

# Differences in Grassroots Parties' e-Participation Systems

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Senator On-Line



Knivsta Nu



demoex.net



www.aktivdemokrati.se  
Aktiv Demokrati

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## Abstract

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Grassroots political parties are an emerging and radically new form of political party that enables citizen participation in the policy-making process using ICTs. This paper compares the e-participation systems of four of the first grassroots parties (Senator On-Line, Knivsta.Now, Aktiv Demokrati and Demoex) using an e-participation ontology that describes e-participation systems according to 1) stages of policy-making, 2) levels of engagement, 3) stakeholders, 4) participation areas, 5) e-participation tools and 6) e-participation technologies. By applying this ontology a great diversity among grassroots parties' e-participation systems was discovered. Two overall categories, proxy politician systems and deliberative community systems, are created to label the current variety of systems. However, even within these overall labels there are substantial differences and several subtypes of proxy politician e-participation systems are suggested: individualistic systems, citizen-review systems and delegated-leaders systems. Additionally, a multi-channel system may be a variety of the deliberative community e-participation system. Finally, it is argued the e-participation ontology can be improved in the stakeholders, e-participation tools and e-participation technologies areas.

**Keywords:** e-participation, eDemocracy, grassroots politics, political parties, ontology.

## I. INTRODUCTION

Information and communication technologies (ICTs) are creating new opportunities for citizen participation in democratic governance. Early reactions to eDemocracy (the use of ICTs in democratic politics) ranged from excitement at the dawn of a more democratic future [Budge, 1996], to fear that ICTs would destroy the democratic process [Haskell, 2001]. However, even while ICTs increasingly are changing our lives, actual affects on *formal* democratic participation have been limited.

Nonetheless, e-participation (the use of ICTs for democratic participation) has been moving from the realm of hypothetical hopes and fears to the realm of practical experiments, applications and empirical research. Not only have local, regional, national and supranational governments around the world taken various e-participation initiatives, but citizens themselves have organized and experimented with the use of ICTs for democratic participation. However, while the research community has done a good job of investigating (and often actively being part of) government-initiated e-participation systems, there has been less examination of citizen-initiated e-participation systems [Rose et al., 2007].

This study investigates one form of citizen-initiated e-participation system: the systems of new forms of grassroots political parties. These grassroots parties, defined in greater detail below, are a new phenomenon using e-participation to give citizens a greater voice in politics. The grassroots parties work by providing a platform for citizen participation into the policy process. Depending on the party, they provide either deliberative or direct representation of citizen voices in governments. Their elected politicians reflect their citizen participation systems. If these parties (and their perspectives on democracy) were to become popular, they would greatly change the traditional democratic process. Understanding the sorts of e-participation systems they are promoting thus gives us insight into the kinds of e-participation citizens are pursuing.

### Research Question

At this time, very little is known about these ICT-centric grassroots political parties. The empirical research on such parties has been essentially non-existent<sup>1</sup>. There is however, a general theoretical model of grassroots political parties that suggests what form of e-participation systems they would have [Löfgren and Smith, 2003] (discussed below). However, the theoretical model does not give us details about the e-participation systems, nor does it provide empirical evidence of their e-participation systems, and does not tell us if there are differences between the e-participation systems of different grassroots parties. To understand what is revolutionary about the forms of participation these parties are promoting, we must have a detailed understand of their e-participation systems. Thus, my research question is:

- **What are the differences between grassroots parties' e-participation systems?**

It may be that the parties' all share the same e-participation system, or it may be that there are a great variety of e-participation systems between different parties.

### Grassroots Party Theory

[Löfgren and Smith, 2003] present a theoretical model of political parties with four types: mass parties, cartel parties, consumerist parties and grassroots parties. While these party models are common in other political science literature as well, they look at how the different party models would use ICT (see Table 1).

Mass parties are the forms of party that dominated in Europe in the middle of the 20<sup>th</sup> century and focused on a large party membership. The party represented a particular group (commonly laborers) and focused on furthering that group's interests while enabling active participation of the that group through party membership. These parties

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<sup>1</sup> Two parties were briefly mentioned (but not investigated) in [Sæbø and Päivärinta, 2006] as possible examples of "direct eDemocracy". Additionally, a study of municipal secession in Sweden [Erlingsson, 2005] does not explicitly mention Knivsta2000 (the social movement predecessor of the Knivsta.Now party), but Knivsta2000 was the key group promoting that secession.

existed before modern ICTs, but would be expected to focus on internal member collaboration in their e-participation systems. [Löfgren and Smith, 2003]

Cartel parties dominate Europe today and focus on more professionalized campaigns. They have limited memberships, and instead run campaigns that target many voters (rather than a specific group). They use government funding rather than a mass of loyal party members. ICT usage would focus on campaigning applications. [Löfgren and Smith, 2003]

The consumerist party is just emerging in Europe, but may be more developed in North America. The parties run highly professionalized campaigns that target voters as “consumers” of policy. The goal of the party is to meet policy preferences and needs of voters with specific targeted messages and policies. The party may have no real members, but instead recruits campaign workers and donations during election cycles. ICTs would be important for these parties both for professionalized campaigning, but also for analyzing and gathering public opinion. [Löfgren and Smith, 2003]

The important form of party for this study is the grassroots party. The grassroots party is an emerging form of political party that only recently was empirically confirmed to exist [Ovid, 2008]. Unlike the other forms of political parties, grassroots parties take a less traditional approach to representative democracy. Their goal is to enable citizen participation in government policy-making rather than to put their own specific agenda into place. They aim for wide-scale citizen participation in more deliberative or direct forms than today. ICTs are essential for grassroots parties' participatory aims. [Löfgren and Smith, 2003] For a more detailed definition of grassroots parties see [Ovid, 2008].

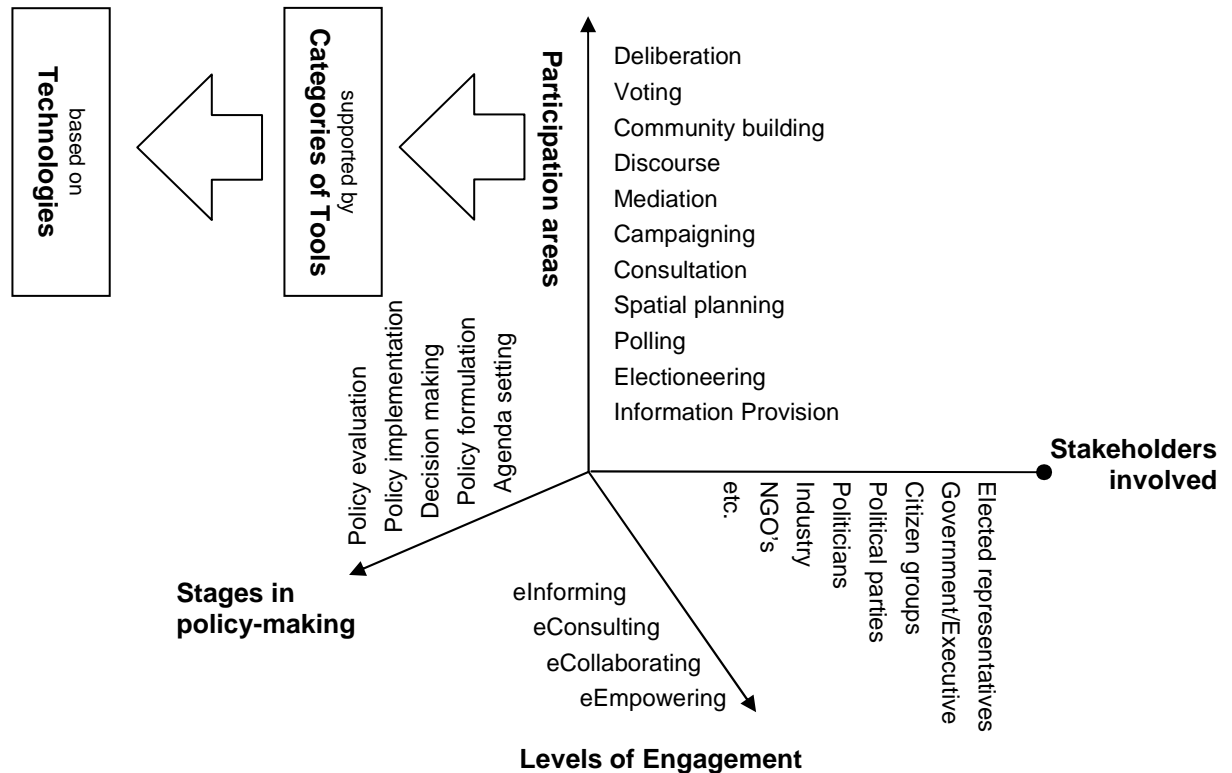
**Table 1: Party Models**

	mass party	cartel party	consumerist party	grassroots party
<b>Democracy forms</b>				
linkage	representative and participatory	representative	representative	participatory
democratic form	pluralist/deliberative	pluralist/liberal	liberal	deliberative/direct
legitimacy	pluralist competition; mass memberships	election of representatives	representation of policy preferences and provision of quality services	citizen participation in policy formation
democratic values	empowerment through party membership	quality representation	individual rights	citizen deliberation and direct decision-making
<b>Roles</b>				
citizens' role	party members	voters for representatives	service consumers	decision-makers
citizens involved	a defined interest group	any citizen	any citizen	any citizen
membership	members with privileges	members with few privileges	temporary supporters	open and loose participants
number of members	high membership:voter ratio	low membership:voter ratio	no members; only party elite	no members; every citizen can be participant
representatives/elites	subordinate to members	independent	independent	subordinate to citizens
<b>Political techniques</b>				
political discourse	political elites confront others in the media; party members deliberate in meetings	political elites confront others in the media	political elites confront others in the media; citizens in policy consultations	citizens deliberate online
information flow	bi-directional (biased) elites ↔ members	unidirectional elites → voters/members	bi-directional (biased) elites ↔ consumers	multi-directional citizens ↔ citizens
election campaign	mobilize membership	hire professionals	hire professionals	means of promoting participation
ICT applications	eMembership support	eElectioneering	eElectioneering and eConsultation	eParticipation
role of ICTs	complementary	complementary	essential	essential

### e-Participation Theory

In order to investigate the differences between grassroots parties' e-participation systems we need a categorization system of different forms of e-participation. The model I have used in this paper comes from Maria Wimmer's "Ontology for an e-Participation Virtual Resource Center". This model was developed by DEMO-net, a European Community funded network of Europe's leading e-participation researchers, and is designed specifically to meet the needs of a shared and commonly-agreed upon way of classifying political e-participation. This up-to-date model is based on the shared expertise of DEMO-net and draws from previous categorization systems. While the ontology is only a draft, I believe it is currently the highest quality categorization system for e-participation. [Wimmer, 2007]

The ontology can be visualized as having four dimensions: 1) stages in policy making, 2) stakeholders in e-participation, 3) level of engagement and 4) participation areas. Participation areas is further defined as being supported by different “categories of tools” and those tools being based on different “technologies”. See Figure 1 for a graphic interpretation<sup>2</sup>. [Wimmer, 2007]



**Figure 1: e-Participation ontology framework (based on [Wimmer, 2007])**

The **stages in policy-making** dimension of an e-participation system measures where in the government policy-making process the e-participation system is working [Wimmer, 2007]. For this, I will ask where in the policy-making process the grassroots parties’ take place. Is it 1) in setting the policy agenda? 2) formulating policy? 3) making policy decisions? 4) implementing policies? or 5) evaluating policies? For definitions of each stage, see Appendix.

