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EVALUATION FRAMEWORK FOR UKRAINIAN CADASTRAL SYSTEM

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There are several mechanisms for achieving the goals of sustainable land administration and land management, but the cadastral system is the major one. The procedure for systematic evaluation of the performance of cadastral systems is inadequate or non-existent in most developing countries and Ukraine is no exception. The Ukrainian State land cadastre system does not provide a regular evaluation framework to measure and evaluate its activity, and the domestic literature does not pay attention to this issue. The aim of the research was to evaluate the current state of the cadastral system in Ukraine based on methods that have successfully proven themselves in developed countries.

A general description of the cadastral system of Ukraine was carried out in the section of the institutional framework, the cadastral system and the cadastral map. The evaluation of the Ukrainian cadastral system was carried out according to indicators at five areas (political level, management level, operational level, external factors and review process). Each of these evaluation areas were further detailed with evaluation aspects, which would have to be assessed individually for a complete evaluation. The article highlights the good practices of developed countries and their indicators of a well-functioning cadastral system. The study employs analytical and qualitative methods. The evaluation methodology was conducted in four stages: analysis of assessment criteria; identifying good practices for each aspect; identifying performance gaps of the cadastral system and establishing a summary profile by using SWOT analysis.

Policy Level: The stakeholders of this level are responsible for land administration from a strategic point of view. Main aspects to evaluate in this level are: definition of land policy objectives, definition of land tenure arrangements, land market issues, funding and revenue issues, and environmental sustainability issues.

Management Level: The stakeholders of this level are mandated by the Government to carry out specific land administration tasks. Main aspects to evaluate would be the definition of strategies, institutional and organizational settings, human resources issues, and cadastral principles such as comprehensiveness and completeness.

Operational Level: The stakeholders of this level are the operational units that have to carry out the daily tasks of land administration. Aspects to evaluate for this level would include user, product and service issues, reliability, security, accuracy, efficiency, transparency, and accessibility issues.

External Factors: may be the technology available on the market, capacity building aspects, human resources issues, or if there is a professional association.

Review Process: The stakeholders' responsibility would be the overall assessment of the system's performance.

It was established that the weakest points (gaps) of the cadastral system are the political level and management level. The results of the SWOT analysis show that the weak aspects of the cadastral system prevail (*Table 1.*). Most weaknesses can be minimized due to the dominance of opportunities. Identified threats are not fatal but most difficult to be minimised.

This contribution develops an evaluation framework of the cadastral system in Ukraine, which could be used for systematic measurement and evaluation the functioning of both the State Land Cadastre and the State Title Registration and comparison of the world cadastral system practice. The paper emphasizes that the evaluation of Ukraine's cadastral system should be related to broader economic and societal issues.

Such an evaluation framework should take into account a combination of political, legal, institutional, social, economic, environmental, technical aspects, as well as the public-private partnership factor. This approach will provide a basis for a more standardised and comprehensive approach to the evaluation of the Ukrainian cadastral system.

Table 1. SWOT-matrix of the evaluation results of the Ukrainian "cadastral system"

Strengths	Weaknesses
- single government service is responsible for all spatial cadastral data - central databases of the State Land Cadastre and the State Register of Property Rights are available via the Internet - unified and standardised data format for the identification and exchange of digital information - registration procedure of land and property rights and functions of the actors are clearly defined - relatively fast and cheap procedure for land registration in the State Land Cadastre and the State Register of Property Rights - relatively efficient transaction processes, fast and relatively cheap - single-window system principle - strong involvement of private sector - good cooperation between public and private sectors - professional association takes an active role - implementation of different pilot projects by the StateGeoCadastre	- lack of clear state policy on future development of "cadastral system" - lack of regular and comprehensive review (revision) of the strategy "Cadastre 2.0" - lack of procedure for regular evaluation of the effectiveness of the "cadastral system" - need for regulative strengthening of the land-use planning and cadastral documentation standards - registration of land plots and property rights is carried out by two different organizations - registration of a land plot in the State Land Cadastre is carried out at its location - cadastral surveying are carried out in different coordinate systems - cadastral map is not complete and not comprehensive - weak cooperation between public, private and academic sectors - competition between different interest groups (geodesist, land surveyors, public and private sectors), rather than cooperation - monopoly access of the StateGeoCadastre to cadastral information - limited integration between the State Land Cadastre and the State Register of Property Rights information - double registration of lease rights for one land plot - most of the objects that should be contained in the State Land Cadastre are missing - there are signs of bureaucracy - the laws governing registration of land and property rights are, in most cases, not in line with new technology - the slow pace of cadastral system development due to systems and resource issues - lack of systematic and regular user (customer) satisfaction surveys
Opportunities	**Threats**
- to develop the clear vision on the future of the "cadastral system" - to strengthen the political and legal support - involvement of the private sector can be further developed to get a mutually beneficial public-private partnership - development of a national spatial data infrastructure may enhance spatial data acquisition and distribution - developing digital cadastral data base is essential for good governance. - It is a suitable time to start setting up a single real property cadastre - decentralisation of managerial and regulatory powers - to strengthen the commitment to good governance and the rule of law - rapid development of infrastructure and technology - to realise the importance of the cadastral system in the socio-economic growth with the required resources to remain on the cutting edge of technology. - to improve perception of land and property rights security - to increase the user-friendly service and user satisfaction - involvement of non-governmental organizations / Civil Society Organisation	- loosing political support - not being able to bring the diverging interest groups together - cost of data collection, implementation, and incorporation of new technology - continued tensions between main public agencies, private firms and officials - lack of funding and local capacity building - dependence on the introduction of modern foreign (imported) information and communication technology

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