) present the following guidelines as a mean of achieving a trusted facilitation:

- Set out clear and transparent rules for participants, e.g. maximum length of messages; maximum frequency of messages; attitudes to offensive language and defamation;
- Regulate the discussion, both by implementing agreed rules and adhering to ethical principles, such as data privacy, political neutrality and non-coercion;
- Moderate discussion messages, ensuring that any participant with a point to make receives a fair hearing and that the discussion is conducted on a fair and friendly basis;
- Help discussion participants to reach conclusions (not necessarily shared ones) rather than incessantly rehashing old arguments;
- Summarize the deliberation so that key points of evidence and main conclusions are set out in a balanced and accessible form;
- Seek to ensure that there is feedback to the participants, so that they do not feel that they have contributed to the policy process without any response from the policy-makers.

In online engagements, it is possible to distinguish two different environments of moderation: in one, the debate is done in an asynchronous way, for instance, by means of an online discussion forum, and participants are able to post messages at any time day; in the other, the debate is synchronous, for instance, by means
of an online chat, and participants are all online at the same time. Both methods have their advantages and disadvantages (see Box 3.27), presenting also different challenges of moderation.

**Box 3.27 – Synchronous VS Asynchronous participation.**

**Synchronous participation:**

- **Focus:** In a synchronous environment participants feel more focus on the discussion and the possibility of going off-topic is lessen.

- **Presence:** Synchronous events provide the possibility for real time interactions, improving group cohesion and dynamics.

- **Feedback:** Synchronous systems allow participants to give immediate feedback on the topics posed and to be engaged in real time discussions.

- **Pacing:** Synchronous debates are highly dynamic and encourage participants to keep focus on the discussion.

**Asynchronous participation:**

- **Flexibility:** Participants can access and participate in the discussion at any time, accordingly with their convenience.

- **Time to reflect:** Participants have more time to reflect on the topics under discussion and on their ideas.

- **Situated learning:** Participants can easily integrate the ideas being discussed with the working environment.

- **Easy Implementation:** The technology behind asynchronous systems it is simpler and easier to implement that the one of synchronous systems.

Source: Adapted from Mason in Green, 1998.
Nevertheless, in both cases, the role of the moderator involves guiding the group process, help the group generate its purpose, solve conflict and make interventions to keep the group working towards its purpose. This involves a group of processes which include (Green, 1998; White, 2004):

- Fostering an engagement process which help members become active participants;
- Supporting sociability, relationship and trust building;
- Constructing, adapting and modelling norms, agreements and accountability;
- Supporting discussion and dialogue;
- Supporting divergent, convergent and task oriented group processes;
- Anticipate and work with conflict and abrasion to both allow emergence of new ideas and protect people from harassment;
- Work with full understanding of diversity in skills, culture and personal styles;
- Understand and make visible group participation cycles in the online environment;
- Summarise, harvest, merge and support appropriate content and connections;
- Provide basic help as needed with the tools;
- Ensure the space is kept organised and navigable.

Box 3.28 shows some of the techniques that can be adopted by the moderator to address the community and its members when inappropriate content is detected.

**Box 3.28 – Basic troubleshooting techniques.**

**Working behind the scenes**
If a member is violating the guidelines or rules, or other members have expressed concern, the facilitator can start by trying to clarify the situation by e-mail. This can save face for the member in question as well as for the host/facilitator.

**Working 'live' in front of the community**
Some communities’ value knowing what is going on and may be less trusting of "behind the scenes" interventions. However, the stakes are higher as people’s reputations are put on the line. If problems are resolved in public, there should be a clear procedure.

(Continued)
Hiding or deleting/erasing posts

When members post something that is against the guidelines (spam, obscenities, personal attacks), the host can either hide or erase posts. Posts with questionable content may be hidden, and linked to with an accompanying warning message. Erasing posts should only be done in extreme circumstances and for clearly stated purposes in order to avoid issues of censorship.

Banning

Banning is when a person is denied access to a service, such as a deliberation exercise. People should only be banned according to the stated processes of a deliberation exercise. In private deliberations, this is fairly easy to do. In public communities where members can register with free email addresses, banning an email address is not an effective solution. There are people who have the sole intent of disrupting the process. Often the most effective solution is simply to get everyone else to ignore them.


Asynchronous e-Participation

In an asynchronous e-participation, the moderator main activities, apart from the ones described earlier, consist in monitoring the discussion boards, ensuring that all postings meet the guidelines and standards of behaviour.

The moderation of the participants’ contributions is based on the terms and conditions of the discussion and typically can be done in two ways (Sommer, 2007):

- Moderate all comments before they are posted, or
- Allow comments to appear and moderate them after in collaboration with the community;

Sommer (2007) emphasises that most experiences with online participation have shown that moderating comments before they appear on the website is very work intensive. It is preferable to allow the direct posting of comments, trusting the facilitator and the community to find and flag any inappropriate content. Apart from being more efficient, this approach has the benefit of demonstrating
confidence in the community, and allowing participants to be satisfied at seeing their contribution appear immediately.

If some of the discussions become intense, it might be necessary to closely moderate those particular sections. In these cases, it should be explained to the community the reasons and motives for any change in the moderation policy or practice.

**Synchronous e-Participation**

In a synchronous e-participation, the moderator has the task of supporting both the process and the content at the same time. He is responsible for ensuring that the group remain focused on the discussion, sharing experiences and building on each others contributions, while providing feedback to the participants and additional information as needed.

Before the session, participants should confirm that the deliberation platform works correctly with their computer configuration and, furthermore, they should experiment and use the platform in order to get familiarised with it. During this process, it is important for the participants to have access to help information explaining how the platform works or, alternatively, have access to the direct support of the moderator.

Also, before the session, participants should be provided with the agenda of the session, explaining the objectives of the session, what is expected from the participants and relevant preparatory material. The most effective way is to send the agenda by email, although it can also be made available on the platform.

In the beginning of the deliberation session, independently of the previous steps, the moderator should give the participants a few minutes to explore the platform and to ask a few questions about how the session will work.

After this phase, the moderator can present the agenda, along with the general rules of engagement and, finally initiate the deliberation in a structured way.

In the end of the session, it should also be allocated some time by the moderator to evaluate the development of the session with the participants.
User Feedback

Online engagement systems are relatively new and therefore one can expect that the design of such systems will evolve over time. In order to support on-going improvements of these systems it is imperative that they provide the opportunity for users to comment on the appropriateness of the user interface, content and functionality of the system. One way of achieving this is to include an online questionnaire or an assessment form for users to complete.

Integration with Offline Tools

The importance of integrating offline tools in e-engagement initiatives should be stressed. The implementation of e-participation processes and the use of online technologies should be done in parallel with offline techniques of public engagement where both are mutually reinforced. One concrete way to achieve this is to ensure that each one promotes the other for any specific e-participation initiative. For instance, online tools can be used as a primer in the run-up to a face-to-face interaction, or as a way of keeping the conversation going afterwards. The following examples illustrate how online tools can be integrated into the design of some common consultation and engagement approaches (Sommer, 2007):

- Public meetings: an online blog with postings about the issues might be a good way to introduce people for a public meeting, and allow them to comment in advance.

- Roadshows or exhibitions: allow people to leave video messages or short films for one another related to the issues raised by the exhibition or roadshow.

- Local workshops: an online workbook which people fill out before they arrive can inform and help share people’s views, to generate conversation at the workshop. A similar workbook could be filled out at the end of the workshop to see if people’s views have changed.

- Citizens’ panels: wikis, geographic information system, as well as discussion forums and email lists can be combined to encourage people to share information about their community, and generate recommendations about proposed changes.
While e-participation techniques and tools can provide new and powerful means for supporting public policy making, the integration of traditional face-to-face techniques of public participation can help overcome some of the limits of online techniques and technologies.