The **level of engagement** dimension is based on previous studies and measures the depth of the e-participation system [Wimmer, 2007]. The current draft version contains four levels: eInforming (one-way information provision which could be either government-to-citizen information provision or citizen-to-government (ePetitions)); eConsulting (a limited two-way channel that allow citizens to submit opinions but does not involve them beyond that); eCollaborating (the active participation of all stakeholders in policy development—but final decision-making rests with government); and, eEmpowering (the public makes the final legally binding decision) [Wimmer, 2007]. (For specific definitions of how each level is defined, see Appendix.)

The **stakeholders** dimension appears to be the least developed part of the ontology. While the ontology indicates that it is important to identify who is involved in using and operating an e-participation system, the draft ontology does not yet contain a defined list of such stakeholders [Wimmer, 2007]. So, in this dimension I will use my own judgment to determine which stakeholder categories are important in the grassroots parties’ e-participation systems.

<sup>2</sup> This version makes the following changes from [Wimmer, 2007]: 1) categories of tools and technologies were in a separate figure, but I combined them here as they are part of the ontology 2) levels of engagement was incorrect in the original (it was based on an earlier 5-level categorization) 3) the arrow on the stakeholders dimension had no purpose 4) community building/collaborative environments was shorted to community building as this seem to fit the definition and avoids confusion with deliberation and 5) Like the stakeholders dimension, the participation areas also had no purpose. In this version I ranked the areas from least to most participative to give the arrow a purpose; however, this is arbitrary, as most areas aren’t comparable.

Finally, the fourth dimension, **participation areas** actually measures three related aspects of an e-participation system. The first aspect is what area(s) of participation is the system addressing. Based on DEMO-net collaboration 11 participation areas are defined (see Figure 1; for detailed definitions see the Appendix) [Wimmer, 2007]. I will identify which participation areas the grassroots parties address according to the ontology's definitions.

The second aspect asks which categories of **e-participation tools** support this participation area. These tools could be core e-participation tools, those used extensively in e-participation contexts or more generalized ICT tools. A list of the current categories of tools has been produced by DEMO-net research exchanges, see Table 2, and the ontology provides definitions for each (see the Appendix). [Wimmer, 2007] I will identify which of these tools the different grassroots parties use in their e-participation systems. However, the separation of core, extensive, and general tools are not important for this study (their purpose is to identify where DEMO-net research efforts should be directed).

Table 2: Categories of e-Participation Tools		
Core e-participation tools	Extensively used tools	General tools
e-participation chat rooms	webcasts	search engines
e-participation discussion forums/boards	podcasts	alert services
decision-making games	wikis	online newsletters
virtual communities	blogs	FAQs
online surgeries	quick polls	web portals
ePanels	surveys	groupware tools
ePetitioning	GIS-tools	listservs
eDeliberative polling		
eConsultation		
eVoting		
suggestion tools for planning procedures		

based on [Wimmer, 2007]

The third aspect measures which underlying technologies support the e-participation tools (and indirectly the overall participation areas). A definitive list of important technologies is not available in the ontology; however, DEMO-net has identified certain technologies as particularly important, and others as interesting emerging technologies [Wimmer, 2007]. Additionally, technology channel (PC, mobile phones, television etc.) is an important part of the supporting technology aspect, (see Table 3) [Wimmer, 2007]. To add the complexity, certain technologies are specifically defined in the ontology while others are not (see Appendix). For these reasons, I will limit myself to identifying some supporting technologies that need further development to support the parties' e-participation systems.

Table 3: Categories of e-Participation Technologies		
Emerging technologies	Important technologies	Channel
natural language technologies	collaborative environments	PCs
speech technologies	argumentation support systems	TV
text mining	ontologies	mobile
conversational agents	web services	etc.
multi-agent systems	semantic web services	
computer supported argument visualization	Surveys	
Computer Supported Cooperative Work (CSCW) <sup>3</sup>	knowledge management and knowledge engineering	

based on [Wimmer, 2007]

As well as my overall research question (What are the differences between grassroots parties' e-participation systems?) by using the DEMO-net draft e-participation ontology to classify the parties' e-participation systems, I will give feedback on how to improve the ontology as a secondary result.

<sup>3</sup> Accidentally written as CCSW in the draft.

## II. METHOD

Both quantitative and qualitative methods would have been valid ways to answer the research question.

For one, I could have used a questionnaire listing all the stages in policy-making, levels of engagement, stakeholders, participation areas, e-participation tools and e-participation technologies and asked each party to fill it out according to their parties' e-participation system. However, I do not believe this would have been a good method. Not only would the questionnaire have been exceptionally long, but each question would contain very specific terms and specialized definitions. Moreover, from previous experience, I knew most parties (perhaps surprisingly) are not made up of highly technical people. Most members would not necessarily know, or even care, if their e-participation systems contained semantic web services or argumentation support systems for example.

Thus, rather than ask the parties to learn the e-participation ontology, I felt it would be better if I conducted more generalized interviews about their parties, as well as collect documentation about them, and analyze the e-participation system they described in regards to the ontology's categories myself. [Hall and Hall, 1996] was used to prepare the method.

### Case selection

The cases investigated in this study are not simply a sample of a larger population of grassroots parties, but are believed to make up the entire current worldwide population of grassroots parties who have made a significant effort to formally create a political party and contest elections.

The population was limited specifically to political parties and does not include the numerous social movements. For example, The Democracy Foundation aims to create a national initiative in the US [Democracy Foundation, 2008]. Or, an example of an e-participation social movement might be Metagovernment, a plan to make an open source eDemocracy platform for policy-making [Metagovernment, 2008].

Moreover, the definition of a "political party" used here is a group that has contested elections. For this reason, I removed Direktdemokraterna from the study (although interviews had been conducted and analyzed) as they have built an e-participation system, but have not attempted to contest any election.

Also, the grassroots parties are limited specifically to ICT-centric ones. As defined above, an important part of the definition of a grassroots party used here is an emphasis on e-participation. Although it might be possible to make a grassroots party with only offline participation and no e-participation, it might be difficult to achieve in practice—participatory parties without ICTs may be better classified as mass parties based on member's internal participation than grassroots parties by on citizen-wide participation. For instance, the participatory Australian Democrats may be based around internal member democracy and don't use ICTs extensively, so may be examples of "mass parties" as defined above [Jeffcoat, 2007]. Moreover, I am studying e-participation systems, so if any grassroots party exists with an e-participation system it would not be relevant in this study. Also, for practical reasons the study is limited to currently existing parties.<sup>4</sup>

I learned about the first identified party, Demoex, through a Swedish political science professor, Joachim Åström. After becoming aware of the phenomenon, additional grassroots political parties were identified by general web searches; asking parties' members of other groups they were familiar with (i.e. snowballing); searching through the parties' forums for posts about related parties; presenting information to eDemocracy researchers and asking if they had identified similar parties; searching academic publications for information on grassroots parties; and, searching wikis and direct democracy organizations for examples of grassroots parties. It is believed most, if not all, current grassroots parties were identified because there tends to be interlinking and announcements of similar parties on each others' websites. However, grassroots parties outside of the English-speaking internet could be missed.

Finally, it is expected that many more grassroots parties, or at least attempts at forming them, is occurring. For instance, it appears that a serious attempt was made to form a grassroots party, Lista Partecipata, for the Rome municipal elections held on April 13<sup>th</sup>-14<sup>th</sup> 2008 [Lista Partecipata, 2008]; [Lista Partecipata Roma, 2007]; [Telematics Foundation, 2007]. Unfortunately, this is too recent a party to be included in this study. With this

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<sup>4</sup> To the best of my knowledge this only excludes one party, Die Digitalen, which contested Berlin municipal elections in 1999 [Löfgren and Smith, 2003].

exception, the study is believed to cover the entire current population of grassroots parties:<sup>5</sup> Senator On-Line, Knivsta.Now, Demoex and Aktiv Demokrati (see Table 4 for party backgrounds).

	<b>Knivsta.Now<sup>6</sup></b>	<b>Demoex</b>	<b>Aktiv Demokrati</b>	<b>Senator On-Line</b>
<b>country</b>	Sweden	Sweden	Sweden	Australia
<b>level of government</b>	municipality	municipality	national	national
<b>elections 2002</b>	11.5% (840 votes)	1.7% (261 votes)	∅	∅
<b>elections 2006</b>	12.3% (982 votes)	2.9% (471 votes)	~0% (81 votes)	
<b>elections 2007</b>	∅			.06% (8,048 votes) <sup>7</sup>
<b>founded by</b>	out of activist group Knivsta2000	high school student debates	computer science students	businessman
<b>webpage</b>	knivsta.nu	demoex.net	aktivdemokrati.se	senatoronline.org.au
<b>number of representatives</b>	4 of 31	1 of 41	none	none

[Australian Electoral Commission, 2007]; [Valmyndigheten, 2002/2006]; ∅ = Not applicable

### Knivsta.Now

Knivsta.Now is a party in the Swedish municipality of Knivsta. The party formed out of a social movement to secede Knivsta from Uppsala. After this success, the party was formed to get locals involved in community dialogue and deliberative policy-making. The party has been electorally successful (and is the 3<sup>rd</sup> largest party in the municipality [Valmyndigheten, 2006]) which means they have to deal with the practical realities of being a political party. The party has faced difficulties in creating the kind of deliberative democracy they envision; although, they can point to many initiatives they have undertaken. Their website does not meet their needs and has become neglected due to frustrations.

