The Luxury of Participation in Innovative Virtual Planning with Citizens in Vast, Remote, and Sparsely Populated Areas

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Citizen participation in the development of urban space is oriented towards citizens' choice of proposed solutions. Often, this is a regulated process which happens at a stage when relevant issues may already be overlooked. However, technology for virtual meetings now offers new opportunities for early and innovative citizen participation. This paper presents how spatial planning software and virtual decision making tools are changing and innovating governance processes. eParticipation in the vast archipelago surrounding the City of Turku, Finland, aims at more inclusive consultation. The area participates in several European ICT projects focusing on user and demand driven research, development and innovation. Elected citizens and civil servants can make use of virtually conducted preparation meetings at earlier stages in the planning processes. We conclude that though planning may not commonly prepare and present issues virtually, rural areas are an example that there is readiness for this for reasons of distributed governance.

1. Introduction

Technology's role in the public sector, city planning in the context of global challenges, and citizens' responses to these constitute the background of this paper. The rationale guiding the paper is that citizenship and democracy are both part of the challenge and part of the solution. Also, in terms of technology use, participation of citizens provides a user perspective that is the key to innovating public service solutions, governance, and the quality of urban life.

Cities and their surrounding territory offer the ground for participative innovation. Urban centers become the arena where user involvement processes in technology development can, at their best, enable inclusive solutions for urban and mobile life. With regard to spatial planning, its related social and economic value, depends on inclusive, participative and networked value propositions. Cities can thus offer sustainable,

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formalized and well instrumented innovation communities, experimental platforms and conditions for successful market uptake of socially valuable products and services. This is especially of importance for products with significance to the societal challenges that may create unfavorable discrimination. In this paper we focus on the participation aspect of city planning by analyzing some practical experience in consultation and decision making based on evidence from two EU projects conducted in the archipelago area of Southwest Finland, and applied by the local living lab, ArchipeLabo, as validation and innovation facility (Schaffers, H. et. al., 2008; Hongisto, P., Ferm T., 2009)

Participation is a luxury in areas where distances are a major issue when democratic processes and consultation are to be fulfilled, let alone improved. To join public hearings is costly and requires commitment of time and effort on the part of both citizens and the municipal authorities, especially if living and working is distributed over a large and inaccessible area. Technological solutions are seen as an opportunity worth investing in to support governance processes when the vitality of such areas is at stake. By introducing e-democracy tools the possibility for virtual collaboration is enhanced in the preparatory committees for planning and in decision making phases. The luxury of democracy extending to early preparation of the planning activity by using new ICT-enabled tools needs attention in order to clarify both conceptually and practically how this affects planning, construction, and the use of built environment.

The paper is structured in as follows: the next chapter, chapter two, examines what we consider restrictions to participation mainly due to the complexity of the detailed phasing of planning processes and the resulting contractual agreements. A link with the domain of innovation policy is presented and thus a theoretical framework is set which stresses social and collaborative aspects. We suggest that this is necessary if we consider city planning as an innovation environment where technology management and user involvement meet as part of citizen participation in urban changes. Chapter three looks at the existing solutions in facilitating extended participation in planning mainly through the examples of living lab activities in the Finnish archipelago and chapter four describes how the proposed solutions in the selected rural areas may enhance an extended level of participation in planning as part of locally made innovation in decision making. Chapter five present the conclusions and suggestions for further development.

2. Participation Restrictions in Planning and Innovation

Participation in planning has been with us from the beginning stages of professional planning. Already in the 80s with the aid of technology various dimensions of participation were combined. Neither is technology, as a means to empower citizens, a new topic. Also, a lot is being done in the area of eGovernment. Why then should we dwell on the restrictions to participation as yet defining the planning processes and call for innovation to guard the luxury of participation? Our focus therefore, is on how the planning system still poses restrictions to absorbing the information created through participation and on its practical implications. (Väyrynen, 2010)

Citizens' participation is part of legislation and is practiced within the legally set parameters. However, restrictions can be defined in the realm of communicative action, characterized by interactions between citizens and planners. Concerns are raised on how emerging channels of communication allowing and increased knowledge flow are met by a planning system that may be unable to absorb and use the information. More often than not public hearings are experienced as one-way talk, complicated, time-consuming, and intimidating. Major limitations of the participation process are due to the technical nature of planning and decision making. The form in which information is given may not be understandable by the general public. This is due to the fact that planning is dominated by a rational-technical approach and unreasonable time constraints for public responses. In the end, these elements are not easily regulated in legal terms and essentially constitute a process that does not provide participants with actual authority.

