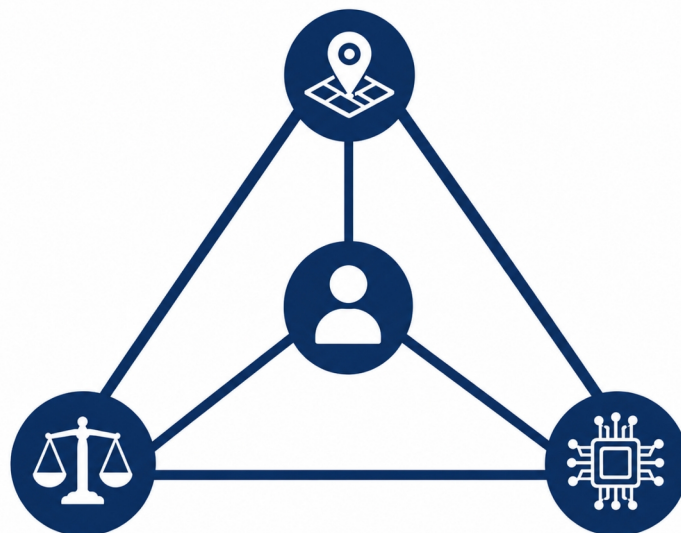




RIGHTS, SPACE AND TRUST

**A global agenda for the functional cadastre in the
twenty first century**

*Principles and a shared direction for
modern land administration*

A professional initiative based on the experience of cadastral system reform in the Republic of Serbia

Belgrade, August 3, 2026

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1. Introduction

The security and protection of rights in real property are among the foundations of personal security, family stability, economic development and trust in institutions.

A right is not fully realised merely because it is recognised by a constitution, law, court decision or administrative act. It must be connected with a person and with a concrete space. It must be spatially determined, recorded, verifiable, accessible and protected.

For the purposes of this agenda, the term cadastral system is used in a functional sense. It includes the connected institutions, registers, data and procedures through which rights in real property are legally established, spatially determined, recorded, preserved and made available.

This agenda proposes the functional cadastral system as a direction for the further development of land administration in the twenty first century. It is a system that does not merely preserve data, but connects institutions, supports the realisation of rights, limits corruption, enables the formalisation of real space and transforms geospatial data into public value.

2. Od najvišeg pravnog načela do lokalnog upisa

Property rights and other legally acquired rights in real property have different sources and forms of protection in different legal systems. Their common essence is universal: a person must be certain that their right will be recognised, determined, recorded and protected.

A right becomes fully realisable and verifiable when it is possible to reliably establish who holds it, to which real property it relates, where that property is located, what its boundaries are, how the right arose and how it can be verified and protected.

Between the highest legal principle and the concrete record there is an uninterrupted vertical chain of public responsibility. Responsibility must not disappear between institutions.

3. Technical materialisation of rights

Institutional arrangements differ across countries. In some systems legal decision making and cadastral recording are performed by separate institutions, while in others they are integrated. Regardless of the organisational model, the function of determining the legal basis and content of a right must remain clearly distinguishable from the function of its unambiguous technical and spatial determination.



Legal institutions determine the existence, content and legal basis of rights. The cadastral system has a different but equally important responsibility: to technically identify the right, spatially determine it, connect it with a person and real property, and transform it into authoritative geospatial data.

The cadastre is not a source of rights and it is not a substitute for the institutions that determine their legal content. It is a public technical, spatial and information infrastructure that makes legally established rights visible, spatially determined, verifiable and usable.

4. Development models of the cadastral system

The development of cadastral systems can be analytically described through four connected models: the model of legal records, the legal geometric model, the digital professional model and the functional legal model.

The functional legal model goes beyond digitalisation. It connects data, rules, competences and consequences in order to produce reliable and legally relevant answers. The traditional model gives data. The digital interoperable model exchanges data. The functional legal model connects data, rules and consequences and turns them into a basis for responsible decision making.

5. The functional cadastral system

The traditional cadastre primarily answers the question of what is recorded. The functional cadastre must also answer the question of what the recorded data serves.

A functional cadastral system is a public infrastructure that connects people, rights, legal bases and space so that rights, restrictions and responsibilities become spatially determined, verifiable, accessible and usable for lawful decision making. In the functional cadastre, data is not the end of the procedure. Data is the beginning of new public value.

6. Principles of the functional cadastral system

Person, right, legal basis and space form one verifiable whole.

A legally relevant event is recorded at the source and without unnecessary delay.

Data is collected once, while responsibility for it remains with the source.

Division of competence must not become avoidance of responsibility.

Authority is proven through origin, quality and the possibility of correction.

Technical and engineering management is a condition of legal reliability.

Integrity is designed in advance.

Every decision must be understandable, verifiable and challengeable.



Openness and data protection must be part of the same model.

The system must remain reliable in crisis and capable of learning.

7. Rights should be recorded when they arise

Rights in real property should be recorded when they arise, wherever legal and institutional conditions allow.

