

# **Sustainable Urban Development in the City of Narva, Estonia**

*Doris SCHNEPF & Sophie STRASSER*

(DI<sup>in</sup> Doris Schnepf, SERI, Sustainable Europe Research Research Institute, Garnisongasse 7-27,  
1090 Wien, doris.schnepf@seri.at)

(DI<sup>in</sup> Sophie Strasser, SERI, Sustainable Europe Research Research Institute, Garnisongasse 7-  
27, 1090 Wien, sophie.strasser@seri.at)

## **1 Introduction**

The development of modern societies is often considered to be in opposition to the environmental health and human well being. Due to the growing complexity of societies and their spatial representation in utilization of rural and especially urban areas, the understanding of the whole system has become increasingly difficult. The understanding of environment has undergone changes in accordance to the development of environmental management methodology and practices as well as in land use and development planning. Both, in spatial planning of rural communities but even more in urban settlements, the importance of combined and comprehensive analysis of environmental as well as social and cultural aspects are getting more and more important. For effectively integrating social and economic dimensions in environmental issues, environmental management practices need to go along with:

- Interdisciplinary
- Problem orientation and

- Public involvement

On the following pages, the **eCommunity project**, an EU project within the LIFE – Environment program finished in August 2005, will be presented.

Within the scope of eCommunity a web based management tool for sustainable spatial planning for the City of Narva, Estonia, was developed and general conditions for the implementation of an effective eGovernance systems in order to reach sustainable urban development were researched.

The tool particularly promotes more transparency in decision-making in the city of Narva, and therefore aims to develop a more effective dialogue between administration and town inhabitants and a better understanding among the public of decisions adopted by the municipality.

## **1.1 Goal of eCommunity**

The overall objective of the eCommunity project was to promote sustainable and democratic urban planning by offering an internet-based tool for exchanging spatial environmental information and connecting those with online participation possibilities.

The eCommunity tool was implemented for Narva Municipality in 2005. Innovative web-based software solutions were applied to promote the concept of e-Democracy by facilitating the exchange of opinions and spatial environmental information about the City of Narva. Doing this, environmental challenges in and around Narva were made more visible and could be highlighted in a decision-making process. The combination of spatial environmental information and online decision-making offered a window of opportunity to the Narva Municipality to develop a more effective dialogue with the city's inhabitants, a more transparent planning process and therefore a better understanding among the public of decisions adopted by the Municipality. The

eCommunity tool makes information on environment and urban development available not only to the citizens of Narva but also to interested organizations and persons internationally: This can promote the interest on issues of local development and environmental management to increase investments or to attract tourism in Narva.

## 1.2 The context of Narva

The town of Narva with a population of about 70 000 is situated in the northeast of Estonia; it is the third largest town in Estonia after Tallinn and Tartu (see Figure 1). Narva is located on the border to Russia: the frontier goes along the Narva River that separates Narva from the neighbouring Russian municipality of Ivangorod with a population of 10 000.

Figure 1. Location of Narva in Eastern Baltic Sea area



It is worth to note that Narva was a beautiful town before the Second World War; its architecture was competing with that of Tallinn. During the war, almost all architectural landmarks were bombed and destroyed. After the Second World War when Estonia was occupied by the Soviet Union, local Estonian population was deported and people from different parts of the Former

Soviet Union arrived to North-Eastern Estonia to work at the newly built thermal power plants, the oil-shale mines and the chemical enterprises processing the oil-shale.

A new town of Narva was constructed with standard Soviet-style blocks of houses and this new Narva did not differ anymore in the way it looked from thousands of other towns all over the Soviet Union – in central Russia or Russian Far East, Ukraine or Belarus. One of very few architectural landmarks left over was the Herman fortress on the bank of Narva River that overlooks the river to the Ivangorod fortress. During the Soviet time, Narva and Ivangorod were not divided by any borders and were built as one town with shared municipal infrastructure. When the Estonian-Russian border regime was re-established at the beginning of the 1990s, the border cut the shared town infrastructure as well as personal connections between the two towns. Cutting the previously existing economic connections and restructuring of Narva economy resulted in high unemployment in the town.