The eDemocracy pilot that was set up in the ArchipeLabo living lab facility through the software technology integrated project Collaboration@Rural (C@R) had distance as the key limiting factor (Hongisto, 2007). This was based on the realization that merging a number of communities spread around on several thousand islands into one municipality would mean a decline in citizen participation in the development of their community, and in politics in general. Participation would be affected negatively, because of the radically increased distances and consequently the loss of productive time for citizens, whose major occupation is entrepreneurship. Physical distance and lack of communication would result in a disinterest in participation. (Hongisto, 2008) Thus, several local projects supporting citizens' involvement, among which the EU projects C@R (2006-2010) and DEN4DEK (2008-2010), have been set up in the archipelago area of Southwest Finland to research, develop and validate virtual participation and raise the awareness of the potential of a regional digital business ecosystem respectively. An eDemocracy Tool Box (EDT) was developed that could provide specifications for developing new commercially viable and scalable eDemocracy services. Such tools enhance self-governance and provide channels for extending participation to earlier phases of planning.

Another need to extend participation, not related to distance, but to the process of participation, was observed. Based on the response to EDT the full cycle of participation in decision making was mapped, and the gap was made evident in the area of planning: citizens participation, as it is required by law, is formally practiced, yet not necessarily in the early stage of preparation for planning. Or, simply, it cannot be guaranteed that all stakeholders among the citizens are properly involved in the preparation process. The hearing process, information in public forums, such as newspapers, internet, announcement boards or even direct letters may be distant to citizens' life situations and not catch the attention, raise interest, or be understood. Most importantly, the timing of participation may not uncover potential crucial 'mistakes' until it is too late. Participation in planning extending to earlier processes will therefore be the focus of two new EU projects in the region.

Yet another reason to extend participation is found from general shifts in the practice of spatial planning. The Finnish Land Use and Building Act(132/1999) and its amendments (222/2003 and 1589/2009) view spatial planning as an integral part of holistic community planning. The focus on planning has notably shifted emphasis from land use and an aesthetic contribution to the built environment to a comprehensive model of living and, consequently, the need to consider the surrounding socio-economic and physical environment, a the need for a systemic approach to stakeholder involvement and to citizens' engagement in planning process has grown.

In addition, we maintain that, since the mandatory information and hearing procedures require an existing plan or delineated suggestions for a plan. There is no provision and no tools are yet in use to systematically explore diverse public opinions before the planning procedure as such begins. This at a moment when the advancement in peer to pear technology and social media activity makes it possible to include and increase participation both in numbers and with regards to different functions and phases of urban changes.

Several of the restrictions related to participation can be compared to constraints observed in open innovation and to the challenges of opening up public data. Thus, attempts to improve the degree of participation can be aligned with challenges of user involvement in the field of (open) innovation which aims at networked collaboration between civil servants, citizen, developers (public and private) and academia for better solutions as well as business and operating models. The objective to strengthen mechanisms for including citizen knowledge user driven innovation in public services has led to increased attention from the European Commission side towards public procurements processes. (Rolfstam, 2009) Similarly, here the idea is to specifically direct R&D collaboration between public sector and companies to earlier stages of solutions development. This attempt is termed as pre-commercial procurement (PCP). Transferred to city planning the approach of pre-commercial public procurement raises questions about how participation in early preparatory stages of planning could be made a part of the planning system.

