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Article

Cadastre-Land Registry coordination in Spain: application of Law 13/2015 and its effects

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Abstract: Ever since the Cadastre and Land Registry have existed in Spain, they have been completely separate organisations with very different objectives, which influence the real-estate reality. Their coordination is essential to better identify buildings and to more suitably render services to citizens and Administrations. To this end, Law 13/2015 was passed in 2015 for this desirable and pressing Cadastre-Land Registry coordination to come about. This law came into force on 1 November 2015, and coincided with the development of the technical aspects of the graphical information exchange among the Cadastre, Land Registries and Notaries. Several ministries and different organisations, like the Cadastre personnel, jurists, technicians, and even citizens, are implied in this law. Among the technical aspects, georeferenced graphical representations and GML exchange files adapted to the European INSPIRE directives stand out. Such technical aspects are a genuine revolution as they were transferred to the legal world. After more than 2 years after its application, it is still in its initial and adaptation stages because it is a long-standing law that allows land registry units-cadastral parcels to be coordinated while they are incorporated into real-estate trade.

Keywords: cadastre; land registry; notary; cartography; geomatic; coordination; GML; land surveyors

1. Introduction and background: Law 13/2015

Ever since the Cadastre and Land Registry have existed in Spain, they have been completely separate organisations with very different objectives: the Cadastre with its graphic base with a basically fiscal objective; the Land Registry as a voluntary registry of rights to real-estate properties, which initially lacked a graphic base. As their coordination was necessary and essential, after 3 years of debate the Government passed and published Law 13/20151 in June 2015, which allows coordination between them both. Law 13/2015 is in charge of amending the Land Registry Law and also the Law on the Real-estate Cadastre.

- Cadastre

The General Directorate for Cadastre (GDC[2]) manages 7,604 Spanish municipalities of a total 8,124 throughout Spain (except for the northern Spanish regions of the Basque Country and Navarre as they have an independent, but similar, system to that used by the rest of Spain). These municipalities have 80 million urban and rural properties with special characteristics. By means of cartography, it continues to cover the whole national territory, and also comes in a digital format. Since 2006, this information can be freely obtained through the Cadastral Electronic Office (CEO[3]).

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Thanks to the CEO services that require authentication, any citizen can download vector cartography as shp and/or dxf. The CEO received 77 million visits in 2017.

Descriptive and Graphic Cadastral Certificates (DGCC) are documents that accredit the physical, legal and economic data of the real-estate properties registered with the real-estate Cadastre, along with their graphic representations. According to cadastral regulations, these certificates must be included in all the documents authorised by Notaries which contain legal facts, actions or businesses that lead to modifications in the real-estate cadastre (changes in ownership, fiscal amendments to real-estate properties, etc.), and to the Land Registry. Inquiries of unprotected data can be made at the CEO, which can be freely downloaded; users must be accredited or registered to access full information. In 2017 6,940,532 DGCC were downloaded, of which 4.2 million were downloaded by notary publics (3,923,663 notaries and 261,507 registrars). Since Law 13/2015 came into being, the GDC has had to redesign its DGCC.

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GOBIERNO DE ESPAÑA · MINISTERIO DE HACIENDA Y FUNCIÓN PÚBLICA · SECRETARÍA DE ESTADO DE HACIENDA · DIRECCIÓN GENERAL DEL CATASTRO

CERTIFICACIÓN CATASTRAL DESCRIPTIVA Y GRÁFICA

Referencia catastral: 05047A012000370000WL

DATOS DESCRIPTIVOS DEL INMUEBLE

Localización: ER EXTRARRADIO Polígono 12 Parcela 37 CARDENILLO. 05480 CANDELEDA [ÁVILA]

Clase: Rústico
Uso principal: Agrario

Valor catastral [2017]: [redacted] €
Valor catastral suelo: [redacted] €
Valor catastral construcción: [redacted] €

Titularidad

Apellidos Nombre / Razón social	NIF/NIE	Derecho	Domicilio fiscal
[redacted]	[redacted]	100,00% de usufructo	28029 MADRID [MADRID]
[redacted]	[redacted]	100,00% de nuda prop.	28803 ALCALA DE HENARES [MADRID]

Cultivo

Subparcela	Cultivo/Aprovechamiento	Superficie m²	Subparcela	Cultivo/Aprovechamiento	Superficie m²
0	PR Prado o Praderas de regadío	3.499			

PARCELA CATASTRAL

Superficie gráfica: 3.550 m2 — Parcela, a efectos catastrales, con inmuebles de distinta clase [urbano y rústico]

COORDINACIÓN GRÁFICA CON EL REGISTRO DE LA PROPIEDAD

Registro: ARENAS DE SAN PEDRO **Código finca registral:** 05001000166739 **Fecha coordinación:** 23/02/2017

