

A summary review of the Hellenic Cadastral Project

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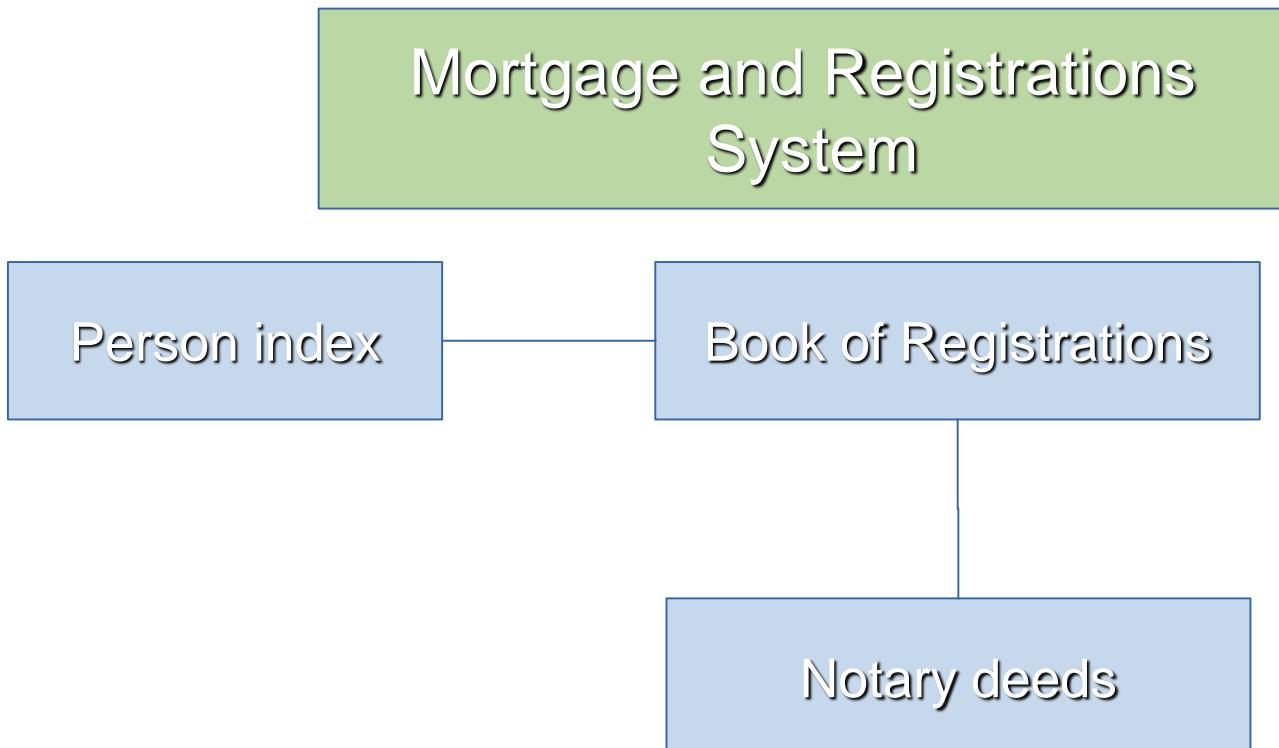
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Background

- Since the early 19th century Greece operates under the system of Registrations and Mortgages, as a paper-based public register of real property owners and the deeds that they have been involved in.



Shortcomings of the system of Registrations and Mortgages

- ensures the publicity of transactions but not legal security
- cannot identify or accurately describe individual real properties (position and boundaries)
- is not complete (e.g. the rights of the State are not registered),
- does not allow the identification of the existing owners of a property



Typical Mortgage Office



Why to develop Cadastre in Greece

The lack of Cadastre results in:

- No security in real estate transactions
- No security in investments in real estate
- No basis for sound:
 - land policy
 - protection of the environment
 - utilization of natural resources
 - real property taxation