### Demoex

Demoex is another Swedish municipal party, this one in Vallentuna. The inspiration for the party came from high school debates on technology and democracy. The party was able to elect one representative into the municipal council. The party runs an e-participation system that allows any local citizen to vote on upcoming municipal policies while the party's council member is pledged to follow the results of the vote. Participation in the system is very light, possible due to the inability of just 1 of the 41 council members to have significant impact. Nonetheless, the party received nearly double the votes during their second election.

### Aktiv Demokrati

Aktiv Demokrati originally formed out of discussions of Swedish computer science students on how they might reform democracy. They came up with a voting system that would have any members they elect to the Swedish Riksdag (parliament) pledged to vote according to the e-participation system's results. Currently, they are primarily a discussion forum, but they also made a modest attempt to contest the 2006 Swedish national elections as a party.

### Senator On-Line

Senator On-Line formed in time to contest the 2007 Australian Senate. The founder, Berge Der Sarkissian, is a businessman who took the initiative to found the party and fund a small national campaign. The party aims is to provide an e-participation system that will let any citizen vote on all bills coming before the Australian Senate. The party's Senators would then pledge to follow the results of the citizens' vote. Taking advantage of the Senate's traditional role as a "House of Review," this would allow Australian citizens to have a final voice on government policies before they become law.

### Informants

The individual informants from each political party were purposively selected. I contacted members from the parties' websites, forums or through the snowball method of asking contacted members to get me into contact with others.

<sup>5</sup> As of May 2008.

<sup>6</sup> Their Swedish name is Knivsta.Nu, but they preferred the English name Knivsta.Now during interviews.

<sup>7</sup> The Australian Senate uses a preferencing (also known as instant run-off) electoral system. The number here is the total first preferences.

The people interviewed in each party tended to be very active and knowledgeable party members/leaders (either currently or previously). Members involved since the founding were studied from each party. I also interviewed someone critical, somewhat disillusioned or who had quit from every party (except for Demoex). All interviews were conducted in English and informants were given the opportunity to use a pseudonym, (but few opted for this). As the way people speak is not the same as the way they write, quotations have been edited for grammar and flow.

### Email interviews

Data from email-based interviews was used to study two of parties (Aktiv Demokrati and Demoex). I collected this data one-year ago, but due to the lack of an election or major changes to their websites in the intervening time, it is expected that the data still accurately describes their situation. While not originally obtained for this research project, use of previous data can be a convenient and cost saving method that can that expand the scope of the research [Hall and Hall, 1996].

While in-person interviews would have been preferable, Aktiv Demokrati members are scattered around Sweden while Demoex does not regularly hold in-person meetings, so that option was not viable. Phone interviews were considered, but I decided against them due to concern that the phone may be the most difficult place to express oneself in a second language, as it lacks the non-verbal cues of in-person communication and lacks the time to consider and think in written communication. Written email provided more time to consider answers, but also takes more time to complete, However, I hoped the political parties would be keen to spread their message and so would take the time to respond in detail. I am satisfied with the depth of information obtained from Aktiv Demokrati (total interview length 8,500 words), but was not fully satisfied with the depth of the Demoex interviews and so sought out additional sources of data on them (5,000 words).

I designed my email interview method based on [Bourque and Fielder, 2003]. For each interview, I asked different questions because each party has engaged in different activities. Each set of questions were arranged into five categories: 1) "The Beginning" here I asked questions about the party founding, why the interviewee joined, the party's earliest activities and changes since then 2) "How it works" here I asked how their participation systems works, how the party is organized, what roles do people have in the party and what activities they engage in 3) "How others see the party" here I asked about the party's relations with citizens, the media and other political parties 4) "The Future" here I asked about their strategies, plans and long-term goals 5) "Reflections and Interpretations" here I asked about mistakes made, frustrations, obstacles and successes. After the initial responses, I conducted follow-up email interviews with most respondents to delve deeper into interesting issues.

### In-person interviews

Knivsta.Now was studied using in-person interviews. This data was also collected one-year ago, but again based on the lack of an election cycle and lack of major website changes it is believed to continue to be up-to-date.

In-person interviews are an ideal method for developing a depth of understanding; I designed my interviewing method based on [Seidman, 1998]. Knivsta.Now regular holds meetings in a single location which made arranging in-person interviews convenient. A series of questions were prepared in a similar manner as the email interviews, but the questions were primarily for planning purposes and ensuring important topics were covered. All interviews were recorded to an MP3 recorder. Afterwards, all interviews were transcribed. Altogether, four members were interviewed for 4.5 hours producing more than 30,000 words of data.

### Phone interviews

Phone interviews were conducted with Senator On-Line members in Spring 2008. Phone interviews allow nearly the same amount of depth as in-person interviews, which could not be conducted due to members spread over Australia. The interview questions were prepared in a similar format to the previous interviews, (but were used primarily for preparation and to ensure coverage of all topics). The interviews were conducted in an open-ended manner. As this data was gathered specifically for this research project, the interviews were more tightly focused on the party's e-participation system. The phone interviews were conducted on Skype to allow for better audio quality and save money. They were recorded for transcription afterwards. Altogether, 5 hours of interviews with 3 members produced about 35,000 transcribed words.

### Additional data sources

Additional data sources were also important in determining each party's approach to e-participation. Each parties' websites, their forums, their other online communities (like facebook), their party documents such as manifestos or constitutions, their party videos, their campaign materials, their wikis, members' personal websites, members' blogs entries and essays, news articles about the parties and the limited academic publications about them were all used as sources to define the parties' e-participation systems. For details of data sources, see Table 5.

**Table 5: Data sources**

	<b>Knivsta.Now</b>	<b>Demoex</b>	<b>Aktiv Demokrati</b>	<b>Senator On-Line</b>
<b>interview method</b>	in-person	email	email	phone
<b>number interviewed</b>	4	3 <sup>8</sup>	4	3
<b>detail of interviews</b>	4½ hours; over 30,000 words <sup>9</sup>	nearly 5000 words	over 8500 words	5 hours; about 35,000 words
<b>additional documentation</b> (news articles not included due to space concerns)	[Knivsta.Now, 2006 August]; [Knivsta.Now, 2006 September]; [Knivsta.Now, 2008]	[Demoex, 2007a]; [Demoex, 2007b]; [Demoex, 2007c]; [Demoex, 2007d]; [Nilssons, 2008]; [Norbäck, 2004]	[Aktiv Demokrati, release 7]; [Aktiv Demokrati, 2005]; [Aktiv Demokrati, 2006a]; [Aktiv Demokrati, 2006b]; [Aktiv Demokrati, 2006c]; [Aktiv Demokrati, 2006d]; [Aktiv Demokrati, 2006 November 24]; [Aktiv Demokrati, 2007]; [Aktiv Demokrati, 2008a]; [Aktiv Demokrati, 2008b]; [Aktiv Demokrati, 2008c]; [Gustavsson, Martin, 2006]	[The King Makers; 2007]; [Mayer, 2007a]; [Mayer, 2007b]; [Mayer, 2008]; [Sarkissian, 2007]; [Sarkissian, 2008a]; [Sarkissian, 2008b]; [Senator On-Line, offline]; [Senator On-Line, 2007 April]; [Senator On-Line, 2007]; [Senator On-Line, 2008a]; [Senator On-Line, 2008b]; [Senator On-Line, 2008c]

**Research question operationalization**

Based on [Wimmer, 2007] I operationalized the question “What are the differences between grassroots parties’ e-participation systems?” in the following ways: Firstly, which **stages in policy-making** does the party’s e-participation system address? Secondly, what **levels of engagement** does the party’s e-participation system operate on? Thirdly, what **stakeholders** are involved in the e-participation system? Fourthly, what **participation areas** does the e-participation system address? Fifthly, what **e-participation tools** support those areas? And finally, what (emergent) **technologies** are enabling those tools? Some of these aspects will be identified based on the specific categories developed in [Wimmer, 2007] and described previously, but some of the aspects are in a draft form and will need me to use my own judgment based on the draft ontology. At the end, each grassroots party had its e-participation system described for comparison for differences between them. Because the parties have generally only intentions for their e-participation systems without actual development, or unsatisfactory development, or have not had the electoral success to fully implement them into political system, I will have to look at both their current e-participation systems as well as their intended ones.

**Analysis**

I searched the literature on each party (interviews and other documentation) for evidence for the presence of the e-participation ontology. Many items (see Appendix) have specific definitions in the ontology, which simply required searching for evidence of that definition within the parties’ e-participation system. However, other items, such as stakeholders, are not specifically defined and depended on my own judgment of appropriate categories. To aid in the analysis, before searching for the specifics of the ontology, I had coded all the parties’ interviews by topics. As I had already spent significant time conducting, listening to, transcribing, reading and coding the interviews I am familiar with data set.

- ◆ = this aspect is an essential/core part of the parties’ e-participation system that was frequently mentioned
- √ = this aspect is part of the parties’ e-participation system
- = an empty field means this aspect is not part of the parties’ e-participation system
- ∅ = this aspect the party has *explicitly* mentioned as *not* being part of their e-participation system

**Figure 2: Result table key**

**III. RESULTS – HOW DIFFERENT**

The following sections report the results dimension by dimension. The dimensions will be pulled together in the discussion section that follows. For the following tables, symbols are used as defined in Figure 2; see Appendix for terminology definitions.

<sup>8</sup> One proper interview with an active member and one detailed paper written by a member analyzed as an interview. Additionally, one interview with a peripheral member was not analyzed as one of their interviews.

