

«An assessment of the socio-economic benefits of the Hellenic National Cadaster»

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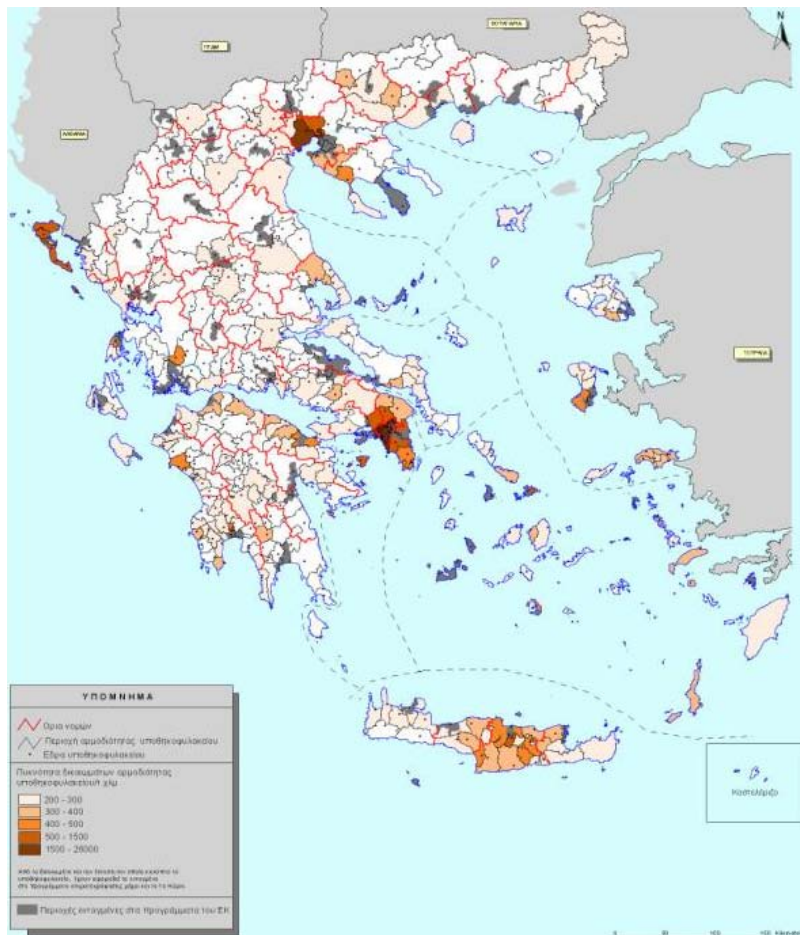
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The Hellenic National Cadastre

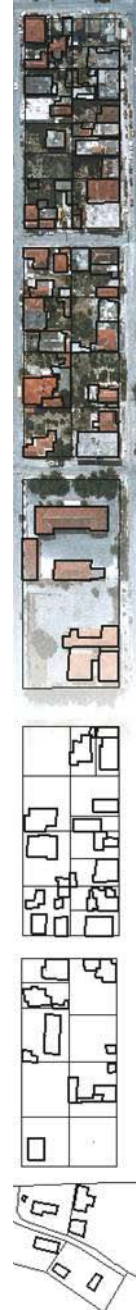
Background statistics



Densities of property rights in Greece
(Source: Hellenic National Cadaster)

