

# eParticipation in Narva, Estonia, towards sustainable urban development

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## ABSTRACT

The paper is based on the premise that the use of Internet and Communication Technologies (ICT) in government has the potential to increase citizen participation leading to greater transparency, more democratic decision-making and reaching sustainable development. However, the development of an equitable, functional and participative decision-making structure based on ICT has to address a variety of aspects. The eCommunity project, which will be presented, promotes more transparency in decision-making in the city of Narva, Estonia, and therefore aims to develop a more effective dialogue between administration and town inhabitants and better understanding among the public of decisions adopted by the municipality.

This paper presents the results of interviews conducted with the municipal administration of Narva in 2004, addressing the issues of trust, access, institutional change as well as will and time to participate, for the successful implementation of the eCommunity tool.

How can we cope with the possible excessive demands, information and knowledge needed and the complexity of any online tool?

Within the scope of the eCommunity project we research conditions for a broader and more effective participation with the help of ICT, in order to reach sustainable development at all its levels (ecological, economic, social).

## 1 THE ECOMMUNITY PROJECT

### 1.1 Project description

The objective of “e-System for real Time Democratic Land-Use Planning of Urban Environment – Pilot Action in Narva Municipality” (eCommunity) is to promote sustainable and democratic urban planning by using opportunities offered by information technology and WWW. The project is applying innovative web-based software solutions to make information on urban planning and development available to the citizens of Narva as well as to interested organizations and persons internationally for promoting public involvement into decision-making on issues of local development and to increase investments in Narva. It is aimed that the project will demonstrate the use of the system as a tool for urban planning; if this project experience is positive, the same tool could also be used in urban planning in other cities across Europe.

The eCommunity project promotes therefore more transparency in the decision-making process in Narva and offers a) a window of opportunity to the municipal administration to develop a more effective dialogue with the town inhabitants and b) better understanding by the citizens of decisions adopted by the municipality. Creation of the eCommunity web-based information system implies development of a “virtual reality”, where the town spatial plans drawn by specialists will have their own 3D spaces, realistic models of the planned area, which can be virtually walked through, and where citizens will have possibilities to make additions and corrections to the plans and transfer them to a new 3D model representing the recent changes. The system is planned to be able to accept user requests in a fuzzy human form and convert it to a specification of what is to be displayed and how.

This IT-tool will allow synthesizing concrete decisions from statements made by citizens, giving the decision-making process a new democratic identity in real time. The system, available on internet, is developed tailor made to needs of specific stakeholder groups and will include components such as an “investor web” or a “tourist web”. The system includes a range of thematic information sub-systems, such as a city master plan, a bicycle path plan, a public transport agenda; a thematic park of old town; and more.

Sustainability Issues will be considered in the tool: the social side with participation in decision-making, the economic side with the addressing of potential investors in the region, the environmental side with dealing with the follow-ups of the enormous environmental problems, produced by the oil-shale power plants, the institutional/cultural side in challenging the existing institutions to adapt. The underlying principle of the project is sustainable urban development: this tool shall be a helping hand towards it.

### 1.2 SERI Tasks in the project

SERI undertakes several tasks in the project: the main responsibility is, to monitor the project deliverables in respect to sustainability issues. Further we evaluate the interim results of the project and act as an advisor providing guidelines and background information, so that the project can actively contribute to a sustainable development of the region.

One major task of the project is “involvement of the citizens”. The aim of this task is to create the preconditions for more transparency and democracy in the local urban eGovernance System. The hypothesis is that more transparency – within that project through the help of Internet and Communication Technologies – will lead to more participation, and therefore lead to more democratic, dynamic and sustainable decision-making processes at the municipality level.

The success of the eCommunity project will depend on the level of political commitment by the local authorities to involve local stakeholders into the decision-making process regarding issues of urban planning. Only the commitment of the municipality to an open, transparent planning process and the readiness to provide human and financial resources in time can lead to creating interactive and dynamic communication processes with the citizens.

The focus for this paper will be put on the issue of eParticipation, in order to follow the intentions of creating more transparency and interest in decision-making of the municipality.

## 2 METHODS - QUESTIONNAIRE DEVELOPMENT, AIM, EXPECTATIONS AND FURTHER USE

For this reason, we conducted interviews first with representatives of the municipal administration to get information on their expectations and needs besides the technical solution, to allow creating a tailor made tool. The plan for the further progress of the project is to interview administration and citizens before and after the implementation of the new eTool, to receive feedback about the eParticipation expectations, possibilities and actual use. Only then an online tool can be successfully used, and contribute to sustainable participation solutions in urban planning.