<sup>9</sup> More members were met during attendance at one of their meetings, but this was not analyzed as part of the interviews nor is it included in interview time.

## Stages in Policy-Making

The emphasis of the stages in the policy process of the e-participation systems is strikingly different (see Table 6).

**Senator On-Line**'s system would involve citizens mainly in the decision-making and policy evaluation stages. Citizens would be involved in decision-making by binding the party's politicians' vote on bills that reach the Australian Senate. However, the Australian Senate is considered a place to make a final evaluation of policy before it is enacted. "The Senate doesn't really initiate legislation so much (that's done in the lower house). Unlike the American Senate, the Senate here does not really enact its own process of bills. [It's more of] a house of review" [Mayer, 2008]. Senator On-Line's system consciously avoids the policy formulation stage; "The party is designed in the Senate rather than the House of Reps because it is not developing policies; it's part of the final decision" [Lamont, 2008]. However, the system also addresses the agenda setting stage. "There's a lot of issues out there that are nowhere near any sort of bill form. So then how do we ensure we just get all the important issues that people are really interested in?" [Sarkissian, 2008b]. To do that, people will be able to vote on issues to set the policy agenda. "If there's enough public support behind an issue than the politicians will go, 'Shit, we should do something.' Or Senator On-Line itself will try to introduce something in the parliament" [Sarkissian, 2008b].

In contrast, **Knivsta.Now**'s system aims to collaborate with citizens throughout the entire policy process. "Some politicians say, 'Elections are good, but that's enough. We don't need to develop democracy.' We think democracy must still be developed" [Lundberg, 2007]. The system should let citizens set the community's agenda, involve citizens deeply in policy formulation, accept their input when it comes time to decision-making and ensure the policy's are implemented in ways that affected stakeholders can be involved in. Their system centers most on the earlier policy development stages, but they even push for developing community goals to evaluate policy by.

**Demoex**' system is centered on the decision-making stage. Parts of the system that may seem to address other stages, for instance a system for ranking importance issues, may on face value seem to touch on agenda-setting, but the ranking seems limited to proposals already on the municipal council's agenda, so it may better fit in the decision-making stage. While they claim "we want every citizen to be able to vote at every point of the issue," [Norbäck, 2004] voting, i.e. the decision-making stage, seems to be the core of the system.

**Aktiv Demokrati**'s envisioned e-participation system is also centered on the decision-making stage; the party is in many ways a proposal for a direct democratic voting system. However, they also aim to allow citizens to create proposals (agenda-setting phase) and also want people involved in policy formulation (by creating different versions of policies). Their current forum is used in trying to set the party's agenda as a group through discussion (i.e. the party's internal policy formulation).

## Levels of Engagement

**Demoex** and **Aktiv Demokrati**'s e-participation systems are both on the eEmpowering level of engagement. Both systems would provide for binding citizen decision-making. There are also some eConsultative aspects, in that citizens can voice their opinions for or against policies into the system. Aktiv Demokrati's members also try to use their current e-participation in eCollaborative ways. For instance, even during for the interview itself, one member wanted to post his answers to the party's forum to let other party members collaborate on his answers.

**Senator On-Line** is unique in that its e-participation engagement level emphasizes not only eEmpowering, but also unlike any of the other parties is very heavily focused on eInforming. As the founder says, "It's very difficult for people to research and find out about various bills or particular issues and get independent information... [the party] objective then was to provide independent and accurate information on each bill and issue and allow people to then cast their views and have the internet collect those views and deliver the information" [Sarkissian, 2008b]. While the system also has some eConsultating aspects in that citizens can put pro or con opinions into a forum, the system explicitly is not attempting eCollaboration of citizens in the policy development stage, nor of citizens in the party organization. "People get this a little bit confused with a

**Table 6: Parties' Stages in Policy-Making**

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
Agenda-setting	✓	◆		✓
Policy formulation	∅	◆		✓
Decision-making	◆	◆	◆	◆
Policy implementation		◆		
Policy evaluation	◆	✓		

**Table 7: Parties' Levels of Engagement**

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
eInforming	◆	✓		
eConsulting	✓	∅	✓	✓
eCollaborating	∅	◆		✓
eEmpowering	◆	∅	◆	◆

strictly democratic party, it's not... It's a party that actually said exactly what it's going to do which is deliver independent information and allow people to vote" in the Senate [Sarkissian, 2008b].

**Knivsta.Now** on the other hand is absolutely a system at the eCollaborating level of engagement. They want the community working together in deliberation. "Our ambition is still—decisions about school for example—should be discussed with pupils and the parents and the teachers before it comes up to the community. That's very important because those people are close to what it's about, they have important things to say to our politicians, so that we make good decisions" [Lundberg, 2007]. eInforming engagement is also part of their e-participation system as they push for transparency and openness in government. Interestingly, Knivsta.Now's current e-participation system (hastily selected), is produced by the same company as Demoex and emphasizes eEmpowering (voting on decisions) and eConsulting (opinion expressing that is not an essential part of shaping policy like it would be in an eCollaborating environment). Knivsta.Now members express enormous frustration with their current website which is likely due to the mismatch between the kind of engagement they want in their system and the kind of engagement the current website actually provides. For instance, the party had great trouble when it used an eEmpowering (voting) part of their website when what they wanted was a deliberative dialogue.

## Stakeholders

While of course all the parties have numerous stakeholders involved in their e-participation systems, there are some interesting differences in the roles of certain stakeholders between the parties (see Table 1).

One of the striking differences is in the role of citizen interest groups in the e-participation systems. **Senator On-Line** has created processes to keep them out of their e-participation system because "we don't want public interest groups or other political parties to hijack the system" [Lamont, 2008]. On the other extreme, **Aktiv Demokrati's** e-participation actively encourages the creation of interest groups (through vote delegating) as an official part of their system. Other political parties or communities could be integrated in the same way; "it can be a friend, an organization of interests or a politician" [Aktiv Demokrati, 2008c].

Experts have no particularly special role in most of the systems, but they are one of the most essential stakeholders for **Senator On-Line**. The system will feature information from both government experts as well as actively seeking out information from independent experts. A research team would be set up for this; "probably the biggest cost in this whole exercise would be the research team that would be behind getting the information" [Sarkissian, 2008b].

Interestingly enough, and keeping inline with the theoretical expectations of a grassroots party [Löfgren and Smith, 2003], party members are not particularly important stakeholders in most of the parties. There's not any important distinction between members and citizens in **Knivsta.Now** or **Aktiv Demokrati's** systems. For instance, Aktiv Demokrati's president indicates that basically any citizen that hears about the party is considered a member as much as the president of the party is one; "I am officially president of the party, but that is of no importance because of the direct democracy by members within the party. I feel equally responsible for results as any other Swedish person with the knowledge of our party" [Martin Gustavsson, 2007]. **Demoex** originally limited participation in the system to fee-paying members, but this was soon abandoned after they had a stable enough system. "We abolished the member fee for local citizens. Everyone in the municipality that are more than 16 years old have the right to vote in the Local Parliament's issues" [Norbäck, 2004]. **Senator On-Line** is the only party that has a special role for "party members" (only they can change constitution and a smaller "executive committee" has great latitude in abstaining the party from Senate votes, both to buffer the party from special interests); however, they indicate these roles could be done away with once a large number of "poll members" (citizens signed up to participate in Senate policy decisions) are involved in the party (and thus the large membership would protect from minority interests dominating). Because there is no distinction between poll members and other citizens, not even Senator On-Line sees party members as important stakeholders; "I don't think there's any advantage for people to join the party. I not sure why they'd want to. I mean they can have just as much involvement being as a registered person" [Sarkissian, 2008b].

**Table 8: Parties' Stakeholders**

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
citizens	♦	♦	♦	♦
their politicians	♦	√	√	√
party members	√		∅	
political bodies	√	√	√	∅
(other) political parties	∅	√	∅	√
interest groups	∅	√		♦
communities		√		√
experts	♦			
companies	√	√	√	∅
open source programmers			√	√

Companies also have different roles in the parties, ranging from the subcontracted producers of the systems for three of them, while **Aktiv Demokrati** states they will only consider open source development of theirs.

## Participation Areas

Based on [Wimmer, 2007] we can see differences in what participation areas the e-participation systems touch upon. These are the modes of participation that are then supported by specific e-participation tools and technologies.

All the systems except for **Knivsta.Now**'s are essentially voting systems. However, while Knivsta.Now's current website has voting, the party arguably does not want to have it and it does not fit in with their emphasis on eCollaborating.

**Senator On-Line** is the only e-participation system focused on information provision.

**Senator On-Line** has taken advantage of the internet most actively for electioneering, but that may be primarily due to the fact that they are the latest party to go through an election cycle and the internet is becoming increasingly important for electoral campaigns. Still, **Demoex** and **Knivsta.Now** may stick more to face-to-face electioneering as they are local parties in small communities.

**Knivsta.Now** and **Aktiv Demokrati** both would create specialized communities within their parties. **Knivsta.Now**'s would be in the form of collaborative groups focused on specific issues (i.e. the school group). **Aktiv Demokrati**'s would be in the form of interest groups that vote as blocks. On the other hand, **Senator On-Line**'s system would discourage communities (with their special interests) forming.

**Table 9: Parties' Participation Areas**

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
Deliberation		♦		√
Voting	♦	∅	♦	♦
Community building	∅	♦		♦
Mediation				
Campaigning	√	√		
Consultation	♦	∅	♦	√
Spatial planning		√		
Polling		∅		
Electioneering	♦	√		√
Information provision	♦	√		

**Table 10: Parties' e-Participation Tools**

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
discourse	√	♦	√	√
chat rooms		√		
discussion forums	√	♦	♦	♦
decision-making games				
virtual communities		√		♦
ePetitioning	♦	√		
politician support systems	♦	♦	♦	♦
ePanels		√		
eDeliberative polling		√		
eConsultation	♦		♦	√
eVoting	♦	∅	♦	♦
GIS		√		
webinars	√	√		
podcasts	√			√
wikis				√
blogs		√		
surveys		√		
alert services	√	√		
web portals	♦	♦	♦	♦
groupware tools	√	♦		♦
listservs	√	√		
social networking	√			

## e-Participation Tools

As we move into the area of supporting tools and (supporting technologies) the e-participation systems become harder to categorize because they have generally 1) not been developed at all or 2) developed to a limited but unsatisfactory degree or 3) still in a state of infancy due to the limited electoral success of the party and therefore unimportance of the system to the municipality's policy-making. (See Table 10 for tools likely to be important to the parties' future e-participation systems).