Este certificado refleja los datos incorporados a la Base de Datos del Catastro. Solo podrá utilizarse para el ejercicio de las competencias del solicitante.
Solicitante: DIRECCION GENERAL DEL CATASTRO
Finalidad: Revista CT
Fecha de emisión: 29/03/2017

Hoja 1/2

Documento firmado con CSV y sello de la DIRECCIÓN GENERAL DEL CATASTRO (verificable en https://www.sedecatastro.gob.es) | Fecha de firma: 29/03/2017
CSV: [redacted]

(**a**)

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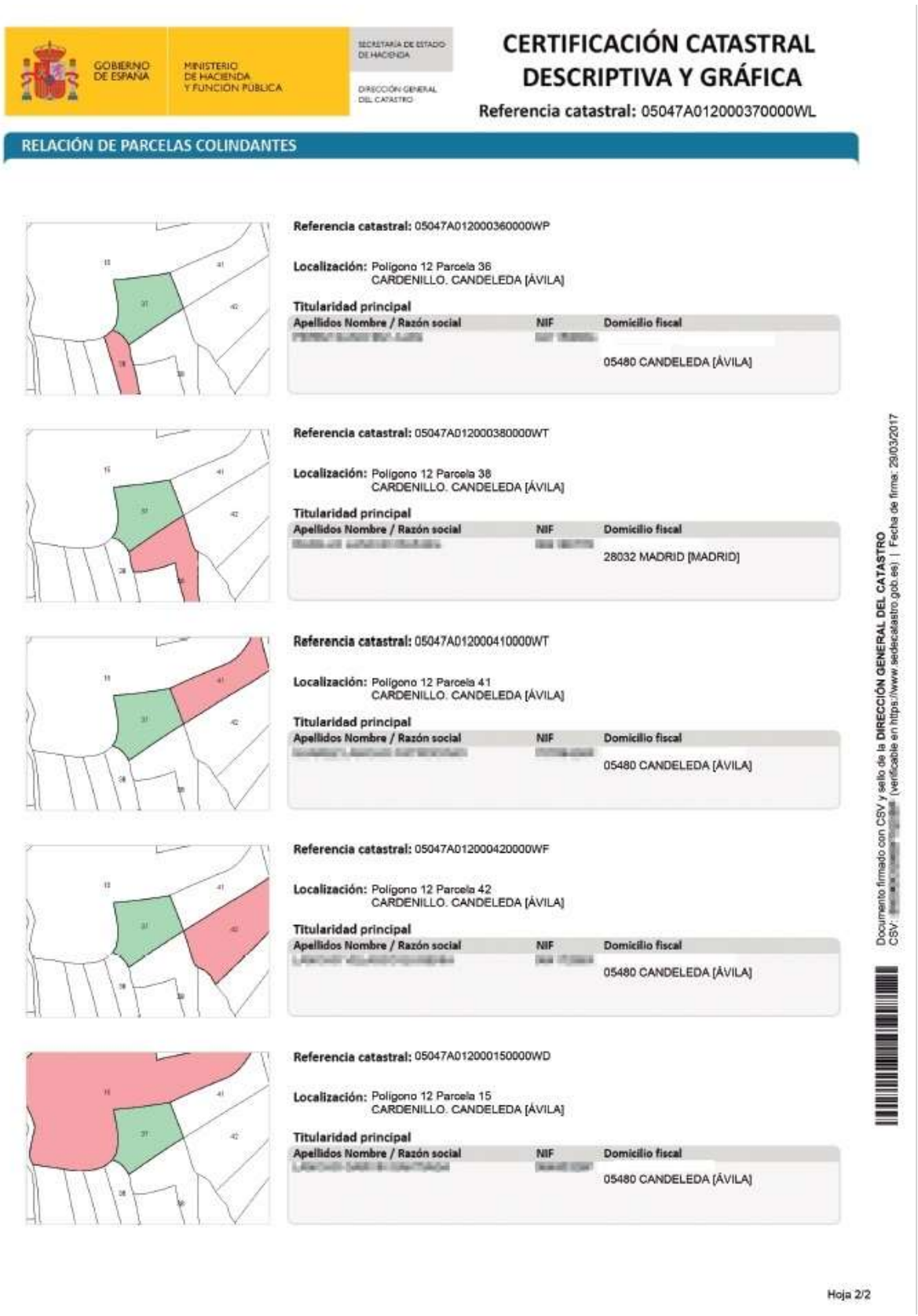

GOBIERNO DE ESPAÑA
MINISTERIO DE HACIENDA Y FUNCIÓN PÚBLICA
SECRETARÍA DE ESTADO DE HACIENDA
DIRECCIÓN GENERAL DEL CATASTRO

