EUROPEAN LAND REGISTRY ASSOCIATION (ELRA)

ANNUAL PUBLICATION EXECUTIVE COMMITTEE

ELRA

ANNUAL PUBLICATION

7

2017

LIST OF ELRA MEMBERS

- AUSTRIA: MINISTRY OF JUSTICE
- BELGIUM: ROYAL BELGIUM FEDERATION OF MORTGAGE KEEPERS
- BELGIUM: PATRIMONIAL DOCUMENTATION OF BELGIUM
- BULGARIA: BULGARIAN REGISTRY AGENCY
- CROATIA: MINISTRY OF JUSTICE OF THE REPUBLIC OF CROATIA
- CYPRUS: DEPARTMENT OF LANDS AND SURVEYS OF CYPRUS
- ENGLAND: HM LAND REGISTRY OF ENGLAND AND WALES
- ESTONIA: MINISTRY OF JUSTICE OF ESTONIA
- FRANCE: ASSOCIATION DES CONSERVATEURS D'HYPOTÈQUES DE FRANCE
- GREECE: LAND REGISTRARS ASSOCIATION OF GREECE
- IRELAND: LAND REGISTRY OF IRELAND
- ITALY: AGENZIA DELLE ENTRATE
- ITALY: SERVIZIO LIBRO FONDIARIO PROVINCIA DE TRENTO
- LATVIA: DEPARTMENT OF LAND BOOK MINISTRY OF JUSTICE OF LATVIA
- LITHUANIA: CENTRAL MORTGAGE OFFICE
- LITHUANIA: STATE ENTERPRISE CENTRE OF REGISTERS
- LUXEMBOURG: ADMINISTRATION DE L'ENREGISTREMENT ET DES DOMAINES
- MALTA : LAND REGISTRY OF MALTA
- NETHERLANDS: CADASTRE, LAND REGISTRY AND MAPING AGENCY
- NORTHERN IRELAND: LAND REGISTRIES OF NORTHERN IRELAND
- POLAND: POLISH ASSOCIATION OF REGISTRARS
- PORTUGAL: ASSOCIAÇAO SINDICAL DOS CONSERVADORES DOS REGISTOS
- PORTUGAL: INSTITUTO DOS REGISTOS DE PORTUGAL
- ROMANIA: THE ROMANIAN LAND REGISTRY ASSOCIATION
- ROMANIA: NATIONAL AGENCY FOR CADASTRE AND LAND REGISTRATION
- SCOTLAND: REGISTERS OF SCOTLAND
- SPAIN: COLEGIO DE REGISTRADORES DE ESPAÑA

OBSERVER MEMBERS

- BOSNIA AND HERZEGOVINA: FEDERATION OF BOSNIA AND HERZEGOVINA, MINICIPALITY COURT OF SARAJEVO
- ESTONIA: CENTRE OF REGISTERS AND INFOSYSTEMS
- FINLAND: NATIONAL LAND SURVEY OF FINLAND
- SLOVENIA: SUPREME COURT OF THE REPUBLIC OF SLOVENIA
- SWEDEN: LANTMATERIET
- ERAL DIRECTORATISTRY AND RE

index

Studies

News

The ELRA Board Statement on the reorganisation and restructuring of Land Registries

BY ALASDAIR LEWIS
ELRA President

1 BACKGROUND

Every member state organises its land registration and land administration functions in a different way. The differences reflect each states' history and their legal traditions.
To understand why land registration is organised in a particular way you need to know,

- Whether the Registry is operating a title (positive) or a deeds (negative) system or some hybrid of the two.
- Whether there is a cadastre and, if there is, how the land register and the cadastre relate.
- Whether the register is computerised and the extent to which registration processes are automated. (Greater automation allows greater centralisation).
- The relationship between the registrars and the judiciary. (Is registration viewed as a legal function? Or is it an administrative function that is subject to judicial oversight?).
- Whether state functions are centralised or organised on a federal or regional basis.

We are aware of a number of initiatives that could affect how land registries are organised and how the service is delivered. These reflect,

- A desire on the part of governments to reduce costs and administrative burdens by combining parts of government.
- In particular, a desire to combine land registries and cadastres or, at the least, to get them working more closely together.
- A desire on the part of governments to create "base registers", to allow datasets to be combined and to provide "one-stop shops".

- The desire on the part of some governments to move from deeds systems to title systems.