The bottom line is that e-engagement should not be seen as just one route for public participation and be supported by other offline engagement activities.
4. b-involved Platform

b-involved (http://b-involved.jrc.it/) is a multimedia online platform designed specifically to support remote and distributed deliberation sessions (Rosa et al., 2007). It appears as a spin-off of the e²FocusGroup platform (Lobo and Guimarães Pereira, 2005; Rosa et al., 2006a; 2006b; 2006c) and aims at enhancing the e-participation processes by providing a new means and opportunities to actively involve society in public policy making.

The development of the platform was inspired by our perceived sense of limited means offered by the European Commission to involve society in policy deliberation: The Your Voice in Europe Portal (http://ec.europa.eu/yourvoice/) is presented as the European Commission’s “single access point” to a wide variety of consultations, discussions and other tools which enables people to have an active role in the European policy-making process (see Box 4.1).

**Box 4.1 – The Your Voice in Europe Portal.**

The Your Voice in Europe Portal announces himself as the “European Commission’s "single access point“ to a wide variety of consultations, discussions and other tools which enables people to have an active role in the European policy-making process”.

“Your Voice” was established in 2001 and it is largely used for e-consultation by the European Commission services. These consultations are offered many times on the basis of surveys, several of them to an invited number of “stakeholders” (and therefore not open to the general public). Usually there is a digest of the surveys’ results but it remains often unclear how actually those opinions are taken up in the regulatory process. Hence, even if the initiative is interesting because it is proposed within a quite heavily bureaucratic structure, it leaves out still many good principles of what extended democracy actually means, such as influence of outcomes, transparency of process and accessibility of both consultation and outcomes. These consultations are accessible to those who know the site, and there is not really a “public call” for wide consultation.

Another feature of your voice is “live chats”. The last live chat occurred in September 2005 (last access to Your Voice: February 2008). The transcripts of the chats are made available however they seem to be rather public informative sessions than actual involvement. Again there is no indication as to how the results of these chats are taken up in the policy process, if they are at all.
When this project started in 2002, the objective was to create a non-intrusive application that could go beyond sole consultation and could support actual policy dialogues. b-involved developments are based upon that same goal.

### 4.1 Features

The design concept of b-involved was inspired by the traditional face to face focus groups from social research methodology, allowing a small group of people (maximum ten) to have a focused discussion about a pre-defined issue through the internet.

![b-involved virtual room interface](image)

**Figure 4.1** – b-involved virtual room interface.

Each venue, or focus group session, has an organiser that can also have a moderator role. The organiser is responsible for inviting the other participants and moderators to attend the session, and for creating their logins and passwords. The discussion group has to be composed of, at least, one moderator and of several participants. The venue occurs in a virtual environment (Figure 4.1) where several tools are available to help the participants express their opinions and ideas:
Participants Table

The Participants Table (Figure 4.2) consists on a graphical representation of all the persons participating in the discussion. Each participant (or moderator) is represented by an icon and a login name which accordingly with the role, has different colours. The moderators’ login names are displayed in blue while the participants’ names are black. One’s own login name is displayed in red. In order to know who is online, the icons of logged participants are highlighted. The discussion should only start when all the persons invited are online (i.e., when all icons are highlighted).

Figure 4.2 – b-involved Participants Table and Discussion Chat.

Discussion Chat

In the Discussion Chat (Figure 4.2), participants are invited to contribute by writing messages with their opinions and thoughts about the issues in discussion. The Moderators have a very important role in this process once they have to facilitate the discussion in order to deal with one issue at the time and in a way that everybody is able to participate. It is also very important that the participants take full account of the moderator’s instructions. In order to facilitate and improve the dynamics of the discussion, all the participants should be able to write with the keyboard and be familiarised with computers.

Presentation Viewer

The Presentation Viewer (Figure 4.3) allows the moderator to display an introductory presentation to all the participants. The presentations should be short and simple and focused on the issue in discussion. It is up to the organiser to create the initial presentation about the topic under discussion.
Whiteboard

The Whiteboard (Figure 4.4) is a collaborative feature that allows the participants to complement their ideas and thoughts with real time drawings and schemes. In order to do this, they have at their disposal several basic drawing tools. All drawings are stored in the platform and can be viewed and changed at any time, even after the end of the venue.

Virtual Library

The Virtual Library (Figure 4.5) consists of an archive of documents and links sent by the participants. All the material sent to the Virtual Library should be relevant to the discussion and be clearly identified by a title. Each document can have a maximum size of 1.5Mb and can be of one of the following types: text file (txt, doc or pdf), spreadsheet (xls), image (gif or jpg), animation (swf) or presentation (ppt or pps).
Video Conference

The Video Conference (Figure 4.6) feature allows the broadcast of live audio and video from to the other participants. For those who might find this feature intrusive to their privacy, it is possible to control what is broadcasted: audio and video, only audio or only video.

Private Chat

The Private Chat is a feature that can only be directly accessed by the Moderator of a venue. It consists in a one-to-one chat, where the moderator can invite someone else (another moderator or participant) to a private talk. Everything that is discussed in this new chat window will not be visible to the others participants of the venue.

Other Features

b-involved also includes some other support features such as:

- User Status;
4.2 Advantages

Although b-involves inherits the common advantages associated to online technologies (see Chapter 3.4), its main advantages are:

- Allows for remote and distributed e-participation sessions: Distance related restrictions are overcome;

- Effective in providing on-screen visual stimulate to participants: The debate can easily include links to web-sites and uploaded documents (ex.: multimedia files).

- Non-intrusive application: There is no need to install any specific software in the computer. It is only necessary to have an internet connection and a compatible web browser.

- The discussion is automatically stored in a database and can be saved, printed and analysed later on by the Moderator.

- No cost associated: b-involved is available for free.

4.3 On-going Developments

Currently b-involved is already a fully functional dialogue platform. Nevertheless, new functionalities are still being designed. A key focus of these developments is the implementation of additional moderators’ management tools including monitoring and control features. Another set of developments are also being carried out in order to enrich the collaborative aspects of the platform. b-involved aims at being a collaborative environment in the spirit of e-participation and not just another “chat room” like platform. Hence, a set of tools that are currently being used in face-to-face participatory events are being integrated in this platform. This includes:

- Multi-criteria evaluation;
- Participatory scenario building.

This set of tools will allow a more thorough implementation of the e-participation concept, beyond writing and audio conversations supported by video. These two features are quite relevant when one deals with policy making.
Increasing the accessibility of the platform is also being taken into account, in order to facilitate the use of the platform to people with low computer skills or with a certain level of disability.

Box 4.2 presents some insights obtained from one of the session where b-involved was used and that where taken into account for improvements of the platform.

**Box 4.2 – b-involved: “CDHS EHIB Meeting”**.

The “CDHS EHIB Meeting” took place on the 21st of July 2006 and was hosted by the Environmental Health Investigations Branch of the California Department of Health Services with the support from the Agency for Toxic Substances and Disease Registry.

The goal of the meeting was to discuss and analyse a set of tools (such as manuals, how-to guides) for community advocates involved at toxic sites. b-involved served as environment for the discussion with the environmental health advocates, which were located at different parts in the state of California.

The session counted with the presence of individual and collective participants and lasted 1h15min. The agenda was the following:

- Introductory Presentation (10 minutes)
- Introductions (5 minutes):
  Additions to agenda, other logistical questions or comments.
- Overview of Resources (5 minutes):
  Quick review of the resources and their focus.
- Assessment of Resources (30 minutes):
  Discussion about the strengths and gaps of the selected resources in terms of content and accessibility.
- Discussion of tools and ways to support community advocates (5 minutes)
  Suggestions on how to distribute these tools to communities most effectively and on other ways to support advocates with relevant resources and information.
- Evaluation (5 minutes):
  Comments about the meeting content, facilitation and virtual format.