Due to this turbulent history of Narva, the demographic situation of the town and surrounding areas is very different from other regions of Estonia. Out of more than 70 000 inhabitants only 3 000 are Estonians, and the majority of the Narva population consists of first and next generations of “newcomers” from the former Soviet Union who arrived in Narva after the Second World War in connection with the industrialisation. The majority of the inhabitants of modern Narva therefore has few friends or family connections to other regions of Estonia, and therefore they do not usually speak Estonian. By the citizenship 35,5% of the Narva population are citizens of Estonia; 28,1% are Russian citizens and 36,4% are registered as foreigners, i.e. own grey passports of “foreigners” or persons without citizenship but residing in Estonia.

Due to the mentioned reasons, Narva remains isolated from the rest of Estonia. For inhabitants of other regions of Estonia, Narva is usually associated with issues of high unemployment, crime

and other social problems. Estonian mass media supports this image rather often, and on Estonian level there are few positive news that can be heard about Narva.

Therefore, the Narva e- Community project had- along with developing public awareness within the local community - an important mission of presenting Narva positively on the Estonian and international arena as a town of democratic and sustainable urban planning; a town of innovations.

### **1.3 The need of an internet-based city planning tool in Narva: Identified Problems**

When the idea to create an e-Community system was formulated, the following problems within the municipality administration for spatial planning were considered to be relevant:

- 1) The common document administration system (Amfora) of Narva Municipality was not functioning and therefore there was a big lack of information between the municipality departments and too much information was delivered only on the paper
- 2) The vertical communication caused no efficient delivering via heads of the departments for other employees
- 3) Delivering information about Narva for tourists and investors was difficult.
- 4) There was a serious lack of attractive visual information about city planning
- 5) The communication between the Narva municipality and inhabitants was quite weak
- 6) The development priorities of the Narva city were not well formulated and prioritized

## **2 Sustainable Development as an underlying principle**

For being able to tackle the great challenges of urban planning in the city of Narva, a management tool needs to integrate not only spatial and environmental information; it also needs to particularly consider the specific socio-economic situation of the citizens.

Sustainable Development is therefore the underlying concept of the development of eCommunity tool.

In general terms, sustainable development is defined as the principle, that current generations should meet their needs without compromising the ability of future generations to meet their own needs. Linking economic, social and institutional development to improve the environment is seen as an important and operative step towards a sustainable future (see WCED, 1987).

In this paper we will first examine the general links between ICT and all three dimensions of sustainable development. Starting from chapter 5, we will then demonstrate, how the eCommunity tool is realizing those concepts within the context of Narva. Special focus will be given to the role of participative decision making in sustainable urban planning.

### **2.1 The use of ICTs for reaching urban Sustainable Development**

#### **The environmental dimension**

The environmental dimension of sustainability recognizes the indisputable fact that people are completely dependent upon the natural world, and that without the resources and ecosystems services it provides, life and development are impossible. In order to sustain the viability of eco-

systems, development must not degrade or deplete them to such an extent that they are unable to function effectively.

### The urban environment

If we are concerned about sustainable development, then attention needs to be focused on the role and contribution of cities. In Europe, some 80 % of the population lives in urban areas and it is here, that the effects of many environmental problems (such as noise, poor air quality and heavy traffic) are felt most strongly (European Commission, 2004).

Poor urban environmental quality for example has impacts that range beyond the borders of cities. Urban centres are responsible for a significant amount of greenhouse gas emissions, and are therefore major contributors in meeting the commitments under the Kyoto Protocol. Urban expansion can lead to the loss of prime agricultural land and sensitive environmental areas. Also the links between urban environmental quality and a healthy knowledge-based economy are becoming more pronounced – the increasingly severe economic impacts of traffic congestion on trade, for example, or the key role urban environmental quality plays in attracting and retaining the talent that drives wealth creation. Good quality of life is an increasingly important factor for motivating people to stay in their home town and to attract investors (see Curwell et al. 2002).

In a knowledge society, the use of ICTs is believed critically important for dematerialization of production and im-materilisation of consumption and lifestyles, green entrepreneurship, sustainable lifestyles, responsible living, corporate responsibility and sustainable communities (European Commission 2002).

Information systems play an essential role in reaching **environmental targets** for sustainable development. Numerous actions on environmental preservation cannot be realized without the support of ICT. Special importance can be given to the possibility of ICT to create

comprehensive monitoring systems for the protection and conservation of ecosystems. The accumulation of very large amounts of data; their effective use and archiving for the far future, requires a global structure and management facilities (Club of Rome, 2003).