In England and Wales the government has now consulted twice on proposals to move land registry operations into the private sector. This is something that has already happened in parts of Canada (Ontario, Manitoba and Saskatchewan). At the time of writing this article, a decision from UK ministers is still awaited.

The ELRA Board were asked whether we had a view on the various proposals being considered across Europe. We decided that, although it would be wrong for us to comment on individual proposals, it was appropriate to set out some principles that we think should be followed when such proposals are being formulated.

2 ▸ GENERAL OBERVATIONS

The Statement contains 4 "general observations".

The first of these relates to the land registrars. The ELRA Board believes that, when governments are drawing up proposals to reorganise their land registry, they should involve the land registrars at an early stage.

Land Registration is a complex business. The land registrars are the experts and are well placed to point out any pitfalls and to suggest workable solutions. Officials are more likely to succeed if they work with the experts.

The second observation relates to consultation. Land Registration is different from most other government functions in that the Registry's primary function is not to regulate the relationship between private landowners and the state, it is to regulate the relationship between one private landowner and others. Therefore any proposed reorganisation of the registry has the potential to affect the interests and rights of many different parties including lenders, citizens and their professional advisers. We therefore believe it is good practice to consult those parties before any proposals are finalised and to take their views into account.

The third observation relates to conflicts of interest. Land Registries create legal interests and relationships and decisions made by registrars affect the rights of citizens. This is true for both title and deeds systems. Some jurisdictions characterise the decisions made by registrars as "judicial" whilst others characterise them as "quasi-judicial" or "administrative". But in all cases citizens need to be assured that those
decisions are being made free from bias and in accordance with the law. And if they are aggrieved by a decision made by a registrar they need to have recourse to the courts. The legal tradition of the state within which the registry is operating will determine how this is achieved.

The fourth observation relates to proposals to move from a deeds to a cadastral system. There is a natural desire to move from a system where title boundaries are defined by reference to title deeds prepared by the parties to a system where such boundaries are defined by reference to a detailed, topographic map. However there is a risk that, in carrying out such a reform, owners lose title to land that was recorded in the registry. Any such proposal therefore needs to be mindful of the provisions of the European Convention on Human Rights which provides for "the right to the peaceful possession of one's possessions" (the so-called, Right to Property).

2 ▸ THE STATEMENT

The ELRA Board hope that the Statement will help registrars and policy makers when proposals to reorganise or restructure land registries are being considered. Here is the text of the Statement:

Reorganisation and Restructuring of Land Registries:
a statement by the European Land Registry Association

Statement by the Board of the European Land Registry Association (ELRA) concerning the reorganisation and restructuring of land registries:

ELRA represents 31 official land registry organisations from 22 member states of the European Union. The Association's primary purpose is to support the development and understanding of the role of land registration in real property and capital markets in Europe.

The ELRA Board is aware of proposals in a number of member states to reorganise and restructure land registries. Of course it is not for the ELRA Board to comment on the merits of any particular proposal. However, based on our experience, we would make the following general observations,

1. In every country, the Land Registrars are the experts in their field. We therefore believe that their views should be invited at an early stage in the process.
2. It is good practice that interested parties, including landowners, lenders, notaries and registrars, be consulted before proposals are finalised.
3. Any proposed reorganisation or restructuring should be mindful of the fact that, in order to give legal certainty and maintain the confidence of the market, land registries must perform, and be seen to perform, their functions independently. There must be no actual or perceived political or commercial influence or conflicts of interest.
4. Any proposal to move from a deeds system to a title or cadastral system must ensure the continuity of landowners' existing property rights.

Summary of the IMOLA Project

BY JESÚS CAMY

Project Manager IMOLA

1 ▸ BACKGROUND

There is a need for a standard means of accessing basic land registry information within the EU. Yet, the cross-border exchange of information between European land registries is complicated. Differences in national legislation and divergences inherent to the practice of land registration are the main causes of this complexity. Therefore, a need for a standard means of accessing basic land registry information within the EU, paired with the availability of explanatory material and the training of practitioners to improve the understanding of foreign legal systems, is evident.

Common points do exist and offer the possibility of defining a structure of key information shared by the majority of land registry systems. IMOLA project, subsidized by the EC Civil Justice Programme, has performed in-depth research on these common key points, developing interoperability solutions that have made the differences understandable to the professionals participating in real estate transactions, and facilitate cooperation with other networks in order to contribute to the development of a European real estate and mortgage market.

The European Land Registry Association initiated the IMOLA-project with EULIS, the Colegio de Registradores de la Propiedad, Mercantiles y Bienes Muebles de España and the Dutch Kadaster.