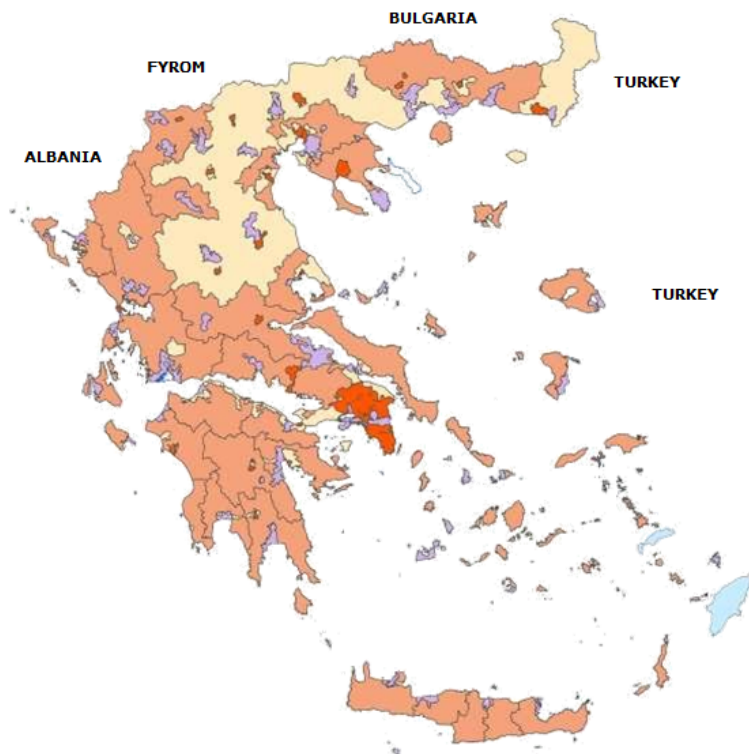
Nation-wide statistics

- **Area:** ~132 Km²
- **Population (2011):** 10.816.000
- **Households** 3.664.071
- **Municipalities:** 5.775
- **Residencies** 5.475.400
- **Land parcels:** ~12-15 million
- **Properties:** ~20 million
- **Property rights:** ~37-39 million
- **GDP (2014):** ~€179 billion
- **GNI per capita** ~€16.500
- **Property owners :** ~7,4 million
- **Value of privately owned land:** ~€750 billion



The Hellenic National Cadastre

Generations of cadastral surveying projects

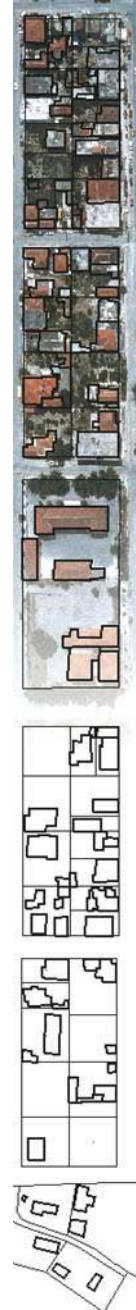


LEGEND

- 1st Generation of Cadastral Surveying Projects (Pilot A, Pilot B, 1st Main Programs)
- 2nd Generation of Cadastral Surveying Projects (Urban centers and Parnitha Mountain)
- 3rd Generation of Cadastral Surveying Projects (Urban sprawl areas and land consolidation areas)
- 4th Generation of Cadastral Surveying Projects ("Rest of the country")
- Special Cases (Dodecanese Cadastre, Cadastre of Kallithea& Palaio Faliro)

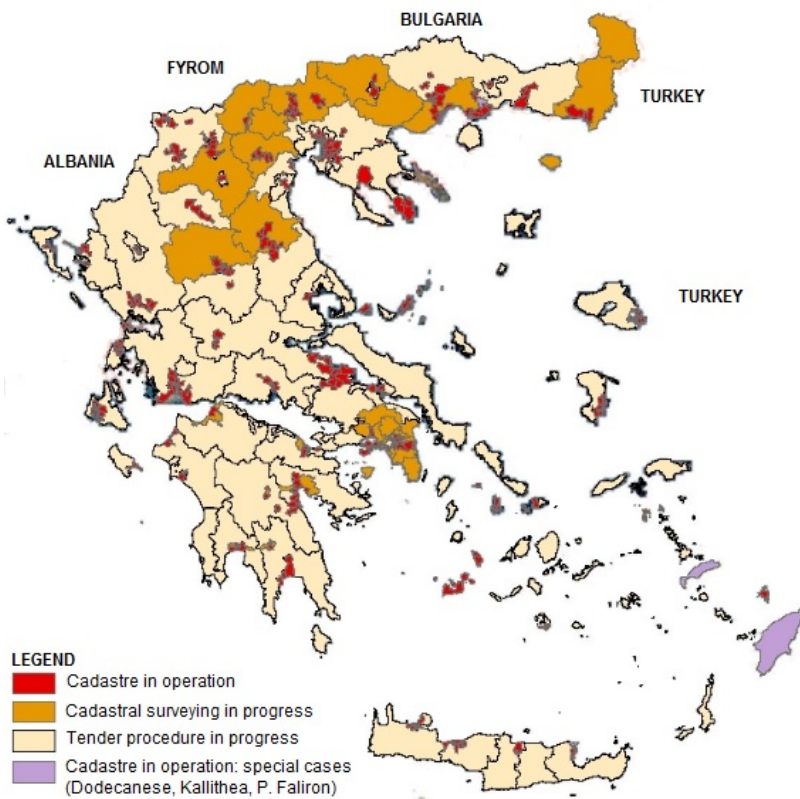
Generations of cadastral surveying projects

