

## **b-involved – electronic extended public participation**

*Paulo Rosa*<sup>1</sup>, *European Commission, Joint Research Centre – IPSC. Via E. Fermi, 2749, 21027 Ispra (VA), Italy. [Paulo.rosa@jrc.it](mailto:Paulo.rosa@jrc.it)*

*Ângela Guimarães Pereira*<sup>2</sup>, *European Commission, Joint Research Centre – IPSC. Via E. Fermi, 2749, 21027 Ispra (VA), Italy. [angela.pereira@jrc.it](mailto:angela.pereira@jrc.it)*

*Gonçalo Lobo, New University of Lisbon, Faculty of Science and Technology. Quinta da Torre, 2829-516 Caparica, Portugal. [ggl@fet.unl.pt](mailto:ggl@fet.unl.pt)*

### ***Abstract***

Information and Communication Technologies (ICT) are increasingly becoming more pervasive of peoples' lives, both for individual and collective usage. Factors like globalisation and individualisation cause more distance of citizens to the state and its institutions. 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.

b-involved (<http://b-involved.jrc.it/>) is an Internet platform that enables a small group of people to have a focused discussion about a pre-defined issue. As in many social research group settings, such as focus groups, each group has at least one Moderator and several Participants who meet in a virtual room that offers the means for an on-line informed debate. This tool was developed with the aim of enhancing e-participation processes, hence providing the means for active involvement of society in public policy making.

In this paper we suggest how the b-involved platform could be used in participatory venues, using limited applications in research settings, as well as challenges for its effective deployment in policy initiatives.

**Keywords:** e-participation, electronic focus groups, ICT, public participation, e-democracy.

### ***1. Electronic Mediated Participation Models and Methods***

#### **1.1 e-methods**

The OECD (2001) has proposed a typology of relationships between governments and citizenry: information which is a one-way relationship in which organisations make accessible or disseminate information to citizens; consultation which is a two-way relation in which citizens provide information upon specific requests from governmental organisations; and active participation where a relationship is created on the basis of partnerships, through which citizens actively engage in the decision and policy making processes.

There is a number of typologies for public participation methods, most of them relating to the degree of interaction participants have with those who promote those processes and degree of influence of participants in the process (e.g. Arnstein, 1969; IAP2, 2000; Rowe & Frewer, 2000; Involve, 2005; Slocum, 2003). These typologies are, broadly speaking, also applicable when such interactions occur within electronic environments.

---

<sup>1</sup> This paper contains opinions that are those of the author and do not represent those of the European Commission.

<sup>2</sup> This paper contains opinions that are those of the author and do not represent those of the European Commission.

e-consultation and e-participation initiatives are the ones that interest this work. Several examples can be found in the Internet. By e-consultation it is meant online feedback from citizens upon request through Surveys, Quick Poll; chat rooms, discussion forums; e-panels; e-deliberative polling, etc...

Although (e-)consultation assumes some degree of reciprocity, since policy makers are implicitly acknowledging that those being consulted are resourceful and may influence the final policy proposal, it is still explicitly conveying that policy makers are ultimately the decision makers (Bishop & Davis, 2002), not guaranteeing influence of participants in the decision making process. This seems to be the preferred means of institutions to e-engage their constituencies.

e-participation refers to building of partnerships and actual opportunity for shaping policy dialogues through, e.g. Discussion forums, e-panels; e-petitions; virtual community, etc. See for instance, Dialogue Circles (<http://www.dialoguecircles.com/>), eCommons (<http://www.bydesign-elab.net/>), Danmarks Debatten (<http://www.danmarksdebatten.dk>) or Dialogue by Design (<http://www.dialoguebydesign.net>) which are quite interesting examples of this sort of processes. Usually, Internet based e-participation initiatives are asynchronous (e.g. discussion forums, YahooGroups and GoogleGroups), targeted for large groups and where discussions can last for several days. Synchronous e-participation, as the Dialogue Circles initiative, works through chats and requires that all participants must join the group at a specific time. In the latter case, the groups are typically smaller and the discussions shorter, albeit more focused and intense.