2 ▸ AIMES AND OBJECTIVES

The project aimed to produce a model for standardised land registry output, connected to explanatory material in different languages, and to provide training to improve understanding of the different legal systems involved. The European Land Registry Association (ELRA) has worked closely with other associations and networks concerned in this area.

The IMOLAS´ global objective is to increase the accessibility and transparency of land registry information and to facilitate the registration of cross-border documents. Varied legislation and practices of Land Registries hamper the exchange of information between them and the registration of cross border documents. Any standard model has to take into account fundamental differences in national organisation. However, common points offer the possibility of defining a structure of key

information shared by the majority of Land Registry systems.

Activities as an initial stage, different types of property rights and registration methods have been compared. Based on this comparative research, an analysis will take place and EU placeholder descriptions will be developed that could help to connect equivalent rights. The research has also included the conditions of access to the information of each country, particularly data protection policy, and the use of electronic communication.

The outcome is a draft of an interoperability framework, which was discussed in three conferences. Part of this framework is describing an XML language for Land Registers and development of a template for a E(uropean) L(and) R(egistry) D(ocument) to which the entering of XML-data could be computerized. The draft was presented to registrars, legal scientists and other key players on IMOLA Closing Conference held at Brussels on January 27th based on the comments received, the model will be updated.

3 ▸ RESULTS OF THE PROJECT

1. Guide lines for the establishment of standardised access to land registry information;

2. Define a broker to unify the many national defined dictionaries, information models, protocols and output formats.

3. **Define a semantic model for a European Land Registry document (ELRD).**

4. The assistance tools complementing the single point of access within the e-Justice portal will enable an effective use of this information.

5. Implement a publication engine that takes a request and formats the results in a standard predefined form.

6. Training will ensure better mutual understanding between registrars and their staff and with other legal professional, in order to promote the smooth processing of foreign documents in Land Registers. In particular, as regards succession matters, it will facilitate best practice in translating foreign rights in rem into their nearest local equivalent.

4 ▸ THE MAIN ACHIEVEMENT : THE ELRD (EUROPEAN LAND REGISTRY DOCUMENT)

IMOLA has reached a proof of concept of an ELRD (European Land Register Document) or template for **organizing land register information at European level**. This project has been based upon the following guidelines:

1. **Judicial cooperation**. ELRA consider that one of the main functions of the land register systems is to facilitate information intended for the legal purposes. Therefore, the paramount scope of the ELRD is judicial cooperation that European legislation is in fact requiring, as well as facilitating transactions of properties (mortgages, sales) by means of information of the legal status of the marketable properties.

2. **Bottom-up.** This legal information is based on a bottom up approach of the European LR systems (**legal neutrality**: not the imposition of one model of those existing in Europe). IMOLA approach suggests:

a. Structure ABC of the information;
b. Plurality of the land register units or properties;
c. Ownership with attributes;
d. Organization of the encumbrances on the properties including judicial restrictions.

That is the result of efforts for mutual understanding between ELRN Contact Points and a complicate balance, given the extreme legal diversity in land registration.

3. **Legal minimum**. ELRD should contain sufficient legal information to provide an adequate idea on the legal status of the land register units or properties. Information is not useful if relevant aspects of it are omitted.

4. **Flexibility.** The idea was not very simplified information but a **flexible model** in order to include all relevant registry information. Omissions in legal information make it inconsistent. ELRD may be used and adapted by all European systems or the more the merrier.
Every land register system could arrange information data on this scheme insofar they are available or disable those data fields not available, depending on the national specifics. Although ELRD is easier for title registration systems, deed registration systems may adapt information of the personal folio to the requirements of ELRD by means of the relation of deeds which it involves. ELRD may be a European guideline for land registries information given that it is based on mutual understanding or minimum shared by the network of contact Points (ELRN).

5. **Reference Information**. Reference information and Glossaries support ELRD in order to explain the use of the template and the comprehension of its legal terms.

6. **Glossaries** explain relevant placeholders. There must be a general glossary and also national glossaries in relation with the general one.

7. **Reference information (RI)** is devoted to explaining the meaning of the information more in detail, even in context. In IMOLA project ELRN have implemented 5 Reference Information Fact Sheets for these purposes (LR Unit (Section A), Propretorship (Section B), Encumbrances (Section C), Legal Value of LR Information and Legal effects of Registration.)