In that context SERI has developed a questionnaire to evaluate the actual state of eGovernment and eParticipation in Narva and how these preconditions influence the implementation of the new eTool. The questionnaire is standardized with partly open and partly closed answers and covers questions about citizens interests, technical questions about the current system, questions about sustainability strategies and data, and questions related to economic and administrative processes in the city. The answers given were assembled in a table and analyzed, the results are supposed to help design the process of promoting the tool and for the needs of training sessions.

These questionnaires are also used by Peipsi, a local NGO and project partner, conducting the training sessions for the system for the municipal staff. With the answered questionnaires and additional informed group discussions with stakeholders, to be held in March 2005, the status-quo can be evaluated, while after transforming the questionnaire into a checklist for the municipality the progress of eGovernance and participation in Narva can be further evaluated.

The interviews we conducted had a major bias source: the language, as they were translated twice (from English to Estonian and back to English). Further, over 90 % of the inhabitants of Narva speak Russian as their first language. We helped us with task sharing and thanks to the translation work of Peipsi could get results.

## 3 RESULTS OF INTERVIEWS WITH THE MUNICIPAL ADMINISTRATION IN NARVA

We conducted individual interviews in August 2004 in Narva: We interviewed three individuals of Narva Municipality and one representative of a local NGO as basis of comparison, if the requirements and perceptions differ between the administration and the civil society, and to be able to put the answers into perspective. They had reviewed the questionnaire beforehand, the open questions then were asked in an interview situation and were transcribed and translated by project-partner Peipsi.

### 3.1 The socio-economic situation in Narva

First, we posed questions to the economic, social and environmental dimension of sustainability, and the relation to the possibilities of improvement the eTool offers.

#### 3.1.1 The current situation in Narva:

##### **The economic situation**

All interviewed persons named different businesses as the main important ones. Textile is the most named, followed by transit, tourism and energy. The border location to Russia (with the Russian speaking inhabitants and the low local labour costs) is commonly seen as the big plus for addressing investors.

The business sector can communicate its needs well with the municipality: For special issues round tables are organised including stakeholders from businesses and the City.

Of special interest for eGovernment issues are the already existing privatisations and public private partnerships, which are common in Narva. Reported was that the privatisation of City businesses needs some improvement and no IT related services are used yet.

##### **The social situation in Narva**

The manyfold social problems of Narva were always present, but not explicitly listed in the interviews. For giving a complete overview about the situation it is necessary to know, that the social situation is very harsh: The unemployment rate is very high, leading to poverty. Further the town suffers from heavy narcotic abuse and smuggling, as well as a high HIV rate among the inhabitants and the cultural separation – as 96 % speak Russian as their first language – from the rest of Estonia. This perceived separation results also in the feeling of many citizens, that their voice stays unheard. Consumer satisfaction is not sampled regularly according to some officials, but there are yearly social surveys about citizens' opinion on city development.

Unemployment was mentioned as the major problem in the city, which was also sharpened in recent years by the restructuring of the biggest employer in Estonia, a textile company located in Narva. One interviewed person expressed hope for reducing unemployment by the development of tourism and by attracting investors. Citizens communicate with the municipality via demonstrations in front of the town house or signature collecting, which was not seen as an effective way of communication by the administration.

##### **The environmental situation**

The environmental situation in Narva is influenced by the economic growth, increased urbanisation and transport in the new member states, which results in a rapid increase in greenhouse gases emissions. Nevertheless, in Narva also the remainders of past environmental damages are still present: The environment of Narva is threatened mainly by two local power plants burning oil-shale, which are the principal electricity generating plants in Estonia, but have a disastrous local and regional impact due to fly ash and alkalisation of soils, as well as atmospheric SO<sub>2</sub> emissions. Further the emissions of the textile company and air quality were mentioned as environmental problems.

#### 3.1.2 Strategies for sustainable development:

According to all interviewed persons, Narva has no specific strategies related to sustainable development.

However, the interviewed all mentioned, that Narva compiled a development plan for 2004–2008, which includes some of the relevant sustainability issues. It covers issues like transport and waste, and has a social development strategy for improving the social situation and a public participation plan. This development plan was compiled because of state requirements. The representative of the local NGO said, that Narva lacks strategic thinking, but instead concentrates on day-to-day problem solutions. Further the City would lack a common goal or vision. Although there are also no strategies for overall environmental sustainability, the city concentrates on the issues air quality and waste. Narva wants to invest in a waste separation plant.

Some important issues, which were mentioned for sustainable urban development are: to battle unemployment, land ownership (as a lot of land is state owned and not by the municipality), and the attraction of tourism and business to help changing the social situation.

### **3.2 Existing web-based information system**

Further we asked questions about the technical side of the current web-solution of the municipality and its usefulness for participation.

