Online Cadastre Portal Services in the Framework of e-Government to Support Real State Industry in Egypt

M. Mostafa RADWAN, The Netherlands, Yaser BISHR, USA, Badr EMARA, Alaa SALEH and Rania SABRAH, Egypt

Keywords: Real Estate Market, Land Registry, Cadastre Services, e-Government, On-line Cadastre Portal, Web services, Broker Services, Chaining Services, Spatial Data Infrastructure

SUMMARY

Current cadastre services in Egypt are provided by 'scattered' organizations that are difficult to access simultaneously to provide coherent set of services. These organizations are: the Egyptian Survey Authority, the Real Estate Publicity & Notarization Department, The Real Estate Taxation Department, and the State-owned land Agency. Improving the performance of the real estate market has become inevitable and a major concern for the present government. Several measures were taken to encourage initiatives to strengthen the real estate market, including advanced services for the on-line delivery of cadastre data and functionalities to all stockholders. Such services can be implemented in cooperating with the private sector in its massive efforts to build citizen-centered services to enhance the quality of life of the Egyptian Citizen.

In this paper we propose an Online Cadastre Portal, eCAD Portal, in the framework of the E-Government and the Spatial Data Infrastructure initiatives in Egypt. We recognize, however, the lack of a coherent framework for these initiatives, and therefore we outline a generic framework and build on it in order to introduce the Online Cadastre Portal.

The goal of the eCAD Portal is to provide a single place where agencies can post metadata that describe their resources (cadastre data and land registry functionalities) and where clients can go to discover such resources and request services through brokerage service. The provided services can be simple (a functionality provided by a single source) or complex (chaining of functionalities from several sources). The eCAD Portal includes the necessary Web technologies, which are needed to request, deliver, coordinate and control the execution of identified, tailored, services. A Service Brokers maintain registries containing relevant service metadata to aid the discovery of required services. A Workflow Management Services control and coordinate the execution of service chains, both intra- and inter-enterprise, negotiate and enforce adherence to quality of service specifications while shielding the client from the complexities of the chaining process. Other essential tools to extract and harmonize data sets as well as to invoke GIS functionalities from the participating agencies, are embedded in the under laying layer of protocols provided by the current form for the spatial data infrastructure architecture.
The proposed architecture of eCAD Portal also provides the necessary platform for real estate agencies, to work beyond their boundaries and to operate in a more ‘tight’ coupled mode, forming an integrated ‘virtual’ enterprise to seize business opportunities in such market.