7. **Semantic Model**. ELRD has required a Semantic model based on:
a. Placeholders (in English) and commonalities of LR information at European level (ELRA bottom-up approach);
b. A Thesaurus, which becomes the cornerstone of the following developments of IMOLA;
c. Features of e-Codex building blocks, which have to be taken into account.

Guidelines on legal elements for European Land Registry Information

BY JORGE LÓPEZ

ELRA Secretary General and ELRN Coordinator

GUIDELINES ON LEGAL ELEMENTS FOR LAND REGISTER INFORMATION IN EUROPE

One of the results of IMOLA project is a lot of material on legal aspects of land registration across Europe. The Contact Points of ELRN have made interesting contributions explaining their models and systems. This is an important background, valuable for the mutual understanding in this scope, and can be used and studied to try to understand the complex European situation regarding land registration, from the legal point of view.

The aim of this article is to present relevant legal aspects to consider laying down some guidelines for exchanging land register information at a European level, especially considering what the main targets should be: judicial cooperation and conveyancing.

1 ▸ A STRUCTURE FOR THE REGISTRY INFORMATION

ABC structure for land register information

In several Land Register systems of Europe there are practices which allow us to find some commonalities in legal aspects on land register information, as well as what structure may be adequate to deliver the system across Europe for the mentioned purposes of judicial cooperation and conveyancing.

Such practices are unequal to some extent. They have different origins and evolutions, although the systems which have these practices are considered mostly *title registration systems*. They consist of dividing the registry title into three parts or sections, devoted to the description of the property, the ownership and finally the mortgages, burdens or other restrictions that encumber the ownership. This structure of land register information could be called *ABC*, where Section "A" is for the property, Section "B" for the ownership and Section "C" for the mortgages and other encumbrances.

Of course there may be in these systems other types of Sections or subdivisions, or other ways to denominate the Sections, but the structure ABC seems to be an acceptable minimum common denominator or principle of order. Hereinafter Sections "A", "B" and "C" will be intended as Sections or Parts referred to respectively as "description of property", "ownership" and "encumbrances" in general.

It is indeed a familiar schema for German or Swiss or other systems arising from the Austro-Hungarian one, which became a pattern for countries that formed part or were linked to the former Empire despite their later national developments (apart from Austria and Hungary, Croatia, Slovenia, Bosnia-Hercegovina or Italian Autonomous Provinces of Trentino-Alto Adigio and Bolzano for instance)—. Also, it is familiar for the English and Welsh system or those of Portugal or Spain.

However, it seems timely to warn that there are also deed registration systems where this *ABC* structure does not work or becomes too forced, although there are also cases in which it is in some way taken into account for the purposes of arranging land register information

(Italy or Romania).

The *ABC* structure —not exclusive to European systems— may be considered a starting point for supporting the exchange of land registry information across Europe, at least with respect to the title registration systems and provided that we do not forget the specifics of the deed systems.

One of the aims of this paper is to present succinctly what legal elements should be taken into account at European level for exchanging land registry information. This task appears to be at least easier if we rely on the structure ABC for explanatory purposes.

Discussions on what is the extent of every Section's scope may be constructive and interesting.

An initial view on this topic

Once explained this tripartite structure of information, in a very elementary way some factors have to be remarked to reach a wider perspective:

A) Some factors have influence on the scope of "A":

- Research on land registration shows that properties or plots of land appear as the most common *connecting factor* of the land register information, but that there are also other entities that may be so as well. And they are marketable. The European experience shows that there is no unique category of properties (e.g. cadastral parcels) nor are properties the only land register unit that are possible. On the contrary, there are entities, even rights *in rem* that are also considered so by operation of law or by means of a legal fiction or for the purposes of the registry organization and information derived normally from national practices or underlying property rights systems. In simple terms: land registers of Europe have different kinds of land register units and not only parcels, or even pieces of land.

- Moreover we find different categories of information, *land or territorial information*, mostly focused on the physical features such as land use or environmental or urban status, and *property information*, particularly related to legal status —ownership and encumbrances— from a particular plot or piece of land, that is to say, intended for legal purposes.

B) With respect to "B" or the part of the information concerning proprietorship, the identity of the owner of the properties appears as a necessary element of information but this is not sufficient. A land register system should ensure first and foremost reliable information about who the owner of a concrete property is. This is an essential item of data. Otherwise the system would absolutely fail.