## 1.2 e-synchronous dialogues

The work described in this paper refers to e-synchronous dialogues. In this section we will briefly concentrate on tools for synchronous on-line groups' dialogues, in particular those initiatives that mimic focus groups<sup>3</sup>, the electronic focus group. Research companies began using online venues for quality research around 1994, when they started to use chat rooms in discussion groups (Sweet, 1999). There are several tools available, for instance, one of the first tools developed with the aim of being used for electronic focus groups was the application Computer Mediated Dialogue (CMD) designed by Clapper & Massey (1996). Others include e-Dialogues (<http://e-dialogues.royalroads.ca/>) attempts to stimulate substantive dialogue between leading academics and diverse audiences, including the public policy community the Worldwatch Live portal (<http://www.worldwatch.org/>).

As in any participatory initiative, an e-focus group requires a great deal of organisation and while it may lose some of the interesting things about meeting face to face, it also provides several advantages that should not be disregarded.

In this section some advantages and challenges of e-focus groups will be discussed based on an inevitable (albeit arguable) contrast with face to face events:

- Access to infrastructure: allows remote and distributed focus group sessions with associated low costs
- Discussion dynamics: it is more difficult for one of the participants to dominate the group (Sweet, 2001) and to influence the other participants (Harrison, 2006). The presence of participants with strong character is harder to be felt once every participant can state and write his/her opinions in parallel with the other participants; online focus groups are very effective in providing on-screen visual stimulate to participants (Harrison, 2006). Questions can easily include links to web-sites and uploaded documents; indeed they can include links to video clips, sound files and multimedia files (Harrison, 2006).

---

<sup>3</sup> Focus groups are group interviews. A moderator guides the interview while a small group – usually 8 to 12 people – discusses the topics that the interviewer raises. The moderator is a well-trained professional who works from a predetermined set of discussion topics. These groups have a flexible organisation, as the objective is to promote interaction and discussion. See for instance: Morgan (1998).

- Skills: While people with good rhetoric skills tend to dominate face-to-face discussions, in electronic focus group participants familiarised with chats and instant messengers have a clear advantage. Therefore, all the participants should be able to write with the keyboard and be familiarised with computers, including the moderator.
- Moderation: the issue of moderation is a crucial aspect of on-line opportunities to engage publics in participatory processes; Coleman and Gøtze (2004) offer a variety of indications with regards to moderation and mediation on online participation that constitute challenges for those organising such events – see Box 1. 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).

**Box 1: Moderation & Mediation issues in on-line engagement after Coleman & Gøtze**

“Deliberation requires trusted facilitation. Facilitation is a cultural-democratic function. The facilitator’s role is to provide discursive focus, stimulate groups into interacting constructively, build a sense of team spirit or community, referee, troubleshoot and keep time. Those facilitating online engagement in policy deliberation will only be trusted if they:

- i) set out clear and transparent rules for participants, e.g. maximum length of messages; maximum frequency of messages; attitudes to offensive language and defamation;
- ii) regulate the discussion, both by implementing agreed rules and adhering to ethical principles, such as data privacy, political neutrality and non-coercion;
- iii) 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;
- iv) help discussion participants to reach conclusions (not necessarily shared ones) rather than incessantly rehashing old arguments;
- v) summarise the deliberation so that key points of evidence and main conclusions are set out in a balanced and accessible form;
- vi) 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.

Trusted facilitation is the basis for democratic mediation.”

## ***2. The b-involved Platform***

### **2.1 Motivation**

In the previous section this paper focused on electronic mediated participation models and methods and more specifically on the potential and challenges for e-synchronous dialogues to be used in e-participation initiatives. We strongly believe that there is a need to create innovative and effective spaces for public debate and that e-participation platforms should be further developed in order to meet that purpose.

### **2.2 Main features**

The b-involved platform was designed to be used in remote and distributed *focus group* sessions. It is inspired in the traditional face to face focus groups from social research methodology, being particularly useful when public debates take place among participants that live far away from each others.

Each venue, or focus group session, has an Organiser (which can also have a Moderator role) that is responsible for inviting the Participants and other Moderators to attend and contribute to the session, creating their logins and passwords, and preparing if necessary an introductory presentation. The Organiser can also prepare and store in advance, within the b-involved platform, all the relevant documents to the discussion.

