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eParticipation Research Direction based on barriers, challenges and needs

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Abstract: The report is of DEMO-net work package (wp) 12, task 12.6. It reports on work done in Phase 2 of the project to define an eParticipation research direction based on DEMO-net partners' current skills and research interests and idendentified barriers, challenges and needs raised by their research. Having described these it then considers the future research areas for DEMO-net. Specifically it provides priority research areas for Phase 3 of the network of excellence.

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Table of contents

Executive Summary

In this report we identify future research priorities for eParticipation researchers. We do this by first setting the context by providing the trajectory of eParticipation from its early days to current practice. We then consider this current situation and analyse the challenges facing future research. With an understanding of barriers and challenges we then consider the expertise within the DEMO-net partnership so as to understand the appropriate research challenges to take forward in Phase 3 of DEMO-net. This report represents deliverable D12.3 from Task 12.6 of DEMO-net Phase 2.

The research priorities were identified through analysing the literature – both workshop reports and scientific published papers by DEMO-net researchers. This coding resulted in six main areas of barriers and challenges which are listed below:

"Complexity of research field" addresses problems resulting from the fragmented research field that constitute a real threat to the further development of eParticipation tools and integration of research. Achieving more integrated, multi-disciplinary research is a key challenge requiring more dialogue between researchers to identify links between shared objects of research and ecologies of eParticipation.

"Research methods" depicts methodological shortcomings of research designs that tend to focus upon on government institutions rather than other forms of spontaneous participation on the net.

"Information systems and Information Management" focuses on the predominantly technical and socio-technical perspective. It highlights the extensive consequences of technical determinism for eParticipation and the need for inclusive socio-technical design.

"Institutions and stakeholders" outlines barriers, challenges and needs belonging to political and institutional structures. This area is dominated by institutional and political resistance to use, introduce and act on eParticipation applications. The area draws attention to complex themes such as the nature of power and the problematics of power sharing and the diminished relevance of political institutions to citizens' life when faced with global economic forces.

"Equity: technical, communicative, cultural and language divides " focuses on the major divides which characterise the problem of political disengagement from political institutions among citizens and barriers deriving from demographic, social, economic and cognitive obstacles that limit access to eParticipation initiatives.

"Theory" summarises various conceptual and explanatory shortcomings that are relevant to eParticipation research. It highlights the need for a general discussion about the benefit of participation in the context of democratic theory, with particular emphases upon relationships of citizenship and power.

Based on these areas, in particular the complexity of the field and the needs for a multi-method approach to research, six research priorities for Demo-net were identified. These are:

1. **Inclusive eParticipation** focuses on the growing multi-cultural and multi-ethnic shape of our society and the need for inclusion in public engagement. It will consider how on-going research into e-inclusion can be of benefit to eParticipation and what other research needs to be undertaken to realise inclusive eParticipation. Also the role of the mass media and public sector broadcasters as a trusted intermediaries needs to be considered.

2. **Quality and Impact of ePparticipation** focuses on how eParticipation applications may be *affecting* democracy by changing existing practice, and *effecting* it as they become new instruments for achieving democracy. It seeks to integrate criteria and methods for assessing eParticipation initiatives in terms of their impact on democracy, their planning of public engagement and quality of the tools provided for public engagement.

3. **Understanding the conversation and supporting deliberation** focuses on understanding how to enhance and use knowledge technologies to support eParticipation. It is concerned with the potential for combining techniques from data mining, argument mapping, social networking, discourse analysis and ontological engineering in order to investigate whether such a combination of methods and tools has the potential to support open dialogue and public deliberation across a range of conversational platforms including blogs and discussion forums.

4. **Representatives and eParticipation** is concerned with the elected representative who has, to date, stayed at the periphery of eParticipation. The research will investigate how to provide answers concerning the relevance and added value of eParticipation to both motivate and engage the politician. There is a need to understand what politicians think about eParticipation, how they are talking about eParticipation and how they use the technology.

5. **Social networks and eParticipation** investigates how formal consultations are taken up by the public sphere, i.e. where civil society discusses the formal consultation issues at non-government sites. Previous eParticipation research has treated online consultations as discrete sites and have analysed contributions and interactions within these discrete sites. Building on this work, DEMO-net research will analyse how effectively online consultations are inter-connected with other sites of discussion on the same public-policy issues. It will also look for evidence of how discussion and opinion flow in and across these sites.

6. **Cultural and normative differences regarding intensity of participation** is concerned with the cultural differences across Europe which are reflected in different styles of public engagement in politics.

These six priorities have already been discussed by the DEMO-net consortium and there is general consensus that they provided a useful way forward to integrate and consolidate partners' research and to aid planning for the overall work of DEMO-net in Phase 3. Therefore the six research priorities will be further investigated and result in detailed workpackages for months 25 to 42 of DEMO-net.

1 Introduction

1.1 Purpose and Scope of Study

The report is of DEMO-net work package (wp) 12, task 12.6. It reports on work done in Phase 2 of the project to define an eParticipation research direction based on barriers, challenges and needs.

The DEMO-net project is funded by the European Commission, to establish a sustainable European virtual centre of excellence in the area of eParticipation, that will become the focal point of eParticipation activities in Europe. This network aims to be the focal point of eParticipation activities in Europe which will strengthen scientific, technological & social research excellence in eParticipation. To achieve this aim, DEMO-net has four main objectives:

1. To achieve a lasting integration of currently fragmented research in eParticipation
2. To stimulate joint research in DEMO-net's agreed research areas
3. To disseminate DEMO-net research amongst eParticipation stakeholders
4. To provide a barometer of research effectiveness for eParticipation in Europe by establishing a corpus of lessons-learnt resource to show what kind of projects have delivered what kind of results and thereby considered effective for eParticipation.

This report directly supports these objectives.

The report has five main sections. After this introduction there follows a section which traces the historical roots of eParticipation up to the start of the DEMO-net project.

The following section focuses on the current challenges, barriers and needs of eParticipation. This is based on work conducted during Phase 1 and Phase 2 of DEMO-net and a number of scientific papers presented by DEMO-net partners over the lifetime of the network. These detailed challenges and barriers arise from a number of perspectives ranging from the government practitioner perspective to the information technology perspective.

Section 4 reflects on the eParticipation research expertise within DEMO-net.

Section 5 ‘Future eParticipation Research Direction’ takes the investigated challenges and barriers and considers the future research areas for DEMO-net in the light of DEMO-net partners’ current expertise, research interests and identified barriers, challenges and needs. Specifically it provides priority research areas for Phase 3 of the network of excellence.

Finally, the separate Appendix gives detailed information on the DEMO-net partners along with the research questions they are addressing and a list of some of their recent publications related to eParticipation.

1.2 Study Approach

This study is based on:

1. understanding how eParticipation has progressed
2. identifying current eParticipation barriers
3. identifying partners research expertise and research interests
4. identifying current and desired state of eParticipation research
5. analysing the above to create a short list of strategic areas that fall within partners' expertise, require joint research and are of key importance to furthering eParticipation research.

To identify current eParticipation barriers we considered DEMO-net partner outputs from previous DEMO-net work packages, workshops and deliverables, namely:

- DEMO-net eDeliberation workshop. 16 October 2006, Leeds;
- DEMO-net eParticipation policy workshop. 12 March 2007, Bergamo;
- DEMO-net: Argumentation Support Systems for eParticipation workshop. 5 March 2007, Berlin;
- DEMO-net: Knowledge and Semantic Technologies for eParticipation workshop. 5 December 2006, Athens
- DEMO-net Deliverable 4.2. 31. December 2006. Multidisciplinary roadmap and report on eParticipation research;
- DEMO-net Deliverable 6.2. 22. July 2007. Interdisciplinary framework to address the socio technical and political challenges of eParticipation, including WP6 survey (14 contributions) and position papers (15 contributions).

We also considered four papers from DEMO-net members focussing on obstacles to eParticipation, associated challenges and needed action, namely:

- WIMMER, M. A., SCHNEIDER, C., SHADDOCK, J. 2007. Framework and Methodology to Turn Barriers and Challenges of eParticipation into Research Themes and Actions. *In: eChallenges 2007, 24-26 October 2007, The Hague, The Netherlands*
- ANDERSEN, K. V., NØRBJERG, J., SECHER, C., WIMMER, M. 2007. Coach class or Red Carpet Treatment: Strategic choices for eParticipation in Local Government. *In: eChallenges 2007, 24-26 October 2007, The Hague, The Netherlands*

- ROSE, J., SANFORD, C. (forthcoming). *Mapping eParticipation research: four central challenges.*
- SAEBØ, Ø., ROSE, J., FLAK, L.S. 2007. *The shape of eParticipation: Characterizing an emerging research area,* Government Information Quarterly.