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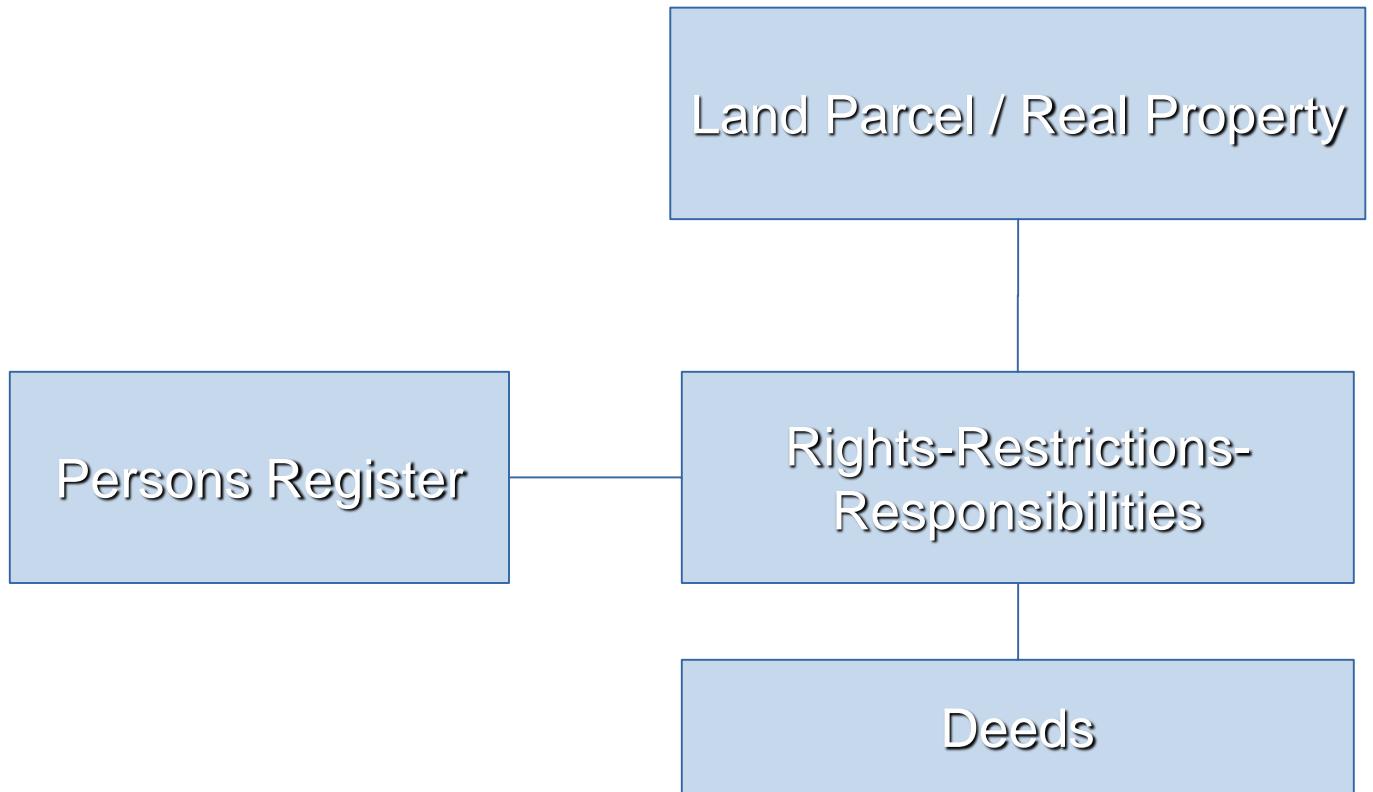