### **The social dimension**

Equity and social cohesion are prerequisites for achieving sustainable communities, which need a certain amount of capacity-building to realize. Capacity-building has to be designed not only to support equity and social cohesion but also to reduce vulnerabilities, and to motivate local populations. Training for professional skills, by and for local people, at all levels of assimilation, provides the necessary long-term perspective for local entrepreneurship as well as for social integration (Club of Rome, 2003).

Creating and sustaining strategic networks and partnerships, creating the political and social support to implement policies successfully and to enhance the communication between the administration and the citizens are considered key to success.

### **The economic dimension**

Promoting ICTs is seen as good opportunity to improve local economic development. In this context the development of new industry and employment opportunities may generate potential positive impacts on sustainability. Private and public sector organisations play an important role in this respect. Their understanding of the role of the online economy and new ways of working will be a key factor of local economic development.



ICTs seem likely to offer capacity to enable economic growth, and to allow a more equitable distribution of wealth, without necessarily increasing consumption, pollution and energy use. Information sharing and knowledge sharing enables a better management of scarce resources.

## **e-Governance and e-Democracy activities**

“Governance” has been a guiding principle for many European countries in the last decade (European Commission, 2003). The European Commission refers to it as to the “rules, processes and behaviour that affect the way in which powers are exercised at European (and other) level, particularly as regards, participation, accountability, effectiveness openness and coherence” (European Commission, 2003).

e-Governance, that means designing governance processes with the help of ICTs, is therefore not just about implementing technology – it is about reinventing the way in which government and citizens interact, transforming government processes, providing community leadership, enabling economic development and renewing the role of government itself in society through the utilization of Information Technology.

### **2.2 Terminology<sup>1</sup>**

The following terms, frequently used in association with e-Governance, probably need to be clarified before opening the discussion on governance issues:

**e-Democracy** is a concept used to define any activities or communication between governments and citizens of a political nature, utilizing information and communication technologies. Often it is divided into e-Voting for elections and e-Participation for communication.

---

<sup>1</sup> Lennard Forseback (2004), in: Best Practices in eGovernance; Intelcities Project, Deliverable Nr. 11.2.1

**e-Voting** is a term used for formal elections in electronic form, requiring heavy security and legal formalities. It is related to decision making processes based on some electronic device or procedure (or simply ICT) and involving citizens where the result is, or can be, binding, based on voting such as referendums, elections etc.

**e-Participation** is the use of ICTs to enhance active participation of citizens and to support the collaboration between actors for policy-making purposes, whether acting as citizens, their elected representatives, or on behalf of administrations, parliaments or associations (i.e. lobbying groups, interest groups, NGOs) within the political processes of all stages of governance. It consists of three components: information provision, deliberation, and participation in decision-making.

**e-Government** is mostly used for services various government agencies provide to the citizens in electronic form, e.g. via the Web. Examples would include filing of tax-returns or payment of traffic tickets. It also covers inter agency activities and back-office solutions utilizing ICTs

**e-Governance** is formed from the merging of e-Participation and e-Government principles, and in its most basic form consists of the use of ICTs in the relations between citizens, politicians and government administrators to increase cooperation, participation and transparency at local and national level. Inclusion and accessibility are key-words for realizing e-Governance i.e. the rate at which people have access to the social and economic opportunities, and can use technology as a means to learn, work and thrive.

### **2.3 The importance of eGovernance Systems in the European Union**

European Governments and the EU have started to use new information and communication technologies to revive the political sphere, which is supposed to be mainly characterized by deliberative discussions on issues on a common concern. Since the treaty of Maastricht has been

negotiated it has become evident that there is a fundamental deficiency of democratic principles within the European Union. The standard view of the European democratic deficit interprets this as a mixture of the institutional in-adequacies of the EU when judged by standard liberal democratic criteria of accountability and responsiveness, and the absence of a substantial feeling of solidarity/community between the different peoples of the member states. Against this background, new technologies are perceived as tool for diminishing these deficits, as new spaces for participation and deliberation since they enable digital communication and extend our understanding of civic engagement and planning processes.