From the perspective of urban planning mirrored with public service innovation participation in early stages could be seen as limited by processes of public procurement and their legislative regulations. However, public procurement is now being reconsidered as a potential for innovation, which the EU project PreCo is investigating. The basic idea is that pre-commercial public procurement often intersects with several policy domains, and coordination is not driven as jointly created service in collaboration with citizens. In practice urban planners and public procurers with different mandates run specifically dedicated agencies, and while they may support large scale interaction with the general public, they can only act in accordance to technically specified agendas, diverse and fragmented in nature. The technical fragmentation of administrative unites may shadow the overarching principle of solutions as service logic focusing on inclusive use.

New variations of institutional interplay (Rolfstam 2009) we argue would stem from large scale participation and would account for innovation that reflects a change of perspective towards service logic. A similar institutional stand is taken in the OECD Innovation Brief on Sustainable Public Procurement with regard to how planning, when it includes an extended participation of citizens, can affect the innovation performance of the procurement process in urban planning. As stated in the OECD Innovation Brief governments wanting to promote more environmentally friendly construction and usage patterns may need to align planning, public procurement, and participation practices. The fear is that publicly advertised environmental goals towards 'green' or 'smart' cities may otherwise be restricted by an array of diverting interests and conflicting expectations of an urban and built environment. However, citizens and other stakeholders, among which private actor nodes, can mutually benefit by participation in earlier planning processes which may yield applicable results.

Based on the framework of we have set ourselves in this chapter, we want to understand the systems that guide the practice of participation in planning and then map the innovative potential of the participation processes with the use of ICT-enabled services. This does not primarily address, or resolve, long-running philosophical differences underlying the practices, rather, we aim to show how participation is organized and what an innovative approach to citizen participation could set itself to achieve. An interesting aspect of investigation is here whether, as we assume, doubts about the influence of public voice due to these limitations would be dispelled if participation would be extended to earlier planning processes and a concept of openness and PCP approach to participatory innovation would be implemented.

3. Towards Solutions for Extended Participation in Planning

Given the long practiced consultation with residents and the participation mechanisms applied in city planning we need to look carefully into the particular need of extending participation, what an extension should focus on, how can it be 'modeled', and whether its benefits add to the quality of participation. In earlier stages of technology developments public hearings already attempted to use methods such as a combination of multiple communication tools, e.g. restructuring illustrations with the aid of photographs and technically reproduced maps while artists would simultaneously sketch solutions suggested by the citizens participating in the hearing.

In this paper we refer to the work on virtual decision making tools in the EDT case within the largely spread municipality in Southwest Finland as presented in the previous chapter. EDT introduced a systematic use of videoconferencing for municipal decision making. The immediate expected outcome of EDT as a virtual solution is a contribution to reducing costs related to traveling inside the municipality. By conducting virtually "every third meeting among the civil servants the saved traveling costs are 200 000 € in a year" (as stated by the vice mayor of the archipelago city of Väståboland in Korpo on June 17, 2009). These administrative, virtual meetings apply to topical meetings, smaller than public hearings and are conducted as

discussions rather than formal decision making meetings. Joint preparation and shared documents also constitute an important part of the virtual interactions between the civil servants, experts and board members. The tools used in these cases are PC-based collaborative applications such as Adobe Connect Pro or Skype. Though the simple existing technology is not a challenge these virtual meetings requires changes in the working processes in the administration. For example, although virtual meetings are discussions by nature attention on focused planning is needed through back-ground material and meeting agendas, coordination of follow-up physical face-to-face meetings, and combining several issues into one trip. In addition, relying on a common level of ICT-skills in the use of shared documents and videoconferencing applications is a basic starting point.

The most important factors, when deciding whether to have a virtual or a physical meeting, are the urgency of topics and significantly confidentiality concerns, as well as trust in the videoconferencing technology and in the reliability of data networks. In practice the Korpo board for local services in the archipelago city of Väståboland (constituted of 15000 islands) has used videoconferencing in regular meetings (for example as observed on 2.11.2009) to enable both, physical and virtual participation. The farthest participant in the board for local services is from the island of Utö – a two hours boat trip from the main administrative island, if weather conditions are good. In winter conditions, such as on 2.11.2009, the only possibility to participate is by virtual presence and using video conferencing tools.