The Hellenic Cadastre

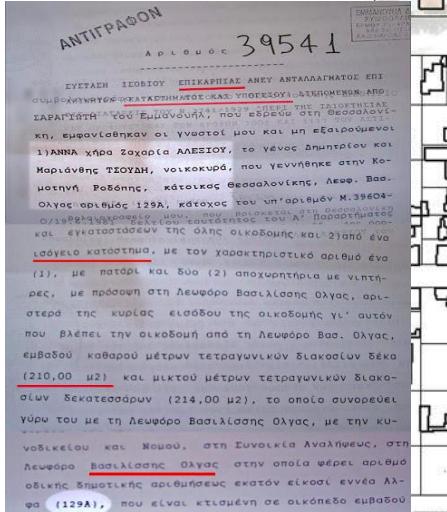
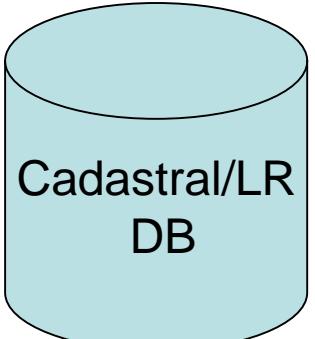
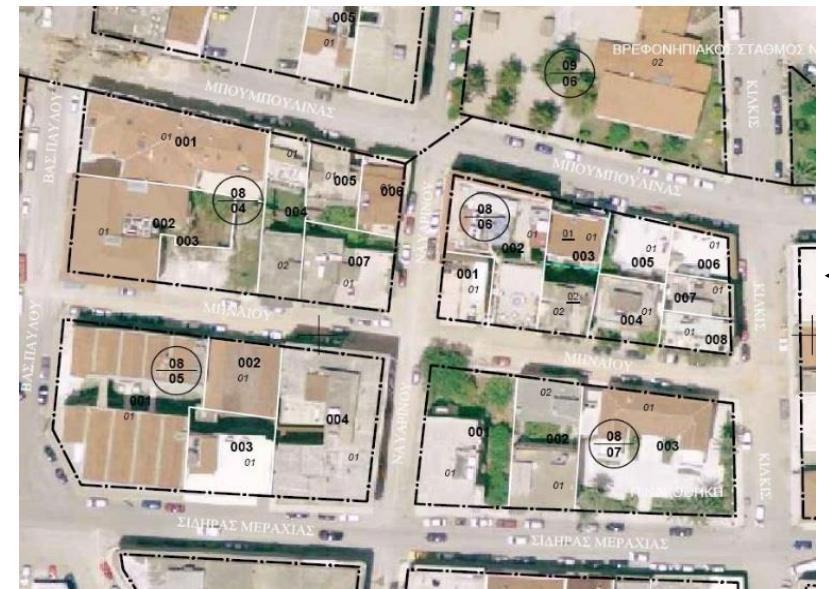
- The Cadastral project was initiated in the mid 1990's by the Ministry of Environment, Physical Planning and Public Works, aiming to replace the existing system of Registrations and Mortgages as a:
 - a uniform and always up-to-date system of registrations, which consist of the geometric description and the ownership status of all the real properties of the Country, overseen and guaranteed by the State.
- The new system combines **Cadastre and Land Registry**.