E-government strategies could in particular contribute to the EU goal of increased openness and transparency at all stages of decision-making, for example through the provision of up-to-date, on-line information. Furthermore, new ICT-based governance strategies could significantly intensify the communication between EU institutions and Member States, which has been identified as one main obstacle towards increasing the efficiency of the overall policy strategy.

## **2.4 e-Governance and sustainable urban planning**

Sustainable urban development and planning requires the integration of relatively isolated and often conflicting economic, environmental and socio-cultural interests/subject areas. The resulting increasing complexity of urban planning problems calls for more effective and channelled communication & information exchange and new participative planning models in order to reach consensus on these complex issues (Märker, 2000).

One important aspect of e-government relates to increased participation of citizens in governmental decision-making. Turning towards the Internet and Web Services for solutions is

not a recent phenomenon, as it constitutes a time and place independent media for feedback in digital form and complements face-to-face meetings and traditional public participation processes (information sessions, discussions, letters and phone conversations) (Hendrikson & Ko, 2003). However, despite emerging research on ICT in urban and environmental planning, few examples of web-based participatory planning processes are available.

## **2.5 Successful eGovernance**

According to the final update of the “e-Government Strategy” that was published by the Government of New Zealand<sup>2</sup>, it is a common outcome that there are three main characteristics marking successful e-Government:

**Convenience and Satisfaction:** People should have a choice of channels to government information and services that are convenient, easy to use and deliver what is wanted.

**Integration and Efficiency:** Information and services should be integrated, packaged, and presented to minimize cost and improve results for people, businesses, and providers.

**Participation:** People should be better informed and should be able to participate in government.

### **Basic requirements for e-Governance systems:**

**Better services:** More convenient and reliable, with lower compliance costs, higher quality and value.

**Cost effectiveness and efficiency:** Cheaper, better information and services for customers, and better value for taxpayers.

---

<sup>2</sup> New Zealand is ranked third among 169 nations on a global e-Government leadership index according to the 2002 United Nations report Benchmarking E-government.

Improved reputation: Building an image of an attractive location for people and business.

Greater participation by people in government: Making it easier for those, who wish to contribute; and leadership – supporting the knowledge society through public sector innovation.

e-Governance requires an urban government working across boundaries within the public sector and between the public and the private and voluntary sectors to provide the capacity to act and achieve a set of desired policy goals. Strong leadership can speed the process of e-Government implementation, promote coordination within and among agencies and help reinforce good governance objectives.

## **2.6 Added value of e-Governance**

For government added value can be created with a **strong leadership** role in a complex urban development, with efficiency and effectiveness becoming key criteria of its workings. For businesses, local e-Governance can add value to their earnings, provide more business opportunities and access to government services, generate new skills and capacities, and ensure their privacy and security. Citizens and civil society too have a stake in city e-Governance. Improving the quality and value of government services can increase their welfare.

## **2.7 ICT Dangers**

As any other type of technology, information and communications technologies (ICTs) are not the panacea to current problems, but have to be regarded as tools that have the potential to further or hinder the move toward a more sustainable society. In order to channel the effects of new technologies toward sustainability, administrators and politicians need to create corresponding

political, legal and economic environments and frameworks. Potential barriers to ICT access, whether economic, socio-cultural or technological, need to be addressed to avoid creating or widening a digital gap and to take advantage of the opportunities ICT offers to narrow social and economic inequalities instead.

### **3 Involving Citizens in Decision-making**

Politics and government are going online: not only in Estonia, but in all over Europe, cities have increased participation in policy- and decision-making on their political agenda. The aim of implementing ICTs in democratic processes and activities at the local level in Narva is to enhance participation by reaching a wider audience. The ultimate goal is a civil society, participating actively in an inclusive, transparent and productive way – by getting more people involved and creating a consensus for better decisions.

#### **eParticipation in political processes**

e-Participation in a democracy must provide time and space for thoughtful consideration by representatives so they can make the difficult decisions and compromises required of their oath of office. Online protesting, advocacy and lobbying may actually make it more difficult, in the near term, to reach compromises and diffuse the growing partisan nature of politics.

