

# Regional Co-operation in Municipality Information Infrastructure Development - the SEEmunIS Case

*Bojil DOBREV, Victoria DAMYANOVA, Youri ATANASSOV*

PhD Bojil Dobrev, Professor and Academic Director of International University in Sofia  
Victoria Damyanova, Head of Foreign Investment Projects Department, Sofia Municipality  
PhD Youri Atanassov, Managing Director of International Software and Information Services Ltd.

## SUMMARY

*Different forms of co-operation and partnership both on local and regional levels are considered as a promising solution for Municipal Information Infrastructure (MunIS) improvement according to the requirements of modern Information society.*

*Main goals, activities and results of "South Eastern Europe municipalities Information infrastructure" (SEEmunIS) – a project based on co-operation, are reported.*

*Co-operation of municipality with local IT companies following Public Private Partnership (PPP) principals is derived from SEEmunIS practice as a successful form for improving and managing Municipal Information Infrastructure. A development approach, using regional co-operation, for the next SEEmunIS phase - e-Municipality Information Services – is discussed,*

*Conclusions are made that:*

*Co-operation on local level based on PPP could extend municipal IT budgets and frees municipal staff from inappropriate market decisions.*

*Regional co-operation could reduce significantly the required development investments.*

## 1 INTRODUCTION

Information in today municipalities is not only tool helping everyday activities but also a significant part of municipal services to citizens.

In order to store and use the information an appropriate Municipal Information Infrastructure (MunIS) is necessary to be built. Building such MunIS requires significant efforts, investments and time (which exceed normal municipal budgets and possibilities). In addition investing in market conditions assumes the ability to take risks, (which is not the case with the municipality staff)

Different forms of co-operation and partnership both with other municipalities and local IT companies seem to be a promising solution.

Regional co-operation could reduce required investments as well as the development time. Co-operation with the private companies or Public Private Partnership offers good opportunities for extending municipal IT budget and freeing municipal staff from inappropriate market decisions.

## SEEMUNIS - A PROJECT BASED ON CO-OPERATION

These considerations have been proved by our experience in developing the project "South Eastern Europe municipalities information infrastructure".

The project with a short name SEEmunIS aims by means of Information technologies (IT) to improve information services for citizens, to extend citizens possibilities to participate directly in the process of governing municipality, to promote local economy development and therefore to contribute for political stability in the region.

Cities of Belgrade, Sarajevo, Skopje, Sofia, Tirana and Zagreb participate in the project. A consortium, including municipalities, local IT companies as well as German companies and consultants has been established in order to perform the project. The consortium leader is GMD – German National Research Center for Information Technology.

From the very beginning co-operation was the core of the project:

- Co-operation between the participants;
- Co-operation on local level between municipality and local IT companies;
- Regional co-operation in the development.

The project started in November 1999 and a pre-project phase has been finished in July 2000. As a result an analyses of current situation of municipal IT has been done and ten subprojects, related to the citizens information support have been developed.

The most significant result of this phase is the multinational project team established in joint development.

In order to achieve the project goals the following activities are planned:

- Municipal information infrastructure development;
- Transfer of existing applications from other countries;
- Development of new applications;
- Training of municipal personnel both managers and clerks;
- Development of Public Private Partnership (PPP).

An important role in the project has been previewed for co-operation on the local level following principals of PPP. Municipal IT Competence Centers (MICC) based on PPP are proposed assuming the following tasks:

- To develop of municipal strategy, projects, infrastructure and management;
- To control the value added of information technologies to the quality of municipal services;
- To provide a communication platform for exchanging knowledge and for preparing decisions;
- To advice the Mayor, City council, municipal departments and enterprises on these issues;

- To create co-operation with local IT industry and with international partners.

Based on PPP a significant extension of municipal IT possibilities is expected.

MICC – Sofia has been created as a project preceding a possible institutionalization. A municipal IT advisory board has been established there as well as with the aim to organize the development of an IT strategy and to prepare conditions necessary for establishing MICC - Sofia as an entity. Three of the leading local IT companies takes part in this board: IBM-Bulgaria, Latona – a Lotus notes provider and GIS-Invest – a geographic software applications developer. Other board's members are IT experts from municipality, experts from two municipal enterprises as well as two independent IT consultants. The most promising thing from this activity is that private IT companies have been convinced to invest in advance in MICC initiative (as server's place and time, free use of software, free consulting).

Using Sofia team experience the Institute of Information Systems at Skopje municipality in cooperation with local consulting company T&P worked out possible organizational forms for MICC –Skopje. Establishing MICC now is a priority goal for the City of Skopje. The concept of PPP was accepted by municipal and local IT managers.

### **E-MUNIS - A JOINT DEVELOPMENT APPROACH**

Next phase of SEEmunIS project is “Electronic municipal Information Services” (E-munIS). The accent in this phase is information services to citizens. In order to develop information services to fit Information society requirements several basic problems have to be solved as municipal IT strategy, municipal Electronic Document Management System (EDMS),

Geographic Information System (GIS) as well as citizens communication to municipality. Based on this E-munIS activity is divided in 5 working packages (WP):

- 1.) Municipality Information Strategy Development Support
- 2.) Municipality Office
- 3.) GIS Development
- 4.) Municipal Communication Network
- 5.) E-Services to Citizens

Despite many specifics in regulation and different IT level in municipalities in SEE region there are a lot of similarity and even identical problems when performing the above mentioned WP-s. That is why the first task in every E-munIS WP is specification of a common core of problems to be solved.

If one of the municipalities (or group of them) is much more experienced in certain area, than this municipality takes the responsibility for the common core development for this area. That was the reason to involve in the common core development for GIS - Zagreb and Sofia municipalities, for EDMS – Skopje and Sofia, for E-services to citizens – Sofia and Skopje. Every municipality develops its own specific module.

In the case the differences in experience for certain area are not so big, than a joint team is established as for IT strategy.

Suppose that the development resources needed for the defined WP-s are DR. We can estimate the common core development as 60% of the total and therefore – 60%DR.

In the case of independent development six municipalities have to spend 6 times DR. In the case of co-operation to the 60% DR (necessary for the common core) we have to add 6 times resources required by specific module development (40%DR). Altogether, we will receive 60% DR plus 240% DR, totally – 300% DR or 3 times DR.

Therefore using regional co-operation we can reduce twice the development investments.

### **CONCLUSIONS**

- 1.) Based on SEEmunIS experience co-operation between municipality and local IT companies based on PPP would be recommended in order to extend municipal IT budgets and free municipal staff from inappropriate market decisions.
- 2.) There are a lot of similarity and even identical problems related to the information infrastructure of municipalities from SEE region. Regional co-operation on such a base could be successfully used to reduce the required development investments.
- 3.) A multinational team is established for Municipal information infrastructure development, including the Municipalities of six of SEE capitals (Belgrade, Sarajevo, Skopje, Sofia, Tirana and Zagreb) and a consortium of IT companies from Germany and SEE with leading organization the German National Research Center for Information Technology (GMD). This team is looking for suitable programs, investors and partners for developments in municipal information technology.