CERTIFICACIÓN CATASTRAL DESCRIPTIVA Y GRÁFICA

Referencia catastral: 05047A012000370000WL

RELACIÓN DE PARCELAS COLINDANTES

Referencia catastral: 05047A012000360000WP

Localización: Polígono 12 Parcela 36
CARDENILLO. CANDELEDA [ÁVILA]

Titularidad principal

Apellidos Nombre / Razón social	NIF	Domicilio fiscal
[redacted]	[redacted]	05480 CANDELEDA [ÁVILA]

Referencia catastral: 05047A012000380000WT

Localización: Polígono 12 Parcela 38
CARDENILLO. CANDELEDA [ÁVILA]

Titularidad principal

Apellidos Nombre / Razón social	NIF	Domicilio fiscal
[redacted]	[redacted]	28032 MADRID [MADRID]

Referencia catastral: 05047A012000410000WT

Localización: Polígono 12 Parcela 41
CARDENILLO. CANDELEDA [ÁVILA]

Titularidad principal

Apellidos Nombre / Razón social	NIF	Domicilio fiscal
[redacted]	[redacted]	05480 CANDELEDA [ÁVILA]

Referencia catastral: 05047A012000420000WF

Localización: Polígono 12 Parcela 42
CARDENILLO. CANDELEDA [ÁVILA]

Titularidad principal

Apellidos Nombre / Razón social	NIF	Domicilio fiscal
[redacted]	[redacted]	05480 CANDELEDA [ÁVILA]

Referencia catastral: 05047A012000150000WD

Localización: Polígono 12 Parcela 15
CARDENILLO. CANDELEDA [ÁVILA]

Titularidad principal

Apellidos Nombre / Razón social	NIF	Domicilio fiscal
[redacted]	[redacted]	05480 CANDELEDA [ÁVILA]

Documento firmado con CSV y sello de la DIRECCIÓN GENERAL DEL CATASTRO (verificable en https://www.sedecatastro.gob.es) | Fecha de firma: 29/03/2017
CSV: [redacted]

Hoja 2/2

(**b**)

Figure 1. A Descriptive and Graphic Cadastral Certificate (DGCC) of a coordinated land registry unit, according to the new design of 11/11/2016. (**a**) Main page, sheet 1/2; (**b**) The rest, sheet 2/2. Source: GDC

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- Land Registry and Notary

Registrars and notaries belong to the General Directorate for Registries and Notaries (GDRN[4]) which is answerable to the Ministry of Justice. They are included in professional groups. Registrars in Spain are grouped in the Property Rights and Commerce Registrars Public Corporation (CORPME[5]), with 1,058 geographically delimited Land Registries (February 2018). Rights are registered in Spanish Land Registries. For notaries, different professional corporations exist for regions that are, in turn, grouped through the General Notaries Council (GNC[6]).

At the end of the 1990s, Registries realised the importance of having a graphic base to define the land registry units that they registered. Therefore, they signed an agreement with the GDC to use cadastral cartography as a reference in exchange for its digitalisation which, at the same time, led to its own computer application being designed to manage its graphic registry base, known as the Geobase programme. There are different versions of this programme and, depending on Registries, it is applied at several levels, although some did not even have this programme. Nowadays as far as Corporations are concerned, only one application (Geobase 4) exists, which must be used by all Registries.