Citizens will engage in governance when they feel they have a stake in the political outcome, if they think their voices will be heard, and where they feel their input matters. ICTs can be used to bring citizens' input and thoughts into representative political processes. These processes have direct political power and authority. They are not simply an external exercise or academic

experiment. Therefore connecting ICT-enhanced participatory democracy to representative processes may be the most effective path toward deepening democracy through e-government and involving citizens in the democratic processes. It can open up the political process: more citizens can engage themselves in governance also *between* elections.

People tend to participate if they feel their participation makes a difference. Participation in policy making is therefore location-based: the nearer to your home, the more likely you are to participate. At local levels the use of ICTs in governance will thus reach a broader cross-section of citizens, who expect to see the results of their participation reflected in the local or municipal agenda setting and actions.

Successful participation requires access to information and government accountability. Citizens must be able to acquire the knowledge and information about governance needed to make informed choices. The dialogue between citizens and government must be continuous, open and committed. Most governments have an unbalanced ecology of governance that is still central and executive dominated where governance is closed and hierarchical, not transparent and participatory. Somehow this must be altered, a process which will take a long time. Perhaps ICTs will prove a convenient vehicle for this change.

Local governments need to play an active role to maintain existing democratic practices despite pressures coming from information outside. They need to incorporate and adapt ICTs to expand and enhance participatory democracy. Deepening citizen participation in democracy is vital to ensuring that governments at all levels, can both accommodate the will of their people and more effectively meet public challenges.

## 4 The eCommunity tool

### 4.1 What exactly is the e-Community system?



Narva e-Community is a web-based software solution that makes available information on the town's spatial planning and development.

“Narva e-Community” acts as a functioning spatial planning system. The system includes a wide range of thematic information sub-systems, such as a city master plan, a thematic plan of bicycle traffic, a public transport agenda; a thematic park of the old town; etc. The system available through the regular Internet system is developed to meet the needs of specific stakeholder groups, such as investors, tourists and other interested parties and will include components such as an “investor web” or a “tourist web” sites.

The e-Community stands for more transparency in decision-making in Narva town and therefore offers a window of opportunity to the municipality to develop a more effective dialogue with the



town inhabitants and better understanding among the public of decisions adopted by the municipality.

The creation of the E-Narva web-based information system on spatial planning implies development of the "virtual reality" where the town spatial plans drawn by specialists will have their own 2 and 3 dimensional spaces.

The 3 dimensional spaces are realistic models of the planned area, which can be virtually walked through and where citizens have possibilities to make additions and corrections to the plans and transfer it automatically to a new 3D model representing 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 innovative IT tool will allow to synthesize concrete decisions from statements made by citizens, giving the decision-making process a new democratic identity in real time.

The credibility of the system is achieved by ensuring that anybody does not vote not more than once.

## **4.2 Elements of the tool**

### **Registration**

Only registered users can use the eCommunity system. The registration can be done via filling the application form, that can be found on the web site. The citizens of Narva are registered automatically.

### **Languages**

The system website is usable in Estonian, Russian and English.

## **Menu points**

The opening site contains the following menu points:

### The Decision making module (DMM)

The decision- making module is built into the administrative section to evaluate free text polls.

### Live polls

The menu point LIVE POLLS enables to vote the latest poll and view the attached corresponding 2 and 3 dimensional maps.

2 types of polls exist:

**Free text polls:** registered users can click on their poll, they want to vote on. In a mask box they can upload or type in comments. Users can download related information material (can be the base maps, can be text documents..), edit them if they want on their computer and upload it again.

The illustrative maps can be navigated by using the arrow buttons on the side of the grid image.

Once voted the user will get a checkmark next to the poll indicating, that it has been processed.

The polls act as the tool to develop an effective dialogue with the residents of Narva on the town spatial planning.

**Multiple choice polls (MCQ-polls):**

Users can vote on a given set of possibilities

### Results

The poll results become available once the poll has been closed.

They will be shown in a graphical model

### Q/A

The management of the “Question/Asked” Forum enables to set up new questions and to view the answers given by the city authority.

This kind of tool will strengthen the relations between city residents and authorities. The questions set by residents will get an adequate answer from the responsible city authority.

### Forums

To participate in the forum means the possibility to create new forum topics and respond to already created subjects. To attend the forum, user must be registered.

The forums acts as a tool that gives people a chance to argument the possible additions and corrections to the town planning and give their suggestions.