All the e-participation systems center around a political web portals. e-Participation discussion forums/boards are also a tool shared between all systems.

As **Aktiv Demokrati** and **Knivsta.Now** e-participation systems both have the community building participation area, it is not surprising virtual communities would be important for them.

ePetitioning is a tool that would be especially important for **Senator On-Line** as it would use this tool to let citizens get involved in agenda-setting stage of policy-making by signing support to issues they feel are important.

ePanels could be one of a variety of ways to enable **Knivsta.Now**'s deliberation participation areas. eDeliberative polling could be another way, (combining deliberative meetings with sampling of other voters,) but the parties previous attempts at eDeliberative polling have caused problems due to lack of methods to combine the deliberations will polling information.

eVoting is an essential tool for **three of parties**' systems while it is available to **Knivsta.Now**'s current system but arguably not wanted in their system. "Voting—it's not the most important thing in the democracy.

The most important thing is the dialogue in the society" [Eklund, 2007].

Webcasts and groupware tools might become a useful tool for both **Senator On-Line** and **Knivsta.Now** but for different reasons. Senator On-Line would use them to organize party members across a large and sparsely populated country into the party's organization; "We [might] have monthly webinars, because we can't obviously all meet in one place, to discuss the best way to set up a more solid organizational structure" [Lamont, 2008]. Knivsta.Now would use them for policy collaboration. They need to incorporate citizens in their deliberations that can't physically attend the in-person meetings, "If you haven't got the time to come to these meetings on Thursday then the homepage, the internet, is the best way" [Hermansson, 2007].

Podcasts and social networking are two tools **Senator On-Line** has actively used to support the electioneering area. **Aktiv Demokrati** has also used podcasts to some degree for the same purpose, but the other parties have not yet used social networking tools.

Alert services are tools **Senator On-Line** would use in their system to alert citizens to upcoming votes on bills of their interest. **Knivsta.Now** members mentioned alert services as something inadequate in their current website which they need for spreading information about upcoming meetings.

### Emerging Technologies

It is difficult to identify the important underlying technologies as this is the most weakly developed portion of the ontology; moreover, all the parties' e-participation systems are tentative. However, if we re-interpret this part of the ontology not for identifying just any relevant underlying technologies, but instead for identifying technologies that are lacking and need development before the e-participation system becomes viable, (see Table 11).

**Three parties'** systems based on eVoting clearly need secure and reliable identification and authentication technologies. Unfortunately, remote internet voting is not a secure technology and is unlikely to become so in the foreseeable future [Federal Voting Assistance Program's Security Peer Review Group, 2004]. Fortunately for the parties, as can be seen with Demoex, initial versions of the systems may be only binding for tiny fractions of representative bodies (1 out of 41 seats in Demoex' case) and therefore are unlikely to change votes on policy outcomes. Thus, they would be low priority targets for committing voting fraud.

Collaborative environments, argumentation support systems, ontologies and knowledge management are a related set of technologies enabling the discussions and consultations needed by **all** the parties to varying degrees. **Knivsta.Now**, with its e-participation level of engagement focused on eCollaboration and participation areas focused on community building and deliberation, is dependent on the development of these technologies to make its system viable. The lack of these technologies makes Knivsta.Now's e-participation system frustrating to use; it is likely the party to will continue to de-emphasize grassroots e-participation and focus more on traditional in-person deliberation. "The idea with the party was that you could engage in the way that suits you. If you want to do it at one o'clock in the morning, in the middle of the night, you can do it from your computer. Then you can meet as well, but not *only* meetings" [Åhlander, 2007].

### Technology Channel

Not surprisingly (considering the definition of a grassroots party used) the personal computer is a key channel for **all** the parties. More surprising is the fact that only one party's e-participation system uses another channel as well (in-person participation)<sup>10</sup>. **Knivsta.Now**'s combination of PC and in-person channels makes clear the need for multi-channel integration technologies within their system. For instance, when it came to purchase of a sawmill "We had a very intensive discussion with public meetings and it ended up with a referendum on the website. The majority of people voting on the website said 'Yes, buy it.' But then when we came to the meetings we had a little referendum and in that meeting people were against" [Lundberg, 2007]. The lack of tools to integrate the two channels into a

	Senator On-Line	Knivsta.Now	Demoex	Aktiv Demokrati
identification and authentication	◆		◆	◆
natural language		√		√
collaborative environments	√	◆		√
argumentation support systems	◆	◆	√	
ontologies	◆	◆		√
knowledge management	◆	◆	√	◆
multi-channel integration		◆		
<b>Channel:</b>				
PC	◆	√	◆	◆
TV				
mobile				
in-person		◆		

<sup>10</sup> It might be argued that the other parties incorporate in-person participation in that their elected politicians would participate in the legislature in-person, but none of the other systems include citizen in-person participation.

single policy discussion caused somewhat of a crisis within the party. “It started a debate, ‘You’re asking us to participation in an election on the internet and then you don’t listen to it” [Lundberg, 2007].

#### IV. DISCUSSION – UNDERSTANDING THE DIFFERENCES

It can be seen that the differences between stages in policy-making, levels of engagement, stakeholders involved and participation areas based on tools and technologies are tied together. To help understand these connections between the differences and similarities, I have given each parties’ e-participation system labels based on the results.

##### Proxy Politician and Deliberative Community systems

Three of the parties (Demoex, Senator On-Line and Aktiv Demokrati) have different versions of a similar kind of system I will refer to as the “proxy politician” e-participation system (see Figure 3), while the final party has a very different system that might be called a “deliberative community” e-participation system (see Figure 4).

The **proxy politician** systems share a strong emphasis on the decision-making stage of policy-making and an eEmpowering level of engagement. In these systems, the parties’ elected politicians are primarily proxies for the citizens’ votes; they simply act on behalf of the citizens. Thus, voting is an important participation area, with eVoting tools and identification and authentication technologies needed to support that. The system also allows citizens to voice opinions on policies on the eConsultative level of engagement and so touches upon the consultation participation areas with discussion forums/eConsultation tools supporting that and needing argument support systems technologies to work best. The most important stakeholders are the political bodies who need to provide policy proposals in a timely enough manner to be entered in the e-participation system, the citizens who are invited to vote on the policies and the party’s politicians who promise to be bound by the citizens’ decisions in their official vote in the legislative body.

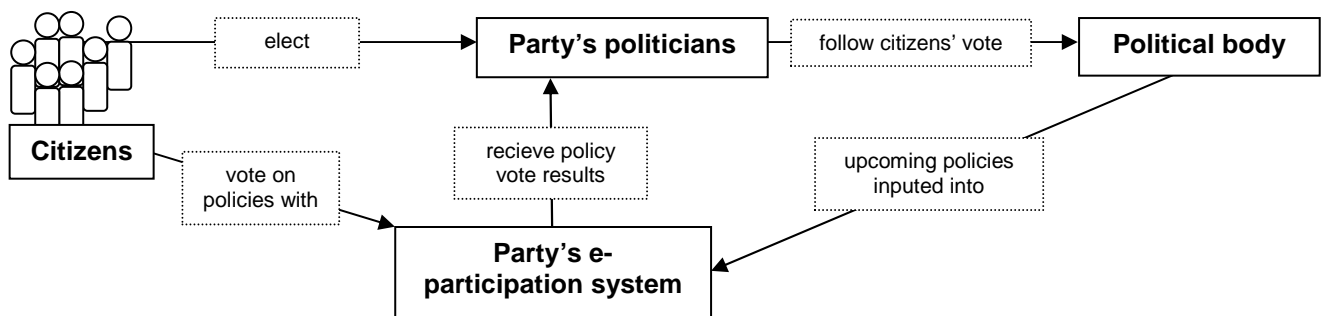


Figure 3: Proxy Politician System

Conversely, the **deliberative community** system more holistically involves the entire policy development process, from the agenda setting to beyond the decision-making stages. More importantly, the level of engagement within the system is eCollaboration. The primary goal is not that final decisions are made by citizens, “some people thought that everything is going to be a referendum on the internet, but that hasn’t been our goal” [Lundberg, 2007]. Rather the goal of this e-participation system is that every citizen can participate as an essential part of a deliberative policy process. Deliberation and community building are thus the core participation areas with possible important tools including discussion forums, virtual communities, ePanels, ePetitioning, chat rooms, suggestion tools for planning procedures, surveys and eDeliberative polling. A variety of emerging technologies would be important to support and integrate these tools, such as collaborative environments, argumentation support systems, ontologies, natural language technologies and knowledge management.

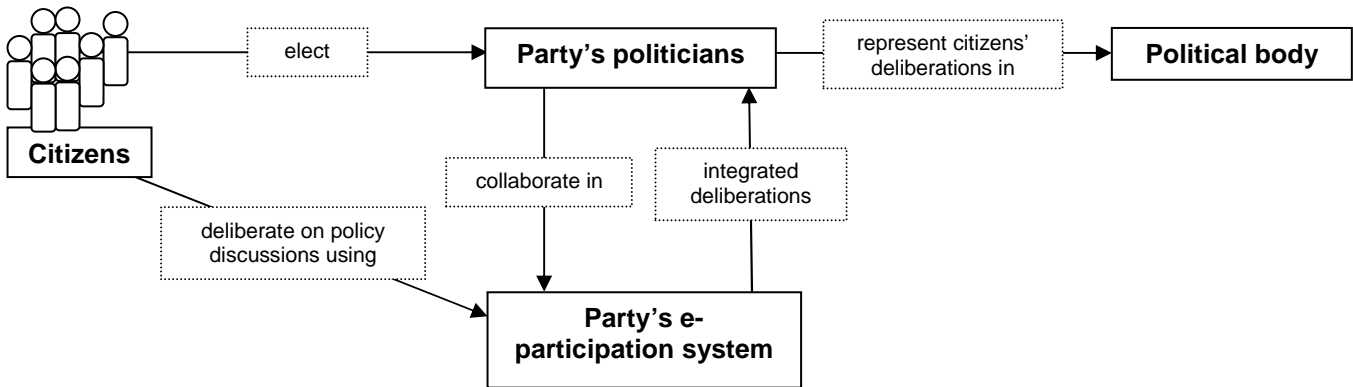


Figure 4: Deliberative Community System

### Demoex – The Proxy Politician System

Demoex’s e-participation system is very much the basic proxy politician system described above (Figure 3).