From this venue, the main aspects taken into consideration where:
• General thoughts

− Participants had a very positive experience and enjoyed exploring new ways of "meeting" using new technologies, and how this lowered associated costs and environmental effects (such as from driving to and from a meeting site).

− The platform was well suited for discussions that focused on a topic, resource, or project. The organisers were able to get specific answers on whether the content and accessibility of the resources reviewed were adequate and whether they met the participants' expectations for advocate tools.

− Participants reflect more on their comments. Having to type a response to a question motivated participants to refine their comments or questions, and in that sense lessened the possibility of the group going off-topic.

• Logistics and accessibility of the virtual discussion

− Participants had different comfort levels and experiences with computers and virtual discussion programs. For instant, the writing skills of participants who are accustomed to use online communication application are different from the ones who are not. While the first have the tendency to write several short sentences to answer to question, the seconds usually write just one long text. This can cause gaps in the discussion dynamics.

− The accessibilities features need to bee improved in order to facilitate its use by people with disabilities. One of the participant in the session was legally blind and could not use the platform on her own.

− It was useful to leave a few minutes in the beginning of the session for participants to get acquaintance and accommodated with the functionalities of the platform.

• Platform Layout

− Some of the labels on the buttons raised some confusion among the participants and had to be rephrased.
− The logout button was not visible enough and had to be re-designed.
Quality Assurance Guidelines
5. Quality Assurance Guidelines

The quality assurance guidelines proposed in this section aims to assess the “fitness for purpose” of e-participation tools developed under the context of online citizen engagement in complex decision making issues and policy formulation processes. It is based on research carried out by Guimarães Pereira et al. (2005a) and implements the principles of quality assurance by extended peer review as conceived by Funtowicz and Ravetz (1993).

These guidelines (see Table 5.1) are not a panacea for the quality assessment of all sorts of e-participation tools yet it can be considered as a starting point to assess and assure the quality of tools applied within the context of online citizens’ involvement. It must be pointed that these are still preliminary guidelines and that further work needs to be done in order to validate them.

The implementation of the guidelines is divided in two distinct phases which go beyond software quality assurance and focus also on the usage context, addressing issues related to the deployment of these type of tools in participatory contexts:

− The first phase of the quality assurance process is dedicated to in-house testing following established procedures in the field of software testing (see for instance, Hetzel, 1993; Kaner et al., 1993; Beizer, 1995; Marick, 1995; Patton, 2001). However, this phase goes beyond the detection of possible flaws and errors in the architecture of the tool and sought also context dependent issues that can result on ways to improve it and to assure that it is fit for the purpose of concern. If necessary, potential end-users can be involved in the testing through the use of focus groups.

− The second phase consists of a continuous external peer review process, where users are asked to give their comments about the tool based on a set of quality criteria created specifically to assess several aspects of the software. This phase relies heavily on techniques of social research enquiry, such as surveys or focus groups.
Table 5.1 – Quality criteria.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Issues to consider</th>
</tr>
</thead>
</table>
| Accessibility  | • Operating system compatibility  
                    • Minimum screen resolution  
                    • Internet connection requirements  
                    • Browser compatibility  
                    • Disability access  
                    • Necessary plug-ins and availability |
| Reliability    | • Absence of mistakes and/or inaccuracy  
                    • Absence of incongruities  
                    • Absence of dead ends  
                    • Absence of process failures and code crash  
                    • Capacity to provide the expected service despite of faults having occurred or being occurring |
| Security       | • Security protocols implemented  
                    • User authentication system  
                    • Intrusion prevention mechanisms  
                    • Encryption algorithms used  
                    • Document upload system |
| Updatability   | • System capacity to manage new material  
                    • Server capacity to store new material |
| Integrity      | • Functional relationship between the different components |
| Performance    | • Processing and accessing times  
                    • Latency times  
                    • Multi-tasking techniques implemented |
<table>
<thead>
<tr>
<th>Suitability of Design</th>
<th>Usability</th>
<th>Aesthetics</th>
<th>Layout</th>
<th>Integration</th>
<th>Readability</th>
<th>Interactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Clarity and simplicity of architecture</td>
<td>• Visual attractiveness</td>
<td>• Effective use of the available space</td>
<td>• Clear and effective incorporation of elements</td>
<td>• Clear content</td>
<td>• Level of interest raised</td>
</tr>
<tr>
<td></td>
<td>• Clarity and simplicity of interface</td>
<td>• Professional appearance</td>
<td>• Effective use of multimedia elements</td>
<td>• Congruence of the elements</td>
<td>• Clear writing style</td>
<td>• Level of intuitiveness</td>
</tr>
<tr>
<td></td>
<td>• Clear and visible navigation</td>
<td>• Artistic integration</td>
<td>• Right balance of multimedia elements</td>
<td>• Unique look and feel</td>
<td>• Clear arrangement of text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consistency between conventions</td>
<td>• Colour harmony</td>
<td>• Effective graphical message</td>
<td></td>
<td>• Contrast between text and colours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consistency between objects and their functions</td>
<td>• Text size</td>
<td></td>
<td></td>
<td>• Text size</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Aids, tools and help resources available</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Systems status mechanisms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Informative error messages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Fitness for purpose</th>
<th>Adequacy</th>
<th>Functionality</th>
<th>Relevance</th>
<th>Adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Types of contexts and audiences considered</td>
<td>• Level of functionality accordingly with the context and audience</td>
<td>• Level of relevance accordingly with the context and audience</td>
<td>• Level of adaptability to different contexts and audiences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fitness for e-participation</th>
<th>Inclusiveness</th>
<th>Equality</th>
<th>Transparency</th>
<th>Independency</th>
<th>Knowledge Sharing</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Inclusion of all stakeholders and citizens in the process who feel they have an interest in the topic under discussion</td>
<td>• Equal consideration for the opinion of the participants</td>
<td>• Clear aims and objectives</td>
<td>• Neutral and balance process</td>
<td>• Environment mutual understanding and respect</td>
<td>• Explicit relationship between the participants contributions and the process outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Equal right to be heard and to be part of the process</td>
<td>• Clear citizens expectations</td>
<td>• Independent organisers and moderators</td>
<td>• Social interaction</td>
<td>• Legitimacy of outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Equal access to information</td>
<td>• Perception of how participants contribution can influence the outcomes</td>
<td>• Participation of stakeholders without affiliation with the sponsoring body of the process</td>
<td>• Visibility of participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Openness to the wider public</td>
<td></td>
<td>• Common grounds</td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
| **Effectiveness**          | • Outcomes produced  
|                          | • Relevance of the outcomes  
|                          | • Impact of outcomes  
|                          | • Importance of possible alternatives  
| **Participants Evaluation** | • Participants satisfaction  
|                        | • Participants fulfilment  
|                        | • Participants comments  
|                        | • Participants contributions and relevance  
| **Integration**           | • Integration with other online techniques and technologies  
|                          | • Integration with offline methodologies  

Source: Adapted from Guimarães Pereira et al., 2005a.

With the aim of tuning b-involved as far its fitness for the purpose of online moderated debate, the described quality assurance guidelines were implemented.

Hence, in a first stage, b-involved was tested in-house with the supervision of the developers for possible system bugs and functionality flaws. During this phase, apart from the several tests performed directly by the developers using a *test to pass and test to fail methodology*\(^{20}\), two test sessions where organised with possible end-users using a black-box approach\(^{21}\). The main purpose of this phase was to identify critical errors in the platform architecture and to solve them before it was available to the public.