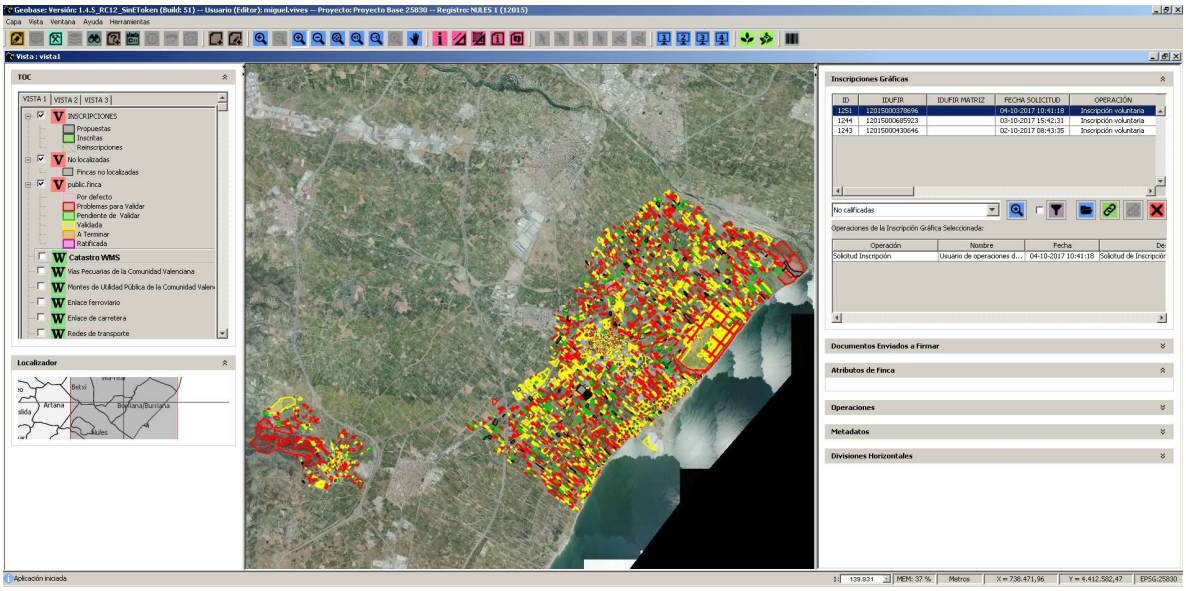

Figure 2. Programme Geobase 4. Source: Land Registry Nules 1, Castellón, east Spain

1.1. Motivation and the fundamental objectives of Law 13/2015

As the preamble of Law 13/2015 states, the reasons which have led to this law being passed, and the pursued objectives, are:

The intention is to *"…write a report with the measurement proposals which will provide the Administration with size, efficiency and flexibility that citizens and the country's economy demand.*

The Land Registry and the Real-Estate Cadastre are quite different institutions with distinct competences which, notwithstanding, cover the same area: the real-estate reality. Coordinating the information that both institutions hold is essential to better identify buildings and to better render services to citizens and Administrations.

This requirement has long-since been pending and many attempts have been made to fulfil it. However, it was not until Law 13/1996, of 30 December, on tax, administrative and social order measures, was published before the first pillars for effective coordination were set when the cadastral reference was introduced as an element to identify and exchange information, and to incorporate cadastral and graphic certification as a vital requirement of land registry units in the Land Registry.

Since then, the Land Registry forwards relevant data to the Cadastre. However, no connection currently exists that allows any two-way information exchange that permits the necessary coordination between both institutions to actually materialise. Given the voluntary nature of records, some assumed cases exist in which registry operations or cadastral amendments can be made without such communication existing, or there are

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other reasons why diverging situations may arise. Nor does a coordination procedure exist to help solve any discrepancies in the description of real-estate properties that may arise between the Land Registry and the Cadastre.

Considering all this background and the difficulty of the shared objective being fulfilled with today's procedures, this Law aims to accomplish the desirable and pressing Cadastre-Land Registry coordination using currently available technological elements via a secure and fluent data exchange between both institutions to encourage interoperability between both, provide a suitable legal framework and a better graphical representation of buildings by increasing legal security in real-estate trade, and by simplying administrative procedures.

The first effect of the reform will be to favour coordination between the Cadastre and Land Registry. From both the economic and legal security viewpoints, it is essential for the Land Registry to determine the portion of land on which its effects are projected as exactly as possible. It is essential for the Cadastre to know and reflect in cartography all the registry amendments or alterations that have been made on the physical realities of land registry units due to any fact, business or legal act. Such coordination must be performed by swift procedures but which must also offer sufficient legal guarantees for those possibly affected by them through procedures that avoid any defencelessness situation.

The Law defines when an agreement exists between the land registry unit and cadastral parcel, and when coordination is achieved. It also establishes the ways to make registry and cadastral records of the achieved coordination, and to make this circumstance public."

Law 13/2015 fully came into force on 1 November 2015. The coordination of land registry units with cadastral parcels is a voluntary process, one that owners request as they are included in real-estate trade. Such coordination implies a legal guarantee in the land registry unit's physical delimitation, and the Land Registry's principles cover the graphical representation of the coordinated land registry unit.

As land registry units are registered in the Land Register, they are coordinated with the cadastral parcel. Cadastral cartography is official and is, therefore, that which must be taken as the basis for coordination. Nonetheless, the Land Registry can use an auxiliary programme to manage its registry graphic base, which must be made official by the five Spanish Ministries (Justice, Treasury and Public Administrations; Public Works: Defence: Agriculture, Food and the Natural Environment) involved in this process (Geobase 4 programme)[7].

After Law 13/2015 came into force, several joint interventions have taken place in conferences and international events of the GDC and CORPME [8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20].