### Senator On-Line – The Individualistic and Citizen-Reviewers Proxy Politician System

Senator On-Line’ e-participation system could be labeled the individualistic (Figure 6) and citizen-reviewers (Figure 5) proxy politician system. While it essentially follows the basic proxy politician system outlined above, it has some important differences.

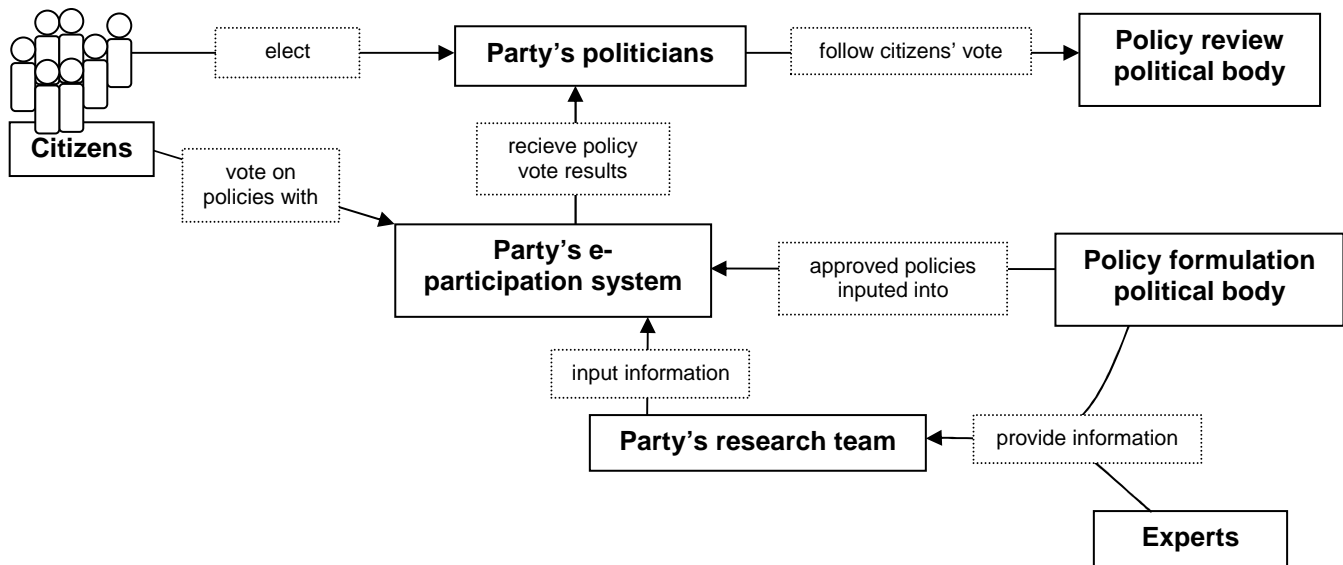
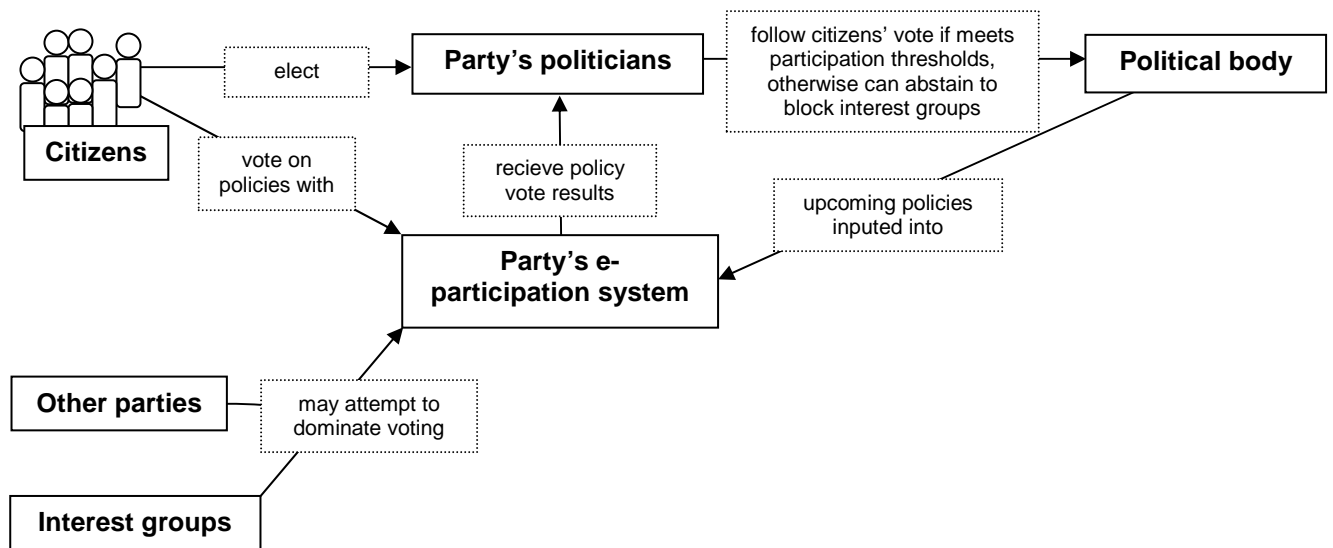


Figure 5: Citizen-Reviewer Proxy Politician System



**Figure 6: Individualistic Proxy Politician System**

When it comes to the **citizen-reviewer** aspect, the system is designed to address the very final stage of the policy-making. The system is a final, citizen evaluation (review), of policy. To make the evaluatory stage effective, the system focuses on enlforming engagement (in addition to eEmpowering as in the other proxy politician systems). This leads to some other important differences. For instance, information provision becomes one of the key participation areas and the party members (in the form of a research team) become more important stakeholders as they need to seek out and incorporate the views of experts into the system.

Additionally, there is an **individualistic** aspect of their proxy politician system. Their system is designed to represent the majority view, not the views of specific communities or interest groups. This is most obvious in their requirement that the e-participation system needs at least 100,000 citizens voting and 70% agreement to bind the parties' elected Senators to vote [Senator On-Line, 2007, April 11]. "Those numbers were worked out as a way to avoid lobbying from special interest parties. It's enough people to make sure the majority opinion is being represented" [Lamont, 2008]. As a 70% agreement among citizens is extremely high and only likely to occur only in the most uncontroversial of policies, the party would have a great deal of latitude in abstaining from votes in cases they decide interest groups were too involved. "If they saw a particular block of votes or a particular interest group trying to manipulate the votes, than that would invalidate the vote" [Mayer, 2008]. So, their version of the proxy politician system is designed to allow citizens to participate as individuals, not as groups.

### **Aktiv Demokrati – The Delegated-Leaders Proxy Politician System**

Aktiv Demokrati's system is nearly opposite to "the individualistic proxy politician" and might be called the delegated-leaders proxy politician system (Figure 7). The main difference between their system and the general proxy politician system is the important role of vote delegation. While citizens can directly vote on policies, they can also delegate their vote to someone else. This person might be a politician, an interest group or a political party that had reformed itself to become a seeker of delegated voters. Thus, their system would allow a continuity of the representative system. (Essentially voting for a party to a legislature would be similar to delegating a vote to a party in this system). But, at the same time, citizens could vote independently anytime (or all the time). This is strikingly different than the "individualistic proxy politician" system.

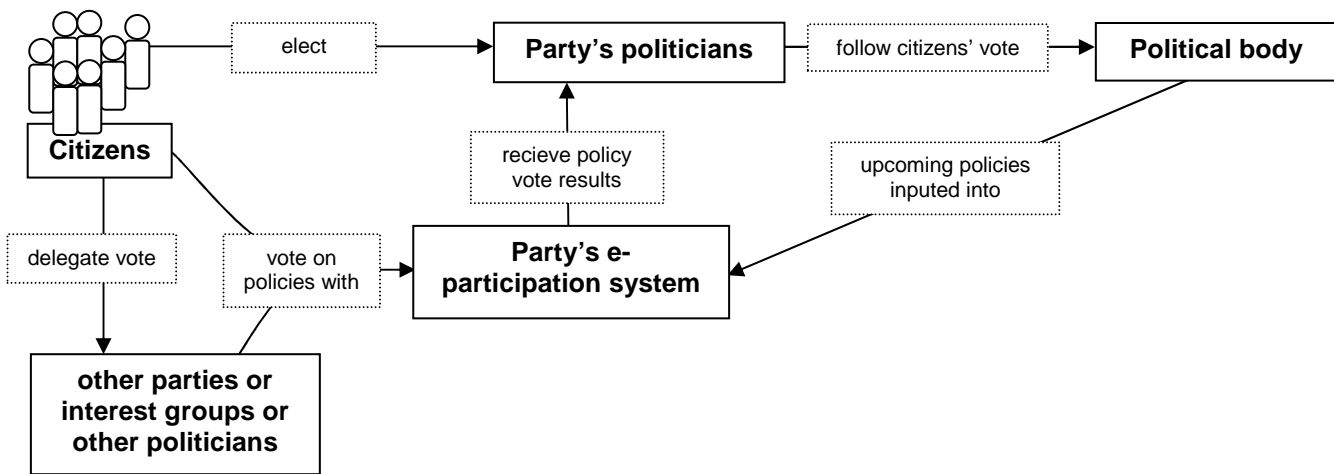


Figure 7: Delegated Leaders Proxy Politician System

### Knivsta.Now – The Multi-Channel Deliberative Community System

Finally, Knivsta.Now, while the basis for the deliberative community system described above, also has a important difference from the generic description. The system described above could be focused on one channel (PC channel), while Knivsta.Now is interested in using all functional channels (and emphasizes in-person meetings due to frustrations with the state of their e-participation system). “A lot of people do use the computer today, so that is a channel we can use more” [Åhlander, 2007]. Because their e-participation system would need to allow all citizens to participate, the ability to integrate a variety of different participation tools and channels into a single deliberative policy environment is essential for their e-participation system (see Figure 8).