The second step in the quality assurance process (which is still on-going, as we write this thesis) consisted of inviting all the users of b-involved to evaluate the platform and to make recommendations for possible modifications by responding to an online survey created for this purpose (see Appendix G). The goal is to collect the views and

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\(^{20}\) The goal of the test to pass methodology is to assure that the software works as expected. On the other hand, the test to fail methodology consists in designing and running test cases with the sole purpose of "crashing" the software (see for instance, Patton, 2001).

\(^{21}\) Testing software using a black-box approach means that the person who executes the test does not know exactly how the software works. In alternative, it is possible to use a white-box approach. In this case, the person performing the test has access to software code and can monitor the program as it runs (see for instance, Patton, 2001).
experiences of users so it could be incorporated in future improvements and developments of the platform.

The survey was prearranged into eight groups of questions:

- First impression: Section composed by an open question where it was asked to the user to write his immediate thoughts about b-involved;
- Knowing you better: Group of questions about the user;
- Knowing your system: Set of questions intended to assess the characteristics of the system used by the user;
- Technology integrity: Group of questions addressed to evaluate the behaviour of the platform in terms of accessibility, integrity, performance and suitability of design;
- Context of usage: Questions focused on the user’s opinion about the contexts in which b-involved could be used;
- Moderation: Section addressed only to those users who had a role as moderator in a session. The purpose of this section was to investigate the challenges of online moderation, in particular of the session organised by this particular moderator and gather his suggestions for moderation tools that might lack in the current platform;
- Participation: Section addressed only to users who had a role as participants in a focus group session. Here, the goal was to understand how the platform encourages or hinders participants to contribute to the debate, including the expression of their points of view, and if they could follow and intervene in the debate easily;
- Final Remarks: In this final section of questions, the objective was to know if the users were satisfied with their experience and if they would use b-involved again and/or recommend it to others.
6. Conclusions

The new challenges raised by a technical, economic and social changing society created the need for a revised relationship between governments and citizens. This is entrenched in political rhetoric, normative and legislative initiatives. The social and institutional momentum behind wider public participation, not only increased the opportunities for citizens’ involvement in decision making but also a created a growing concern to explore effective ways of engaging civil society in those processes.

Public participation is presented as a means to involve citizens in the decision making process by allowing them to participate fully in decisions that affect their lives. However, in this thesis we suggest that this is only genuinely possible when participation is used in some form of deliberative approach, in which citizens engage in a structured dialogue, exchanging opinions, reflecting on arguments, weighting issues and, ultimately reaching a consensus decision by which all can share. Eventually, this will influence an institutional process that is ready to acknowledge the outcomes of a participation process.

Reflection on public participation

Having the principle of deliberative public participation in mind, we present in this thesis a new typology of public engagement that intends not only to address some of what we consider as limitations of commonly used models (e.g. OECD, 2001 and IAP2, 2000) but also to promote more relevant roles for citizens in decision making. The model proposed consists of three levels of public participation, Consultation, Collaboration and Empowerment, where the influence that citizens can have in decision making processes increases from consultation through empowerment.

Comparing with existing typologies, the one proposed does not consider “Informing” as a level of public participation since informing or accessing information ensure per se neither active involvement from citizens nor gives them the possibility to influence decisions. Also, special emphasis to “Empowerment” is given, since it is only at this level of public participation that citizens are offered the possibility to genuinely influence the policy outcomes.

We point “the right to be heard” as one of the main motivations for citizens to be involved in decision making processes, although it is also argued that the involvement of citizens:
- Can help reduce conflict and provide the basis for better, long lasting and wiser policy formulation;
- Addresses problems such as lack of trust among the citizens in government institutions and perceptions of weak legitimacy;
- Strengths the relationships between citizens and governments;
- Fosters the skills of argumentative dialogue, active listening and problem solving in citizens, changing their behaviours, political attitudes and skills of citizenship.

However, the idea of involving citizens in decision making processes is not accepted by all and several critics have been raised. They mainly refer to public participation processes being too costly as well as oftentimes helping to increase rather than decreasing already existing conflicts; other critics point out that it may merely serve to increase the influence of special interest groups and others consider that citizens are too apathetic about politics or do not have the required knowledge to be involved in complex issues. These critics can be seen as evidence that stronger efforts need to be done in order to promote better public participation.

Hence, in order to tackle these issues, we present the following principles of good practice as a starting point for a meaningful and effective engagement:

- Inclusiveness
- Trust
- Equality
- Transparency
- Independency
- Commitment
- Accessibility
- Knowledge Sharing
- Congruency
- Early involvement
- Accountability
- Productivity
- Responsiveness

Hopefully, by following these principles the engagement of citizens will be improved and bad experiences from the past will be put aside.

It should also be stressed the importance that the moderator can have in a participatory process, since he/she is the person responsible for helping the participants, as a group, to search for innovative solutions and agreements that incorporate everyone’s points of view. An ineffective moderation can lead to an unsuccessful participatory process.

*Reflection on e-participation*

With the advent of the internet, online technologies emerged as an innovative way for institutions to extend and enhance the involvement and engagement of citizens in
deliberative public participation. The main advantages of online technologies can be formulated as their capacity to both transcend place and time, along with the associated low costs of implementation, multiple possibilities of user interaction and, efficient capacity of organising larges amounts of information.

However, technology is only a medium and it cannot be expected to solve the problems of active citizenship and participation, as well as government legitimacy and liability. In reality, the introduction of online public engagement into policy deliberation has little to do with technological innovation and more with a new thinking on ways to improve the democratic process. This primarily encompasses political will as well as strong meaning and motivations on the citizens side to actively participate in decision making processes. This requests the creation of support structures for both, a new politics of civic engagement and, in the e-participation context, a new media literacy. Although technological issues can influence the success of an online public engagement; social, cultural, political and organisational issues pose a greater challenge.

The possibility of a digital divides continue clearly to be one of the major concerns of governments when implementing online engagement tools. It is commonly argued that ICT, and in particular online based tools, are exclusionary leaving out those who do not have internet access or lack of technological skills required to participate. This deprives certain social groups from the online deliberation and creates unbalances within the decision process. If care is not taken when employing ICT in engagement activities, rather than helping bridging citizens and strengthen the democratic process, the effect might actually be the opposite and wider even more the existing gap between those with access and skills technology, and those without it.

We would argue that digital exclusion is not solved by rejecting e-participation as a form of democratic engagement. e-Participation is indeed about creating new opportunities for connecting citizens to the institutions. Those without internet access or that do not have the required technological skills, could in the long run, be provided with support and training. We would argue that e-participation should be viewed as complementary means of offline techniques of public engagement.

In order to do this, new interfaces of dialogue and deliberation along with the mechanisms for engaging citizens should be purposefully developed. Such new interfaces entail skilled design and should be quality assured, transparent, socially robust, tangible and reliable.

The lack of an accepted evaluation framework to assess the impact of e-participation initiatives is one of greatest setbacks to the improvement of future e-engagements. It is
important for governments to understand and assess the benefits and impacts of applying technology to the decision making process, and to realise whether such electronic engagement meets the citizens and governments objectives and expectations.

Based on the review of the most commonly used technology and tools used in e-participation engagements, the following characterisation was elaborated:

**Table 6.1 – e-Participation techniques, technologies and tools.**

| e-Participation Techniques | • e-Focus Groups  
|                           | • Online Surgeries  
|                           | • e-panels  
|                           | • e-Petitioning  
|                           | • e-Deliberative Polling  
|                           | • e-Consultation Software  
|                           | • Decision-Making Games  
|                           | • e-Voting  
| Enabling Technologies     | • Online Chats  
|                           | • Online Discussion Forums  
|                           | • Virtual Communities Portals  
|                           | • Wikis  
|                           | • Blogs  
|                           | • Video Conferences  
|                           | • Quick Polls  
|                           | • Online Surveys  
|                           | • GIS-Tools  
|                           | • Groupware Tools  
| Support Tools             | • Search Engines  
|                           | • Email  
|                           | • Mailing Lists  
|                           | • Email Alerts  
|                           | • Webcasts  
|                           | • Podcasts  
|                           | • Web Portals  
|                           | • RSS Feeds  
|                           | • Online Newsletters  
|                           | • Frequently Asked Questions  |
The goal of this typology is, firstly to establish a clear distinction between e-participation techniques and online technologies (or tools) and; secondly to divide and classify the different online tools and technologies according to the active role they can enable users in an e-participation initiative.