One of the most important points that this Law has conferred is the obligation, in certain assumed cases, of incorporating a Georeferenced Graphical Representation (GGR) to the Land Register's initially literal information. In all other cases, incorporating a GGR and subsequent coordination is optional. These compulsory assumed cases take place, as the Law sets out,[21]: *"Whenever a land registry unit is registered, or when certain operations are done (e.g., parcelling, reparcelling, parcel concentration, segregation, division, grouping or aggregation, compulsory purchase orders or rectification of boundaries) that determine territorial reorganisation, the goereferenced representation of a land registry unit that completes its literary description and, if duly accredited, the georeferenced coordinates of its survey points will be recorded."*

2. Technical information exchange among the Cadastre, Land Register and Notaries[22]

A few days before Law 13/2015 came into force, two joint rulings were published which settled and stated the technical aspects of the information exchange to take place among the GDC (Cadastre), CORPME (registrars) and GNC (notaries). This is a fundamental aspect given the obligation to present a graphic representation for certain compulsory assumed cases, which must also be georeferenced in the Spanish official coordenates system (the ETRS89 reference system, REGCAN, and UTM coordenates). The whole cadastral cartography is included in an official reference system (ETSR89 and REGCAN, on the Canary Islands). Since 2015, this system is unique for any official cartography. During the 2007-2014 period, this system has co-existed with ED50[23].

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The GML (Geography Markup Language), adapted to the European INSPIRE directives (now in its version 4), was designed as an exchange file to be delivered to the GDC for both output exchange from the Cadastre and alterations input. To this end, the graphical information sent by Land Registers and Notaries must meet this format.

Basically, two GGR cases can be presented depending on whether the cadastral cartography is right or not:

- Those for which the physical real-estate reality presumably coincides with the land registry unit's description in the Land Register, and with the graphical representation of the cadastral parcel in the Cadastre. In this case we can state that a GGR exists. The employed GML are generated by the Cadastre, and accompany DGCC as attachments to pdf files; i.e., these are cases in which the cadastral cartography does not need amending because it correctly reflects the reality.

We also indicate that a GGR exists when the physical real-estate reality coincides with the cadastral parcel's graphic representation, but not with the registered land unit's description in the Land Registry. With a GGR (which is the cadastral graphical representation), the land registry unit's physical description must be amended to adapt it to the cadastral description.

Technicians barely intervene in such cases as they are the simplest assumed cases since they entail making no changes to the already existing cadastral graphical representation.

- When the physical real-estate reality or the Land Registry unit's description, despite them being correct, do not coincide with the cadastral cartography because it is mistaken; or because they present some assumed cases contemplated by the law, which involves territorial reorganisation. Here we can state that an Alternative Georeferenced Graphical (AGG) Representation exists; these assumed cases are the most complex ones as they involve amendments made to the cadastral graphic base, in which changes from +- 1 cm can be detected. The implication of a technician is essential in such cases. GML files are normally created by *"competent technicians"*, although the Law does not specify any given qualification since Spain has no technician with competences that are exclusive to property delimitation aspects. Moreover, no exclusiveness for any group exists when devising GML.

In the first few months, many computer applications were developed to automatically obtain GML files for the AGG adapted to the new regulation in both free and owned software[24]. Different technical groups sought a quick adaptation to legal technical changes, where the work by the Spanish Official Corporation of Engineering in Geomatics and Land Surveying (COIGT) stood out.

A computer system was designed for the previous technical validation of the files to be delivered to the Cadastre in AGG cases. This validation system allows Graphic Validation Reports (GVR) to be obtained, which subsequently permit the cadastral cartography updating process to be automated. The Law sets a maximum 5-day period for land registry unit-cadastral parcel coordination. The intention here is to clearly define the Cadastre's object. A positive GVR ensures that all the legal procedures in Notaries and/or Registies refer to the geometries of the registered land units that are technically correct for the Cadastre. A previous check is done to avoid problems arising later.

GML files are validated by the CEO with previous authentication, and both positive and negative IVG are saved in its database until they are legally authorised by notary public. Such information is stored by a 16-digit Secure Verification Code (SVC), in the same way as DGCC, which allows any cadastral document to be uniquely identified.

The land registry units-cadastral parcel coordination through GGR has been operating correctly now for a few months. The first AGG are still scarce because they are limited only to pilot zones being tested because the work being done to develop the Notaries and Land Registries applications is about to finish.