A text analysis using the key words "challenge", "barrier", "need", "problem" was applied to these documents to extract current barriers, challenges and needs in the eParticipation research field. Definitions of the categories challenge, barrier and need were adopted from Wimmer, et al who define a barrier as "an obstacle that prevents progress, or a structure or object that impedes free movement". A challenge is described as a goal that can derive from a transformed barrier. Both can be descriptions of circumstances, situations or objectives. A need refers to activities necessary to achieve predefined objectives or to overcome identified barriers. Our text analysis identified a variety of ways forward to develop relevant eParticipation research questions, methods and disciplinary cross-linkages.

To summarise the research expertise among DEMO-net partners we considered the research findings from the overall survey into eParticipation research from December 2006: DEMO-net Deliverable 4.2. 31. December 2006. *Multidisciplinary roadmap and report on eParticipation research.*

Furthermore, in October 2007 we conducted a second, smaller survey where we asked all partners to compete a feedback form. This form required each researcher and PhD student within the partner organisation to list the eParticipation research questions they were addressing and provide up to three relevant eParticipation publications which reflect their work. The full list of feedback forms can be found in the separate appendix to this report.

Based on the above studies, six research priorities have been chosen for the joint research activities in Phase 3 of DEMO-net. These have been chosen for a number of reasons which include their alignment to partners' research expertise, a logical follow-on to Phase 2 research activities to build on the research results and partner collaborations in that Phase and also with the realisation that there is a need make a step change in eParticipation research.

2 The Historical Roots of eParticipation[1]

Rhetorical claims for the democratising effects of new media have been a perennial feature of modernity. For example, Lytton Butler was convinced that the rise of the popular press in the 1830s would mean that 'a new majority must be consulted, the sentiments and desires of poorer men than at present must be addressed; and thus a new influence of opinion would be brought to bear on our social relations and our legislative enactments.' (Briggs, p.202) The invention of the telegraph in the 1850s led one member of the US Congress to predict that 'Space will be, to all practical purposes of information, annihilated between the States of the Union, as also between the individual citizens thereof.' Edward Bellamy's popular nineteenth-century utopia, *Looking Backward* (which William Morris dismissed as 'a cockney paradise') envisaged wireless as an instrument of cultural unification; in the 1930s HG Wells argued in favour of a 'World Brain': 'a unified, if not a centralized, world organ to "pull the mind of the world together"' by collecting, indexing, summarising and disseminating all the knowledge in the world; and in 1948 Vannevar Bush envisaged the invention of a desk-sized computer called 'memex' which would provide access to an encyclopaedic array of facts, 'ready-made with a mesh of associative trails running through them …'

Deterministic claims that new media technologies are bound to lead to more democratic consequences have been rightly criticised for neglecting the ways in which technologies are themselves socially shaped and for conceiving political relationships in an excessively functional and mechanistic fashion that misses the cultural and ideological dynamics of social power. McLuhan's famous distinction between 'hot media' which are 'low in participation' and 'cool media' which 'are high in participation or completion by the audience' exemplifies such determinism. Media technologies are neither inherently participatory nor exclusive, but depend upon cultural practices and policy contestations. The history of radio is a case in point. In the early twentieth century amateur enthusiasts regarded radio technology as a tool for interpersonal (and inter-communal) communication, while governments conceived it as a means of centrally regulated broadcast transmission. Herbert Hoover, as US Secretary of Commerce, took the view that 'The use of the radio telephone for communication between single individuals … is a perfectly hopeless notion', whereas Brecht argued that

> The broadcasting system must be changed from a distribution system into a communication apparatus. The broadcasting system would be the most wonderful communication apparatus imaginable a fantastic channel system, that is, if it understood not only to transmit but also to receive, in other words, to make the listener not only hear but also speak, and not to isolate him *(sic)*, but to involve him in a relationship …

[1] This chapter is based upon Coleman, S, (2007) 'E-Democracy: the History and Future of an Idea', in Quah, D., Silverstone, R., Mansell, R. and Avgerou, C. (eds.) *The Oxford Handbook of Information and Communication Technologies*, Oxford: Oxford University Press

The 'hot' or 'cool' character of radio as a medium had less to do with its evolution as a centrally-regulated system of broadcasting than did political concerns about the control of public information and (in the United States rather than Britain) economic ambitions to commercialise the airwaves.

In the late 1960s, with the introduction of portable video and broadband cable television, renewed hopes for a more participatory form of political communication were raised. According to Dutton, 'stimulated by the promises surrounding two-way interactive cable television systems, proponents saw the convergence of computing and telecommunications as offering a technological fix to the many pragmatic constraints on more direct participation in governance.' In Canada, Henaut and Klein's pioneering work with the Challenge for Change project gave communities access to video technology which enabled them to record their social concerns which were shown at public meetings and to government officials. Experiments in community access to media technologies led to a revival of the Brechtian vision of interactive public communication. Shamberg, whose 1971 book, *Guerilla Television*, became a counter-cultural manifesto for the democratisation of public communication, argued that 'The inherent potential of information technology can restore democracy in America if people will become skilled with information tools.' (p.28) The failure of Shamberg and his associates to recognise the more formidable politico-economic barriers to media democracy than simply providing citizens with video-production skills reflected a degree of naivite. As Enzensberger observed, 'Anyone who expects to be emancipated by technological hardware … is the victim of an obscure belief in progress.' (1970, p.34)

The emergence of cable TV in the United States , and the 1972 ruling by the Federal Communications Commission (FCC) that cable operators had an obligation to provide access channels for educational, local government and public use, was seen by enthusiasts as having 'the potential to rehumanize a dehumanized society, to eliminate the existing bureaucratic restrictions of government regulation common to the industrial world, and to empower the currently powerless public.' (Streeter, 1987, p.181) This optimism was countered by harsh economic realities: the deregulatory atmosphere within which cable TV flourished was not ultimately conducive to civic imperatives and investment in viewer feedback declined, except for such services as tele-shopping and evangelical pay-to-pray services.

Nonetheless, a number of interesting 'teledemocracy' experiments were pursued in the 1970s and 1980s, taking advantage of the growing convergence between computers, telecommunications and interactive cable TV. (Hollander, 1985; Arterton, 1987; Grossman, 1995) In 1972 Etzioni developed the MINERVA (Multiple Input Network for Evaluating Reactions, Votes and Attitudes) project, designed to enable 'masses of citizens to have discussions with each other, and which will enable them to reach group decisions without leaving their homes or crowding into a giant hall.' The system involved telephone conferencing, radio, two-way cable TV and satellites. In the 1980s Becker and Slaton were associated with a number of 'televote' experiments in Honolulu, Hawaii and Southern California, in which random groups of citizens were contacted by telephone,

invited to study a brochure containing policy information and varied opinions and then asked to vote on a policy question. Few of these projects were sustained or integrated within the constitutional mechanisms of state governance, but they served to spur creative thinking amongst political theorists about the putative relationship between interactive communication technologies and more participatory forms of democratic governance.

It was the emergence in the 1990s of the internet as a public communication network, however, which provided an impetus for some of most grandiose narratives of technocratic determinism. This hyperbolic tendency had three main characteristics. Firstly, cyber-visionaries depicted the internet as a new frontier, a deterritorialised cyber-utopia beyond the comprehension or control of the political state. John Perry Barlow's 1996 *Declaration of the Independence of Cyberspace* exemplified what Barbrook and Cameron referred to as the 'the Californian ideology':

> We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth.
>
> We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.
>
> Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here.

A second feature of this technocratic determinism was a belief that the feedback path of the internet would enable mass democratic societies to transend political representation and allow everyone to vote directly on every issue. (Becker and Slaton; Grossman; Etzioni) Dick Morris, who was at one time chief strategic adviser to President Bill Clinton, predicted the imminent arrival of plebiscitary, Jeffersonian democracy:

> Whether direct Internet democracy is good or bad is quite beside the point. It is inevitable. It is coming and we had better make our peace with it. We have to better educate ourselves so that we can make good decisions. Restricting the power of the people is no longer a viable option. The Internet made it obsolete. (Dick Morris, 1999)

Thirdly, many of those who entertained sanguine hopes about the democratic potential of online politics failed to recognise the implicit codes of rationality built into the hardware and software through which most people access the internet. As Street has suggested, 'Technical fixes are less fixing a problem as imposing a particular definition of what the problem is (and to which the technology represents a happy solution.)' Such 'definitions' and 'solutions' reflect particular interests and perspectives which are rarely transparent or accountable.