Under this classification, while an “e-participation technique” entails the implementation of a structured methodology which is associated to the use of one or more online technologies or tools, “enabling technologies” refer to the technology (or tool) itself that can be used under the context of e-participation. “Support tools” refers to the basic tools essentially used as a mean to provide information to the user or to assist him in the e-participation process.

**Reflection on the design of e-engagement systems**

When designing technology and tools to promote and support the engagement of citizens in decision making processes, it is necessary to consider two distinct perspectives: the perspective of “democracy” and the perspective of “technology”, and to follow for both perspective principles of good practice. Hence, from a democratic perspective, it is necessary to comply with guidelines for good citizen engagement, and from a technology perspective, with software best practice for participatory user design.

**Table 6.2 – Designing e-engagement systems**

<table>
<thead>
<tr>
<th>Perspective of Democracy</th>
<th>Perspective of Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inclusiveness</td>
<td>• Accessibility</td>
</tr>
<tr>
<td>• Trustiness</td>
<td>• Usability</td>
</tr>
<tr>
<td>• Equality</td>
<td>• Reliability</td>
</tr>
<tr>
<td>• Transparency</td>
<td>• Security</td>
</tr>
<tr>
<td>• Independency</td>
<td>• User Authentication</td>
</tr>
<tr>
<td>• Commitment</td>
<td>• Updatability</td>
</tr>
<tr>
<td>• Accessibility</td>
<td>• Customisation</td>
</tr>
<tr>
<td>• Knowledge Sharing</td>
<td>• Readability</td>
</tr>
<tr>
<td>• Congruency</td>
<td>• Channels and interoperability</td>
</tr>
<tr>
<td>• Early involvement</td>
<td>• Information management</td>
</tr>
<tr>
<td>• Accountability</td>
<td>• Online moderation</td>
</tr>
<tr>
<td>• Productivity</td>
<td>• User Feedback</td>
</tr>
<tr>
<td>• Responsiveness</td>
<td>• Integration with Offline Tools</td>
</tr>
</tbody>
</table>
Reflection on b-involved

b-involved was developed having in mind the insights arising from a review of several e-participation methodologies and tools. It was conceived as an online deliberative platform that seeks at enhancing e-participation processes by providing new means to actively involve society in public policy making. It aims at creating an effective and genuine space of public deliberation, fostering the connection between democratic structures and the voices hardly heard in policy making. However, like in any other participatory process, the successful use of the platform is closely connected to the methodology implemented, planning of the venue, the target group, and, especially, to the moderation.

We argue in this thesis that amongst others, “fitness for the purpose” is a guiding quality criterion to assess these types of platforms. We have developed tuning guidance of online platforms for moderated debate: a quality assurance guidelines by extended peer review. Hence, the type of platform and the processes that it supports are directly assessed by the user communities and not only by experts. The protocol goes beyond software quality assurance focusing on the usage context, addressing issues related to the deployment of these type of tools in participatory contexts. It does not intend to be a panacea for the quality assessment of all sorts of e-participation tools yet it can be considered as a starting point to assess and assure the quality of tools applied within the context of online citizens’ involvement.
7. References


Bristol City Council (n.d.): Askbristol: Urban gulls in Bristol. Website of Bristol City Council (last access 3rd March 2008):
http://www.bristol.gov.uk/ccm/content/Council-Democracy/Consultations/consultation-finder.en?Task=detail&Interest=0&Status=4&RecId=249


CMB (2007): Participatory spatial planning in Europe: Portugal case study. Website of Câmara Municipal do Barreiro (last access 3rd March 2008):
http://www.cm-barreiro.pt/noticias/detalhe_noticia.asp?id=1743

http://ssrn.com/abstract=421161


ePractice.eu (2007c): The Norwegian national portal for geographic and environmental information services. Website of epractice.eu (last access 3rd March 2008): http://www.epactice.eu/cases/geonorge


ePractice.eu (2007e): Interactive City Council (Issy-les-Moulineaux, France). Website of ePractice.eu (last access 3rd March 2008): http://www.epactice.eu/cases/issyicc


http://www.olis.oecd.org/olis/1998doc.nsf/LinkTo/PUMA(98)15


Involve (2008a): E-petitions. Website of People and Participation.net (last access 3rd March 2008):  http://www.peopleandparticipation.net/display/Methods/E-petitions


Involve (2008c): Webchat. Website of People and Participation.net (last access 3rd March 2008):  http://www.peopleandparticipation.net/display/Methods/Webchat


Involve (2008e): Blogs. Website of People and Participation.net (last access 3rd March 2008):  http://www.peopleandparticipation.net/display/Methods/Blogs


Nordpol.dk (n.d.): About nordpol.dk. Website of nordpol.dk (last access 3rd March 2008): http://www.nordpol.nja.dk/project/project_eng.htm


ODPM (2004): Teachers’ Resources. Website of Demgames (last access 3rd March 2008): http://www.demgames.org/resources


http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci213306,00.html

http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci213386,00.html

SearchSOA.com (2008): Interoperability. Website of SearchSOA.com (last access 28th December 2007):
http://searchsoa.techtarget.com/sDefinition/0,,sid26_gci212372,00.html


http://www.interactweb.org.uk/papers/E-Participation%20and%20the%20Future%20of%20Democracy.pdf

Smith, G. (2005): Beyond the Ballot: 57 Democratic innovations from around the world. The Power Inquiry. Available online at (last access 3rd March 2008):
http://www.makeitanissue.org.uk/Beyond%20the%20Ballot.pdf


Appendix A - Vroom-Yetton Decision Tree.

This model was first introduced by Victor Vroom and Phillip Yetton\textsuperscript{22} in 1973 has a contingency decision-making model for the business world. Later, the model was slightly modified in order to be used in public participation and natural resources decision making (DPC, 2003).

In this scheme, participation takes on a number of forms, from seeking information through to joint decision making. Deciding which participation approach to use becomes a judgment for officials, who must accurately categorize an issue so that the right form of participation occurs (Bishop and Davis. 2002).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{vroom_yetton_tree.png}
\caption{Vroom-Yetton Decision Tree (Source: DPC, 2003).}
\end{figure}

\begin{table}[h]
\centering
\begin{tabular}{|c|}
\hline
\textbf{KEY} \\
A: The manager solves the problem or makes the decision alone without public involvement (\textasciitilde INFORM). \\
B: The manager seeks information from segments of the public, but decides alone in a manner which may or may not reflect public influence. (\textasciitilde CONSULT) \\
C: The manager shares the problem with separate segments of the public or stakeholders, getting ideas and suggestions, then makes a decision which reflects public influence. (\textasciitilde INVOLVE, with separated stakeholder segments) \\
D: The manager shares the problem with the public and stakeholders as an assembled group, getting ideas and suggestions, then makes a decision which reflects public influence. (\textasciitilde INVOLVE, with mixed participants) \\
E: The manager shares the problem with the public and stakeholders as an assembled group, and together the manager and the group attempt to reach agreement on a solution. (\textasciitilde PARTNER) \\
\hline
\end{tabular}
\end{table}

Appendix B – Ladder of Citizen Participation.