Cadastral/Land Registry System



The Cadastre/Land Register Database



ΟΡΙΖΟΝΤΙΟΣ ΙΔΙΟΚΤΗΣΙΑ			
ΕΜΒΔΟΜΗ ΤΙΤΛΟΥ:	41.500 τ.μ.	ΟΕΣΗ:	TK 26221
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<p>Οι αρχικές τυπωφές των οποιων δεν αποδεχόται η ακρίβεια μέσα σε αποκλειστική προθεσμία πέντε (5) ετών, εκτός αν πρόσθια για την Ελληνική Δημοκρατία ή μέρους της αποτελείται εξαιρετικά ή τριτοβιβλιούς μόνιμα στο εξωτερικό για τους οποίους η προθεσμία διατηρείται στα συνήθη από δύο (2) ετών, εκτός αν στα τέλη, καθιερώνοται οριστικές και περίσυνης αύξησης τεκμηρίου υπέρ των φερεύοντων ως δικαιούχων για τα δικαιώματα στα οποία ανήκει σφετερικά. Οι διατάξεις των άρθρων 235 έως και 270 ΑΚ εφαρμόζονται αναλόγως και για την αντιτίτιμη προθεσμία (άρθ. 6 & 7 του Ν.2664/98):</p> <p>Ημερομηνία έναρξης υπολογισμού της προθεσμίας του άρθ. 6 του Ν.2664/98:</p> <p>ΚΥΡΙΟΤΗΤΑ</p> <p>ΠΛΗΡΗΣ</p> <p>ΚΥΡΙΟΣ (ΠΟΣΟΣΤΟ:51.100)</p> <p>Ονοματεπώνυμο-Φωνος Προσώπου: ΔΗΜΗΤΡΑΚΟΠΟΥΛΟΣ ΓΕΩΡΓΙΟΣ ΔΗΜΗΤΡΑΚΟΠΟΥΛΟΣ ΑΝΔΡΕΑΣ</p> <p>Ονοματεπώνυμο Πατέρα: ΜΠΟΥΡΙΝΑ ΒΑΣΙΛΙΩΣ</p> <p>Ονοματεπώνυμο Μήτρας: 25/11/1941 ΚΩΝΣΤΑΝΤΙΝΟΠΟΥΛΟΣ Σ. ΤΚ: 26441 ΠΑΤΡΑ, Νομός: ΑΧΑΙΑΣ Α.Φ.Μ. 0177113620</p> <p>Ημερομηνία & Τόπος Γεννησης: 24/10/1989 Α.Τ. ΠΑΤΡΩΝ Π.131659</p> <p>Διεύθυνση:</p> <p>Α.Δ.Τ.: ΣΤΟΙΧΕΙΑ ΤΙΤΛΟΥ/-ΩΝ</p> <p>ΣΥΜΒΟΛΑΙΟΓΡΑΦΟ ΕΠΤΡΑΦΟ</p> <p>Αριθμ. & Ημερομ.: 23099, 22/04/1988, ΣΥΜΒΟΛΑΙΟΓΡΑΦΟΣ ΦΑΛΣΙΣΤΑ ΑΝΑΓΝΩΣΤΙΚΟΥ ΦΑΝΗ ΕΛΛΑΣΑ, ΠΑΤΡΑ Τοπος: 1594 Αριθμ.: 302971 Ημερ. Μαρτυρησης: 25/04/1988</p> <p>Υπόγραφος οποίου ΠΑΤΡΑΣ: ΠΩΛΗΣΗ Από/αντα Κτήματος:</p>			

Procedure for developing Cadastre in Greece

- The contractor develops a preliminary cadastral map based on orthophotos, administrative acts and information collected on site.
- Beneficiaries are invited to declare their real property in the area, submitting their legal documents and verifying (or modifying) the position and the boundaries of their property.
- The contractor processes in cross-reference the declarations, the deeds, the geometric characteristics on the deeds, the actual property on the ground and information from the mortgage offices in order to develop the preliminary cadastral database (cadastre + land registry combined).
- The preliminary cadastral database is publicly presented and people are invited to inspect and request corrections if needed.
- Objections on the ownership are decided by an external independent administrative committee presided by a judge.



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Our Company

- **Hellenic National Cadastre and Mapping Agency S.A.** (former Ktimatologio S.A.) is a Legal Entity of Private Law and its mission is the study, development and operation of the Hellenic Cadastre.
- The sole shareholder of the company is the Ministry of Environment and Energy.
- Staff: ~370

<http://www.ktimatologio.gr/ktima/EN/index.php>



Role of NCMA S.A. - 1

Development of the Cadastre

- Drafting Technical Specifications and Tender documents
- Procuring tenders
- Contract supervision, quality control and acceptance testing
- Development of web services to formalize the work of contractors, allow citizens to declare through the internet
- Collect and manage the fees that are paid by the owners