These elements of hyperbole and naivite flourished in the heady atmosphere of the dot-com boom, supported by mantras such as 'The internet changes everything' and

'Information wants to be free.' After the dot-com bubble burst, a more sober, empirically-based research agenda emerged, exploring the effects of new information sources upon civic knowledge; the opportunities and risks associated with virtual communication; and the potential reconfiguration of political relationships within representative democracies – and beyond. (Tsagarousianou, Tambini and Bryan, 1998; Loader, 1999; Coleman, Taylor and van de Donk, 1999; Hoff, Horrocks and Tops, 2000; Gibson and Ward, 2000; Axford and Huggins, 2001; Hacker and van Dijk, 2001; Coleman and Gotze, 2001)

This trajectory of technology and participation concludes at the emergence of the empirically-based research which DEMO-net partners have been active in. Section 3 of this report allows reflection on this level of research and discusses the research barriers and challenges associated with new media facilitating participation.

3 Understanding eParticipation barriers, challenges and needs

In this section we focus on understanding the barriers, challenges and needs of future eParticipation research that have been identified from an analysis of DEMO-net partner feedback and publications. For this purpose, eParticipation barriers, challenges and needs have been clustered into different thematic areas to explain and illustrate overlaps and links.

3.1 Identifying eParticipation challenges, barriers and needs

In this section we focus on identifying immediate challenges for eParticipation and directions for future research. In order to do this, we identify key eParticipation challenges, barriers and needs associated with the conduct of effective eParticipation research. We also identify concepts that lack clarity and consistency and therefore require conceptual exploration and expansion.

Our findings stem from the analysis of DEMO-net partner deliverables from WP1, WP4 and WP5 and four papers from DEMO-net members focussing on obstacles to eParticipation, associated challenges and needed action. A text analysis using the key words “challenge”, “barrier”, “need”, “problem” was applied to these documents to extract current barriers, challenges and needs in the eParticipation research field.

Texts containing matching definitions of key words were selected and categorised into six main areas: I) Complexity of research field, II) Research methods, III) Information systems and Information Management, IV) Institutions: stakeholders, processes, roles and responsibilities, V) Equity: technical, communicative, cultural and language divides and VI) Theory. Each area contains clusters of challenges, barriers and needs that affect eParticipation practice, research or both. These areas are not mutually exclusive but include overlap.

The first area, “Complexity of research field” addresses problems resulting from the fragmented research field that constitute a real threat to the further development of eParticipation tools and integration of research. Achieving more integrated, multi-disciplinary research is the key challenge and requires effective dialogue between researchers to identify links between shared objects of research and ecologies of eParticipation.

The second area “Research methods” depicts methodological shortcomings of research designs that tend to focus upon on government institutions rather than other forms of spontaneous participation on the net.

The third area "Information systems and Information Management" summarises eParticipation barriers, challenges and needs from a predominantly technical and socio-technical perspective. This includes themes such as internet accessibility and the design of eParticipation tools, and information and knowledge management. Most importantly, this area highlights the extensive consequences of technical determinism for eParticipation and the need for an inclusive socio-technical design. Furthermore, this area emphasizes the relevance of user acceptance which determines the success and failure of eParticipation applications. We identify the lack of computer-supported feedback analysis and formal representation of information as a main barrier to eParticipation practice and research. The challenge is to develop improved information management solutions that connect information that is spread across different sources and media by visualising and linking it together to support online discussion.

The fourth area "Institutions and stakeholders" concerns institutional and political resistance to use, introduce and act on eParticipation applications. The area draws attention to the relevance of digital media for politicians when faced with complex themes such as the distributed nature of contemporary governance, the nature of power and the problematics of power sharing and the diminished relevance of political institutions to citizens' life when faced with global economic forces.

The fifth area "Equity: technical, communicative, cultural and language divides" describes a range of barriers, challenges and needs resulting from multi-layered asymmetries of technical, political, civic, cultural, social, economic and cognitive resources and values. Major divides characterise the problem of political disengagement from political institutions among citizens and barriers deriving from demographic, social, economic and cognitive obstacles that limit access to eParticipation initiatives.

The sixth area "Theory" summarises various conceptual and explanatory shortcomings that are relevant to eParticipation research. It highlights the need for a general discussion about the benefit of participation in the context of democratic theory, with particular emphases upon relationships of citizenship and power.

We now consider each of these areas in turn.

3.1.1 Complexity of research field

Fragmented research is the 'overall' barrier that is responsible for triggering a number of other obstacles to eParticipation research. Disintegrated eParticipation research lacks focussed discussion and shared concepts to identify barriers and challenges and joint measures to initiate concrete needs and research themes as actions to respond to identified problems. Isolated research is likely to produce idiosyncratic case studies fostering niche developments rather than supporting a comprehensive research framework. The complexity of the research area means that it is difficult to understand what eParticipation research involves and to define and refine research agendas with concrete goals that move

the field forward. Missing coordinated research agendas can result in overlaps and even duplication of research activities causing unwanted competition, wasted resources and ineffective eParticipation applications. It is therefore essential to foster an integrated interdisciplinary research culture through shared methods, tools and data which are agreed and disseminated through joint conferences and workshops. In this way we create common meeting places for researchers from different disciplines to share and exchange research results and to plan future cooperation.

If research can be channelled into an overall framework, eParticipation will benefit from the rich epistemological and methodological approaches that are necessary to understand this multidisciplinary area. While researchers are tempted to hold firm to their traditional research disciplines, the eParticipation research domain suffers from a lack of a consistent terminology and language use which poses a barrier to adequately identify and understand relevant sources. It also hinders scholarly communication causing misunderstandings among researchers of different disciplines. It is therefore important to support interdisciplinary translation and a commonly shared terminology. The on-going work within DEMO-net continues to clarify terminologies, distinguish eParticipation from other areas and explain relationships to other disciplines by establishing a conceptual model of the eParticipation domain.

An emerging research area such as eParticipation is more likely to face obstacles in terms of a lack of professional support by senior researchers that stems from the above mentioned lack of ownership and identification to a defined research area. In the case of eParticipation, researchers are not only dispersed geographically but also across different departments and institutions which complicates joint communication and cooperation. For example, in the case of Italy, eParticipation researchers are relatively young which means limited resources and advocacy for the field by established researchers.

One important challenge is the existing plurality of definitions for eParticipation, caused by different contested views on democratic processes by government bodies, research institutions, or citizens. Finding definition(s) for eParticipation is a crucial process for mapping the field, defining boundaries and giving it an identity. This process however is at risk of having a biased influence that can cause certain aspects to be excluded and other to be included automatically. The issue of the potential of eParticipation to reshape democratic structures and the empowerment of citizens are examples of contested matters that demonstrate a further need for discussion. Added to this challenge is the lack of a recognised eParticipation research domain. This lack is demonstrated by inconsistent uses of theory, research agendas and a lack of standardisation[2]. Establishing an eParticipation research domain requires scope, structure and conceptual clarity in order to combine existent sources of contributions from other disciplines into a useful eParticipation research pool.

3.1.2 Research methods

The immaturity of research methods and designs poses a barrier to the development of eParticipation research and practice. Finding and assessing adequate methods is

2 ROSE, J., SANFORD, C. (forthcoming). *Mapping eParticipation research: four central challenges*

complicated by a lack of scope and agreed boundaries of the research field, as discussed above. Here the question is whether eParticipation can be researched with a selection of existing methods or if the creation of new methods is necessary. There needs to be a culture of constant reflexivity and problematisation of common practices to ensure the detection of methodological weaknesses. eParticipation research designs need to be comprehensive, integrated and interdisciplinary in nature.

Currently employed research methods lack sensitivity towards self-representing strategies of political actors in their communicative practices, risking overlooking actual processes of participation. The problem of fragmented and asymmetrical orientated research agendas addresses the mistaken assumption that government institutions are at the forefront in the development of participation on the net. This leads to a consequent undervaluation of the importance of spontaneous participation on the net, driven by citizens, voluntary organisations and pressure groups.

There is a need for mixed and triangulated research designs. An example of methodological triangulation is the combination of ethnographic research approaches, semiotics of political systems and quantitative methods used for eParticipation practice. The combination of qualitative and quantitative methods will counterbalance deficiencies of individual methods, overcoming overconfidence in established methods of individual disciplines. Further measures to improve eParticipation methodologies include developing a history of case studies with a documentation of their development and lessons learned and linking approaches to theoretical foundations.