The “Ladder of citizen participation” developed by Arnstein (1969) (Figure 7.2) is considered as one of the first typologies of relationships between governments and citizenry. It comprises eight levels of participation, arranged in a ladder pattern with each step corresponding to a different level of public participation and to a different extent by which citizens can determine the final outcome of the decision making process.

Figure 7.2 – Ladder of citizen participation (Source: Arnstein, 1969).

Arnstein (1969) describes the ladder as follow:

- The bottom rungs of the ladder are (1) Manipulation and (2) Therapy. These two rungs describe levels of “non-participation” that have been contrived by some to substitute for genuine participation. Their real objective is not to enable people to participate in planning or conducting programs, but to enable powerholders to “educate” or “cure” the participants.

- Rungs 3 and 4 progress to levels of “tokenism” that allow the have-nots to hear and to have a voice: (3) Informing and (4) Consultation. When they are proffered by powerholders as the total extent of participation, citizens may indeed hear and be heard. But under these conditions they lack the power to insure that their views will be heeded by the powerful. When participation is restricted to these levels, there is no follow-through, no “muscle”, hence no assurance of changing the status quo. Rung (5) Placation is simply a higher level tokenism because the
ground rules allow have-nots to advice, but retain for the powerholders the continued right to decide.

Further up the ladder are levels of citizen power with increasing degrees of decision-making clout. Citizens can enter into a (6) Partnership that enables them to negotiate and engage in trade-offs with traditional power holders. At the topmost rungs, (7) Delegated Power and (8) Citizen Control, have-not citizens obtain the majority of decision-making seats, or full managerial power.
Appendix C - Evaluation criterions for the effective conduct of a participatory process.

Table 7.1 presents the evaluation framework elaborated by Rowe and Frewer (2000) which is based on a list of criterions. The criterions can be divided into two types: acceptance criterions, which are related to the effective design and implementation of a method; and process criterions, which are related to the potential public acceptance of the method.

**Table 7.1 – Evaluation criterions and guidelines.**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Context</th>
<th>Requirements to be effective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task Definition</strong></td>
<td>The nature and scope of the participation task should be clearly defined.</td>
<td>Scope</td>
<td>Describe the scope of the exercise:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- What issues will it address?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Whom do they affect?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- What is the timescale?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outcomes</td>
<td>Specify the aims and outcomes of the exercise, in terms of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Decision-making status (will its results be advisory or directly inform decision-making?);</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Intended benefits and impacts (what substantial benefit will the exercise have? What do you hope to achieve?).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Context | Identify all the factors which have made this exercise necessary:  
• Regulatory (e.g. required by law);  
• Social (e.g. need to involve public);  
• Organisational (e.g. organisational policy). |
| Rational for exercise | Justify why this type of exercise is being adopted and not others:  
• List pros and cons for the different methods. |
| **Representativeness** | Participants should comprise a broadly representative sample of the affected population.  
| Participants | Identify all persons and groups with a legitimate interest in the issue:  
• State appropriate groups (define their nature) and clarify reason for interest/involvement;  
• State inappropriate groups (define their nature) and clarify why they are not to be involved. |
| Selection | Give full details of the selection procedure:  
• Identify the sources from which participants will be chosen;  
• Identify and justify the selection method  
• Decide and justify on whether participants are to be appointed or self-selected;  
• Fix on the proportions of participants from each |
<table>
<thead>
<tr>
<th>Participants role</th>
<th>Specify and justify the balance of participants between representatives (delegates) and individuals (general public).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>Describe the steps being taken to recruit the right participants (i.e. participants in the proper proportions belonging to the intended target groups). Discuss whether more can be done with hard to reach groups.</td>
</tr>
<tr>
<td>Actual representativeness</td>
<td>Set up mechanisms to monitor actual representativeness of participants (describe) and respond appropriately. Adopt a policy on the rotation of participants if appropriate.</td>
</tr>
<tr>
<td><strong>Resource Accessibility</strong></td>
<td>Participants should have access to the appropriate resources to enable them to successfully fulfil their task.</td>
</tr>
</tbody>
</table>
| **People**       | Check that enough people are involved in:  
  - Preparation  
  - Backup  
  - Running the exercise  
  Ensure that they know what they are doing. |
<table>
<thead>
<tr>
<th>Time</th>
<th>Consider the time demands of the exercise:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Set out a timetable for the exercise;</td>
</tr>
<tr>
<td></td>
<td>• Verify that the intended timetable is realistic and sufficient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Detail the physical requirements needed to conduct the exercise and justify. In particular:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Anticipate and provide facilities needed;</td>
</tr>
<tr>
<td></td>
<td>• Anticipate and provide equipment needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expertise</th>
<th>Consider the requirement of experts, for fulfil the task and for the participants.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• What experts are necessary? Why?</td>
</tr>
<tr>
<td></td>
<td>• Are they available?</td>
</tr>
<tr>
<td></td>
<td>• If they become unavailable, is there any backup?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finance</th>
<th>Estimate costs and consider uncertainties:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• What monetary resources are available?</td>
</tr>
<tr>
<td></td>
<td>• Over what time period?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information</th>
<th>Justify the information needs of the participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Anticipate their information requirements;</td>
</tr>
<tr>
<td></td>
<td>• Identify available sources of information;</td>
</tr>
<tr>
<td>Structured Decision Making</td>
<td><strong>Operational management</strong></td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>The participation exercise should provide and use appropriate mechanisms for structuring and displaying the decision making process.</strong></td>
<td><strong>List the expected course of events.</strong></td>
</tr>
<tr>
<td><strong>Procedures</strong></td>
<td><strong>Detail the procedures of the engagement:</strong></td>
</tr>
<tr>
<td></td>
<td>• Specify the exact format for the discussion, presentation and exchange of information;</td>
</tr>
<tr>
<td></td>
<td>• Specify, if appropriate, the procedures to be used for reaching group decisions and consensus.</td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td><strong>Consider worst case scenarios and unexpected events and think how to deal with them.</strong></td>
</tr>
<tr>
<td><strong>Consistency</strong></td>
<td><strong>Consider whether the process is likely to lead to contradictory outcomes and how to deal with this.</strong></td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td><strong>Specify the competence requirements of the participants:</strong></td>
</tr>
<tr>
<td></td>
<td>• Decide whether a minimum of competence level is necessary for the participants;</td>
</tr>
<tr>
<td></td>
<td>• Consider whether that level is likely to be met</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Validation of methods</strong></td>
<td>Identify existing external references that can be used to benchmark the procedures used and ensure a quality control. If none exist, emphasize it.</td>
</tr>
<tr>
<td><strong>Shared understanding</strong></td>
<td>Identify procedures that can confirm whether there was sufficient shared understanding of essential concepts and terms by all parties.</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td>The participation process should be conducted in an independent (unbiased) way.</td>
</tr>
<tr>
<td><strong>Procedures and outputs</strong></td>
<td>Set an appropriate level of control for the participants over the procedures and outputs of the exercise, i.e., allow the participants to influence the way the exercise is run, and the questions that are asked, to the maximum level that is sensible (which could be “none at all”). Justify this.</td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
<td>Arrange to obtain the participants feedback on the exercise:</td>
</tr>
<tr>
<td></td>
<td>• Detail and set up a mechanism for obtaining participants assessment (e.g. questionnaire, interviews);</td>
</tr>
<tr>
<td></td>
<td>Justify why this mechanism is adequate.</td>
</tr>
<tr>
<td>Transparency</td>
<td><strong>The process should be transparent so that the relevant public can see what is going on and how decisions are being made.</strong></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Legal / Regulatory</td>
<td><strong>Identify the legislation and regulations that bear upon the exercise (if any – if not, still acknowledge this). Ensure that the exercise will comply with both the letter and the spirit of regulations.</strong></td>
</tr>
<tr>
<td>Publicity</td>
<td><strong>Decide and justify the appropriate level / type of publicity. Set it up.</strong></td>
</tr>
</tbody>
</table>
| Auditability | **Specify the audit trail:**  
  - What is covered?  
  - How is it recorded?  
  - Who is responsible for this?  
  - What is its format (project report etc.)? |
<p>| Availability | Specify the availability of the audit trail, i.e. to who is it available to? If anyone is excluded from viewing the audit trail (e.g. participants), justify. |</p>
<table>
<thead>
<tr>
<th>Influence</th>
<th>Accessibility</th>
<th>Decide the appropriate format and level of detail for the audit information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence</td>
<td>Specific decisions</td>
<td>Decide on how to identify and measure specific, concrete impacts of the exercise, in terms of specific decisions.</td>
</tr>
<tr>
<td>Influence</td>
<td>Corporate policy</td>
<td>Decide on how to identify and measure impacts in terms of corporate policy-making procedures.</td>
</tr>
<tr>
<td>Influence</td>
<td>Corporate style</td>
<td>Decide on how to identify and measure impacts in terms of corporate approach to handling the issues and general corporate “mindset”.</td>
</tr>
<tr>
<td>Influence</td>
<td>Media Coverage</td>
<td>Decide on what kind of media response will constitute a positive impact of the exercise.</td>
</tr>
<tr>
<td>Early involvement</td>
<td>Accessibility</td>
<td>Ensure that all parties have enough time to become familiar with all the elements of the exercise. If the exercise involves no special preparation by the participants, acknowledge this.</td>
</tr>
<tr>
<td>Early involvement</td>
<td>Specific decisions</td>
<td>Ensure that all parties have enough time to become familiar with all the elements of the exercise. If the exercise involves no special preparation by the participants, acknowledge this.</td>
</tr>
<tr>
<td>Early involvement</td>
<td>Corporate policy</td>
<td>Ensure that all parties have enough time to become familiar with all the elements of the exercise. If the exercise involves no special preparation by the participants, acknowledge this.</td>
</tr>
<tr>
<td>Early involvement</td>
<td>Corporate style</td>
<td>Ensure that all parties have enough time to become familiar with all the elements of the exercise. If the exercise involves no special preparation by the participants, acknowledge this.</td>
</tr>
<tr>
<td>Early involvement</td>
<td>Media Coverage</td>
<td>Ensure that all parties have enough time to become familiar with all the elements of the exercise. If the exercise involves no special preparation by the participants, acknowledge this.</td>
</tr>
<tr>
<td><strong>Cost effectiveness</strong></td>
<td><strong>Entry point</strong></td>
<td>Specify where in the decision-making process the exercise will take place. Justify that this is early enough.</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>The procedure should in some sense be cost effective from the point of view of the sponsors.</strong></td>
<td><strong>Effectiveness</strong></td>
<td>Decide which aims will be used to assess whether exercise has succeeded or not. Justify the choice.</td>
</tr>
</tbody>
</table>
| **Benefit/ Cost** | Decide how the costs will be calculated:  
  • Adopt a policy on indirect, opportunity, emotional, controversy, political, social and organisational costs. Justify;  
  • Decide on how to weight the costs against the benefits;  
  • Decide what are the alternatives to this exercise (or would have been) and how exercise could be compared against them. |  
| **Fairness** | Adopt a policy on how the benefits should be distributed among the stakeholders in order to constitute a “fair” exercise. Justify. |  