Role of NCMA S.A. - 2

Operation of the Cadastre

- Development and maintenance of the Cadastral Information System (spatial and descriptive data)
- Establishment of cadastral offices (including when needed offices, hardware, software, staffing)
- Updating of the cadastral maps
- Provide technical and legal support to the Head and the staff of the Cadastral Offices
- Provide technical and legal support to the professionals and citizens
- Collect and manage the fees that are paid through real property transfers



Role of NCMA S.A. - 3

Forest maps

- *Delineation of forested areas on orthophotos of 1945 and recent with photointerpretation augmented by ground survey and verification, digitisation of all administrative acts regarding the characterization of an area as a forest. A forested area by default belongs to the State unless it can be proven otherwise.*
- Drafting tender documents
- Procuring tenders
- Contract supervision, quality control and acceptance testing
- Development of web services for the citizens
- Collect and manage the fees that are paid by the owners



Other infrastructure projects

- Production of orthophotomaps
- Geodetic services
- Development of web tools for the use of KT basemaps from the Public Administration
- Manage projects for other State agencies (Natura delineation)

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First generation of Cadastral projects

- The first generation of the cadastral projects covered ~340 municipalities throughout the Country, but these projects were completed with considerable delays and budget overruns.
- Main reasons:
 - Lack of experience,
 - unclear scope,
 - insufficient planning.
- These projects were included in the O.P. “Environment” of CSFII, but due to the delays and the budget overruns, the Commission decided to revoke its contribution.



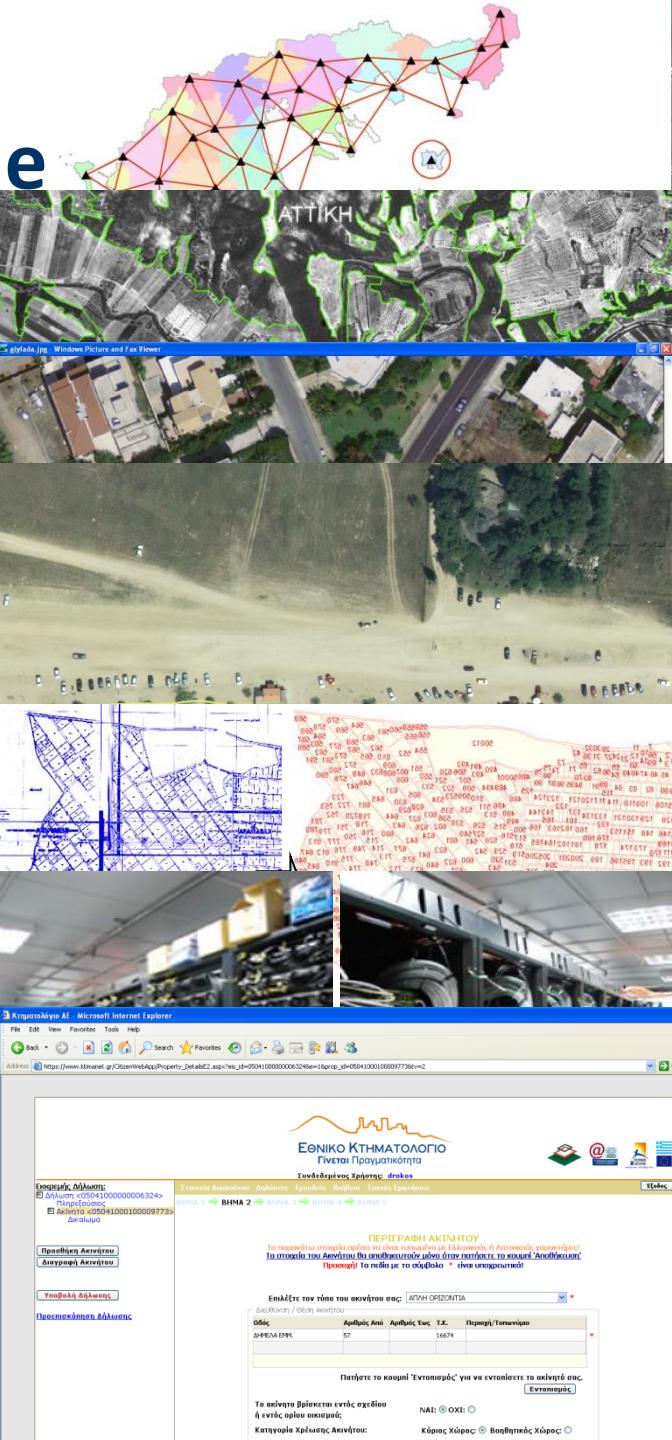
CSFIII Major Project “Data and IT Infrastructure for a modern Cadastre”