There is a strong need to improve the quality of descriptive analyses addressing research gaps such as understanding eParticipation habits across demographic and cultural differences, understanding the roles of different stakeholders and analysing motives of spontaneous political engagement on the Internet. Further needs for research designs and methodological improvements include advancing qualitative research through visualisation techniques that enables analysis of differently structured and also unstructured eParticipation content.

eParticipation research designs lack comparative studies that focus on different political, organisational and institutional contexts and different forms of participation. When conducting comparative eParticipation research, several dimensions need to be taken into account that address the differences among states such as specific traditions and socio-cultural environments. Cross-national differences are relevant in relation to the type and scope of eParticipation applications, the range of participants or the institutional commitment. There is a strong need for the creation of an open data and tools archive that provides experience reports, tool classifications, actor involvement, and related costs which could be used by the research community and practitioners. The DEMO-net virtual resource centre is intended to provide such a shared environment.

There is a pressing need for exchange and interaction between research and practice in order to establish a holistic model of eParticipation research methods that are based on real-life experience and practical expertise. This connects to methodological limitations caused by lack of access to primary data. eParticipation, including traditional forms of participation, is perceived as a strategic political issue that addresses the distribution and

access to power. This may cause reluctant behaviour from institutions to participate in eParticipation exercises and provide information and enable first-hand observation of practices.

A complex methodological problem is presented by the need to measure the 'quality' of online deliberation. Done well, this could lead to a value framework for eParticipation. Solutions need to take into account that electronic debates are often dominated by a relatively small number of participants who are contributing large numbers of postings. By only looking at the total numbers of postings the democratic value of such discussions would be overestimated when in fact the number of participants is far from being representative. Similarly, it might also be misleading to interpret anonymity in online discussions as an indicator for low quality deliberation. There are cases where anonymity is intentional, in order to ensure participation of individuals that would otherwise be repelled by identity requirements. It is therefore important to understand evaluation frameworks that differentiate between various areas and forms of eParticipation.

A key methodological challenge is to measure eParticipation effects. While current research focuses on the analysis of activities and outputs it is still open how to evaluate the short and long-term impacts of eParticipation on democracy, institutions and individuals. The challenge of measuring effects opens the question which forms of communication should be included in eParticipation research. In order to grasp the full scope of politically fuelled communication research needs to look for it beyond traditional political forums in the virtual and offline sphere. The inclusion of everyday talk can bring the analysis of eParticipation effects to another level by connecting to everyday culture and would make the deliberation process more egalitarian There is a need to assess whether and how eParticipation activities effectively increase the opportunities of citizens to participate. These opportunities can evolve as a deepening of participation in form of better informed citizens or as a broadening of political participation in form of a maximum involvement of citizens in the political process. Possible scenarios are that eParticipation processes will not change a lot other than accelerating policy processes, they will reinvent direct democracy, they will reinforce established powers leading to more centralisation and social control, or they will foster new forms of political mobilisation.

3.1.3 Information systems and information management

eParticipation tools are highly dependent on user acceptance to work well. To improve diffusion and acceptance of eParticipation solutions to heterogeneous stakeholders, there is a need to explore how systems can be designed to meet users' needs and expectations in respect to their specific skills, contexts, and purposes. Optimising technical qualities of applications is only one way to achieve user acceptance. More importantly, any system design needs to connect with work practices and everyday culture. This design challenge is characterised by a holistic view of technology design that also considers participation and governance structures it is embedded in. This means that the design challenge requires action from both eParticipation practice and research, covering technology design (particularly discussion systems), the design and management of eParticipation

activities, designing on-line governance, participation in rule-making, transparency, use of computer visualization techniques to facilitate consultation and decision making and achieving security and trust.

The lack of computer-supported feedback analysis and formal representation of information in general poses a problem to eParticipation practice and research. This barrier also applies to the area "Institutions", stressing the struggle of institutions to analyse input that stems from eParticipation activities. Unstructured information presented and gathered through eParticipation also affects researchers who express increasing concerns about information overload on the Internet that hinders navigation and focussed searches to find relevant information, putting significant constraints on time resources. This reveals a strong need to consider improved knowledge technologies, semantic navigation and visualisation to work on solutions to make information available at the right time and place, and in the right form, quality and quantity. Demands on improved knowledge technologies include a rationale of why that knowledge is there, establishing the best balance between a structured format, traceability of contributed knowledge, its accountability in use and transparency about how much knowledge is needed or used to form political opinions or policies.

To support decision-making and sense-making, the content stemming from various sources can be processed with the help of argumentation support systems that connect information that is spread across different sources and media by visualising and linking it together. Content can be organised and made accessible by providing hyperlinks to all relevant sources. This enables the user to assess a certain document or piece of information in the overall context and timeline of development. However when using knowledge technologies and argumentation support one has to consider whether any structuring of information creates boundaries and borders that can limit the access to and understanding of content.

Further actions to overcome technical determinism is to move away from solely web-based applications and expand eParticipation designs to other communication devices such as mobile devices and the use of voice and text. Even though mobile technologies have been identified as a possible key technology for eParticipation, the actual potential of such technologies are yet not well understood. Challenges in this context are exploiting the potential of mobile devices for eParticipation purposes, providing convenient applications, and the promotion and distribution of such eParticipation offers through mobile technologies. The needs extracted from these challenges include a better understanding what kind of mobile technologies can be employed for eParticipation processes.

The rapid growth of social networks suggests that political discussions and consultations are taking place away from formal sites. The relevance of these discussions and their potentially destabilising effects for traditional political communication needs to be identified. Making out the space, scope and content of this outsider communication is crucial for understanding the interactions among citizens and the social contexts of everyday life. Online social interactions often materialise in forms of consumerism, entertainment, non-political networking and chat, which outdo traditional forms of democratic deliberation[3]. These examples of online discussion forums demonstrate that

3 DAHLGREN, P. 2005. The Internet, Public Spheres, and Political Communication: Dispersion and Deliberation. *Political Communication*, **22**, pp.147–162

talk among citizens may or may not take on the form of deliberation. More important though is to realise that these forms of online communication among citizens are "the catalyst for the civic cultures that are fuelling this engagement" (ibid, p.160).

3.1.4 Institutions and stakeholders

Institutional and political resistance to use, introduce and act upon eParticipation processes and applications is a major barrier to eParticipation practice and research. It connects directly or tangentially to a majority of the challenges and needs facing eParticipation research. Without serious institutional involvement, the scope and potential of eParticipation remains extremely limited, at least at the official level of political democracy. It is therefore crucial to understand why political support is lacking and how it can be initiated. At the government level, barriers often take the form of fear and resistance. Increasing the involvement of elected representatives in eParticipation processes has been identified by researchers as a major and pressing challenge. The online visibility of policy makers in eParticipation activities is seen as an important factor for citizen's confidence. There is a need to better understand what online visibility means, when and how it can be applied. Internal government communication is often hindered by administrative specialisation which makes it difficult for a single face to be turned towards the public.

The problem of scale for feedback on citizens' contributions is another barrier that explains the institutional resistance to adopt eParticipation applications. Online consultations on large-scale political debates can involve thousands of participants with individual contributions. The analysis and assessment of these large quantities of information cannot be made without additional resources, clarity and transparency of use and strong commitment from the institutional side.

A more elusive barrier to eParticipation practice derives from exposing and challenging institutional power. Influential institutions often resist deliberative processes that could undermine their authority by interfering with their fields of activity and responsibility. eParticipation can cause a power shift with consequences for citizens and policy makers. On the one hand, eParticipation will expand citizens' forms of participation from voting to more detailed input on particular policy issues which has consequences for their responsibility towards political outcomes. On the other side, policy makers will experience new forms of accountability to their constituency that requires them to consider citizen input in more regular intervals than only during election times. In this sense, power can stand in the way of realising eParticipation practice in case neither side wants to make a commitment to their changed roles and responsibilities. The goal is to find a balance between problem-solving and power-sharing that benefits both sides in the form of better informed political decisions and institutional trust that encourages sustainable future commitment.

There is a need for integrated analysis of local, regional, national and European policies intended to promote and support eParticipation. The aims, terms and effects of these

institutional initiatives need to be scrutinised and barriers to their realisation assessed. This calls for more than survey-based studies indicating current government practices and intentions. There is a need for qualitative research exploring the aims, norms and cultural differences within the generation and implementation of eParticipation policies. Such research should not resist taking a critical approach to power asymmetries, political inconsistencies and resource conflicts which are likely to impede the development of participatory forms of democracy.