#### **3.2.1 The technical content of the current system:**

Overall the administration is more content with the current system than the private user. The satisfaction with the quality of the provided data is better average. The issue considered worst is the up-to-dateness of the data provided. Quality of writing and the accuracy of the data provided was rated highest, the quantity of the provided data was rated lowest by the interviewed.

The minimum elements of an online tool were identified in previous best practice research and checked against the current webpage: The current webpage lacks a calendar, regular updates, newsletters on (topic specific) updates, opinion surveys, an on-line library for sustainable urban planning, online tutorials and an easily manageable document search form.

The most different opinions were stated in the possibility of all inhabitants of Narva concerning access to relevant information, where the administration side was quite satisfied and the private interviewee was not. Documents are claimed to be missing in English.

#### **3.2.2 Present state of eGovernance in Narva community:**

The set about the present state of eGovernance in Narva was posed to get more information about the fields of administration the City covers. In the field of services offered by the municipality, we were most interested in the existing 2-way interactions and full electronic case handling. At present there is none of those available on the Narva website. One way interactions, like downloading papers and forms are available for online applications and online consultation possibilities, as well as access to local politicians. Information only is available for: civil registration system, health system, pension system, civil benefits and educational system, tourism system, GIS and transportation system, public procurement. In the responsibility of the City of Narva lie far less issues, then we would consider as in the power of the local government (labour system, birth certificates, personal documents..).

### **3.3 Expectations for the eCommunity tool:**

For getting an idea and also support the discussion about the eCommunity tool we asked about the possible future. The rationale was that IT tools are not in the perception of the active administration now, but this might change over time, as the youth uses the web and ICTs in its everyday life (Vedder, 2004).

#### **3.3.1 The administrative processes:**

Language is not perceived as a problem in communication, as virtually everyone of the City staff is bilingual. The most common information channels about city issues now are newspapers, text TV, local radio, (all in both languages), all are typical one-way communication systems. Remarkable is, that no one mentioned the internet as a common information source for the citizens, but for promoting the eCommunity tool the internet was nevertheless favoured. The inhabitants have a strong connection to Russia, but know less about Estonian issues. Calls, letters or personal contacts with the municipality (2-way interaction) clearly range further down the scale. The administration expressed some discontentment with one-way communication, because they want to receive more feedback than now from the community for their actions. They do not consider one-way systems in combination with personal lobbying as effective modes of communication.

A chance for improving the communication would be – according to the interviewed persons – an up-to-date electronic document system or discussion forums on the City homepage, for face-to-face contact, the holding of info-days were suggested. There is also a need seen for applying the same processing rules for emails and online requests as for letters.

Another issue is the possible connection of the access to the eCommunity tool with an Estonian ID-card, then many non-citizens or Russian citizens might be disadvantaged. We could not get a clear response on the topic of ID cards. According to two persons, non-citizens are equal before the local law.

#### **3.3.2 The citizens' interests:**

There is a need seen for computer trainings for the citizens, and to improve public accessible computers, in particular regarding special user groups like handicapped people. The opinion regarding the transparency of administration actions or the ease to give feedback to the administration, or to participate in urban planning differs a lot among the interviewed. The administration considers the content offered on the webpage less interesting than the citizen did. It is seen as easy to give feedback to the municipality, but it is perceived as difficult to influence the decisions or actions of Narva. In particular the possibilities to participate in urban planning decisions are seen as lacking from both administration and citizen.

It was stated, that the internal communication and coordination between the departments and the current web-system is not functioning well enough, on the other hand the communication with the citizens needs to be improved, as well as the deliverance of information about Narva for tourists and investors. At the moment, citizens can communicate their problems in person and by phone or mail, which favours only a certain part of the citizens.

None of the interviewed is totally satisfied with the current situation in any field, this result confirms the results of previous surveys and justifies the implementation of the eCommunity project.

### 3.3.3 Promotion of the eCommunity tool:

For better contacts between the administrative bodies itself, a functional internal system or at least the set-up of an emailing-list was desired by the interviewed. According to them, this has to go hand in hand with intensified training activities, which now only for single departments exist. Further the need for a person or group who clearly is responsible for maintaining and updating and running the system, was mentioned, otherwise the system would die out.

For the eParticipation features of the tool further rules and aspects, which need to be considered, were named: clear regulations how to deal with online requests, differentiated approaching of different groups, to gain the will and trust of citizens to use this form of communication. As the planning tool is supposed to be in the possession of Narva municipality, the system design needs to be easily maintainable also by non-specialists. A need for better guidelines how to use the new system in sense of more efficiency towards sustainable urban development and planning was argued.