- Change in the management of the Project (following an 80 million euro Major Project co-financed by the E.C):
 - Achieve economies of scale
 - Ensure optimum contract management
 - Ensure maximum cost savings due to the use of advanced technology.
 - Focus on quality control and quality assurance
 - Ensure optimum use of existing data



Major Project outline

- A data and IT infrastructure for developing a modern Cadastre in Greece:
 - The Hellenic Positioning System (HEPOS)
 - Forest delineation
 - National coverage of orthoimagery
 - Coastal zone delineation
 - Digitization of land consolidation and land redistribution acts
 - IT infrastructure and web services for cadastral surveys



Achievements following the implementation of the CSFIII Major Project

- Since 2008, the Cadastral projects capitalize on these elements:
 - Improved quality (objections against cadastral registrations <3% vs >20% in the past)
 - Effective management of the contracts' time schedule
 - Implementation of projects without budget overruns
 - Considerable reduction of the average unit cost (€ /right)

1996	2008	2011	2013
53	33	30	29 (budget before discounts)



Achievements following the implementation of the CSFIII Major Project -2

- Except providing services to the contractors and citizens during the cadastral survey and the information system that maintains the cadastral database during the operation of the cadastre, KT utilizes its powerful IT infrastructure to provide:
- Free imagery to all citizens through its website (<http://gis.ktimanet.gr/wms/ktbasemap/default.aspx>),
- Web-services to more than 500 public agencies to date for using KT's orthophotos
- Specialized web-services for the development of new applications from agencies such as:
 - The registration of unauthorized constructions
 - The management of the real property of municipalities



4 generations of cadastral projects

Programs	Type of area	Period	Area (km ²)	Rights
1 st generation (pilot)	Scattered areas around the Country	1996-2005	8.700	6.600.000
2 nd generation	Urban centers	2008-2015	3.500	7.300.000
3 rd generation	Rural and peri-urban areas	2012-2018	33.900	6.700.000
4 th generation	Remaining parts of the Country	2016-2020	83.500	16.000.000
Special areas	Dodecanese cadastre		1.800	800.000
TOTALS			~131.400	~37.400



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Summary progress report of the Cadastral Project

With respect to the existing real property rights (~37.000.000):

- 25,3% has been completed
- 18,2% cadastral survey projects under development
- 4,1% the first part of the cadastral procedure has been implemented, but the second part will be performed in the context of a new contract which is not awarded yet
- 50,3% cadastral surveys tendered await contract awarding
- 2,1 % cadastre operates based on an old legal framework which needs to be migrated to the new system.