3.1.5 Equity: technical, communicative, cultural and language divides

eParticipation research faces a range of barriers, challenges and needs connected to multi-layered divides of a technical, political, civic, geographical, cultural, social, economic and cognitive nature. One of the major divides is the gap between people who are politically active and those who are not. This political divide is problematic for nation states across the EU. Researchers can do much to help overcome the political divide by contributing to eInclusion policies with a view to ensuring that vulnerable groups of society, such as older people, people with disabilities and people with low income, are not excluded from information society developments.

The civic divide describes the tendency of active citizens to make better use of eParticipation, creating a spiral of already active people that seem to be more prone to make use of eParticipation tools for expressing their political voice. They possess more resources in terms of time, political and technological skills, cultural and language abilities that enable them to take advantage of new technologies and forms of participation. Research has shown that frequent internet use leads to increased participation[4]. The more people use the Internet the more likely they are to become politically engaged. Frequent use of the Internet is related to a learning process that is advantageous for users who are discovering the potential of eParticipation applications for their own benefit. This highlights the importance of access to the Internet since limited and unequal access of people to the Internet not only curtails the potential of eParticipation initiatives and tools but hinders participation and political engagement at the very core.

The term digital divide describes unequal chances of people to access the Internet and eParticipation tools due to demographic, social, and economic segmentations. Limited access to the Internet is perceived as a significant barrier to both eParticipation practice and research. For eParticipation research, the divide between Internet users and non-users poses a barrier to drawing generalisations and evaluating trends that are representative of the population.

4 GIBSON, R. K., LUSOLI, W., WARD, S. 2005. Online Participation in the UK: Testing a 'Contextualised' Model of Internet Effects. *The British Journal of Politics and International Relations.* **7**(4), pp.561–583; DI GENNARO, C. & DUTTON, W. 2006. The Internet and the Public: Online and Offline Political Participation in the United Kingdom. *Parliamentary Affairs.* **59**(2), pp.299-313

Research about the digital divide addresses both technological and social factors. Apart from physical access to the Internet, including the affordability of hardware or the quality of the Internet connection in forms of broadband, other aspects such as language and culture, human capital in form of knowledge, skills and attitudes and social capital in terms of memberships and social networks play an important role for eParticipation. The dominance of English in supra-national political discourses poses a particularly far reaching barrier to eParticipation, hindering the engagement of non-English speakers who lack comprehension, competence and confidence to participate and leading to group polarisation. This linguistic determinism can be described as the language divide. English is not only predominant in the use of supranational discourses but is the top language used on the Internet. This means that the access to information and communication among citizens can suffer from a lack of diversified content provided in different languages. This becomes a particularly pressing problem within the EU. Even though EU legislation, based on Article 290 in the EC Treaty, determines the binding use of currently 20 languages in official regulations, documents and individual communication, the EU's Europa portal[5] provides merely new information in all languages. Older documentation is only accessible in the languages of the member states that were part of the EU when the legislation was passed.

The digital divide is closely linked to the cognitive divide which means that, apart from physical access to the Internet, citizens also require digital literacy skills such as the abilities to manage, integrate, evaluate and contribute information to an eParticipation environment. These skills are determined by the cognitive capacity of each individual to obtain, process, accumulate, and employ information in an efficient and effective way. Developing digital literacy skills through civic education is crucial to foster active citizenship and to provide citizens with the needs to engage in responsible digital interaction. These skills cannot be simply self-acquired, but should be provided as part of civic education that motivates and enables citizens to make use of the empowering features of digital technologies. Researchers have an important role here: defining new media literacy, identifying gaps and devising short-cuts for new learners.

It is also crucially important for eParticipation researchers to address the divide between government and social websites, such as Facebook, youtube, myspace, bebo and Classmates.com. While government websites provide more formal and exposed eParticipation applications, social websites are perceived as offering a more trusted and intimate environment to express political views.

3.1.6 Theory

eParticipation research suffers from being seriously under-theorised. Analysis often lacks critical distance or conceptual clarity. This can sometimes lead to a 'consultancy' form of presentation which seeks to understand the functional working of processes rather than questioning actor motives, interests, values and outcomes. For example, the study of deliberation all too often proceeds as if there is a magical formula to be found (and technically facilitated) which can arrive at universal, consensually accepted truth. This

5 *Europa. Gateway to the European Union.* 2007. [online]. [Accessed on 20 November 2007]. Available from World Wide Web: <http://europa.eu/>

underestimates the inherently contested nature of politics and the inevitability of interest conflicts, preference disagreements and trade-offs. eParticipation researchers need to develop a more sophisticated conception of deliberation, perhaps along a spectrum from everyday talk to structured decision-making discourses.

Overcoming theoretical barriers entails three strategies. Firstly, researchers must devote more attention to the contested nature of democracy. Actor network theory could be helpful in identifying competing political claims and the weight attached to them in the design and management of eParticipation exercises. Secondly, there is a need for more debate about the nature of concepts used regularly in eParticipation discourse. Particular attention should be paid to terms such as citizenship, deliberation, discussion, public and democratic. Recent theoretical developments in uses of the term 'government' (to embrace rich concepts such as governance and governmentality) would be useful to follow. Thirdly, eParticipation researchers need to devote far more attention to meanings and methods of evaluation. Quite apart from the methodological difficulties of evaluating processes that are not discrete from other aspects of public life, there is a need to evaluate in terms that are informed by key works in democratic and political theory. Thus far the field has been particularly influenced by Habermasian theory, but other theorists, from Marx and Weber to Foucault, Castells, Hardt and Negri, need to be brought in to eParticipation literature. There is a huge debate taking place within democratic theory about the changing nature of the public sphere; deliberative democracy and counter-public strategies; eParticipation theory should not develop in isolation from these.

3.2 Next steps

The analysis provided in this section has demonstrated that eParticipation plays an important role in reconciling contemporary conflicts between representative democracy and the participatory aspirations of citizens. Research and practice in this domain has already become very real and demonstrates significant development over a short period of time. But future research needs to be carefully theorised, planned, and strategically evaluated. In the following chapter we set out an agenda for future research.

4 DEMO-net partners' research questions

In this section we consider the key areas of expertise relating to the eParticipation research of DEMO-net partners. This includes a summary of activities in eParticipation research from 2006 and a follow-up analysis of the most recent research of DEMO-net partners. Firstly, we provide a summary of research findings from our DEMO-net survey into eParticipation research from 31 December 2006. Then we outline developments in eParticipation research among DEMO-net partners in 2007 with specific focus on the principal research questions and publications as indicated by feedback forms distributed in October 2007. In these feedback forms DEMO-net partners updated their researcher and PhD student profiles.

The survey results from 2006 revealed deliberation and consultation as the most common eParticipation research activities while mobile communications, electioneering, journalism, and polling were among the least commonly researched. For conducting eParticipation research the survey found strong research emphases upon design techniques and providing platforms and tools, but limited research in interaction and comprehension, content management and underlying infrastructures. For observing and studying eParticipation the survey identified intense research emphases upon eParticipation content and human interaction, but found limited research on technology assessment and impact assessment in terms of understanding political and cultural outcomes. The survey also identified limited research areas of computer games (with their informative and participatory potential), the use of information and communication technology by political parties in Europe, the role of mobile communication, electioneering and mass media.

Academic disciplines in DEMO-net that are represented in eParticipation research include Political Science, Political Sociology, Media/Communication Science, Public Policy Analysis, Social Informatics, Information Management, Cultural Studies, Political Communications, Public Policy Analysis, Social Shaping of Technology, Participatory Design, Knowledge Management, Environmental Management, Innovation Studies, Computational Linguistic, Knowledge Engineering and Software Engineering.

An analysis of the spectrum of disciplines, going from society to technology focussed, demonstrates a well distributed presence of research groups in each discipline with a bias towards the technological end of the spectrum. To emphasise the embryonic nature of the domain, at the time when the survey was conducted (2006) many of the research centres confirmed that they had not published their work in an international journal. No single journal or group of journals could be identified as focus for the domain.

In October 2007 all DEMO-net partners were asked to send information on their research activities, detailing for each researcher three publications and their primary eParticipation research question[6]. Each partner also had to send information on their PhD students and the topics of their dissertations. Feedback was received from 70 DEMO-net researchers and 30 associated PhD students - a slight increase from 2005 the start of DEMO-net. The

[6] See separate appendix for list of eParticipation partners, research questions and publications

following table summarises the eParticipation research interests for each partner. They are based on the research questions and publications provided on the partner feedback forms.