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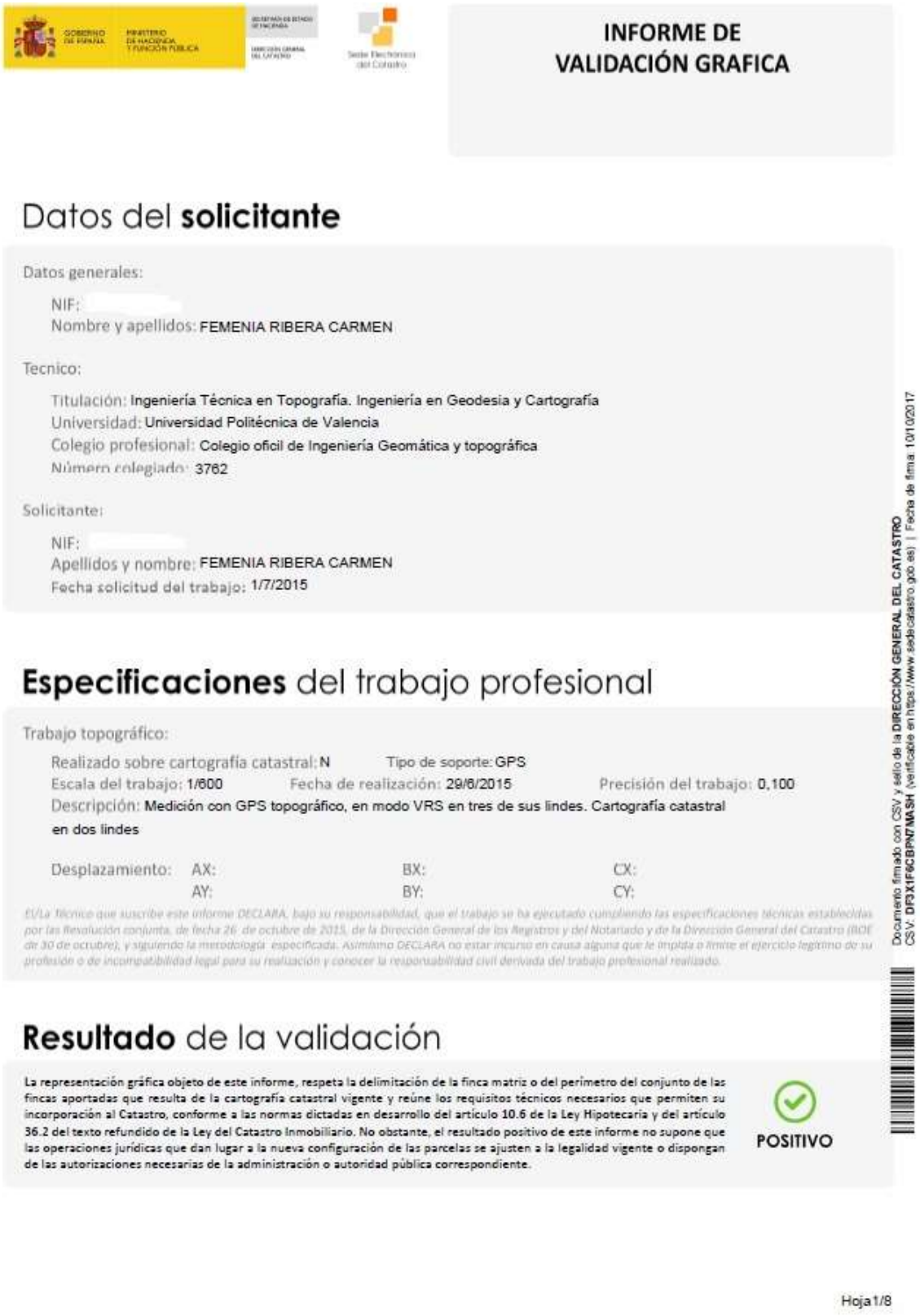

INFORME DE VALIDACIÓN GRAFICA

Datos del **solicitante**

Datos generales:

NIF:
Nombre y apellidos: FEMENIA RIBERA CARMEN

Tecnico:

Titulación: Ingeniería Técnica en Topografía. Ingeniería en Geodesia y Cartografía
Universidad: Universidad Politécnica de Valencia
Colegio profesional: Colegio oficil de Ingeniería Geomática y topográfica
Número colegiado: 3762

Solicitante:

NIF:
Apellidos y nombre: FEMENIA RIBERA CARMEN
Fecha solicitud del trabajo: 1/7/2015

Especificaciones del trabajo profesional

Trabajo topográfico:

Realizado sobre cartografía catastral: N Tipo de soporte: GPS
Escala del trabajo: 1/600 Fecha de realización: 29/6/2015 Precisión del trabajo: 0,100
Descripción: Medición con GPS topográfico, en modo VRS en tres de sus lindes. Cartografía catastral en dos lindes

Desplazamiento: AX: BX: CX:
AY: BY: CY:

El/La Técnico que suscribe este informe DECLARA, bajo su responsabilidad, que el trabajo se ha ejecutado cumpliendo las especificaciones técnicas establecidas por las Resolución conjunta, de fecha 26 de octubre de 2015, de la Dirección General de los Registros y del Notariado y de la Dirección General del Catastro (BOE de 30 de octubre), y siguiendo la metodología especificada. Asimismo DECLARA no estar incurso en causa alguna que le impida o limite el ejercicio legítimo de su profesión o de incompatibilidad legal para su realización y conocer la responsabilidad civil derivada del trabajo profesional realizado.