Map of the Cadastral Programs

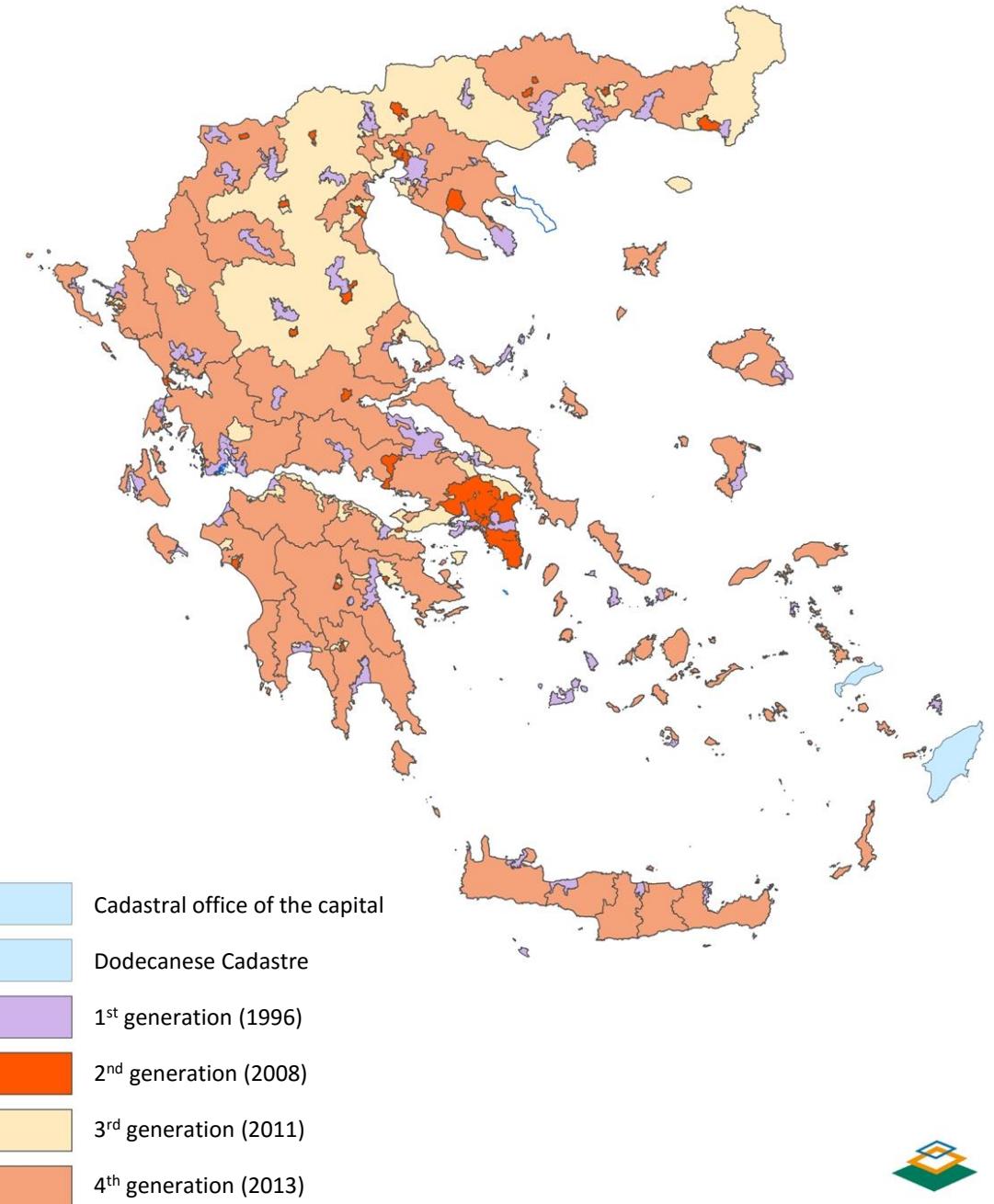


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Next steps - Pending issues

- Securement of funding for the completion of the cadastral survey of Greece
- Recovery of sufficient administrative and financial independence of NCMA S.A.
- Securement of funding for the completion of the forest maps of Greece
- Definite structure and operation of the cadastre



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Conclusions

- The Greek Cadastral project is one of the most important reforms undertaken by the Greek State.
- It brings to the surface many of the problems that resulted from the lack of sound and consistent land governance for over a hundred years.
- It needs a clear vision and strategy that will lead the project successfully to its completion.
- As described above, the major problems that hinder the progress are institutional rather than technical.
- The Hellenic National Cadastre and Mapping Agency has the experience, know-how and proposals to complete the project.
- What must be realized is that the cadastre is a complex mega-project and it must be treated as such.



Thank you very much for your attention!