The use of videoconferencing in decision making meetings aims to enhance the democratic process by enabling participation in spite of long distances and difficult access. The cost savings do not play an equally crucial role in decision making as in the case of regularly recurring administrative meetings. A result of the EDT project testing has been recognizing the different types of participation linked to the relevant stages that are necessary for the legal implementation of the decision making process and for functionally fulfilling the democratic requirements of participatory processes. The technology requirements were tied to the principles of democracy that govern by legislation public decision making. As the following table 1 describes, three stages need to be adequately managed in order to guarantee a democratic outcome. Technology, or virtual use, can be applied to all three relevant stages. Its use is adapted to the characteristic features of interactions in each stage to enhance participation in the whole process. The expectation is that enhanced participation through technology may yield better decision making.

Table 1 also lists in the second column the features of alternative use of virtual participation in the following stage of municipal process innovation. The other solution that will be taken into use in the Finnish town of Väståboland as a development pilot: the electronic town meeting (ETM). The table compares the basic features of both types of e-participation with regard to the three stages that cover the full participation process.

Table 1: eDemocracy tools including pre- and post-interaction of the actual decision making participation event.

	Democratic decision making meeting	Electronic town meeting
Before meeting	Access to material ▪ Documents entered in the eDocument management tool	▪ Material prepared and sent to participants
	Engagement ▪ Participants are officially elected ▪ Participants can comment or conduct a discussion on agenda items (also through the virtual tool)	▪ Participants are selected ▪ Questions can be asked, but no discussion with city officers takes place prior to the meeting
During meeting	Technical arrangements ▪ Participation via videoconferencing (participant validation required) ▪ Documents shared via eMeeting tool (same text visible to all at the same time)	▪ Participation physically or virtually through discussion groups ▪ Printed material is sent out, each discussion group has access to material virtually during the meeting
	Procedure ▪ Asking for the right to speak (managed speaker lists) ▪ Asking for short response to the given speeches ▪ Raise and supporting counter-proposals ▪ Voting with open and closed votes ▪ Statistics on voting and participation	▪ Facilitator manages the discussion ▪ Discussion on given topics ▪ Polling in groups ▪ No voting ▪ Statistics on polls and given opinions
After meeting	Communication ▪ Sharing of meeting protocol with participants ▪ Public information on decisions taken ▪ Possible appeal	▪ Sharing immediate results of polls and gathered opinions ▪ Analysis of polls ▪ Analysis of discussion material and opinions ▪ Analysed results mapped with participant background information ▪ Public information of results

The municipality of Väståboland is part of a European consortium introducing new technologies and new practices for ETM within the EU project PARTERRE starting in July 2010. The first ETM linked to the project took place in Italy already on February 6, 2010 with the participation of five cities (Castelnuovo, Cortona, Orbetello, Piombino and Prato) in the Tuscany region for discussions on urban development. The meeting was organized around open and controversial issues on spatial planning affecting several of the municipalities. The participants were selected using focus group interviews and statistical information to represent a wide range of citizens. The discussions were held in small groups lead by an impartial discussion moderator. The aim was not to reach any compromise or common view, but to widely bring out all possible views on the topics under discussion. The topics were divided into common issues to all five cities on one hand, and on the other hand strictly local issues.

The groups were connected with videoconferencing tools and the general public could follow the discussions streamed in the Internet and also send comments and questions to moderators through the Internet. On the selected topics there had been a lot of discussions among the politicians prior to the ETM, but they had not

led to any conclusion. Therefore there were no city plans to comment on. It is unusual for participatory meetings to address issues at conceptual level, but the aim of the Tuscany ETM was a pre-plans discussion. The aim was a dialogue, or a debate, based on on certain identified items illustrated in the form of photographs and drawings, to give a framework to focus on when proposing views.