Partner 2:LEEDS 6 RESEARCHERS, 3 PHDs	**Partner 3: ORE** 6 RESEARCHERS, 4 PHDs
Evaluation Frameworks	Participatory Information Infrastructures
Argument mapping and Social computing	Inclusion
Social implications of new media	Evaluation
ICT and democratic theory	Deliberation
Use of ICTs in Parliament	ICT design in different social contexts
Content and discourse analysis	democratic implications on governance structures
Participation in Former Soviet Union	eParticipation at local government
Partner 4: IWVI 1 RESEARCHER, 2 PHDs	**Partner 5:FRAUN** 4 RESEARCHERS, 1 PHDs
Intelligent services	eParticipation and CSCW
Barriers and Challenges of eParticipation	understanding online discussion
ontologies and visualization of ontologies	argumentation systems
	eParticipation and civil society
Partner 6:IFIB 5 RESEARCHERS	
Impact of ICT on democracy	**Partner 7:UoM** 2 RESEARCHERS, 3 PHDs
How to evaluate eParticipation	eParticipation frameworks/models
Combining on and off line participation	eElectioneering
Deliberation	evaluation
Media usage	
	Partner 9:CBS 4 RESEARCHERS, 2 PHDs
Partner 8:ICCS 4 RESEARCHERS, 4 PHDs	Policy and managerial change
Semantic web and eParticipation	Institutional change
Social computing and eParticipation	Costs of eParticipation
Quality in eParticipation	Italian local government
Group decision support	
	Partner 11: FNSP 2 RESEARCHERS
Partner 10: AAU 6 RESEARCHERS	Usage of the internet during electoral campaigns
Design and management of eParticipation systems	French election campaigns
Framing eParticipation	Does internet revitalize the public sphere?
Evaluation	online deliberation
Deliberation	
Models of eDemocracy	**Partner 13:CNR-ILC** 5 RESEARCHERS
Social networking software	Information extraction from legal documents
	ICTs in public administrations
Partner 12:TUK 3 RESEARCHERS, 3 PHDs	
Semantic web	**Partner 17: NAPIER** 6 RESEARCHERS
Web mining	Social network analysis
	Socio technical factors in eParticipation tools
Partner 14:UNBG 5 RESEARCHERS, 1 PHDs	ICT Culture of Parliamentarians
Virtual networks and participation	
eDemocracy policies	**Partner 19: UH** 1 RESEARCHERS, 1 PHDs
impacts of ICTs on representative democracy	Democracy and the media
gender and eParticipation	New types of eParticipation
inclusion	
impact and evaluation	
Partner 16:EPMA 4 RESEARCHERS, 3PHDs	**Partner 20:ITA** 1 RESEARCHER, 2 PhDs
eParticipation in research and practice	Evaluation and impacts of eParticipation
eParticipation of disadvantaged persons	Evolution of eParticipation in Austria
Indicators and Methods for Evaluation of eParticipation	Integration of socio technical criteria into the design of eParticipation tools
Partner 18:UI 2 RESEARCHERS, 1 PHD	
Local Democracy and new forms of Democracy	
impact on participation in environment studies	

Over thirty of the listed publications mention ‘eParticipation’ or ‘citizen participation’ through the Internet explicitly in the title. These publications range from books and journal articles to reports, conference and workshop papers. The majority of publications are journal articles and conference papers, followed by books and chapters, and reports. The large number of publications in form of books and journal articles demonstrate the evolution of and growing research expertise in the field. The number of conference papers suggest that there will be promising future publications in the field.

The themes around eParticipation research include various contexts such as: understanding and evaluating eParticipation processes and outputs, eParticipation and computer supported cooperative networks, eParticipation and civil society, developing eParticipation tools, eParticipation and media use, eParticipation and social computing, eParticipation in regional settings, eParticipation costs and management, eParticipation impact assessment, design and management of eParticipation systems and the design of eParticipation tools in particular.

PhD student research projects tended to follow these dominant eParticipation research themes. Examples of these projects include eParticipation design, visualisation of eParticipation ontology, quality management in e-Government and eParticipation and participatory design. These projects also covered topics such as eParticipation of disadvantaged and disabled persons and eParticipation and democratic change in the case of Lithuania and Kazakhstan. (For a full list, see separate appendix.)

5 Future eParticipation Research Direction

In this section we recall the main findings from the previous sections. In particular, we keep in mind the historical lessons identified in section 2, acknowledging the danger of investing too much hope in technocratic solutions to problems of democratic politics and culture. We build upon the identification of barriers, challenges and needs set out in section 3, developing an integrated view of how eParticipation research within Demo-net should progress in Phase 3 and beyond that responds directly to these findings. In particular, the data gathering and analysis in section 3 provides evidence of the barriers and challenges required to establish an eParticipation research agenda.

We first summarise the current state of research and our desired state of research then provide six research priorities for DEMO-net in Phase 3.

5.1 Current and Desired states of eParticipation

Complexity of research field

Current state: The European landscape for eParticipation research is extremely diverse both in terms of academic disciplines pursuing eParticipation research and the eParticipation activity areas they are focusing on. However, this fragmented research and is one of the main barriers to progressing the research and achieving research outcomes. It can lead to duplication of research, wasted resources and ineffective eParticipation applications. The eParticipation research lacks a shared conceptual model of the domain which hinders scientific communication.

Desired state: One of the main objectives for DEMO-net is to restructure current researcher silos into integrated, interdisciplinary structures. It is essential to foster an interdisciplinary research culture that supports joined-up research and progresses eParticipation from different academic perspectives. Such an interdisciplinary environment requires shared methods, tools and data which are agreed and disseminated through joint conferences and workshops allowing planning of future collaborations. Research projects should be populated with the relevant range of academic disciplines and be able to take suitable advantage of results already attained in other disciplines.

Therefore, a major consideration for the future eParticipation research within DEMO-net must be to ensure cross communication and interdisciplinary projects that allow researchers from the different disciplines to come together and transfer methods and translate their vocabularies. What is required is a shared environment, a shared vocabulary and a portfolio of research projects which translates across disciplines and across identified barriers and integrates the research centres. The eParticipation network (ePN) and underpinning technical infrastructure (VRC) are important moves towards such integration.

Research Methods

Current state: eParticipation suffers from immaturity of its research methods and design. This manifests itself in a reliance on existing quantitative and qualitative methods from

other domains with varied success in applying them. Research designs tend to focus on government institutions rather than also considering other forms of spontaneous participation that current developments are encouraging. There is little comparative research design that focuses on different political, organisational and institutional contexts and different forms of participation. In this current state methodological weakness tends to be overlooked, for example, current research tends to focus on limited evaluation of eParticipation, typically focusing on technological fitness for use as opposed to also considering the longer term impacts of eParticipation on democracy.

Desired state: eParticipation research methods and design need to move to within a culture where they are comprehensive, integrated and interdisciplinary in nature. There needs to be an appreciation of which methods to use in which context based on a portfolio of appropriate quantitative and qualitative methods identified for eParticipation. There needs to be a better understanding of the availability of methods and how to choose and use appropriate methods to design, analyse and evaluate eParticipation. Two critical methodological challenges are to measure eParticipation effects and the quality of online dialogue and deliberation. All stakeholders require an understanding if and how eParticipation can improve democratic decision-making at all levels.

Information systems and information management

Current state: The choice of technology, its design and application for research are dependent on a limited understanding of the needs of isolated actors and the dependent skills of available researchers. Information presented and gathered through eParticipation is unstructured and lacks any formal representation constructs. Information is meant in the broadest sense of the word, i.e. both factual information, informal information and conversationally contributed information. Lack of any formal representation of the information and lack of associated metadata hinders, even precludes, computer supported analysis and management of that information. Current methods are dependent on manual efforts for analysis of eParticipation. For the user, this implies difficulty in navigating, finding and understanding complex information and contributing to the debate.

Desired state: There needs to be a change of emphasis, away from a purely technological solution to a more holistic view of design and application where social, political organisational and technology issues are integrated to reflect public engagement contexts. This implies moving to an eParticipation design environment that enables a better understanding of how to determine the type of application, choice of technology and its design to reflect a more holistic appreciation of the overall engagement context. Additionally, suitably configured knowledge technologies including semantic navigation and argument visualisation will make information more searchable, understandable and will contribute to more informed and deliberated online public discussion.

