1. Alert mechanisms (email and RSS Feeds) One-way communication alerts to inform people of a news item or an event, e.g. email Alerts and RSS (Really Simple Syndication) Feeds. This saves the users from having to check manually their favourite websites or their news reader for updates.
2. Blogs - frequently modified web pages that look like a diary as dated entries are listed in reverse chronological order.
3. Decision making games typically allow users to view and interact with animations that describe, illustrate or simulate relevant aspects of an issue. The user 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.
4. ePanels Web applications where a 'recruited' set, as opposed to a self-selected set, of participants give their views on a variety of issues at specific intervals over a period of time.
5. ePetition tools Web applications that host online petitions and allow citizens to sign in for a petition by adding their name and address online.
6. eParticipation discussion forums Web applications for an online discussion group where users, usually with common interests, can exchange open messages. Users can pick a topic, see a "thread" of messages, reply and post their own message.
7. eParticipation chat rooms Web applications where a chat session takes place in real time. Chats provide a means for live question-answer panels between experts or government personnel and participants and also the opportunity for peer-to-peer interaction within communities.
8. eConsultation tools Web applications designed for consultations which allow a stakeholder to provide information on an issue and others to answer specific questions and/or submit open comments.
9. eDeliberation polling tools - Web applications which combine deliberation in small group discussions with random sampling to facilitate public engagement on specific issues.
10. Content management systems base on computer or web-based technology that supports the creation, update and maintenance of digital information (content). Such systems implement a set of processes and technologies that facilitate the possibility to have information and content always up-to-date
11. Frequently asked questions A 'tree' of questions and answers that can be searched using keywords or by inputting a question or statement.
12. Online newsletters Information on specific news items and events on a regular basis to a general audience or a pre-registered audience (for specific community newsletters, etc.).
13. Online surgeries Web applications specifically designed to support elected representatives to engage with the citizens they represent.
14. Podcasts Publishing multimedia files (audio and video) over the Internet where the content can be downloaded automatically using software capable of reading RSS feeds
15. Quick polls web-based instant survey. Typically, they allow participants to select one answer from a list of alternatives in response to a simple statement of question. A tool of consultation (two-way) but in fact not contributing any weighty policy debate.

16. Surveys web-based, self-administered questionnaires, where the website shows a list of questions which users answer and submit their responses online. They can be used to research views, attitudes and experiences of participants either through a sampled approach or through an open invitation to respond.
17. Search engines Web applications to support users find and retrieve relevant information (web pages) typically using keyword searching
18. eVoting Remote internet enabled voting or voting via mobile phone, providing a secure environment for casting a vote and tallying of the votes (other types of electronic voting are available, but for the purposes of this report we focus on internet voting).
19. Virtual communities Web applications in which users with a shared interest can meet in virtual space to communicate and build relationships.
20. Web portals Websites providing a gateway to a set of specific information and applications. Often based on a Web Content Management System.
21. Webcasting tools Real time recordings of meetings transmitted over the internet. They allow people to watch and listen to events such as meetings/debates of Community groups Parliamentary debates, or Council Committees.
22. Wikis Web applications that allow users to add and edit content collectively.[1]

Tool	eParticipation area	Stage of policy cycle	Specials	Access	Channel	Technology evaluation
Alert mechanisms (email and RSS Feeds)	Information provision	Relevant to all stages where stakeholders need to be informed about policy issues	Users will need to sign up or be subscribed to the alert mechanism; therefore privacy of information needs to be considered. There should be facilities where users can unsubscribe and also change their profiles. The web site owner then has the responsibility for sending the relevant emails. When a new entry is added to a website the RSS feed will typically save its title, a short abstract and link to the full content.	Suitable for most audiences. The provider needs to put in place various alert mechanisms that will suit different audiences. They need to decide on content and depending on which mechanism arrange for distribution. If registration is required this should be kept as simple as possible. Web accessibility guidelines should be followed. On the provider side resource implications are low; the technical competency is moderate to high. On the end-user side the technical competency is low.	RSS Feeds only on PCs, alters can reach mobile phones by eMail or SMS	Number of subscriptions