However, apart from identification of the owner of a property, there is another type of information relevant to obtain an accurate idea about this part of the information (proprietorship), such as the extent of the title of the owner or the existence or absence of

restrictions on his/her/its person. If the title of ownership were inconsistent or the owner were affected by a procedure of insolvency —with restriction of his/her powers— information missing from these data would become misleading and incomplete, particularly if it had been requested for purposes of conveyancing or to be used for a lawsuit.

Certainly some attributes should be added to the identity of the owner to provide legal security.

C) Finally, it is remarkable the complexity of the legal situations that may affect or burden the properties and potentially be included in Section "C" as mentioned below.

The absence of a suitable treatment of the encumbrances may create a misleading impression that properties are free of burdens. In terms of land register information, missing a burden or more, or expressing it inaccurately, can have devastating effects on the required information.

ABC Structure and deed registration systems

How could the deed systems be adapted to the *ABC* structure of information? First it should be recognized that the main response or solution should come from their own organizations. From outside, from a title system point of view, mere suggestions might be made, such as the following points:

- One way to do it would be to obtain the data envisaged for the information model from the data of archived documents, provided they were available: a) information concerning the description of the property existing in the last recorded or transcribed document: guidelines of deed systems should be respected so as to permit parties to define a given property (its situation, its boundaries, its physical characteristics) making use of cadastral mapping of which that property forms part —admitting differences between parcels and the properties and taking for granted differences between legal boundaries and cadastral boundaries—; and finally quoting the cadastral code or reference of the parcel involved —although it would be advisable to warn interested parties of dissimilarities between the parcel and the plot defined in the deed—; b) ownership data would be obtained from the document recorded later —it is assumed to be updated—; and c) mortgages or encumbrances, probably part of the most complicated information, would be obtained from the documents relating to them in the order in which they were recorded or transcribed. In any case, it is not such an easy method: land registration of *deed systems* is not intended for the use of the properties as *connecting factor* (typical of folio real systems). *Deed systems* are set on the basis of *personal folio*. We have to admit that deep down this suggestion calls for deed systems to provide the data that appear relevant in an alien information model (based on the real folio) where the connecting factor is properties, not persons.

- The Italian system (State Agency, not other systems in force in certain areas of Italy) appears to offer more possibilities. Insofar as entries are organized in transcriptions *for* (*a favore*) and *against (contro)*, the first corresponds to the current owner and it is fit to be taken to "B" section; the second corresponds to the holders of the transcribed

encumbrances, which might be taken to the "C" section, in both cases indicating the deed from which these data come from. As for the "A" section, the issue would be the same as in the previous case: to take the property as was defined by the parties in the deed. Information about this act and in which deed it was done should also be provided.

It seems wise that any data from the deed systems should be explicitly supported by the deed recorded, which in turn should be the most recent. Of course, it would be appropriate to warn that these data come from the most updated deeds recorded, and that the value and effects of such information should be understood within the legal system they come from. It would be unacceptable to pretend that such information could produce different effects. All remarks in this regard would be useful, even proper.

2 ▸ THE PART OF INFORMATION RELATED TO PROPERTIES

1. The connecting factor

A basic approach to the field of land registration across Europe —also outside Europe— would lead to two types of land registration systems, *deed system* and *title system*. The initial conclusion is that the connecting factor of the title systems should be the properties which the information is based on (*real folio* organization) and the connecting factor of the deed systems should be the person of the owners who appear as parties to the deeds (or copies of them) recorded (*personal folio* organization). Both systems have made a choice of land register units with the aim of organization, crucial for understanding their differences.

However, when information is focused on land or properties and the latter are the relevant part of the information, properties or plots appear as the main object of the information. In the deed systems, the contract of the deed is related to properties but the resulting information (and organization) does not consider them as the main object and they cannot provide this information in a direct way, unlike the title systems, which provide direct information on the properties intended as objects.

In any case, both systems are organized and based on land register units (hereinafter referred as *LR Units*). So, *LR Units* may be understood as all properties or entities with individual register and/or LR number or title number assigned in accordance with each Land Register system.

This definition is remarkably abstract, given that it does not prejudge whether the object is a property or a person and could be acceptable for both systems because it is formal and works regardless of the nature of the “unit”. However, even so, the title systems likely would accept this more easily than deed systems because of the relationship between “unit” and “object”: whereas the object, the property or plot, equals the unit in the title systems, the property conceived as the object of the deed does not equal the unit in the deed systems. This role in the latter belongs to persons.