In the archipelago city of Väståboland the PARTERRE project aims at combining the systematic use of videoconferencing among experts and ETM tools for scaled participation. The electronic ETM methods include spatial planning tools, location based information, 3D modeling and photographs. The ambition of the city of Väståboland is to align communication functions in planning among experts, between experts, citizen and decision makers, and achieve scaled and extended participation of citizens, as users and inhabitants of built environment. The objective of the project is to offer a wide variety and more user friendly material on spatial plans, to reach all citizens that are affected by the city plans, in order to get their opinions and comments early enough and to be able to reduce the time spent in ready plans that may not go through, or may be delayed by appeals. The project does not replace hearing and informing processes but enhances them by producing more accessible material and by offering more channels for a 'citizen – civil servant' dialogue.

Specifically the aim is to find out minority views that are often left unnoticed, but usually give reasons for appealing. A secondary goal is to give civil servants opportunities to discuss with citizens from several physically distant locations in the islands of the archipelago at the same time and thus not only save time and money, but also get opinions that would not have been heard if the discussion took place in only one location, as traditional physical participation allows.

The Association of Finnish Local and Regional Authorities runs a program to advance the co-operation between public and private sectors in land use and planning (JYMY). The success of the co-operation requires management mechanisms. Such mechanisms are thus defined as a simplified planning process and controlled system that balances out the following partly overlapping steps: i) citizens motion and its evaluation, followed by a decision, ii) preparation for and launch of the implementation, iii) land use, construction, and operations plan, iv) construction, and v) use and maintenance. Ideally, in all five phases collaboration between public and private actors takes place. Thus, joint risk analysis and the contractual agreements is increasingly important.

The early citizen participation in the PARTERRE project is primarily targeted at the phases before the actual motion and the preparation in the JYMY model, but also aims at supporting the complete process by offering guiding information on values that influence the strategies in planning and land use. (Kuntaliitto, 2008) It is by emphasizing an extension of civic participation in the earlier stages of urban planning and budgeting preparation that the principles of deliberative democracy can be fulfilled. Issues such as broad inclusion, reflexivity, two-way exchange and autonomy have been particularly analyzed in ETM (D'Agostino,

Schwester, Holzer, 2003) and it is the aim of the collaboration with the city of Väståboland to strengthen this possibility for its citizen through virtual tools, but most importantly by integrating these procedure into the administrative processes of the municipality.

4. Governance of Extended Participation in Planning

Chapters 2 and 3 have introduced issues supporting the need for extending participation into the earlier phases of planning. We argued that this widening of participation has two dimensions: a wider distributed citizenship covering diversity and an engaged dialogue involving experts and public administrators. In terms of governance this requires a shift from public hearing to a iterative dialogue in subsequent stages, similar to the organizational and management requirements of service logic implementation, or user-driven innovation with consequences at systemic level. Therefore still another aspect can be added from the perspective of governance which addresses the national dimensions. Officials and administrators of local and national authorities meet regularly to discuss issues related to regional land use plans and local plans with wider implications. Such meetings aim to clarify and harmonize land use objectives at national, regional and local level (§8 1589/2009).

Based on how participation has been addressed in the Finnish archipelago area as example of virtually enhanced participation in rural environments and eDemocracy specification testing, this paper argues for extended citizens' participation. Equally part of this reasoning is that a focus on citizens relates to a systemic governance approach, since organizing for participation has governance implications that affect established planning processes ranging from local to regional and national administrative practices.

Extended citizen participation in the way this paper argues for is directed towards pre-planning as a first crucial element for widening the traditional informing and hearing processes. The use of new electronic and internet based tools in participation are to a great extent aiming to reach wider range of citizens than traditional methods would reach. However, equally important is that extended participation enables to include pre-processes in earlier, preparatory phases of planning. We believe that this affects the larger governance context in a systemic way, and has relevance for continuation of interaction participation in later stages of planning, for user validation, to borrow a term from software development. The rationale behind enhancing participation not only in scale but also in functionality is to avoid situations were plans may be subjected to appeals and, in the extreme situations, years of preparation and implementation work prove to be misguided to the point of dismantling completed sites.