[1] More detailed description at http://www.demo-net.org/what-is-it-about/tools

Blogs	All except voting	Blogs are suitable for all audiences. Appropriate stages in the policy cycle are (1) agenda setting, (2) policy formulation (including analysis), and (5) policy evaluation	Generally none, but the author of the blog can set options for discussion, for example whether a password is needed before a comment is allowed, whether a comment has to be approved before publishing etc. A clear 'conditions of use' statement is required in order to prevent spam. Weblogs require dedication from the blog owners to publish their entries on a regular basis - sometimes daily. Without this commitment users (readers) will not continue to return to the blog for information. Blogs that deal with specialised or localised content are more successful and durable than those covering every subject.	logs are, like conventional websites, hosted on servers and accessible by keying in a web address (URL) into an internet browser. There are a number of weblog systems that can be used rather than having to build one's own. The resource implication for the blog owner is moderate to high, but the technical competency is relatively low. Web accessibility guidelines should be followed. There is a growing familiarity of, and appeal for, the blog 'diary' format. The familiarity on a diary format may help users navigate the site. As users are generally just viewing the blog, required technical competency is low to moderate	PCs, mobile phone (e.g. by MMS)	Functionalities for extensive web statistics can be added; a feedback questionnaire could be placed on the weblog home page asking whether the user found the information they were looking for, how
Decision making games	Community building / Collaborative Environments Consultation Discourse Electioneering Mediation Polling Voting	Usually in the Policy agenda setting and formulation stages	For quiz type games any responses that form part of the game are not usually shared with others. Where games are designed to be multi-user explicit rules will be required. The content, level of difficulty and types of interfaces are dependent on the target audience. The overall design of the game is important, as it has to be visually attractive and entertaining whilst being realistic and informative.	eb accessibility guidelines need to be followed, which may be more difficult given that games generally have to be visually attractive and entertaining. The game format is likely to be appealing to those who already access computer-based games, particularly young people. However, when used by young people it will be necessary to create a safe system of access whereby individual usernames and passwords are allocated.	Through the technical requirements of games), the PC is the main device.	nalysis of usage statistics and exit questionnaire
ePanels	Consultation	Policy: agenda setting, analysis and formation stages. Service: need and design of a service.	Typically, members do not see the responses from other members. However sometimes a discussion forum is included in which case the issues regarding fora listed above need to be taken into account.	Access by allowing invited participants to contribute online using any combination of the above tools. If registration is required care should be taken not to make the process too onerous and time consuming. Other comments as for discussion fora and surveys apply.	PC	The panel can be issued with evaluation questionnaires

ePetition	Campaignin	All stages are applicable (besides decision making) but particularly the agenda setting for policy.	Needs names and addresses to be checked and if discussion forum is incorporated this will need moderation. Data protection and privacy issues are applicable as users are providing their names and addresses. In fact that ePetitions are only informing the Council about an issue, as opposed to presenting an issue that will become legally binding, the level of checking does not need to be the same as for eVoting. Typically requires a citizen to submit their name and address using a form. For integrated discussion forums, please see the relevant area	Names and addresses need to be checked but as Web accessibility guidelines need to be followed.	Could be realized over any system that has an uplink channel and the option to define name	Analysis of usage statistics and exit questionnaires
eParticipation discussion forums	Community building, Consultation Discourse Electioneering Mediation	(1) agenda setting [includes awareness and problem perception], (2) policy formulation [analysis + information], and (5) policy evaluation). They have the potential to support interaction, thought, deliberation, debate and allow for a full discussion, potentially useful for the development of complex	A clear 'conditions of use' statement is required which can be followed by both moderators and participants. Besides it should be described (and planned before starting) how the results will be used for the further political process, a commitment of the political authorities is helpful. Discussion forums are distinguished from chat rooms by structured interaction around the threads and that extends normally over a period of days or weeks rather than hours. When used for consultations, each forum should last between 4 to 12 weeks to increase participation and also to re-visit the forum and reply to others with a definite time restriction to keep discussion focussed as potential users know that they have to make their statement within a specific time-horizon. For some discussion forums, registration is necessary. Staff time and skills are required to moderate (at least for legal reasons), support and facilitate such discussion, as well as the content analysis skills to analyse contributions and produce reports to embed the results into the political process and to give feed-back to the users.	If registration is required care should be taken not to make the process too onerous and time consuming. Design and accessibility issues need to focus on how to follow the discussion threads and post comments and replies easily.	PC-based web browsers	Content analysis of what is said in the forum is sometimes necessary but time consuming. Statistics are helpful about specific page uses.