## 4 DISCUSSION

### 4.1 Sustainable Urban Development

Sustainable Urban Development (SUD) is defined as "a complex system of legal, economic and other incentive systems, methodologies and tools, data and information resources by which society provides the necessary and appropriate support for efforts by individuals and cities to implement sustainability" (see Paskaleva, Curwell et al. 2002). To reach SUD cities need to be economically efficient, socially integrated and environmentally friendly if they are to provide good quality of life in order to survive and prosper (see Curwell et al. 2003). In order to reflect the aspirations of all individuals and groups of society interactively and interdependently, sustainable development has to comprise the ecological, the economical, the social as well as the cultural dimension.

#### 4.1.1 The environment and resource use dimension

In the networked knowledge society, the use of ICTs is believed critically important for dematerialization of production and consumption, of lifestyles, for corporate responsibility and for sustainable communities (European Commission 2002). Information systems play an essential role in reaching **environmental targets** for sustainable development. (Club of Rome, 2003). The eCommunity system creates the first system in Narva, which is able to function as an exchange hub with other ICT city management systems. Furthermore the eCommunity system will reduce the amount of physical transactions, will collect environmental data to conduct analyses in depth, and will support communication with unprecedented coverage and efficiency.

#### 4.1.2 The social and cultural dimension

Equity and social cohesion are prerequisites for building sustainable communities as well as motivating the local population. (Club of Rome, 2003). For sustaining networks, and to create the political and social support to implement policies successfully and to create the communication strategies within and between the administration and the citizens are considered key to success. Sustainable development can according to a **local Agenda 21** process be reached in close cooperation with local stakeholders. Development cooperation requires an approach involving all actors, which ensures that innovations are firmly anchored institutionally, and which brings together economic, ecological and social negotiating processes on future policy at local level (local governance) (BMZ, 2001).

The role of the eCommunity system is, to improve communication and information exchange, to avoid that ICTs reduces the opportunities of weak social groups to take part in an LA- process, and additionally to improve the integration and participation of young people (and women) in the local development processes.

#### 4.1.3 Local economic development

Promoting ICT is seen as an opportunity to improve local economic development, as the development of new industry and employment opportunities may generate positive impacts on sustainability. Both private and public sector organisations play an important role: Their understanding of an online economy and new ways of working will be a key factor for local economic development. Through informed group discussion with local stakeholders the needs and requirements for the local situation has been taken into account. The results have been implemented into the design of the interface as well as in the design of functions of the system.

#### 4.1.4 eParticipation

It is clear that new efforts are necessary to strengthen or restore the role of Europe's cities as places of social and cultural integration, as sources of economic prosperity and sustainable development, and as the bases of democracy. According to our findings of best practice case studies from throughout Europe (Hester, 2003) at least the following requirements for the success of an eParticipation tool need to be addressed: Access, trust, institutional change, and eInclusion. These best practice studies of eGovernance systems show, that the dynamic of participation is one crucial factor of success for those systems. One one hand, will and time of citizens to participate, on the other hand will and time of politicians/administration to change power structures remain crucial. The demands for

a dealing with an complex system are high, but a tool cannot supplement a non-functioning participation in real life. A prerequisite is, to deal with the information and knowledge needed in a way, which not excludes citizens from the process and which fosters trust in the actuality, and correctness and usefulness of the given information and decision possibilities.

In the responsibility of the City of Narva lie far less issues, then we would consider as in the power of the local government, this might be influential on the development of a public private partnership eGovernment system. We see a need for other communication and promotion modes as the internet for the tool as well, so as to act inclusive. A first eParticipation process could be the common creation of a vision for the future (sustainable) development of the city – in accordance to the development plan prepared by the city.

Participation is one solution for solving complex (governmental) matters and in particular implementing them based on a broad consensus between all relevant stakeholders. For facilitating interdisciplinary, participatory processes with those stakeholders, a well functioning form of communication is basic: the eCommunity tool represents a new form of broad communication and is therefore in a region with language and cultural differences one possibility for making participation a success.

## 5 ACKNOWLEDGMENT

The project “e-System for real Time Democratic Land-Use Planning of Urban Environment – Pilot Action in Narva Municipality” (eCommunity) (*LIFE02 ENV/EE/000426*) is funded by the European Union LIFE-program, SERI’s project participation is co-funded by the Austrian Federal Ministry for Science, Education and Culture. Project partners are: Hendrikson & Ko (Project coordinator – Estonia; environmental consultancy), IDEC (Creation of the databank, Greece), Infinity (IT-company, Hungary), Network Models R&D Ltd (Programming the user-interface, UK, SERI (development of user requirements, Austria), Peipsi CTC (local NGO, Estonia). [www.narvaplan.ee/e-com/](http://www.narvaplan.ee/e-com/)

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