An example is presented in table 2 of how innovation in urban planning and citizen participation is not only limited to innovating the type of interactions, or the methods and tools used for hearing and consultation, but how it is part of an extended process of planning and how a systemic look at governance implications is in place. Initial valuable results from experimentation with eParticipation and eDemocracy tools to enhance

citizen involvement in the early phases of planning are already available from the Intel Cities EU-funded project (Lahti P., Kangasoja J., Huovila P., 2006). Experimentation was done in Finland (Arabianranta, Helsinki), a community in Iceland (Garðabær), and in Germany (Frankfurt). Specifically the Spatial Discourse e-Participation Tool used in Frankfurt aimed at speeding up planning processes and raising the quality and diversity of the discussions between citizens and experts and among citizens. The spatial discourse process geared to collect the concerns and ideas of the citizens and stakeholders is defined as a pre-process to the formal planning procedure. In the following the innovation challenge is tracked by way of looking at the participation approach that a municipality has implemented when introducing planning for urban changes.

Table 2: Three different strategic approaches to planning and participation (based on MECIBS results, Lehtonen, 2005))

Innovations resulting from chosen approach to planning and governance methods used		
International Architectural Competition	**Interactive Planning Game**	**Inter-organisational learning, ICT-enabled networked action**
▪ Development of the evaluation process. (Both expert and public opinions have been gathered on paper and on the Internet pages and have influenced the process.) ▪ Use of international expertise in the competition (two of the four competitors, one professional member of the jury). ▪ Give a chance for a young architectural practice (one of the competitors). ▪ The City's courage to test a new method in planning had excellent results for participation. ▪ This could inspire other cities to organise an international architectural competition. ▪ Involvement of the private sector in the competition re-enforces their commitment to achieve the agreed results.	▪ The new communicative and interactive planning method is very well linked into the real-life planning process. ▪ The method is transferable and adaptable into different planning systems, practices, and countries. ▪ Different actors (e.g., politicians, residents, interest groups etc.) are able to learn the basics of planning and its processes. ▪ The planning process (e.g., evaluation, prioritization, decision-making etc.) becomes more understandable for participants. ▪ An interactive platform is organized for the so-called open innovation process to take place.	▪ The use of the ICT method has widened the number of participants. ▪ The use of ICT methods has widened the diversity of comments. ▪ Different interest groups (e.g., young people) have been reached. This has improved the quality of planning. ▪ Inter-organisational learning is made possible through network actions. ▪ Commitment to the network helps the realization of the quality issues defined in the earlier planning phase (i.e., a 'continuum' could be created). ▪ Organising a local professional forum was possible in order to catalyse the transformation of urban practices.

With a focus on public participation in urban planning and also on urban strategies the three approaches resulted in different governance models for including participation. Different platforms organize for opportunities that can stimulate citizen involvement in diverse ways and at different points of the planning process. Different approaches and resulting governance practices open up opportunities for innovation through planning, which is a challenge that a traditional approach may not allow.

Two fundamental sets of arguments in this paper lead to an extension of the participatory processes. Firstly, we rely on the communicative aspect of participation and, by extension, a certain type of democracy. Secondly, we propose considering innovation as overarching principle of planning, covering participation processes and planning governance, and including, not replacing, preservation functions of planning. In the following these two fields are exemplified in a sketchy manner.

The communication field is somewhat established already and has been addressed in previous research. The conceptual framework behind the Land Use and Building Act is the theory of communicative planning

influenced by Habermas's communicative rationale which is focused around social interaction and communication. From the community development point of view urban planning is a communicative and interactive process. The challenge is to ensure that the participation in the discussion is wide and open so that all possible views are included (Habermas, 1984). Equal opportunities of participation to open discussion are questioned by Sager (1997) while Saaristo (2000) basing on Sandercock (1998) argues that both written and spoken views need to be equally considered and the role of local associations and communities voice should be critically evaluated as the voice of all citizens.