The discussion group has to be composed of, at least, one moderator and of several participants, ideally not more than twelve. All the participants should be able to write with the keyboard and be familiarised with computers, even if audio and video facilities are used..

The venue occurs in a virtual environment where several tools are available to help the participants express their opinions and ideas. The currently available five main features of the b-involved platform are:

- The Participants Table;
- The Presentation Area
- The video and audio facility
- The Discussion Chat;
- The Virtual Library;
- The Collaborative Whiteboard

The platform is accessible through the internet, **its usage being completely free**, not being necessary to download or install any specific software. This is a clear advantage of this platform in relation to others that have external dependencies on software and are pervasive of the user's computer. All it is needed is an internet browser and a stable internet connection, as well as multi-media devices if the video and audio facility is used.



Figure 1 – b-involved virtual room interface

### ***Participants Table***

Through the Participants Table it is possible to view a graphical representation of all the persons participating in the discussion. Currently, each participant (or moderator) is represented by an icon and a login name. 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).

### ***Presentation Area***

The Presentation Area (optional) consists of a short and simple presentation about the issue in discussion and in principle it is the task of the Organiser to create it. All additional and relevant information should be sent to the Virtual Library feature (see below).

### ***Discussion Chat***

The Discussion Chat is, at present, the most dynamic feature of the b-involved platform. It is in this area where the main discussion takes place. The invited persons are able to participate, writing messages with their opinions about the issues being discussed.

The Moderators have a very important role in this process. 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.

The full discussion is automatically stored in a database and can be saved, printed and analysed later on by the Moderator. This feature avoids the time demanding task of audiotape transcriptions.

### ***Virtual Library***

The Virtual Library is a collaborative feature where every participant can view and send different types of documents and links relevant to the issue of concern. Each document can have a maximum size of 1.5Mb and can be a text file (txt, doc or pdf), a spreadsheet (xls), an image (gif or jpg), an animation (swf) or a presentation (ppt or pps). A short description should be provided to all the documents and links sent to the Virtual Library, in a way that each can be easily identified in the library.

### ***Collaborative Whiteboard***

The Collaborative Whiteboard is another important feature of the b-involved platform. Here the Participants can contribute with drawings as a complement to the written discussion.

There are two options available: starting a new drawing from scratch or adding some contribute to an existing one. This way, several people can provide inputs to the same drawing in a collaborative environment. Each time a new drawing is sent, identically to what happen in the Virtual Library, an automatic notification message is displayed in the Discussion Chat. All drawings are stored in a database and can be viewed at any time, even after the end of the venue.

b-involved also includes some other support features such as: User Status; Pre-Written Sentences; Timer, etc.

### ***Audio/Video Conference***

This feature allows the broadcast of live audio and video from the webcam and microphone of a computer, enabling the participants to participate in synchronous online video (and audio) discussions. 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.

Additionally to these features the following on-going implementations are aimed to enrich the platform and will soon be available:

### ***Multi-criteria evaluation***

This tool will allow the users to structure and discuss problems which involve several alternatives and criteria in a collaborative environment through a multi-criteria evaluation framework. For a given multi-criteria problem the user has the possibility to introduce a maximum of ten potential alternatives and evaluation criteria, creating a Matrix of Impacts. Different criteria can be grouped into dimensions (e.g. environment, economy, etc. depending of course on the issue being addressed), where each dimension may have a different weight. The tool allows also framing the problem by establishing a qualitative

relationship between alternatives and social actors groups (the participants of the b-involved session) by means of a Matrix of Social Actors. A ranking of alternatives may be obtained through both matrices.

### *Sticky notes feature*

This feature mimics the paper post-its® commonly used in group discussions and other meetings. It will allow users to present issues by placing and managing virtual notes through a collaborative board. Users are enabled to create text and image based notes, which can have several colours, and to place them schematically in a collaborative board. Each note can also be associated to other notes, creating in this way groups of notes that behave as a single note.