Institutions and stakeholders

Current state: There is currently much institutional and political resistance to eParticipation in practice. Without institutional commitment the potential for eParticipation will remain limited. Current eParticipation can be characterised as ‘experimental’ or ‘pilot’. Sustainable eParticipation is rarely achieved. There is little appreciation of the resources and effectiveness of eParticipation. Different public agencies develop their own public engagement initiatives whereas in practice, policy

issues under consideration invariably overlap with issues being considered by other agencies. There is a lack of commitment from elected representatives as to the relevance and added value of eParticipation initiatives. Added to this, there is fear that opening up issues for public discussion will transfer ownership and power to other parties without an understanding of the consequences.

Desired state: We need to move to an environment and culture where there is clear commitment and willingness of political and administrative representatives to engage with eParticipation. This includes increasing the involvement of elected representatives in eParticipation processes. Such online visibility of policy makers in eParticipation activities is an important factor for citizens' confidence and trust in public engagement. In parallel with this, there is a need for improved internal communication and inter-sector relationships embedded in an integrated and institutional eParticipation strategy and culture. This implies moving to a state where sustainable eParticipation processes are achieved, understanding when it is appropriate to engage with others, an appreciation of who these others should be, and an understanding of the meaning of quality and deliberation as applied to eParticipation. Such sustainable eParticipation processes need to address the inter-connections between government consultations and other, non-governmental, discussion sites on the same policy issues, and eCampaigning (i.e. examining the use of ICT in protest, lobbying, petitioning and other forms of collective action) in general. For all this to happen we need to gain a better understanding of the tentative relationship between problem-solving and power-sharing that benefits all sides which is critical to ensure commitment and trust in eParticipation.

Equity: technical, communicative, cultural and language divides

Current state: eParticipation tends to assume access for all to the knowledge society. There is a lack of understanding about how the various existing divides impact on the representativeness of eParticipation and therefore the reliability and acceptability of decisions taken based on eParticipation**.**

Desired state: A future environment will ensure that eParticipation takes into account the multi-cultural and multi-ethnic society we live in; appreciating the fact that citizens have different needs and preferences; have diverse interests and backgrounds; and have differing linguistic and technical capabilities. This requires an understanding of how to recognise and take into account the various factors that exclude different sectors of society from becoming motivated and engaged in issues of public importance. Issues to consider include not only how unequal access to the internet impacts on public engagement, but also how language is and should be used in eParticipation to reflect the issues and target audiences. There is a need to recognise and understand the role of mass media, public-service broadcasters and other intermediaries in reaching the excluded sections of society. There is a need to explore the relationship between e-inclusion research and eParticipation research and how they can benefit each other. Added to this, there is a need to explore how eParticipation and offline participation can benefit each other.

With the growing use of social websites to express political views, it is important for eParticipation researchers to investigate the divide between these trusted social websites, such as Facebook, youtube, myspace, bebo and Classmates.com and government websites.

Theory

Current state: eParticipation is, in many respects, an immature discipline. Understanding a new discipline requires observation, experimentation, methods and theory. To date, much experimentation has been conducted but this has not been developed further to define models or to reference theory. Further work is required to understand the nature of eParticipation and develop theory. eParticipation work is based around technology and methods, there is little or no appreciation of democratic theory. Both research and practice underestimates the inherently contested nature of politics.

Desired state: A desired future state is where the domain of eParticipation is grounded in theory. This would provide a much needed opportunity for a more critical approach to eParticipation research and allow a questioning of eParticipation achievement so far. Such a critical approach would enable eParticipation researchers to develop a more sophisticated conception of deliberation, perhaps along a spectrum from everyday talk to structured decision-making discourses.

In assessing eParticipation there is a need to understand, for example, what level of participation is necessary; what type of accountability is required in the context of democracy. This implies research to explore different democratic norms and models in the context of eParticipation.

5.2 Phase 3 Research Priorities

Based on the above observations, in particular the complexity of the field and the needs for a multi-method approach to research, a number of research priorities for DEMO-net can be highlighted. Given the nature of the fragmentation of the current research field and the overarching objectives the Network of Excellence, there is a clear need to prioritise integrated multidisciplinary research that provides good opportunities for DEMO-net partners to work together and share expertise from different academic disciplines. This allows for a sharing of methods and a transfer of understanding of when and how to apply such methods and progresses both the integration of the research centres and the development of eParticipation as a research domain in its own right.

The figure below illustrates how overall, DEMO-net is addressing the complexity of the research field.

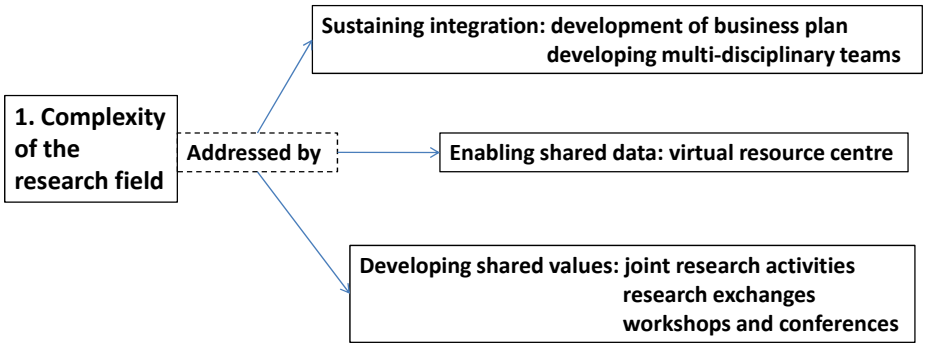

Figure 1: Addressing the complexity of the research field

The other areas need to be addressed by actions undertaken through the joint research programme. However, it is clear that these remaining five areas do not exist in isolation. A research barrier in one area can be a research challenge in another area. There are natural overlaps. By considering each area and the extent of the overlap in barriers and challenges, a number of research priorities can be identified. However, in each of these priorities certain issues re-occur and need to be considered by all of them. These are issues of trust and confidence in government, and the concept of power-sharing between representatives, government and civil society. There is also a growing general appreciation that research conducted to date has been concerned with either a single eParticipation project or a one-off eParticipation initiative; there has been little comparative research across eParticipation projects. In Phase 2, WP14 has made a start on some comparative studies but there is still considerable research to undertake.

For Phase 3 of DEMO-net six research priorities have been selected. They are taken from the areas described above, combining the research issues from each. They have been chosen for a number of reasons which include their alignment to partners' research

expertise, a logical follow-on to Phase 2 research activities to build on the research results and partner collaborations in that Phase and also with the realisation that there is a need make a step change in eParticipation research.

They by no means represent the full span of research that needs to take place to make a step change in eParticipation but they do reflect realistic work that can be undertaken in the next 18 months. The final Phase of DEMO-net will see further research addressed.

The figure below demonstrates some of the barrier and challenge links from areas of concern to research priorities.

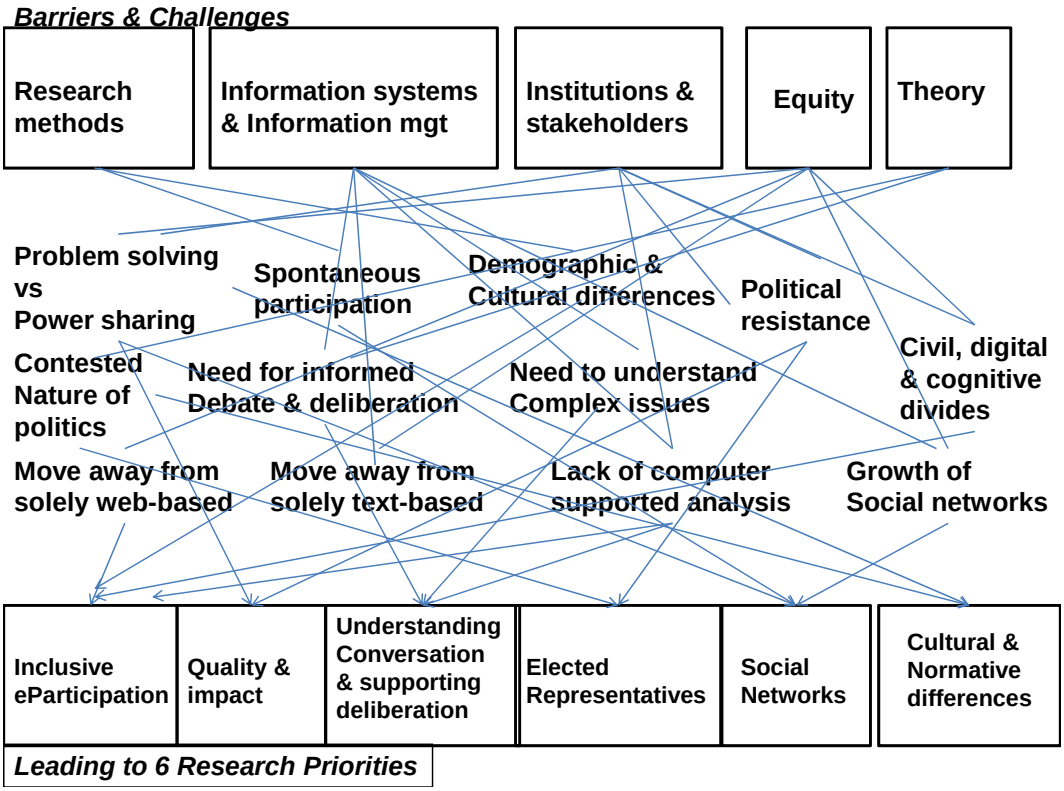

Figure 2: From Barriers and Challenges to Research Priorities

The research priorities are detailed in the following sub-sections.