Source: Adapted from Frewer et al., 2001.
The e-methods approach developed by Macintosh et al. (2005) to characterize e-engagement was developed through research and consultancy projects. It addresses the need to characterize current practice and to consider e-engagement methods and associated tools. The e-methods characterisation, as initially presented, was based in nine key dimensions develop by Macintosh (2004) that supported the selection of the most suitable approach of engagement. This characterisation was afterwards slightly adapted by Macintosh and Whyte (2006) to include the following ten key dimensions.

### Table 7.2 – e-Methods key dimensions.

<table>
<thead>
<tr>
<th>Key Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of engagement</td>
<td>This key dimension considers to what level, or how far, the e-engagement method is to be used to engage with citizens and how much influence do the participant’s responses have in the overall decision making.</td>
</tr>
<tr>
<td>Stage in decision-making</td>
<td>This key dimension considers when to engage citizens. The e-engagement method employed depends to a certain extent on where in the policy lifecycle the engagement exercise is to take place. With regard to policy-making, citizens will be better able to influence policy content through engagement earlier in the process. E-engagement exercises that are close to the draft policy stage are likely to place higher demands on citizens’ ability to understand technical and legalistic statements.</td>
</tr>
<tr>
<td>Actors</td>
<td>This dimension considers who should be engaged and by whom. It should specifically identify the stakeholders, their respective roles and the target audience. The available actors and the associated costs of implementing an e-engagement exercise (promotion, analysis, feedback and evaluation) are important factors in determining the precise e-engagement method. This will help determine whether the application technology is an in-house development, a collaborative development with external agencies or a commercially available off-the-shelf system.</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Technologies used</th>
<th>The availability of the necessary software and hardware is a key issue and this dimension analysis how and with what to engage citizens and support participation. It characterizes how participants are engaged and with what technology or devices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules of engagement</td>
<td>This dimension considers what personal information will be collected, how it will be used, and what the participants can and cannot during the e-participation initiative. Any e-engagement should have a clear state of privacy policy to ensure that all stakeholders understand how any personal information they enter will be used and who will have access to it. The issues of data protection, registration, moderation and, if young people are involved, child safety, should be considered.</td>
</tr>
<tr>
<td>Duration and sustainability</td>
<td>Most consultation guidelines acknowledge that the length of a consultation period is very important and this applies to e-engagement. There is a need to consider when the target audience will have access to the e-engagement system and for how long. If the e-engagement addresses a complex issue there may be a requirement to allow participants to return to the engagement and start where they left off, providing them with tools so they can easily see how they have responded up to that date.</td>
</tr>
<tr>
<td>Accessibility</td>
<td>This dimension considers how many citizens are to participate and from where. It also serves to ensure that resources can be realistically accessed and to highlight if any special measure is necessary to support the access, for instance, of people with disabilities, or to address the digital divided.</td>
</tr>
<tr>
<td>Resources and promotion</td>
<td>This dimension serves to understand the financial implications of using ICT to support public participation. It considers the resources required both in terms of staffing and financial, and of the promotional mechanisms used.</td>
</tr>
<tr>
<td>Evaluation and outcomes</td>
<td>This dimension addresses the evaluation of the influence of the e-engagement method in comparison with the impact and success of offline engagement methods. With e-engagement there are additional needs to consider: Technical evaluation: to what extent did ICT design affect the engagement outcomes? Social evaluation: to what extent did the social practices and capabilities of those consulted affect the outcomes?</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Critical success factors</td>
<td>This dimension addresses any other political, legal, cultural, economic or technological circumstances contributing to the final result.</td>
</tr>
</tbody>
</table>

Source: Adapted from Macintosh et al., 2005; Macintosh and Whyte, 2006.
Table 7.3 presents a list of evaluation issues that can be used as guidelines by practitioners in the review and evaluation of e-participation processes.