### **3.3 Main Advantages**

Although b-involves inherits the common advantages associated to online technologies, like allowing remote and distributed e-participation sessions, reducing distance constraints, its main distinctive advantages are:

- 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 analyzed later on by the Moderator.
- No cost associated: b-involved is available for free.

### **3. Challenges for b-involved when used for public policy debates**

A quality assurance set of procedures was applied to b-involved which went beyond detection of possible flaws in the architecture of the platform, but sought also context dependent issues that could result on ways to improve it and to assure that the tool was fit for the purpose of on-line moderated debate. So, a number of experiments were conducted within low-stakes meetings. As mentioned earlier, b-involved has a number of tools that contribute to address the challenges that the moderation of "virtual meetings" pose to moderation, namely ensuring that the meeting is properly monitored in order to have all participants actually engaged in the debate.

#### **3.1 Reflections on usage experience**

##### 1. Group dynamics

The dynamics of an electronic focus group is very different from the one of a traditional face to face focus group and this was showed also with b-involved sessions. While people with good rhetoric skills tend to dominate face-to-face discussions, in e-focus group participants familiarised with chats and instant messenger have clear advantages.

A clear challenge for the moderation is hence, to ascertain that participants contributions are clearly monitored by the moderator, who should possess tools that encourage those who have more difficulties to engage in the debate, to do so and silence those who tend to dominate the discussions.

When a question is raised, the normal tendency is that every participant will read it, reflect on it and then will start answering it. In an e-focus group, during this period there will be an "empty time" of some seconds where nothing happens and after it, the comments from all the participants will appear in the chat almost at the same time. This creates an enormous flow of information, demanding more time to analyse

all inputs than if the same number of participants would respond to the question, one at a time like in a face to face setting.

Whereas the message flooding problem can be solved by an active Moderator that tries to guide the discussion telling each participant to write at a different time, the persistence of empty times can be tackled if the participants write small sentences instead of large comments. We would argue that for more elaborated commentary other types of tools such as the *worldwatch* live strategy or discussion forums can be used where people have more time to think and write comments; the b-involved is more likely to suit brainstorming type of discussions where participants write what they think fast and short.

Hence, the “success” of a b-involved venue is strongly dependent on the Moderators skills and on the capacity of the participants to comply with the moderator’s instructions.

## 2. Communication Technology

Since the platform requires an internet connection, one might argue that the platform will not be accessible from the majority of the world, where internet connections are less common and less stable. Although we see this as an issue, it also has to be notice that, by allowing remote session’s group or meetings, the b-involved platform can allow meetings that would not take place because of budget constraints or people availability. Therefore the b-involved can lower the associated cost of a venue and also its environmental effects (such as from travelling to and from a meeting place).

Other issue raised was that the platform does not take into consideration participants with disabilities, i.e., legally blind people. This is an issue that can only be dealt by improving the accessibility and usability features of the platform.

## 3. Equity

In one of surveys that was carried out with users of the platform, while some participants mentioned that the b-involved platform was “unbalanced in terms of access” once that the “main people accessing this tool should be well-educated, used to a computer environment and with access to the necessary technology”, others said that it “doesn’t require advanced computer use skills”. The authors believe that this is directly linked to the users’ computer skills and familiarity with virtual discussion programs. A good practice should be to give some extra time at the beginning of the discussion to allow people to explore the platform and allow them to make some questions regarding the way the platform works and how the session would be conducted, and thereafter, start the discussion.

An interesting observation is how the speed of the technology can induce power relationships considerations. During our experiments, it was also noticed that users with low internet connection (dial-up 56k modems or less) found themselves in disadvantage when compared to users with faster internet connections, once their actions took more time to be executed. For instance, the time elapsed since one message was sent to the chat and the time at which it really appeared on the screen was larger for users with this type of internet connection than for those with faster connections where it was instant. One of the users pointed out that if this issue, is not solved from the beginning, it could create “imbalances of power in the ability to influence, direct and contribute to the discussion”. The best way to deal with this issue and assure that everyone has the time to express what he/she thinks is, once again, to switch the discussion to a format where each participant has the right to comment individually by turns, and in the end of the discussion of each topic, the moderator asks the participants if someone has something else to add to the discussion and waits for the comment of the participant.