Focusing the question on the direct object of the information, the properties, a European overview shows definitely that there are diverse land register units or entities which in accordance with the legislations of the Member States may have a separate or individual

register and/or title number so that each of them has assigned a specific folio for registering the data which make up their history in the land register and consequently provide information based on it.

Most of the Land Register systems show that a plot of land is the "unit" or "object" of registration. This plot of land could be rural or urban, it may have a construction or not, and it may also have a map attached to it, or not. Now, in the Member States where there is a cadastre, the properties or plots may coincide with a cadastral parcel or (often) not. This arises from the fact that Cadastre and Land Registry have or may have different aims: Cadastre has a fiscal purpose whereas Land Registries operate as the legal basis for ensuring the legal status of ownership and other legal rights over land.

Moving this point to the construction of a European template for exchanging information across Europe, it appears a priority that information on the properties is related to what basically coincides with the interest of the parties, the marketable object of legal traffic (for sale, mortgage). But the properties deemed so do not always have the same description in the Cadastre because as a matter of fact properties often do not equal cadastral parcels. Many differences seem to remain between them concerning boundaries, size even location or other relevant dissimilarities which question the identity of the marketable object.

Moreover there is indeed a large diversity amongst Member States in their approach to registration of land data and their implementation of the corresponding land registers, which includes the legal context as well as the scope of the information stored in such registries. All these difficulties suggest that the choice of considering exclusively or mainly the cadastral parcel as object of registration is not realistic or feasible at all. In fact some Member States do not even have a cadastre (e.g. England and Wales) or even a cadastre not developed enough. Opting for a connecting factor so restricted would lead to the consequence of excluding from the scope a significant part of the properties or registry entities. On the contrary, the approach should probably be flexible. This issue would be crucial if we aimed to successfully build a European Land Register Document (ELRD) to fulfil the needs of judicial cooperation and conveyancing.

Mostly, but not only from the perspective of the *title systems*, we may distinguish different kinds of properties that work as land register units.

An attempt to rank all this diversity would be the following.

1. *Properties*

In principle there are many types of properties, plots, pieces of land, buildings, building sites. Likely, we could deepen classifications according to their nature but it requires further analyses and the idea is that property or plot has a rather broad and flexible meaning.

Properties once registered have generally a number or ID, which may coincide with cadastral ID or not, or not have cadastral ID at all. The properties sometimes have even got both (cadastral ID or fiscal number and property ID or title number).

2. *Cadastral parcel*

When plots are included in a public or official survey for purposes of tax effects or territorial mapping, they become cadastral parcels. The cooperation or participation of the private owners in the public surveys is uneven across Europe. There are cases in which the role of the owners seems irrelevant in order to describe the parcels or, in any case, less relevant as the role of the surveyors.

a) Some systems establish a Section "A" where the cadastral parcels and properties should coincide. The law imposes the principle of conclusive boundaries, so that in principle there would be only one object for the deeds or contracts and there would not be differences between parcels and properties. This is the case in the German or Austrian system. In theory Scandinavian systems also may be included in this kind with the caveat that they are merged organizations unlike the Germanic systems.

b) In some systems (deed systems), it is the parties who define the boundaries in the deed. The corresponding cadastral parcel may be used for their private interest in an indirect way, laying down the boundaries on it. Hence, differences between legal boundaries and cadastral boundaries are admitted and taken into account. It happens in merged organizations (The Netherlands, Italy-*Agenzia delle Entrate*).

c) In systems where cadastre and land register are separate organizations, there are frequent divergences between properties and cadastral parcels. However, the divergence is not considered desirable and there may be mechanisms of coordination between them so that they become a single object for the purposes of legal traffic and marketability, at least while the cadastral survey does not change the description later. It is the case of Spain or Portugal.

d) In some systems there is no cadastre. Registration titles are recognized on the basis of the private properties and the parties are entirely free to define them. It is the case of England and Wales, where Ordnance Survey is also used for drawing the map of the property.

So, to make cadastral parcels and boundaries equivalent appears only possible in the land register systems with a criterion of conclusive boundaries. There are not so many: conclusive boundaries or coincidence between legal boundaries and cadastral ones are not precisely the most widespread possibility. Even once legally established, it seems difficult (and costly) to be implemented to a significant degree.

In conclusion, there are cases in which properties are determined by cadastral parcel, but they are not the majority. Mostly, properties do not equal cadastral parcels and so, they might be coordinated, or at least cadastral parcels may be useful for the parties in order to define their properties. Besides, we should not forget that there are systems with no cadastre.