eParticipation chat rooms	Community building , Consultation Electioneering	(1) agenda setting and (2) policy formulation	Moderation is required to allow young people (under 16's) to take part safely and to control any disruptive behaviour. Contrary to chat rooms in the internet, chats for eParticipation purposes are offered for a specific time-horizon, normally an hour at most. Often registration (in advance) is necessary or sensible. The chat room appeals because it allows users to freely interact with one another, an online discussion where participants post messages to others in this shared 'chat space'. Each participant can normally see all other's responses and these often overlap; this is an important difference from a discussion forum, which offers a more structured approach to discussion as input is typically organised by 'threads'. This critical difference needs to be considered if the resulting discussion needs detailed analysis.	Design and accessibility issues need to focus on how to follow the chat sessions and participate in them. It can be difficult to schedule a live question-answer panel involving experts and government personnel. Unless there is a record kept of the chat session analysing the interaction can be problematic. The human resource implications are relatively high. The technical competency is moderate to high. Chat is time-specific and limited. Some of the challenges of chat are that it can be somewhat difficult to arrange; timing things to suit all concerned, and ensuring that all people are aware of the opportunity. Often times and locations of chats are broadcasted over TV or Radio. This effects higher numbers of participants and even allows to address a specific target-group. A representative or expert, who took part in the programme, could get involved in the online discussion afterwards. The chat tool also must be designed and supervised/ moderated to ensure safe.	PCs, (web-)clients for mobile phones do exist (problem of text input	difficult to evaluate as the main focus is on whether the participants enjoyed the exercise and were satisfied with the responses from the expert panel
eConsultation	Consultation	(2) policy formulation [analysis + information], (3) decision-making	A clear 'conditions of use' statement is required which can be followed by all participants. Besides it should be described (and planned before starting) how the results will be used for the further political process, a commitment of the political authorities is helpful. The tool typically allows the consultation owner to design different types of consultations, allows information about participants to be gathered, and may also allow for feedback to be provided. Staff time and skills are required to moderate, support and facilitate any discussion as a part of the consultation. Content analysis skills to analyse contributions and produce reports to embed the results into the political process and to give feed-back to the users. Registration is usually necessary	The consultation owner needs to appreciate how to design the consultation and add the relevant content. The tool will either provide the necessary work processing and questionnaire development or allow these to be input from other resources	nternet and PC.	It is possible to have inbuilt evaluation data collection mechanisms (e.g. exit questionnaires, ability to generate web-usage statistics)

eDeliberation polling tools	Deliberation Polling	All aspects of policy and service definition where in-depth, informed debate is required by a recruited representative sample.	Moderation and facilitation is required. Clear rules of engagement are required. Resource intensive and requires personnel who are skilled in social research methods. Resource implications are high.	If registration is required care should be taken not to make the process too onerous and time consuming. Other comments as for discussion fora and surveys apply.	Internet. Mobile channels with smart PDAs	he eDeliberation members can be issued with evaluation questionnaires. These questionnaires can be circulated at the beginning of the process and after deliberation has taken place. The results can be analysed to demonstrate the effect of the deliberation process.