## 4. Potential use

Regarding the context of usage for the platform, it was pointed that the platform can be very useful for triggering discussions and to share information. Activities like project meetings, research meetings, public policy participation initiatives or any action “where a group of people need to prepare for a collaborative

activity” such as conferences and workshops can all be supported and enhanced by the b-involved platform.

The incorporation of tools that could facilitate the moderator(s) task and allow the users to be engaged in the debate actively would increase the potentialities of the b-involved as a deliberative tool.

### 3.2 Further developments of the b-involved platform

Following a set of experiments and the users’ recommendations collected through the survey, new functionalities of the b-involved platform are currently being implemented that aim to try to solve the pitfalls and challenges posed by the current version. A key focus of these developments is being the moderators’ management tools including alert, monitoring and control features.

Another set of developments are being realised, in order to enrich the collaborative aspects of the platform. As it was pointed out earlier, the aim is not to have yet another “chat room” or video-conferencing like platform, but to have a collaborative environment on the spirit of e-participation. Hence, a number of tools that are currently being used already in face-to-face participatory events are being integrated in this platform. For instance, the following features are being integrated:

- mind-mapping tool for brainstorming, problem solving and decision making;
- evaluation tools, such as multi-criteria evaluation – as already described earlier;
- participatory scenario building – being implemented at the moment.

This set of tools will allow a more thorough implementation of the e-participation concept, beyond writing and audio conversations supported by video, turning b-involved into a truly collaborative platform and enhancing its uniqueness. Increasing the accessibility of the platform is also already being addressed, in order to facilitate the use of the platform to people with low computer skills or with a certain level of disability.

## 4. Reflections

The authors share the idea that these types of platforms do not aim at resolving *per se* the most delicate aspects of deliberative democracy, which are related to actual influence of outcomes in the policy processes. Platforms like b-involved, are to be seen as **further opportunities** for implementing such processes.

In many participatory initiatives in which the authors of this paper took part, the invariable first question to moderators is “would my views have any influence in the outcomes of that decision”? The possibility of influencing is what encourages people to take part, enhance credibility and trust on the democratic processes; the means by which involvement takes place, remains dependent on context and the publics. In each case, when participatory initiatives shall take place, the choice of (in this case) “virtual” or “face-to-face” has to be carefully considered against those. It is hoped that ICT based involvement can further improve on institutional *willingness* to engage constituencies, since on-line venues may in some cases be easier to implement, leading to more affordable processes in terms of resource needs (less displacement, less expensive venues, etc) as well as the leverage of digesting outcomes from on-line participatory events.

As Coleman & Götze (2004) put it, “the worst-case scenario for online engagement, [and we add for all participatory initiatives], is one where politicians and bureaucrats *tokenistically* adopt all kinds of e-initiatives, such as online consultations and discussion *fora*, but retain existing structures of policy formation, so that the public’s input is ‘worked around’ by powerfully entrenched institutions”. Clearly, as Gualtieri (1998) recommends, for e-participation to take off, the new technically literate generation has to be placed in positions of power, along with improved technologies for interactivity, synthesis and feedback, as well as 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 and greater desire on the part of the public to participate actively in the policy process.

The aim of the b-involved platform was to create yet another space for genuine public debate. It does not intend to substitute other forms of on-line engagement, but as these other forms of engagement it intends to foster the connection between democratic structures and the voices hardly heard in policy making. As Dewey wrote (1927 quoted in this Coleman & Götze, op.cit.), *The essential need ... is the improvement of the methods and conditions of debate, discussion and persuasion. That is the problem of the public.* For us, this is about creation of effective spaces; that is, spaces that do not frustrate the endeavour of extended public debate about public policies, rather being supportive of it by providing alternative means to implement it.

Finally, as largely understood from our experiences with this platform, e-participation in general and any participatory event is an organised initiative, that implies that it has to be moderated and based on a precise set of rules agreed among those involved, implying genuine commitment from those who regulate it and promote it.