5.2.1 Inclusive eParticipation

This focuses on the growing multi-cultural and multi-ethnic shape of our society and the need for inclusion in public engagement. This research will consider how on-going research into e-inclusion can be of benefit to eParticipation and what other research needs to be undertaken to realise inclusive eParticipation (i.e. inclusion of (partly) excluded groups in the society such as immigrants, people with a lower educational level, marginalized people, people whose first language is not the native language of the

country they live in, but it should also include gender issues, age and other demographic divides).

Within this priority there is a need to investigate the relevance of technological devices, other than the usual PC, and applications other than the usual threaded discussion forum for participation. There is a need to understand to what extent mobile phones and other hand-held devices, in common use by some sectors of society, can be used to motivate people to become engaged and also contribute to the engagement exercise. There is a need to understand the relevance of online games (and environments) to simulate complex issues. Also the role of the mass media and public sector broadcasters as a trusted intermediaries needs to be considered.

5.2.2 Quality and Impact of eParticipation

This focuses on how eParticipation applications may be *affecting* democracy by changing existing practice, and *effecting* it as they become new instruments for achieving democracy. It seeks to integrate criteria and methods for assessing eParticipation initiatives in terms of their impact on democracy, their planning of public engagement and quality of the tools provided for public engagement.

This continues the work of WP13 in determining an analytical framework for eParticipation but expands it by investigating the longer term impacts, considering effects on representative model of democracy and shifts in power base. It includes study into how empirical eParticipation work connects to democratic theory providing the potential to provide a more critical approach to questioning eParticipation achievement. This also continues the work of WP14 in investigating and comparing policies for eParticipation, here further work is required to analysis the impact of such policies.

5.2.3 Understanding the conversation and supporting deliberation

This focuses on understanding how to enhance and use appropriate knowledge technologies to support eParticipation. It is concerned with combining techniques such as data mining, argument mapping, social networking, discourse analysis and ontological engineering in order to investigate whether such a combination of methods and tools has the potential to support open dialogue and public deliberation across a range of conversational platforms including blogs and discussion forums. However, this needs to be undertaken in conjunction with research that seeks to determine a better understanding of the meaning of public dialogue and deliberation in eParticipation.

Issues to consider are: the potential for ontological engineering to facilitate more formal representations of information and knowledge; the use of data mining techniques to discover emerging concepts; the use of semantic services to enable computer supported analysis; the role of argumentation support systems to enable critical thinking. There is also a need to understand which qualitative methods best support eParticipation analysis and how such qualitative methods can be integrated with the currently used quantitative

metrics. Research is required in how to represent, structure and analyse multi-media information to support deliberation and informed debate.

5.2.4 Representatives and eParticipation

This research concerns the elected representative who has, to date, stayed at the periphery of eParticipation. The research will investigate how to provide answers concerning the relevance and added value of eParticipation to both motivate and engage the politician. There is a need to understand what politicians think about eParticipation, how they are talking about eParticipation and how they use the technology.

Closely connected to this is the use of technology during election campaigns. Given the European elections in 2009, our research will compare eElectioneering such as that in the recent elections in France and currently in the US to understand better the potential of eElectioneering at the European level of election.

5.2.5 Social networks and eParticipation

There are two aspects to this research priority. The first is to investigate how formal consultations are taken up by the public sphere, i.e. where civil society discusses the formal consultation issues at non-government sites. Previous eParticipation researchers have treated online consultations as discrete sites and have analysed contributions and interactions within these discrete sites. Building on this work, our research will analyse how effectively online consultations are inter-connected with other sites of discussion on the same public-policy issues. It will also look for evidence of how discussion and opinion flow in and across these sites.

5.2.6 Cultural and normative differences regarding intensity of participation

This research priority concerns the cultural differences across Europe which are reflected in different styles of public engagement in politics. Examples such as direct democracy with ballots and referenda in Switzerland, corporative forms of representative democracy in Austria and Germany, more liberal concepts such as in the UK and the emerging practices in Central and Eastern European states.

These differences lead to dispersed groundings and make a common and theoretically based understanding of eParticipation difficult. Although it is impossible to determine a “common model” of democracy, it is important to describe the differences and their potential impacts on electronic participation.

5.3 Conclusions

These six priorities have already been discussed by the DEMO-net consortium and there was general consensus that they provided a useful way forward to aid planning for the overall work of DEMO-net in Phase 3. Therefore the six research priorities will be further investigated and result in detailed work packages for months 25 to 42 of DEMO-net.

The figure below illustrates the teams being suggested for the new work packages in Phase 3. (Those work packages that are to be taken across from Phase 2 to Phase 3 are not included.) The suggested WP leaders are shown in bold. This is a draft plan and will be fully defined in the Phase 3 work plan once all resource implications for the second reporting period are analysed.

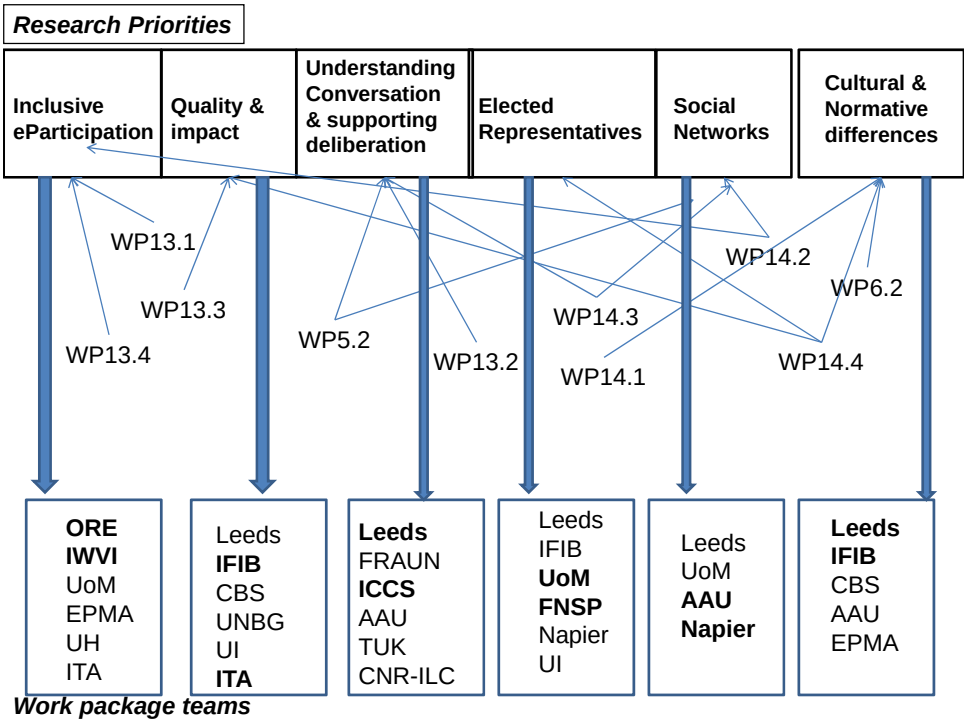

Figure 3: Suggested Research teams against new WPs

For each research priority, small teams of computer and information scientists, socio-technical researchers, political communication and political scientists are suggested from within DEMO-net. These teams are based on each partner's eParticipation expertise as summarised in section 4 of this report and also on past DEMO-net work package involvement and collaboration with other partners. In this way integration of research centres is moved forward based on workable combinations of researchers. These working collaborations will be further discussed as part of the development of the final business plan.