As the forum participants are always registered users, the system avoids exploitation of the system.

### 2 and 3dimensional maps

The system contains 4 types of maps:

Base 2D and 3D maps are simple maps of Narva.

Project related 2D and 3D maps, which are uploaded one by one by system administrator when creating a poll.

GIS maps are accessible via links from the map pages mentioned above.

DMM- *decision making module* – is built into the system and gives administrator analysis of possible outcomes of the open questions polls

The maps can be seen as a guidebook of Narva that gives a user a complete overview of hotels, restaurants, hospital, cinemas etc; or for more practical meaning, for example the air pollution maps, electricity lines etc.

Innovative 3D maps of Narva allow system users to walk through the city and see the present town and planned buildings in their actual size. The maps are being constantly uploaded as the situation in town changes.

## **5 Recommendations for municipalities, adopting e-community solutions:**

In order to implement successful online systems for governance, municipalities need to consider a variety of aspects. On the following pages we will present our research results and will provide a short checklist of the most important points to be considered in order to maintain the interest of the public.

### **5.1 eParticipation Good Practice Guidelines<sup>3</sup>**

**Promotion:** Citizens can only take part in e-democracy activities if they are aware of the possibilities. E-democracy initiatives must be well marketed to attract attention.

**Political commitment and responsiveness:** If citizens are to take part in e-democracy activities, they need to know that their views will be taken into account and their complaints dealt with. Local authorities must be responsive to e-communications from citizens (f. ex. setting rules to treat emails similar as letters).

**Clear purpose of the initiative:** What are the expected outcomes of the online initiative, how will they be used.

---

<sup>3</sup> Kearnes et al. (2002)

**Clear rules of engagement:** e-Participation is a new form of participation and the rules of engagement are therefore not obvious. Published rules and guidelines are important to clarify expectations and obligations.

**Inclusiveness:** To have any legitimacy in democratic terms, e-participation efforts must be as inclusive as possible and must not be allowed to become a channel where those who engage already can simply do so more easily and more conveniently.

**Use of moderators:** E-participation, particularly as it relates to online group interaction rather than simply e-communications between individual citizens and their local authority, requires moderation (which means that one designated person must clean the discussion forums of any old or misleading information). Moderation by an official can aid to keep e-participation focused and useful and that any participation rules and guidelines are observed in practice, this must though not be experienced by the participant as censorship. In most local matters only allowing the participation of named users may help keep the focus on the subject.

**Privacy:** Privacy, and in particular a sense of freedom from surveillance and intimidation is important to democratic politics. In the digital age, privacy can be undermined by data gathering of local authorities. Hence, it is important that authorities both respect privacy in any e-participation activities and communicate clearly their data gathering practices to the citizens, by making it clear which, why and where information is stored. Also it must be explained why some activities should only be performed by named, authorized users.

**Working in partnership:** Given the levels of current disengagement, local authorities cannot simply expect that building e-participation spaces on the Internet will result in major increases in political involvement. Instead, they must work in partnership with NGOs and voluntary groups to develop successful e-democracy policies.

**Training:** The skills required to engage in e-participation must be recognized and training provided to develop them, tailored to specific user groups. F. ex. allowing children participate in decision-making in their own environment such as school yards may improve their adult participation.

For citizens to participate in on-line activities and become an e-Citizen there are a few things the government must keep in mind:

Assured Feedback. Active democratic participation will only be reached if the citizens are given a feedback soon after submission.

Empowering citizens requires real commitment from government

## **6 Options for contacting citizens via an online tool**

Research has been undertaken to find out the most valuable ways to motivate visitors of a website to interact (see Forseback, 2004). There are a number of ways by which to engage the citizens using ICTs. Those, used in the e community system are presented below:

**E-mail lists** interested people can actively sign up for, can provide greater use of the most important issues and help to announce and remind of dates. Although many constituent e-mail lists are built through in-person promotion in the district and not just online. All of these efforts connect citizens more closely with their elected representatives and the community.

**E-mail correspondence and newsletters** are usually an initial step in any policy making. **E-mail newsletters** can be good for information and promotion. The municipality can establish e-mail newsletters to promote a range of activities and content including participatory democracy efforts both online and offline.