- The development of the National Cadaster is an emblematic project for the country, widely advertised as a corner stone institution for its modernization and development
- Launched in 1995
- Four generations of cadastral surveying projects
 - 1st Generation: 1995-1998
 - Pilot A' 1995
 - Pilot B' 1997
 - 1st Main 1998
 - 2nd Generation: 2008
 - 3rd Generation: 2011
 - 4th Generation: 2016
- Expected year of completion: 2020
- Total budget: ~1,4 billion Euros



The Hellenic National Cadaster

Current status



Current status in the development of the Hellenic National Cadaster

- **Cadaster in operation**
 - **Municipalities:** 425 (7%)
 - **Area:** 11.624 (9%)
 - **Rights:** 10.299.259 (26%)

- **Cadastral surveying works in progress**
 - **Municipalities:** 969 (7%)
 - **Area:** 27.825 (21%)
 - **Rights:** 8.001.261 (21%)

- **Cadastral surveying contracts in procurement**
 - **Municipalities:** 4.381(76%)
 - **Area:** 92.493 (70%)
 - **Rights:** 20.716.681 (53%)



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Anticipated benefits



Cadastral map of an indicative urban area

The development and operation of an efficient cadastral system is envisaged to:

- Secure property rights and trigger land market development
- Facilitate land transactions and reduce costs
- Ameliorate the financial burdens of the country
- Improve the efficiency of land resources usage
- Improve the country's governance
- Increase transparency in the operations of the public and private sector
- Boost economic growth
- Diffuse prosperity outcomes
- Help in the protection of environment
- Support sustainable development efforts



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Assessment of socio-economic benefits



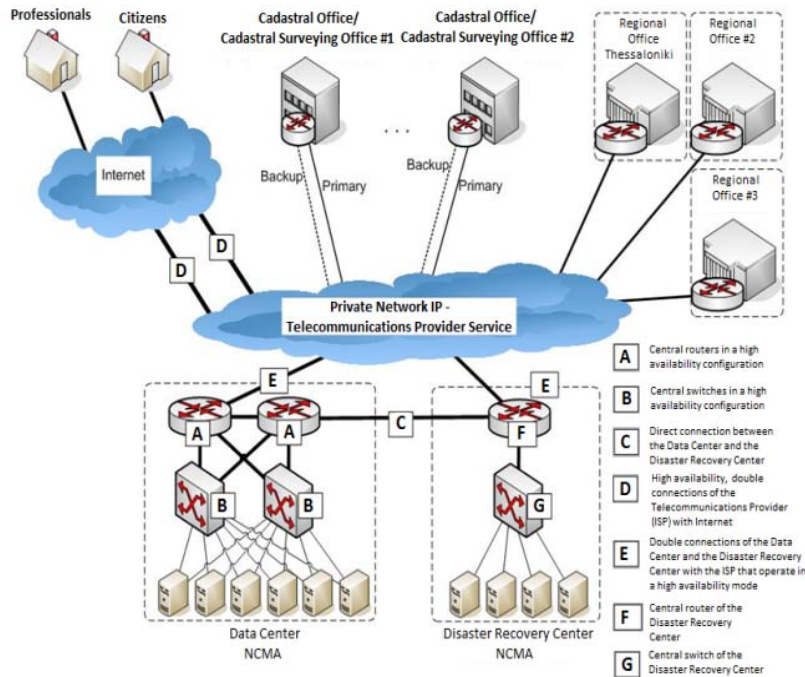
Traditional “title search” in the Office