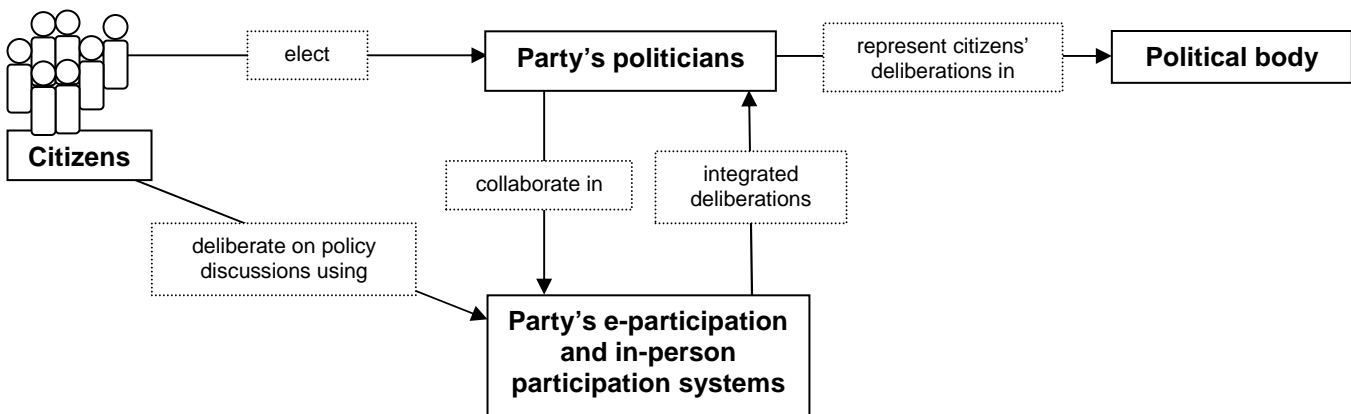


Figure 8: Multi-Channel Deliberative Community System

### Reflections on the e-participation ontology

The ontology used in this study is only a draft version. The ontology has the following goals: “a) learn about the field e-participation and its characteristics from a scientific perspective, b) to provide an instrument to further structure the field, c) to thematically cluster projects and knowledge, and at the same time d) to provide a practical instrument for the users to overview the projects and knowledge in the field” [Wimmer, 2007]. In this study, I attempted to use the ontology to a) much like the first goal, to learn about the differences between different e-participation systems and their characteristics c) much like the third goal, to thematically cluster the e-participation systems and d) much like the final goal, to have a practical instrument for overiewing the systems. Therefore, while the ontology was not developed for my particular use in mind, the ontology appears to be designed for the sorts of usage I put it too. As the ontology is a draft, I can thus give feedback on how it might be improved.

Overall, the stages in policy-making, levels of engagement and participation areas were the most developed and useful parts of the ontology, while the stakeholders, e-participation tools and e-participation technologies were less developed.

The five **stages in policy-making** proved a useful and defined tool in differentiating the parties' e-participation systems.

The four **levels of engagement** also were useful and defined tools for differentiation. They were adequate for defining the grassroots parties' e-participation systems.

The **participation areas** dimension proved useful in defining and differentiating the parties' e-participation systems. However, "discourse" as defined seemed more like an e-participation tool (supporting deliberation or consultation participation areas and so was moved there). Additionally, "community building/collaborative environments" was simplified to "community building" to clarify the distinction from "deliberation".

The **stakeholders** dimension is not yet developed into specific categories in the ontology and so I needed to define the stakeholder groups relevant to the parties. Nonetheless, the ontology's indication that this is an important dimension to investigate proved correct in that the parties' e-participation systems had substantially different roles for stakeholders. However, to be a useful ontology an established set of stakeholders needs to be defined; perhaps the set used in this paper can be useful (see Table 8). Moreover, based on this study and I would suggest the ontology also needs to create definitions for defining the role of the stakeholders, as these roles varied between parties.

**e-Participation tools** needs more development in the ontology. For this study, several tools were minorly renamed for simplicity such as e-participation chat rooms → chat rooms; e-participation discussion forum/board → discussion forums; and GIS-tools → GIS. Online surgeries underwent a major name change to politician support systems. These are "web applications specifically designed to support elected representatives to engage with the citizens they represent" [Wimmer, 2007]. I found the term "online surgery" odd, as this would presumably mean web applications to assist with medical surgeries. Additionally, Webcasts was renamed to webinars and "recordings of" was removed from the definition: real time recordings of meetings transmitted over the internet [Wimmer, 2007]. This clarifies the difference with podcasts and also adds the internet phone/video meetings to the tools list.

Social networking was added to the tool list. Additionally, discourse was moved from a participation area to an e-participation tool, as it seemed to be a tool supporting the deliberation, consultation and mediation areas rather than an independent area of participation.

Finally, several tools were removed: quick polls, search engines, online newsletters, and FAQs. They were either contained in other tools or very minor. For instance, quick polls are generally parts of discussion forums or web portals; search engines would be contained on many tools (searching *technology* may be important however); online newsletters' definition is extremely similar to the blog definition; and FAQs (either instructions on how to use a tool or simply general information) does not strike me as a "tool" so much as a frequently used term for help pages on websites.

Finally, it was useful to clearly define what the **e-participation technologies** dimension of the ontology measures. [Wimmer, 2007] says this dimension "investigate[s] specific technologies relevant for e-participation applications." However, it would seem impossible to develop a definitive list of relevant e-participation technologies as you could continually delve deeper into "relevant" supporting technologies. For instance, a UPS (uninterruptible power supply) could be an important technology for an eVoting system to ensure voting can continue during power outages. To operate the UPS, diesel may be important. Therefore, an oil refinery may be a relevant technology for an eVoting system, but this is hardly the most directly important technology. Thus, it is not worthwhile to classify an e-participation system by determining all relevant technologies. For the reason, based on [Wimmer, 2007]'s presentation of technologies that she limited to emerging and important technologies, I defined this dimension in the study as: identifying emerging technologies that need more development before the e-participation system can function as intended.<sup>11</sup>

I simply removed the technologies I did not identify in these parties' systems (though they may be present in other e-participation systems) these included: speech technologies, text mining technologies, conversational agents and multi-agent systems. Web services and semantic web services were also not included because while all the e-participation systems would contain "well defined, reusable, software components that perform specific, encapsulated tasks via standardized Web-oriented mechanisms" [Wimmer, 2007], I did not want to confuse this definition with e-services, which are government services provided online. Computer supported argument visualization was also excluded. While the parties used argumentation support systems, none were defined to

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<sup>11</sup> The technologies dimension would vary between contexts. For instance, as new technologies become established they would cease to be listed. Also, the needed technologies could vary between situations. For example, in a rural part of the developing world an important needed technology might be a reliable electrical grid, while this would not be a category in the developed world (generally).

indicate whether or not visualization would be used. Finally, I merged Computer Supported Cooperative Work (CSCW) with collaborative environments.

I only added two technologies: multi-channel integration and identification and authentication. Finally, I shortened “knowledge management and knowledge engineering” to “knowledge management.”

The **channel** section was important enough that it should be separated as independent part of ontology and its categories defined. Even though only one party had channel differences, that difference led to a wide number of interrelated differences in the other dimensions that could have been missed otherwise. See Figure 9 for a revisioning of the ontology (“etc.” is added to areas needing more refinement).