The advantage of a newsletter send out to an email list is, that it acts as a reminder, a short information source and as an activator, announcing events, polls, participation possibilities etc. Emails though should not be sent too often but still at a regular interval, and the length should not exceed one page.

**Information provision:** This is always the first stage towards e-Democracy, keeping the stakeholders informed.

**e-Petitions:** People can try to influence the setting of the agenda, using the method of collecting signatures. Many municipalities worldwide offer this possibility as well as private organisations. The outcome of the petition might be heard or not.

Narva e-Community system opens on the web address [www.ecommunity.narva.ee](http://www.ecommunity.narva.ee).

**Discussion forums:** on the website are useful when setting an agenda or in any of the early stages of policy-making. Users can post with name or anonymous.

**e-Consultation:** strengthens the dialogue between citizens, politicians and government administrators using ICT. These are deliberation tools, results of consultations may be binding for a decision.

**e-Involvement:** uses ICTs to include broader and/or new groups in democratic processes, f. ex. political activity, the use of ICTs by political parties and action groups.

**Surveys and polls** on the internet can be made at any stage of the policy-making cycle.

## 7 Project Retrospection

The eCommunity Project was not very easy to finish successfully, due to the fact, that the project team internally but also, between the project team and the Municipality and the Citizens had to face big challenges. This was based in the fact that the project team has been a very heterogeneous working team.

We therefore try to make now a little review on this challenges and will identify the key factors and limiting factors of the project implementation.

**Good communication** is clearly one key factor for success. Due to the fact of very different mentalities and histories of the citizens, the Municipality and the project team had to face big problems of communication, whose are not just based on language problems. Even though, the language problems are not to be underestimated, since the working language was English, the project coordination teams spoke Estonian and the local official language is Russian. Before starting such an ambitious project, an action plan for good and regular communication needs to be created.

Very important for a successful implementation of a project objective is to have a very **clear vision** and a **strong leadership** in order to reach the aim. This seems to be of utmost importance, when dealing with complex and sometimes contradicting issues. The further socio-political development of the City of Narva through the implementation of an eGovernance System is such a complex issue.

Furthermore it is very important to identify possible interest conflicts, concerning, time, money and different way of thinking. Such interest conflicts need to be clarified and handled transparently.



## 8 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, who provided parts of the content of this paper 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/)

### 1 References

BMZ, Topic Paper 10: Sustainable Urban Development  
<http://www.bmz.de/en/topics/Handlungsfelder/umwelt/umwelt19.pdf>, accessed in June 2004

Club of Rome (2003). Towards a New Age of Information and Knowledge for All. Statement of the Club of Rome to the World Summit on the Information Society, Geneva, 2003.

[http://www.worldsummit2003.de/download\\_en/CoR-WSIS-Statement-Final-14-8-03.pdf](http://www.worldsummit2003.de/download_en/CoR-WSIS-Statement-Final-14-8-03.pdf)

accessed on 7.9.2005

Curwell, St., Deakin, M., Hamilton, A., Paskaleva-Shapira, K., Soubra, S., Turner, J.(2002). A Research Roadmap for Sustainable Information Cities.

European Commission (2002). Vision and roadmaps for sustainable development in a networked knowledge society, Information Society Directorate general, new methods of work and electronic commerce.

European Commission, European Governance: A White Paper, 2003, [http://europa.eu.int/lex/en/com/cnc/2001/com2001\\_0428en01.pdf](http://europa.eu.int/lex/en/com/cnc/2001/com2001_0428en01.pdf), accessed in August 2005

European Commission, 2004 (2004). Towards a thematic strategy on the urban environment. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions [COM(2004)60]. Office for Official Publications of the European Communities, Luxembourg.

Kearns, Ian et al (2002), e-participation in local government. IPPR, London

OECD (2001). Citizens as Partners: Information, consultation and public participation in policymaking: OECD.

WCED, (World Commission on Environment and Development (1987): Our Common Future. Oxford, Oxford University Press.

[http://www.nrtee-trnee.ca/eng/programs/Current\\_Programs/Urban\\_Sustainability/Urban-SOD-Report/Urban\\_SOD\\_English.pdf](http://www.nrtee-trnee.ca/eng/programs/Current_Programs/Urban_Sustainability/Urban-SOD-Report/Urban_SOD_English.pdf), accessed in June 2004