### **References**

- Arnstein, S. R. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners* 35, 216-224.
- Clapper, D. L. Massey, A. P. 1996: Electronic focus groups: a framework for exploration. *Information and Management* 30(1), 43-50.
- Coleman, S. and Götze J. 2004: Bowling Together: Online Public engagement in Policy deliberation. London: Hansard Society. Available online at (last access 9<sup>th</sup> February 2007): <http://www.bowlingtogether.net/>.
- Gualtieri, R. 1998: Impact of the Emerging Information Society on the Policy Development Process and Democratic Quality. OECD Reports. Puma(98)15. Available online at (last access 9<sup>th</sup> February 2007): [http://www.oilis.oecd.org/oilis/1998doc.nsf/LinkTo/PUMA\(98\)15](http://www.oilis.oecd.org/oilis/1998doc.nsf/LinkTo/PUMA(98)15)
- Guimarães Pereira, Â. Gough, C. & De Marchi, B. 1998: Computers, Citizens and Climate Change – The Art of Communicating Technical Issues. *International Journal of Environment & Pollution*, 11(3) 266-289.
- Harrison, M. 2006: *Online Focus Groups as A Business-to-Business Research Technique*. Available online at (last access 9<sup>th</sup> February 2007): <http://www.b2binternational.com/whitepapers14.html> and <http://www.marketresearchworld.net/index.php?option=content&task=view&id=489>
- IAP2 (nd). Public Participation Toolbox. Available on: [http://www.vcn.bc.ca/citizens-handbook/participation\\_toolbox.pdf](http://www.vcn.bc.ca/citizens-handbook/participation_toolbox.pdf). [last accessed: 9th August 2006].
- Involve. 2005: People & participation - How to put citizens at the heart of decision-making, Beacon Press. Available on: [http://www.involving.org/mt/archives/blog\\_13/People%20and%20Participation%20final.pdf](http://www.involving.org/mt/archives/blog_13/People%20and%20Participation%20final.pdf). [Last accessed: 9th August 2006].
- Lobo, G. Guimarães Pereira, Â. 2005: e2Focus Groups – The Virtual Ways of Debate. In *Proceedings of the ESEE 2005 - 6th International Conference of the European Society for Ecological Economics - Science and Governance: The Ecological Economics Perspective*, presented at the Special Session “IT based tools for engaging society in policy making - a road show”, 14-17 June, Lisbon, Portugal.
- Morgan, D. L. 1998: *The Focus Group Guidebook*. London, SAGE Publications.
- OECD. 2001: *Engaging citizens in policy making: information, consultation, and the public participation*. Paris: OECD.

- Rosa, P., Lobo, G., Guimarães Pereira, Â. 2006: e<sup>2</sup>FocusGroup - A multimedia platform for virtual debates, Poster included in the *Proceedings of PATH: Participatory Approaches in Science & Technology*, 4-7 June, Edinburgh, Scotland, 2006.
- Rosa, P., Lobo, G., Guimarães Pereira, Â. 2006: e<sup>2</sup>FocusGroup - Extending electronic public participation, in *Proceedings of TED 06: Towards e-Democracy: Participation, Deliberation, Communities*, 24-26 October, Mantova, Italy.
- Rosa, P., Lobo, G., Guimarães Pereira, Â. 2006: e<sup>2</sup>FocusGroup Participatory Session, in *Proceedings of the 7th International PhD Workshop, Young Generation Viewpoint: Interplay of societal and technical decision-making*, 25-30 September, Hrubá Skála, Czech Republic. Available on CD-ROM (ISBN 80-903834-1-6).
- Rowe, G. & Frewer, L.G. 2000: Public Participation Methods: A framework for evaluation. In *Science, Technology & Human Values*. Vol 25 no. 1. Pp. 3-29.
- Slocum, N. 2003: Participatory Methods Toolkit, A practitioner's manual. Report published by King Baudouin Foundation & Flemish Institute for Science and Technology Assessment with United Nations University. Available at: <http://www.kbs-frb.be> or <http://www.viwta.be>.
- Sweet, C. 1999: Anatomy of an on-line focus group, Quirk's Market Research Review, issue #0548. Available online at (last access 9<sup>th</sup> February 2007): [http://www.quirks.com/articles/article.asp?arg\\_ArticleId=548](http://www.quirks.com/articles/article.asp?arg_ArticleId=548)