**Table 7.3 – Evaluation issues.**

<table>
<thead>
<tr>
<th>Evaluation issue</th>
<th>How to address the issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the e-engagement process conducted in line with best practice?</td>
<td>Ask the participants if they are satisfied with the process. Assess whether adequate resources are in place to conduct the engagement. Check whether the process followed the best practice guidelines. Assess whether the choice of the online tool was appropriate.</td>
</tr>
<tr>
<td>Were the consultation objectives and what was expected of the citizens made clear?</td>
<td>Ask the participants if they understand what is being asked. Assess whether the participants contributions are appropriate.</td>
</tr>
<tr>
<td>Was the target audience reached?</td>
<td>Assess the adequacy of the promotion of the e-engagement initiative. Identify who and where potential participants are, in terms of demographic and geographic characteristics.</td>
</tr>
<tr>
<td>Was the information provided appropriate and relevant?</td>
<td>Assess how easily the participants can access the information. Assess whether the participants contributions were informed by it.</td>
</tr>
<tr>
<td>Were the contributions informed and appropriate?</td>
<td>Assess to what extend the contributions address the consultation issue. Assess how easily the participants can access the contributions from others. Classify the contributions according to whether they provide information, pose questions or make</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was feedback provided both during and after the engagement?</td>
<td>Assess whether questions are answered by government during the consultation.</td>
</tr>
<tr>
<td></td>
<td>Assess the extent to which the government feedback relates to the contributions.</td>
</tr>
<tr>
<td>Was there an impact on policy content?</td>
<td>Check to what extent a change of policy is possible given the stage in the decision making process when the process occurred.</td>
</tr>
<tr>
<td></td>
<td>Assess to what extent contributions are reflected in the revised or newly formulated policy.</td>
</tr>
</tbody>
</table>

Table 7.4 summarize the research developed by Wimmer (2007) in the characterisation of commonly used online tools in e-participation initiatives.

### Table 7.4 – List of e-Participation tools.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core e-participation tools</td>
<td>• E-participation Chat Rooms</td>
</tr>
<tr>
<td></td>
<td>• E-participation Discussion forum/board</td>
</tr>
<tr>
<td></td>
<td>• Decision-making Games</td>
</tr>
<tr>
<td></td>
<td>• Virtual Communities</td>
</tr>
<tr>
<td></td>
<td>• Online Surgeries</td>
</tr>
<tr>
<td></td>
<td>• ePanels</td>
</tr>
<tr>
<td></td>
<td>• ePetitioning</td>
</tr>
<tr>
<td></td>
<td>• eDeliberative Polling</td>
</tr>
<tr>
<td></td>
<td>• eConsultation</td>
</tr>
<tr>
<td></td>
<td>• eVoting</td>
</tr>
<tr>
<td></td>
<td>• Suggestion Tools for (formal) Planning Procedures</td>
</tr>
<tr>
<td>Tools extensively used in e-participation but not specific to e-participation</td>
<td>• Webcasts</td>
</tr>
<tr>
<td></td>
<td>• Podcasts</td>
</tr>
<tr>
<td></td>
<td>• Wiki</td>
</tr>
<tr>
<td></td>
<td>• Blogs</td>
</tr>
<tr>
<td></td>
<td>• Quick polls</td>
</tr>
<tr>
<td></td>
<td>• Surveys</td>
</tr>
<tr>
<td></td>
<td>• GIS-tools (Map-server for maps and plans)</td>
</tr>
<tr>
<td>Basic tools to support e-participation</td>
<td>• Search Engines</td>
</tr>
<tr>
<td></td>
<td>• Alert services</td>
</tr>
<tr>
<td></td>
<td>• Online newsletters</td>
</tr>
<tr>
<td></td>
<td>• Frequently asked questions (FAQ)</td>
</tr>
<tr>
<td></td>
<td>• Web Portals</td>
</tr>
<tr>
<td></td>
<td>• Groupware tools</td>
</tr>
</tbody>
</table>

Appendix G – b-involved quality assurance survey.
3. Knowing your system

2.1 Which navigation browser do you use?
- Internet Explorer
- Mozilla
- Firefox
- Netscape
- Safari
- Other
- Don't know

2.2 Is b-involved compatible with your browser?
- Yes
- No
- Don't know
If No, can you give examples of malfunction?

3.3 What is the screen resolution of your computer?
- 1024x768
- 1280x1024
- 1600x1200
- Other
- Don't know

3.4 What is your Internet connection speed?
- Dial-up (modem 56k or less)
- ADSL (~ 4 Mb)
- ADSL (~ 4 Mb)
- Cable
- Other
- Don't know
4. Technology integrity

4.1 Did you find any problem when accessing b-involved (e.g. logging)?

- Yes
- No
- Don’t know

If yes, can you please indicate which?

4.2 Did you find any problem accessing the several features (e.g. Whiteboard, Virtual Library) of b-involved?

- Yes
- No
- Don’t know

If yes, can you please indicate which?

4.3 During the session, did you find any type of 'bug' in b-involved?

- Yes
- No
- Don’t know

If yes, can you please indicate which?

4.4 Did you find any performance problems, e.g. long delays before information appears?

- Yes, when sending documents and links to the Virtual Library
- Yes, when using the Whiteboard
- Yes, when sending messages to the chat
- Yes, when broadcasting audio and video
- Other

- No, I didn't find any performance problems
4.5 Give your opinion about the structure and design of b-involved:

<table>
<thead>
<tr>
<th></th>
<th>Very good</th>
<th>Good</th>
<th>Adequate</th>
<th>Poor</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure (general layout &amp; use of the space available)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Functionality</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ease of use</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual attractiveness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Professional appearance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Text (type) size</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Colour harmony</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Suggestions for improvements:

4.6 Give your opinion about the user friendliness of the platform, according to the following topics:

<table>
<thead>
<tr>
<th></th>
<th>Very good</th>
<th>Good</th>
<th>Adequate</th>
<th>Poor</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aids &amp; help resources</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Clarity &amp; simplicity of the b-involved overall architecture</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Clarity &amp; simplicity of the Discussion Chat</td>
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<td>○</td>
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</tr>
<tr>
<td>Clarity &amp; simplicity of the Presentation Viewer</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Clarity &amp; simplicity of the Whiteboard</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Clarity &amp; simplicity of the Virtual Library</td>
<td>○</td>
<td>○</td>
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<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Clarity &amp; simplicity of the Video feature</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Comments:

4.7 Would you improve any of the current features of b-involved?

- ○ Yes
- ○ No
- ○ Don't know

If Yes, can you please indicate which and how?

[Blank field for comments]
5. Context of usage

5.1 What types of context (or audience) could this tool be used / useful for?

6. Moderation

6.1 Were you a moderator of a venue?
- Yes (answer the set of questions below)
- No (press Next)

6.1 What were your main difficulties in moderating the session?
- I couldn’t maintain the participants focused
- One of the participants was dominating the session
- The entire group wasn’t participating
- There were two or more participants entering in private discussions
- There was one or two participants who didn’t participate
- I couldn’t start the session on time and/or finish it on time
- Other reason

6.2 Did you feel you needed more tools to help you moderate the session?
- Yes
- No
- Don’t know

If Yes, can you please indicate which?
7. Participation

7. Were you a participant of a venue? (If you were a moderator, please skip this section)
   ○ Yes (answer the set of questions below)
   ○ No (press 'Next')

7.1 Could you follow the debate easily?
   ○ Yes
   ○ No
   ○ Don't know
   [If No, why not?]

7.2 Did you have enough opportunities for intervening?
   ○ Yes
   ○ No
   ○ Don't know
   [If No, why not?]

7.3 Where the features tools available enough to help you express your points of view?
   ○ Yes
   ○ No
   ○ Don't know
   [If No, what was missing?]

7.4 Did you feel the moderator couldn't manage the session?
   ○ Yes
   ○ No
   ○ Don't know
   [If Yes or No, can you state your reasons?]

xxiv
8. Final remarks

8.1 Would you use b-involved again?
- Yes, I will use it again
- No, it didn't fit my needs
- I don't know, perhaps if some features were improved
- I don't have an opinion

8.2 Would you recommend others to use b-involved?
- Yes
- No

8.3 Give your opinion / suggestion how b-involved could be improved and about features that could be