The first of the two fundamental arguments relates planning to the communicative field. The second argument relates planning to innovation, open innovation specifically, and user or human-centric research and development for innovation (RDI). We claim that both propositions can achieve an extension in participation in planning for the benefit of the parties involved by relying on i) a service dominant logic (a fundamental concern with exchange of service, the applications of competences, knowledge, and skills in equal terms for experts and citizens), ii) digital business ecosystems adopted from technological discourse of network-based economy (where shared access to services and experiences constitute a platform providing infrastructure, protocol, and legal mechanisms for co-creation of value), and iii) pre-commercial procurement (where equality, functionality, or aesthetics of urban space, coupled with a situated everyday understanding of place form the bases of the process of value creation in terms of partnership).

How service dominant logic (Lusch and Vargo, 2006) and digital business ecosystems contribute to land-use, spatial and urban planning emerges from several newly addressed technological challenges, that seek rootedness in user and demand driven approaches, collaborative and networked processes, as well as peer to peer systems and social media.

Finally, this setting of collaborative network processes is the direction we would like to take in future approaches to extended participation. Numerous discussions around how social media will revolutionize the planning systems are taking place in virtual spaces dedicated to urban development. Web tools for eParticipation are being mapped i.e. at MIT's Department for Urban Studies and Planning (Goodspeed, 2008), while development of Government 2.0 and transparency of data is a recurring topic in the technology and government related discourse. While such web tools may support the benefits of ensuring long-term quality (Väyrynen, 2010) of urban development as service innovation certain challenges at systemic governance level still need to be resolved, including sharing and managing distributed data, issues of IPR related to privatization (Taipale, 2010) and public-procurement legislation.

The mobility between aspects, or layers, of urban planning and its governance and the intensity between the interacting population typical for these spaces may equal what Jane Jacobs would have called 'the social diversity and physical fabric of the city' where human contact makes possible an 'unplanned messiness'.

eParticipation through web tools and social media may build on, communicate, negotiate, as well as cause the messiness of shared life and shared opinions in urban environments. Therefore, we see a need to consider it from a planning and inclusion point of view starting from pre-planning phases.

5. Conclusions

In spite of various efforts in increasing citizen participation in planning, both in scope and scale, aspects of participation of citizens in the earlier stages of preparation are not yet fully resolved. This paper has presented early attempts to address this gap, by looking at a newly conducted pilot for eDemocracy in the vastly distributed inhabited environments of the Finnish archipelago. The experimentation in the ArchipeLabo living lab addresses virtual collaboration and decision making by contributing specifications for eDemocracy tools and applying digital ecosystems. Also a platform and a real life environment is set up for testing electronic town meetings in new planning projects. However, the governance processes on which participation depends still remains an area of investigation.

The motivation for web based tools is to extend participation in municipal decision making that appeals to a wider population base, i.e. including young people, and also reduced costs for travel to the meetings and time lost from entrepreneurial activities of citizen in sparsely populated areas. The work done with eDemocracy in the vastly distributed municipality of Väståboland in Finland, gives indications for further study. As observed, the significance of the use of web based tools lies mostly in enhancing virtual participation for the crucial early stage administrative and preparatory processes in planning. Further multi-layered research is needed to integrate ICT-enabled eParticipation tools in the governance model of urban planning as an extended inclusive and thus successful process for an improved mutually sustaining urban – rural living.

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References:

D'Agostino, Maria J., Schwester Richard W., Holzer, Marc (2006) Enhancing the Prospect for Delivarative Democracy: The Americaspeaks Model in *The Innovation Journal: The Public Sector Innovation Journal*, Volume 11 (1).