Resultado de la validación

La representación gráfica objeto de este informe, respeta la delimitación de la finca matriz o del perímetro del conjunto de las fincas aportadas que resulta de la cartografía catastral vigente y reúne los requisitos técnicos necesarios que permiten su incorporación al Catastro, conforme a las normas dictadas en desarrollo del artículo 10.6 de la Ley Hipotecaria y del artículo 36.2 del texto refundido de la Ley del Catastro Inmobiliario. No obstante, el resultado positivo de este informe no supone que las operaciones jurídicas que dan lugar a la nueva configuración de las parcelas se ajusten a la legalidad vigente o dispongan de las autorizaciones necesarias de la administración o autoridad pública correspondiente.

POSITIVO

Documento firmado con CSV y sello de la DIRECCIÓN GENERAL DEL CATASTRO
CSV: DF5X1F6CBPN7MASH (verificable en https://www.sedecatastro.gob.es) | Fecha de firma: 10/10/2017

Hoja 1/8

Figure 3. Cover of a positive Graphic Validation Report (GVR). Source: GDC, with its own topographical work validated through the CEO on 10/10/2017.

3. Effects of the law

Several Spanish Ministries are involved in this Law, such as the Treasury and Public Administrations and the Ministry of Justice, along with several Cadastre agencies, jurists (registrars, notaries, lawyers, etc.), technicians and citizens. Technical aspects include georeferencing and GML

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exchange files, which proved to be a genuine revolution when such technical elements were transferred to the legal world. Jurists have to learn technical concepts and technicians must learn legal concepts. This Law implies changes in many organisations and groups. It also entails changes in citizen awareness about the former idea held about cadastral information. Two years after it was applied, it is still in its initial and adaptation stages because it is a long-standing law that allows land registry units-cadastral parcels to be coordinated while they are incorporated into real-estate trade. It depends on the market and on coordination requests.

Procedures comply with the main legal guarantees to confer security to the graphical information about the delimitation of coordinated land registry units. This system has not been available in Spain until now. To a great extent, its operation depends on citizens understanding the system, knowing what it involves and using it properly.

The effects of this Law also extend to the Local Administration at a time when it is obliged to revise procedures, and it is also obliged to send all urban planning information to Registries.

Improvements to preventive legal security for real-estate trade in Spain have not only arrived with Law 13/2015, but has been extended to other related laws because Land Registries must also monitor the protection of public property. According to Article 9 of the Land Registry Law: *"Contributed graphic representations will be incorporated into the land registry unit's real document, provided that the Registrar has no doubts about the correspondence between this representation and the registered land registry unit, by evaluating this lack of coincidence, be it partial, with another previously incorporated graphical representation, and any possible public property encroachment."* Article 199 reads: *"The Registrar will refuse registering the land registry unit's graphical identification if it coincides completely or partly with another registered graphic basis or with public property. This circumstance shall be communicated to the Administration that corresponds to the affected building."*

For this reason changes have also been made and affect the Law on Vontunary Jurisdiction for the demarcation of properties not registered with the Registry[25], [26]; or the Law on Natural Heritage and Biodiversity[27], [28]; the Law on Roadways; the Law on the Railway Sector; the Law on Mountains, etc. Although these are minor changes, they are most significant as they indicate mainly the incorporation of any geographic information related with urban planning, environmental or administrative matters into the Registry. Article 1 of the Land Registry Law states that: a) *"When expressed as being accredited, the corresponding urban, environmental or administrative rating will be noted in the margin, along with the date to which it refers" b) "…by also preventing public property encroachment, and inquiries about the property limitations that can derive from classification and from the urban, environmental or administrative rating."*

4. Spanish Geomatics and Land Survey Engineers and applying the Law

Technical Land Survey Engineers, and today's Geomatics and Land Survey Engineers, have been grouped since 1965 as a professional group in COIGT,[29] which has some 4,300 members from all over Spain who work on different geomatics aspects, of which many are done while freely exercising their profession as regards cadastral and property delimitation aspects.