Finally, cadastral parcels appear as units. As such, they have an ID or cadastral ID or reference for each one. But in the event that the parties define the boundaries on the ID the

object of the deed or contract does not equal the unit. And in some systems definitely cadastral parcels are cadastral units but not land register units, which have their own land register ID.

3. *Apartments or flats*

Ownership of apartments is very important from the social and economic point of view (the object of transactions is often apartments) and probably the most common kind of ownership for European citizens. "Prevalence of flats" has just been stressed by a report for the European Parliament that includes statistics about the high average of European population accommodated in flats and also the high number of registered units per million population in the EU. Likely this fact, and how important this kind of property is, should not need further explanation.

Hence logical registry responses there could be expected in this sense. It is certainly widespread the fact that apartments or flats of buildings or blocks have independent registers or title numbers, reflecting the often called *horizontal ownership*. As a matter of fact, a majority of the land register systems open a *real folio* for every flat endowing them with a title number. Whereupon they are able to be sold or mortgaged (or embargoed by judicial decisions) in an independent or separate way, which neither interferes with the other condominium flats nor the ownership of the communal elements. So, this type of registry organization facilitates to a great extent a fluent marketability and legal traffic of this property and also transparency.

There are other legal schemes based on ownership of the block or building on what leases or leaseholds are granted and also Scandinavian housing co-operatives. But anyway it appears indisputable that ownership of apartments is very important from the social and economic point of view and that the object of the transactions is often individual apartments.

From the perspective of land registration the first step is to determine whether flats or apartments are considered property units or not, as seen above, and likely the second one is dealing with the specifics of the identification and description of this type of property, and within the relationship between the apartment and the block and location in it (storey or floor) or main elements of the condominium (share or number).

In several European countries apartments or flats appear totally disconnected from the building they belong to, due to practices, even historical reasons (denationalisation of properties), but European legislations that rule horizontal ownership usually deal with the legal situation of the apartments with respect to the block, identifying the apartments as units and indicating their shares in relation with the communal elements of the building or block. It would also seem useful to incorporate within the description of the apartment — once considered a marketable and specific type of property— some more information about the storey where they are located or a basic description of the layout or distribution.

Condominiums where apartments or flats lie are usually governed by statutes. Although to find out these rules of organization seems very important, there is usually no immediate or

easy access to them by the ordinary means of registry information (excerpts). Likely all land register systems should make efforts for this purpose so that information related to a flat may (at least optionally) include the statutes of the condominium. It seems worth working on this aspect in order to improve transparency for the sake of buyers or creditors.

Apparently, apartments or flats do not have an easy connection with the cadastre. In the land register systems in which they are considered units or objects, having their own registry history, they have an individual register. On the contrary, it is not so frequent that apartments have an individual cadastral number, but that the reference or cadastral number is related to the building they belong to.

4. *Special properties*

There are special properties, often economically valuable, whose description or identification is complex because they are fragmented or discontinuous or too large. For example mines, pipelines, ownership of waters or underground properties. They might comprise several parcels or plots or parts of them.

It may also occur that a given special property embraces land and rights of diverse nature, for example private and public. For example, a shipyard may comprise ordinary private land and an administrative concession to occupy or use a part of the public domain of the coast.

Given that they might comprise several parcels or plots or rights of different nature, maintaining unity from the point of view of the legal traffic, they should be considered as land register units and endowed with an individual register. We may even expect these special land register units to reflect the entire parcel IDs of the parcels or plots they embrace and also describe which part is included and which not.

Moreover, it appears reasonable to seek means of identification as sophisticated as possible. Probably UTM coordinates and/or mappings are particularly appropriate here.

Thus, we understand that the potential complexity of these special properties justifies a separate category.

5. *Property rights*

LR systems and law of the Member States show different cases of property rights whose status is different than usual because they are recognized with an individual register or title number. For example, leases and leasehold (mostly); time-sharing units; administrative concessions; *profit a prendre in gross*, franchise; likely the temporary ownership after being exercised a right to *superficies* on a site; etc.

For these rights/properties or rights/objects identification or description are in practical terms the right itself, defined with respect to the legislation governing them.

In this event an cadastral ID is unlikely but it is taken for granted they will have received a register number given that they have arisen from a legal fiction (treating as property what

is only a real right), but this legal fiction at the same time comes from the needs or conveniences of the legal traffic.