Frequently asked questions	Information provision	Relevant to all stages where stakeholders need to be informed about policy issues. Particularly useful where there have been a large number of existing queries about the issue.	FAQs on their own are usually not sufficient to communicate the relevance of a complex issue. A secondary navigation system can be provided to navigate through logical sub-groups in long lists of FAQs.	Depending on the stability of the subject area the resource implications range from low to moderate. The technical skills required to set up and maintain the FAQ depend on the specific tool used but can be time consuming to set up initially and needs maintaining as new questions and new answers arise over time and old Q/A pairs become redundant. Untrained users can be assisted by supporting questions in 'natural language'. Need to consider how many Q/A pairs are needed to explain the issue and what level of detail is required. Should include a facility for users to notify FAQ owner if the answer to their question cannot be found.	Mainly used with PCs but can also be accessed with mobile phones, if the user interface is suitable.	short exit questionnaire asking if answer was found, how easily and if level of detail in the answer was sufficient; accepted measures of information retrieval performance, such as 'recall', 'precision' and 'mean
Online newsletters	Campaigning, Information provisison, Electioneering	Relevant to all stages where stakeholders need to be informed about policy issues	ypically users have to register to receive the newsletter, providing a varying amount of personal information depending on the specific newsletter; therefore privacy of information needs to be considered	Typically a current web browser or email client; in cases also, possible word processing technology, such as adobe Acrobat reader.	Every device that is able to receive eMail. This includes PCs and mobile phones	Number of subscribers

Tool	Function	Stages	Governance/Rules	Description	Technology	Issues
Online surgeries	Campaigning, Electioneering	All stages are applicable but particularly the agenda setting for new policy and the evaluation	If registration is required care should be taken not to make the process too onerous and time consuming. Other comments as for the above tools apply	he simplest just offer an online form to ask a question or make a statement, where the more sophisticated provide access to tools such as newsletters, chat, discussion fora. The elected representative is the main content provider and therefore needs adequate skills to easily add news and information.	PC	Need to ensure involvement of the community and other stakeholders in
Podcasts	Information provision	Usually agenda setting.	Generally none, unless users have to subscribe. There may be some rules concerning how interaction is governed if emails and texts are replied to.	Depends upon the nature of the content – podcasts could be made to be more accessible through multimedia subtitling. Content provision requires some level of expertise. Use of content is relatively simple. Relatively high bandwidth is required if the user wishes to download a number of podcasts and a suitable device capable of replaying the content such as an iPod. Fairly high bandwidth is required, as is a site capable of syndicating content and storage (1 minute = 1Mb) Third party podcasting websites are available where users can post their podcasts. Content needs to be provided by an information supplier but due to ease whereby content may be produced at low cost. Citizens listen and can post emails or text messages which may be replied to in subsequent casts	PC is mainly needed to download and watch, but content can be automatically loaded onto mobile devices (such as iPod) to listen and/or watch everywhere	Number of subscriptions; Requires evaluation over time

Quick polls	All exept voting	1) agenda setting and (5) policy evaluation. For closed user groups it can also be used in the (2) "policy formulation"-stage to get quick atmospheric pictures.	There is usually no way to stop participants responding more than once. A user's answers are generally not disclosed to others except as statistical totals, which are displayed on completion. Usually conducted over a relatively short timescale (several days to weeks) and often replaced by a new quick poll. The results of previous quick polls can be archived and accessed by users at a later date.	Web accessibility guidelines need to be followed. A cheap and straightforward mechanism. Resource implications are low and the level of technical competency should be similarly low, but this depends on the actual software. Advantages of quick polls are that they collect quantifiable data that is easy to analyse and understand, they require a minimum of staff time and skills and involve users in a funny way.	Usually via Internet; Advanced ones via mobile communication or even Digital TV	Through analysis of the answers received.
Surveys	Campaigning Community building Consultation Electioneering Mediation Polling	(1) agenda setting (2) policy formulation, and (5) policy evaluation	A user's answers are generally not disclosed to others except as statistical totals. (But providers can analyse individual answers of a small sample if they use log files.) Some online survey software includes additional features for participants, for example, a 'progress bar' and a facility 'to stop and save' so that participants can complete the survey at a later time. In some tools it is possible to jump from one question to another, to distinct among pages, or the transfer into statistical software such as SPSS, and the avoidance to repeat answers. Advantages of surveys are that they collect quantifiable data that is easy to analyse and understand.	Developers require specialist skills. The list of questions and possible answers needs careful consideration so as not to lead to bias. The results usually require statistical analysis. The management of a survey usually requires a minimum of staff time and skills. Users tend to be used to surveys and require no special skills.	PC-based	Through analysis of the answers received and the total number of responses.