As expert technicians in historical and technical delimitation matters, the COIGT was aware that this Law was necessary, and it presented amendments to it when it first came into being by following its whole course and its advances until the present-day. Ever since it came into force and was published, several lines of action were set up, which continue today, to improve the technician's role to support this Law actually being applied, such as:

- Own and joint events and continuous training courses, and conferences related to it, with legal organisations, registrars and notaries
- Publications in specialised technical and legal journals
- Computer developments to obtain the GML files adapted to new regulations[30]
- Designing the property's georeferencing report according to new regulations[31]
- Making contact with directly involved organisations, such as GDC, CORPME and GNC to set up the Law, and for the possible connection with different computer applications

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- Designing the outline for certifying Expert Technicians in Cadastre, Real-Estate Property and Evaluations according to Standard ISO 17024 on certifying persons,[32] through the Spanish Institute of Graduates in Engineering and Technical Engineers (INGITE[33]), which is an organisation accredited by the Spanish National Accreditation Agency (ENAC).
- Creating and designing the National Land Surveying Archive of Boundaries (ATNL[30]) to manage the geographical information and property delimitation metadata obtained by COIGT technicians, which resulted from the research in Professor Mora-Navarro's doctoral thesis[34], [35]. The intention is for this information to help improve coordination as these data are not currently stored in either the Cadastre or the Land Registry.

5. Results and Conclusions

- Currently it is possible to count coordinated registered land units in real time (111,418 on 21 February 2018; 12:39h, Spanish time) from the Cadastre website; in this case, only those where the cadastral cartography is not amended (GGR) are referred to
- In the present-day, GVR operate, but the first AGG to be automatically processed are not numerous as they are limited to pilot test areas. Adaptation to the computer developments of notary and registry applications is lacking. In short, major advances are expected
- Improving the quality of real-estate data by the coordination between the Cadastre and the Land Registry is included as a commitment in the recently published III Action Plan of Spain 2017-2019 of the Alliance for an Open Government[36]
- As the cadastral cartography is official and as is, therefore, the graphic basis of coordination, the GDC has envisioned the need to improve the graphic quality of its information. Thus it has set up a plan to improve it by creating a specific cartography area to solve any related conflicts, such as: tolerances between graphic and alphanumerical surfaces; cases that involve displacements in some areas, including the analysis and improvement of position-related accuracy in particular, etc. The possibility of even including geographical metadata, e.g accuracy, was thought in the data model
- After the Law came into force, the first parties to be affected by it, e.g., citizens, technicians, notaries and registrars, had to make many efforts to adapt to it, and then found themselves in very different phases, depending on each case. However, those in the most advanced phases managed to overcome the initial problems with both GML files and GVR in the first few months
- Techicians (mainly from the COIGT) quickly adapted to the system after a few intense months, and are still learning and adapting to changes. Now many are capable of generating the GML of cadastral parcels with positive GVR. They are even beginning to create GML of buildings, which the Law contemplates, to be validated with the new Cadastral Reports about the Location of Buildings (CRLB), designed by the GDC and set up in June 2017
- The COIGT is well aware of the major changes that this Law can contribute, and the COIGT foresees the possible requirements, where expert technicians' certification in these matters or the collection of geographical metadata from works done by technicians through the National Land Surveying Archive of Boundaries, stand out
- The evolution and problems with applying the Law that have taken place in these 2 years have meant that several involved organisations are obliged to continue making improvements to procedures and computer applications, by even extending some assumed cases that were not initially considered
- No jurisprudence exists about the considered problems although the GDRN has published many and different rulings that have clarified and specified many aspects related with the Law being applied in Registries and Notaries
- The GML files and Law 13/2015 have arrived, will remain and will revolutionise Spanish administration. The Local Administration's greater awareness and further implication are still pending, especially in urban planning themes. These include, and are directly applied to, assumed replotting cases, which are compulsory by Law, and are the competence of Town and

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City Councils. The Administration that is in charge of public properties, such as cattle tracks, mountains, coastlines, water, Nature Reserves, etc., needs to be more involved.

- After the first year with plenty of work and with the typical problems of adapting to change, certain tasks were quite often done in the way they had always been done, as knowledge about the correct procedure was lacking, and without considering the coordination consequences
- Quite often citizens were unaware of the implications of the decisions they made when seeking to speed up processes and cut costs. Social unawareness exists as, generally speaking, the relevance of coordination is unknown, which involves assuming the veracity of graphic information. It can be stated that citizens have always considered the Cadastre to be merely a tax office that is basically interested in charging taxes on real-estate properties (Land Value Tax). Currently, the role that its cartography plays is significantly changing at the time it is coordinated with the Land Registry
- Today the whole process is long and slow as processes need to be automated; thus some justify not using it or bringing it into disrepute because the real-estate trade pace cannot be stopped. It is true that it is sometimes slow and awkward, but it is going through a phase of being fitted and adapted; many organisations, groups, technologies, processes and applications are involved which, with the numerous changes going on, are operating at a good rate and show constant improvements. Speed, efficiency and social awareness need to improve, but we are getting there. It is necessary to work slowly, but steadily, to set solid bases.

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