- A. Reduction in the time required by professionals (lawyers) to carry-out land transactions**
- B. Reduction in the fees (proportional) that citizens or legal entities have to pay in order to register a land transaction**
- C. Increase of the wealth of the Hellenic State by uncovering and developing or exploiting underutilized land assets**



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A) Reduction in professional time required carry-out land transactions



Schematic architecture of the NCMA ICT System

- **Method: Estimation of total resulting benefits using the Gross Value Added (GVA) per employee approach.**
- **Average working days per employee/year: 190**
- **Average working hours per day: 7,50**
- **Total working hours per employee/year: 1.425**
- **Gross value added (Euros/year): ~160 billion**
- **Total number of employees: ~3.530.000**
- **GVA per working hour (Euros /hour): ~32,4**
- **Average time required for a professional lawyer to carry-out a “title search” in the Registry System: 5,06 hours**
- **Average time that would be required for a professional lawyer to carry-out the same “title search” when the cadaster will be in full operation: 2,11 hours**
- **Savings in time: 2,95 hours (58%)**
- **Total number of transactions requiring involvement of a professional (lawyer): ~300.000 / year**
- **Total savings in professional time due to the operation of the cadastral system: ~28.674.000 Euros/year**

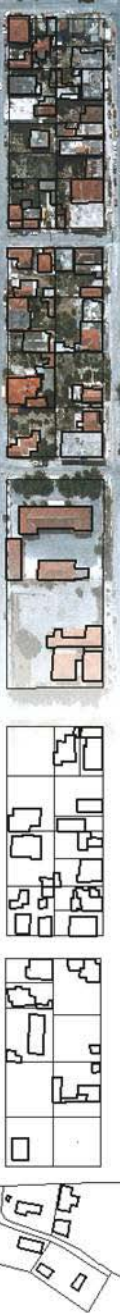


The Hellenic National Cadaster

B) Reduction in the fees required for registration of land transactions



- **Proportional fees for registering land transactions in the Registrations and Mortgages System: 3‰**
- **Proposed proportional fees for registering land transactions in the cadaster: 1,2‰**
- **Estimated total value of private properties that are amenable to proportional fee registrations: ~447 billion Euros**
- **Annual rate of transfers: 3,868%**
- **Average value of properties transferred each year: ~17,3 billion Euros**
- **Estimated total savings due the operation of the cadaster: ~20.745.000 /year**
- **Benefits to be obtained by 2021 and onwards**



The Hellenic National Cadaster

C) Increase of the wealth of the Hellenic State by uncovering unknown land assets



Significant portions of public land (forests, agricultural land etc.) lacks official title

- **Total number of public assets: 70.000**
- **Total area of public assets: 3.446.864.501m²**
- **Estimated value of public assets: €273 billion**
- **Assets of unknown data about location and size: ~20%-22%**
(Source: Public Properties Company)
(<http://www.etasa.gr>)
- **Value of assets of unknown data: ~€62 billion**
- **Exploitation of a fraction of these assets (e.g. 0,1%) per year would have a significant amount of economic benefits: ~ €62 million**
- **Benefits to be obtained after finalization of 1st registrations**



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Other economic benefits (qualitative)



Rural area in Greece that underwent land consolidation

- **Reduce time and cost to implement:**
 - land consolidation projects
 - urban expansion projects
 - Projects involving land expropriation (e.g. roads, highways, motorways etc.)
- **Support land and property taxation**
- **Reduce administrative burdens through the simplification and acceleration of property transfers**



Conclusions



National Cadastre and Mapping Agency: Headquarters

- The development of the Hellenic National Cadaster involves substantial economic benefits
- However, the realization of those benefits entails efforts and political will to release to potential of the system

Acknowledgments and disclaimers

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