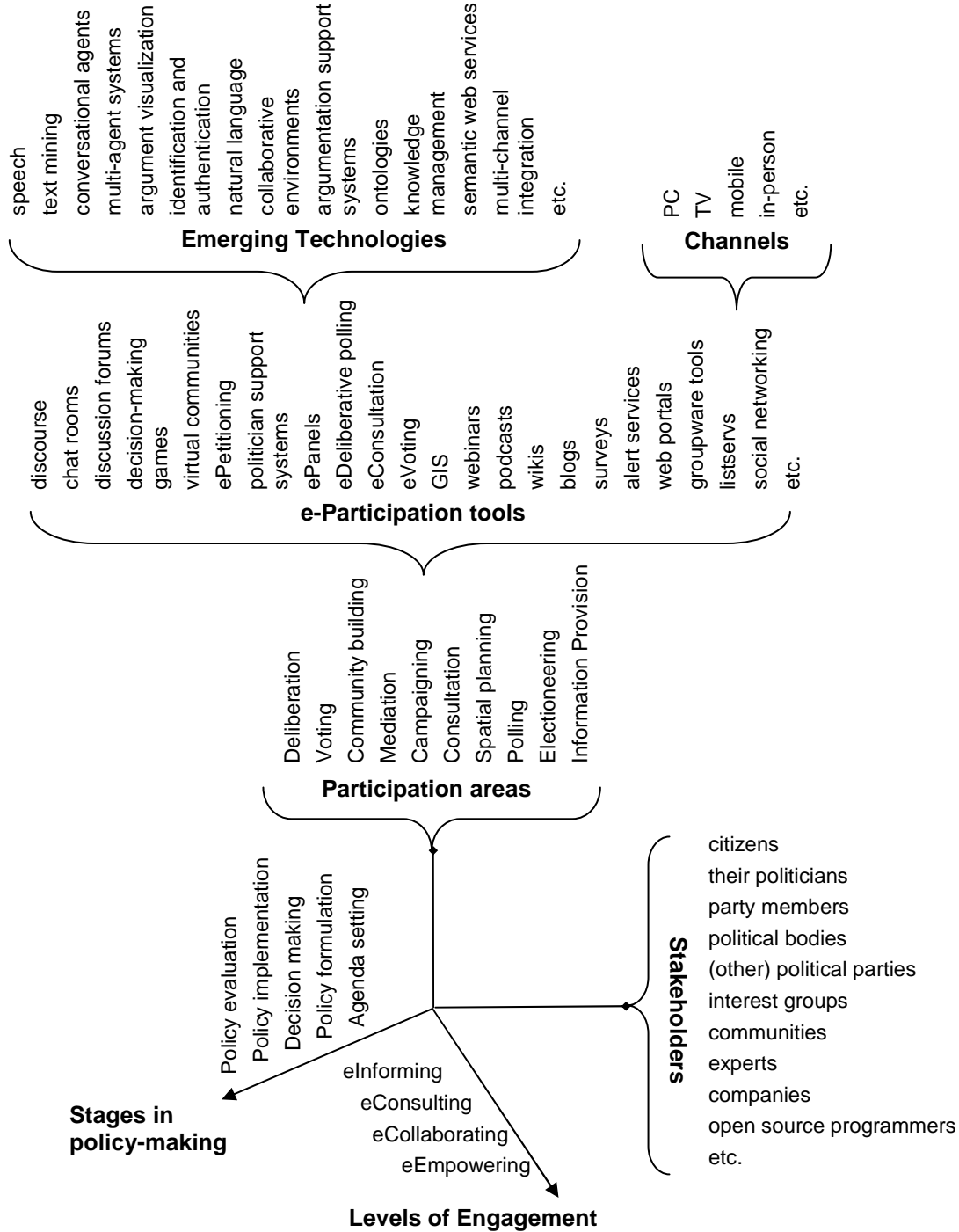


Figure 9: Updated e-Participation ontology

## V. CONCLUSION

Grassroots parties and their e-participation systems are both emerging phenomenon, but already there is a striking variety of e-participation systems of grassroots parties. However, it is important to keep in mind that all the parties and all their e-participation systems are young and open to ongoing change. For instance, while Senator On-Line's system is primarily limited to the decision-making and evaluation stages of policy-making, they do not rule out getting involved in the policy formulation stage. "Eventually it would be fabulous if [Senator On-Line] could be in policy development, but at this stage the Senate is our focus" [Lamont, 2008]. None of the e-participation system differences explored in this paper are set in stone; "I wrote the manifesto in detail much to make a subtle point actually, that yes, details matter. If you don't pay attention to detail, there is a chance you get fooled or that you don't get what you want... Whether the exact systems are implemented as described is not so important. I just want people to think of voting systems" [Wensman, 2007].

I have presented two main kinds of grassroots parties' e-participation systems: proxy politician and deliberative community systems. I have shown that there is already a great number of variations of such systems (such as the individualistic, citizen-reviewer or delegated leaders proxy politician systems or the multi-channel deliberative community). As grassroots parties continue to emerge, we can look forward to even more creative systems for deepening citizen participation in democracy.

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<sup>12</sup> A few interviewees are listed using pseudonyms.

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## APPENDIX

### e-Participation Ontology Terminology

The following are the definitions of each variable defined in [Wimmer, 2007].

#### Stages in policy-making

<b>Agenda setting</b>	refers to the process by which problems come to the attention of governments
<b>Policy formulation</b>	refers to the process by which policy options are formulated within government
<b>Decision-making</b>	refers to the process by which governments adopt a particular course of action or non-action
<b>Policy implementation</b>	refers to the process by which governments put policies into effect
<b>Policy evaluation</b>	refers to processes by which the results of policies are monitored by both state and societal actors, the result of which may be re-conceptualization of policy problems and solutions

#### Levels of engagement

<b>eInforming</b>	refers to a one-way channel that provides information from either government such as official websites or Citizens such as e-Petitions
<b>eConsulting</b>	is a limited two-way channel where official initiatives by public or private agencies allow stakeholders to contribute their opinion, either privately or publicly, on specific issues
<b>eCollaborating</b>	is a more enhanced two-way channel. It acknowledges an active role of all stakeholders in proposing and shaping policy - although the responsibility for the final decision rests with officials
<b>eEmpowering</b>	refers to the placement of the final decision in the hands of the public. E.g. legally binding referenda

#### Stakeholders

*no definitions*

## Participation areas

<b>Deliberation</b>	ICT to support virtual, small and large-group discussions, allowing reflection and consideration of issues
<b>Voting</b>	ICT in the context of public voting in elections, referenda or local plebiscites
<b>Community building/collaborative environments</b>	ICT to support individuals come together to form communities, to progress shared agendas and to shape and empower such communities
<b>Discourse</b>	ICT to support analysis and representation of discourse
<b>Mediation</b>	ICT to resolve disputes or conflicts in an online context
<b>Campaigning</b>	ICT in protest, lobbying, petitioning and other forms of collective action (except of election campaigns, see electioneering as participation area)
<b>Consultation</b>	ICT in official initiatives by public or private agencies to allow stakeholders to contribute their opinion, either privately or publicly, on specific issues
<b>Spatial planning</b>	ICT in urban planning and environmental assessment
<b>Polling</b>	ICT to measure public opinion and sentiment
<b>Electioneering</b>	ICT to support politicians, political parties and lobbyists in the context of election campaigns
<b>Information Provision</b>	ICT to structure, represent and manage information in participation contexts

## e-Participation tools

<b>e-Participation chat rooms</b>	Web applications where a chat session takes place in real time, which is especially launched for e-participation purposes
<b>e-Participation discussion forums/boards</b>	Web applications for online discussion groups where users, usually with common interests, can exchange open messages on specific e-participation issues. Users can pick a topic, see a "thread" of messages, reply and post their own message
<b>Decision-making games</b>	These typically allow users to view and interact with animations that describe, illustrate or simulate relevant aspects of an issue; here with the specific scope of policy decision-making
<b>Virtual communities</b>	Web applications in which users with a shared interest can meet in virtual space to communicate and build relationships; the shared interest being within e-participation contexts
<b>Online surgeries</b>	Web applications specifically designed to support elected representatives to engage with the citizens they represent
<b>ePanels</b>	Web applications where a 'recruited' set, as opposed to a self-selected set, of participants give their views on a variety of issues at specific intervals over a period of time
<b>ePetitioning</b>	Web applications that host online petitions and allow citizens to sign in for a petition by adding their name and address online
<b>eDeliberative polling</b>	Web applications which combine deliberation in small group discussions with random sampling to facilitate public engagement on specific issues
<b>eConsultation</b>	Web applications designed for consultations which allow a stakeholder to provide information on an issue and others to answer specific questions and/or submit open comments
<b>eVoting</b>	Remote internet enabled voting or voting via mobile phone, providing a secure environment for casting a vote and tallying of the votes (other types of electronic voting are available, but for the purposes of this report we focus on internet voting)
<b>Suggestion tools for planning procedures</b>	Web applications supporting participation in formal planning procedures where citizens' comments are expected to official documents within a restricted period
<b>Webcasts</b>	real time recordings of meetings transmitted over the internet

<b>Podcasts</b>	publishing multimedia files (audio and video) over the Internet where the content can be downloaded automatically using software capable of reading RSS feeds
<b>Wikis</b>	Web applications that allow users to add and edit content collectively
<b>Blogs</b>	Frequently modified web pages that look like a diary as dated entries are listed in reverse chronological order
<b>Quick polls</b>	Web-based instant survey
<b>Surveys</b>	Web-based, self-administered questionnaires, where the website shows a list of questions which users answer and submit their responses online
<b>GIS-tools</b>	Webpplications that support information provision and enable the users to have a look at maps underlying planning issues and to use them in various ways
<b>Search engines</b>	Web applications to support users find and retrieve relevant information typically using keyword searching
<b>Alert services</b>	One-way communication alerts to inform people of a news item or an event, e.g. email Alerts and RSS Feeds
<b>Online newsletters</b>	One-way communication tools to inform a general audience or a pre-registered audience of specific news items and events
<b>FAQs</b>	A 'tree' of questions and answers that can be searched using keywords or by inputting a question or statement
<b>Web portals</b>	Websites providing a gateway to a set of specific information and applications
<b>Groupware tools</b>	Tool environment to support computer-based group works
<b>Listservs</b>	<i>no definition</i>

### e-Participation tools

**Natural language** *no definition*

**Speech** *no definition*

**Text mining** *no definition*

**Conversational agents** *no definition*

**Multi-agent systems** *no definition*

**Argument visualization** *no definition*

**CSCW** *no definition*

**Collaborative environments** Electronic collaboration has a strong potential to support distinct participation areas and different stakeholders in the various stages of e-participation. Collaborative environments combine a number of technologies to facilitate and enable community building and collaborative tasks.

**Argumentation support systems** These help people to participate in various kinds of goal-directed dialogues in which arguments are exchanged. Examples are to engage citizens in dialogues with government about public policy, plans, or legislation. Thereby, argumentation plays a central role. Technologies to facilitate argumentation by structuring and visualizing pro and cons of a topic, and by facilitating the argumentation of reasons for a certain position.

**Ontologies**

are a concept to structure a complex area thereby creating the natural links among application of ICT and the context of citizen engagement during their discourses with politicians and governments (in the case of e-participation). This way, a proper understanding of the field can be provided, which is at the same time machine-readable and computable. In more advanced e-participation implementations, ontologies can represent the basic underlying concept of structuring domains, lines of argumentation etc. where intelligent reasoning and knowledge extraction may be facilitated. The recent technologies and digital ontology descriptions even enable the exploitation of reasoning and inference mechanisms, consequently providing innovative means for knowledge management and personalized and customized tools and services in a wide range of e-participation.

**Web services**

Web services are well defined, reusable, software components that perform specific, encapsulated tasks via standardized Web-oriented mechanisms. They provide the ability to be automatically discovered, invoked, and composed along with other services through well defined service modeling frameworks and service orchestration along with service-oriented architecture concepts (SOA). Web services provide only syntactic-level descriptions of their functionalities, without any explanation of what these syntactic definitions might mean. This means that fully automated service discovery and composition (i.e. without human intervention) becomes only possible with semantic enrichment (SWS).

**Semantic web services**

provide annotation of Web Services with semantic descriptions of their capabilities, thus facilitating automated composition, discovery, dynamic binding, and invocation of services.

**Knowledge management and knowledge engineering**

The public sector is dealing with a significant amount of information and knowledge resources. This knowledge has to be appropriately managed and smoothly integrated. Especially in policy formulation, i.e. in various e-participation areas, the activities and results of action are of information and knowledge by nature. KM and KE investigate and develop tools and technologies of data and knowledge engineering, which can also support e-participation in its various forms.

**Channels**

*no definitions*

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