Search engines	Infformatiom provision	As a general purpose information finding tool they could be used at all stages in the policy	It is possible to include a search engine in your own website	Most internet users are familiar with general purpose search engines using simple keyword searches · Many search engines offer a variety of languages	Search engines are usable over browsers on PCs	Accepted measures of information retrieval performance, such
Virtual communities	Community building	All stages are applicable but particularly the agenda setting for new policy and the evaluation stage where the need for a major change in policy has	uch a web site typically provides background information and should be organised specifically to support an issue, a range of connected issues or a geographical area.	Trust, trustworthiness and community-building aspects should all be addressed in designing the application. If registration is required care should be taken not to make the process too onerous and time consuming. Other comments as for the above tools apply.	PC. Mobile phones and digital TV could be used to keep track of the ongoing process	Need to ensure involvement of the community and other stakeholders in assessing the effectiveness.
Web portals	all	Relevant to all stages where stakeholders need to be informed about policy issues	For the portal itself this is not usually applicable as they are open to all users, however applications they point to may require user registration	ypically a current web browser, otherwise other software which might be required is usually available for downloading from the portal. The majority of government agencies in the US and across Europe now have web portals.	Some portals offer special access for mobile phones (over wap) besides that through PCbrowser	Number of visits, the length of time a user stays o the portal, number of repeat visits, number of sites linked, number of available applications

| Webcasting tools | Consultation Information Provision Planning | Typically viewing debates on agenda setting, policy formulation (including analysis and information) and decision making. | If interaction is offered, some kind of authentication might be necessary. Webcasts are typically viewed in real-time and can last over an hour but they can also be archived to allow people to view them at a later time | Need to consider duration of webcasts as users may have to pay for their internet connection. The viewers need an appropriate internet real-time player. The technical competency required by the user is moderate and mainly concerns the initial access to the real-time player. Should have a link to where viewers can download a real-time media player. Bandwidth which the target audience has access to needs to be considered. In areas where broadband is not yet available, consideration should be given to how long participants will have to stay on line and the associated costs or inconvenience of tying up their telephone line. Archived webcasts should be indexed to allow viewers to navigate them more easily. Webcasts can be run in-house, then the provider needs highly skilled technical personnel, but this could also be outsourced to a Webcasting Service Provider. Implies significant initial investment. The on-going resource implications are moderate to high | PCs as multimedia and high bandwidth is required. Emerging mobile channels (WLAN, UMTS) and digital TV could widen range in the future. | Requires evaluation over time and is likely to be dependent on the issue being broadcast |

Wikis	Consultation Information provision	As Wikis allow for collaborative writing, they lend themselves to being used in many different parts of the policy making process. There is the issue of what happens once a decision has been made and you only want comments upon this – it is possible to lock some Wiki content.	Some Wikis have strict moderation policies, others are less restricted, dependant upon the user group. It is generally the case that a clear statement of the rules of engagement makes for a more effective collaborative experience	Moderate to high technical expertise is required to set up the tool on a server. Once set up, simple to use and to edit, technical competence required is very low. They are typically easy to use and do not require knowledge of HTML, using their own simplified form of markup. As the Wikipedia becomes more prevalent, people's familiarity with the idea of an editable website (often without requiring registration) lowers the initial barrier to participation. Often users feel reticent about adding content, but prolonged use increases confidence.	Full size web browser is needed to add and edit content. Reading is also supported over diverse mobile devices.	Count the number of page views and page edits particular pages in the Wiki; come up with a metric of "collaboration" – how much mediation is required to come up with content which users can accept? Questionnaire about users maturity with wiki, whether