One successful pilot of this principle is the procedure for recording the rights of spouses in real property introduced in the Republic of Serbia. Its basic idea is simple but deeply reform oriented: the property right of a spouse should not be established for the first time only when a marriage ends, when a dispute arises, or when one spouse must prove their contribution before a court.

This procedure is a practical contribution to the international discussion on timely recognition of property rights.

8. Complexity must not become a burden on people

Land administration connects the legal world with the physical world of space. This connection is necessarily complex, but that complexity is the responsibility of institutions and experts. It must not be transferred to the person who is trying to exercise a right.

Data that the public system already possesses should not be requested from citizens again. The division of competence must not become an avoidance of responsibility. The person is not the last point of the process. The person is the reason the process exists.

9. Reform changes power relations

Every serious reform of land administration changes more than technology and procedures. It changes the distribution of information, influence, discretion and economic benefit.

Connected data, traceable procedures, clear responsibility and accessible information reduce the space for privileges, hidden mediation, arbitrary interpretation and profit derived from disorder.

Resistance to reform is not an exception, but a predictable governance risk. Reform must correct its own mistakes, while also recognising attempts to re establish non transparent discretion.



10. Integrity is built into the system

The fight against corruption is not conducted only through reports, investigations and subsequent sanctions. The most lasting fight against corruption is conducted by building a system in which decisions are verifiable, procedures are traceable, data is connected, responsibilities are clear and the space for arbitrariness is limited.

Integrity must not depend only on the character of the people who happen to hold positions of responsibility at a given time. It must be built into the architecture of the system.

11. The cadastral system as an architecture of trust

Trust is not a feeling that is requested from citizens. It is the result of an architecture in which every important statement can be verified, every change can be traced and every responsibility can be found.

The cadastral system is an infrastructure of trust because it connects the legal norm, the decision of the competent authority, the technical determination of space, authoritative data and a publicly understandable result.

12. Formalisation of real space

In many countries, including Serbia, people live, work or create property in spaces that physically exist but are not fully recognised in the legal and administrative system.

Society cannot responsibly manage space that it refuses to see.

Formalisation is the orderly transition from the informal to the legal, technical, urban, social and fiscal system. It is not an automatic confirmation of every existing situation and not a reward for violating rules. It is a way to regulate the consequences of long term systemic failure according to clear, equal and verifiable criteria.

13. Technology must serve rights and people

Technology is not the goal of land administration reform. It is a means to make rights more accessible, procedures more reliable, data of higher quality and responsibility more visible.

Algorithms can propose, warn, connect data, recognise patterns and indicate risks. Responsibility for legality, fairness and the consequences of decisions must remain clearly assigned.



14. Data as infrastructure of public interest

Data about space and real property is infrastructure of public interest. The institution that maintains it is not its private owner, but the responsible custodian of an authoritative source.

Data has public value only when it is accurate, up to date, secure, understandable and accessible to those who have the right to use it.

15. Rights must remain provable in crisis

The value of a cadastral system is tested most clearly when the normal functioning of society is interrupted.

Floods, fires, earthquakes, extreme weather events, displacement, power outages or cyber incidents must not erase the ability of the state and citizens to prove who has which right, where it is located and on what basis it arose.

16. Multidisciplinarity and technical governance

No profession can understand or solve all problems of land administration alone. The strength of the system arises when different forms of knowledge begin to act as one whole.

Technical and engineering competence must form the core of strategic and operational management, with strong participation of legal, economic and other professions. Technical governance is not opposed to law. It is a condition for a legally established right to be accurately, reliably and permanently placed in space.

17. Transparency as a source of authority

A public institution does not become weaker when it shows its way of working, results, limitations and errors. It becomes more reliable.

Institutional authority does not arise from formal power or from the volume of response. It arises from expertise, consistency and the willingness to make one's own work verifiable.

18. Reform as a permanent ability to learn

Reform has no final date of completion. Every solved question opens new expectations. Every technological advance creates new possibilities, but also new responsibility.

The greatest success of a leader is not to become irreplaceable, but to build an institution that can continue, improve, question itself and correct its own mistakes.



19. From principles to implementation

The agenda becomes real only when principles are translated into operational priorities: authoritative sources of data, recording legal events at their source, connecting people, rights, legal bases and space, embedding traceability and resilience, and publicly measuring results.

20. How system functionality is measured

Functionality is not proven by the name of a reform, the number of digital services or the volume of scanned documents. It is proven by results that people, institutions and the state can verify.

Key measures include coverage, timeliness, reliability, accessibility, challengeability, integrity, interoperability, resilience, public value and trust.

21. A common agenda

This document is not the conclusion of a reform process. It is a proposal for its continuation.

We invite institutions, the legal, geodetic, technological and academic communities to develop the functional cadastral system as a shared direction for the twenty first century.

We do not propose just another model of a register.

We propose a new standard of public responsibility and trust.

This is the functional cadastral system.

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REPUBLIC **GEODETIC** AUTHORITY