DEN4DEK Digital Ecosystems Network of regions for DissEmination and Knowledge deployment. Thematic Network. IP-ICT-PSP-2007-1

Goodspeed, Rob, Internet Tools for e-Democracy in Urban Planning **Posted:** November 30th, 2008, accessed June 10, 2010. http://goodspeedupdate.com/e-democracy-in-urban-planning

Habermas, Jürgen (1984) The Theory of Communicative Action, Vol. 1: Reason and the Rationalization of Society. Translated by T.McCarthy. Boston, MA: Beacon Press.

Hongisto, Patrizia (2007) www.c-rural.net Reports to the European Commission, Collaboration@Rural Project, IST-2006-34921. Requirements for Application and Platform Development. Turku Archipelago Rural Living Lab.

Hongisto, Patrizia (2008) www.c-rural.net Reports to the European Commission, Collaboration@Rural Project, IST-2006-34921. ArchipeLabo. Changes in Life and Technology, video, run time 15min.

Hongisto, Patrizia, Ferm, Tiina (2009) ArchipeLabo: Building a Living Lab for Governance and Rural Development in *eJOV Executive - The Electronic Journal of Virtual Organisations and Networks*, Volume 1

Julkisen ja yksityisen sektorin yhteistyö maankäytössä. Eväitä yhteistyön rakentamiseen ja hallintaan. Kuntaliitto (2008) Helsinki

Lahti, Pekka; Kangasoja, Jonna; Huovila, Pekka, eds. (2006) Electronic and Mobile Participationin City Planning and Management. Experiences from INTELCITIES – an Integrated Project of the Sixth Framework Programme of the European Union. Helsinki Urban Facts.

Lehtonen, Samuli (2005) Public Participation in Urban Planning and Strategies. Lessons from medium sized cities in the Baltic Sea Region. Helsinki University of Technology, Centre for Urban and Regional Studies. Project results of MECIBS, Interreg IIIb, www.mecibs.dk

Lusch, Robert and Vargo, Stephen (2006) "Service Dominant Logic: Reactions, Reflections, and Refinements", *Marketing Theory*, 6 (3), 281-288.

Saaristo, Kimmo (2000) Avoin asiantuntijuus. Ympäristökysymys ja monimuotoinen ekspertiisi. Nykykulttuurin tutkimuksen julkaisuja, Jyväskylän yliopisto, Jyväskylä.

Pre-commercial Procurement: Driving Innovation to Ensure High Quality Public Services in Europe. Publications of the European Communities, 2008

Regione Toscana Electronic Town Meeting, February 6, 2010
http://www.regione.toscana.it/regione/export/RT/sito-RT/Contenuti/sezioni/ambiente_territorio/paesaggio/visualizza_asset.html_745097407.html

Rolfstam, Max (2009) Public procurement as an innovation policy tool: the role of institutions, in *Science and Public Policy*, 36(5) 349-360.

Sager, Tore (1997) Planning and the Liberal Paradox: A Democratic Dilemma in Social Choice. *Journal of Planning Literature*, August 1997, Vol.12 Issue 1.

Sandercock, Leonie (1998) The Death of Modernist Planning: Radical Praxis for a Postmodern Age, in Douglass, Mike & Friedmann, John (ed.) *Cities for Citizens*. John Wiley & Sons Chichester & New York.

Schaffer, Hans; Garcia Guzman, Javier; Merz, Christian (2008) An Action Research Approach to Rural Living Labs Innovation. www.c-rural.eu

Stanley, Joe and Briscoe, Gerald (2010) The ABC of Digital Business Ecosystems in *Communications Law. Journal of Computer, Media and Telecommunications Law*, Vol. 15 (1)

Toscana Notizie. Agenzia di informazione della Giunta regionale. Notiziario telematico registrato al tribunal di Firenze. Accessed on May 28, 2010 http://www.regione.toscana.it/regione/export/RT/sito-RT/Contenuti/sezioni/ambiente_territorio/paesaggio/visualizza_asset.html_745097407.html

Väyrynen, Erja (2010) Towards an Innovative Process of Networked Development for a New Urban Area. Four Theoretical Approaches. Doctoral Dissertation. Aalto University School of Science and Technology. Studies in Architecture 2010/43.