2. The description of the property

2.1. Descriptions in the ownership title and spatial data

Within the model of the title registration systems, the properties —whatever their nature— appear as the connecting factor of the information because they are the axis of the registry folio (real folio) which the information is obtained from.

INSPIRE spatial data provide a framework but not the registration data itself. First and foremost, spatial data seem to be important with respect to the description of the registered properties or plots but not properly with respect to their legal status, that is to say, who the owner is and which restrictions or encumbrances correspond. Ownership and rights in rem can not be considered spatial data or date within the scope of INSPIRE considering the terms of Article 8 or the Annex of Directive 2007/2/CE

Moreover the results of the interoperability (Article 7 Directive 2007/2/CE) would enable the collection of territorial or land-related information, so relevant to enhance the description data of the properties embraced by the area of administrative units or cadastral parcels defined by the Member States.

The European Land Register systems usually rely on methods for identifying and describing the properties as objects or units for purposes of registration and information, such as title plans or literary descriptions. Unless one has an exaggerated idea about INSPIRE developments, we cannot expect spatial data to replace the national methods but complement them. Geography may facilitate land registration but does not equal it.

An overview on the Land Register systems on this aspect, the description of their properties as object or units of registration and information, shows a significant diversity with respect to what land register units may be, what effects they may have, what their organization is like and what criteria of identification of description are observed. So, a pan-European perspective should take this into account firstly.

2.2. The description of the properties in land registers: an attempt to find a minimum common denominator

Land register systems use different methods to depict properties or pieces of land, more or less exhaustively, based on literary descriptions or backed by mapping. Although we may find commonalities, every system seems to have its preferences.

However, the main point, prior to a suitable description of their physical features, should be the identification of the properties so that they become an independent and unique object. In that sense, we could recognize at least two elements generally used for this purpose, which may be used as minimum common denominators of the LR units: the register number

or ID and its location.

1. Individual register number or title number of each LR unit means its individuality and existence according to the organization and legislation under whose scope it was created.

2. Location, even geo location. It appears also as a minimum physical feature. ISA core vocabularies (*core location*) are useful in this respect. Boundaries or size of a given property may be debatable but as far as it is identifiable, the location of a property is much less debatable than those.

Land register systems generally comply with both requirements and enable searches through them (search by ID, search by location or address). So, the minimum description at least enables 1st identifying properties or plots by means of its number/ID with the effects corresponding to property law; 2nd establishing the situation of such properties or plots.

Nevertheless, the description of the properties should be more complete for the sake of clarity and transparency for purchasers or creditors and the next element to be considered is the boundaries, either by means of a literary description or by some kind of mapping.

Within the discussions on land registration matters, divergence between legal boundaries (fixed by mutual consent of the owners of adjoining properties or by means of an action at law) and cadastral mapping (as a result of the mapping performed by cadastres' surveyors), is a classical topic. Attempts to make cadastral boundaries prevail on legal boundaries have been considered abusive and to infringe on human rights (e.g. case Devecioglu versus Turkey)

The physical data of a parcel such as boundaries are considered facts, not rights, which means that the legal presumptions regarding the content of the Land Registries do not apply to them –the presumption that registered rights in rem exist and belong to the registered holders on the precise terms stated in the Registry-. We can trust that the owner of a certain property is the one published by the Land Registry, but the registrar will not be held responsible for the boundaries of said property.

The study for the JURI committee above mentioned makes observations about the negative effect of the lack of determination of boundaries on transactions, but in this respect also recognizes that whether future purchasers feel concerned by this problem, or not, they usually rely on the practice of securing a survey before buying. However, experience shows that these previous surveys might be due to something else, like the interest of the creditor who is going to fund the acquisition by means of a mortgage in order to reinforce the value of the real right of security or simply because it is due to a specific provision of the Law to avoid subprime mortgages (it happens for example in Spain), which requires a specific survey and valuation that cannot be avoided, although boundaries have been established with the greatest faithfulness.

Also, this Study shows concerns about problems of quality of geo-spatial information, specifically the variation between the extent shown on the cadastre and on the register, and

speaks of the "reconciliation" or "coordination" of the cadastre and land registers, our experience suggests that divergence between cadastre and register titles is often the result of the measurement or mapping performed by cadastral surveys outside the will of the interested owners and their titles. It does not make sense to describe faithfully a property in a title if the cadastre is entitled to change unilaterally this description and it is also a source of problems which —as above mentioned— potentially breach rights to enjoy peaceful ownership, definitely a human rights matter.

2.3. More criteria for purposes of identification or description

The differentiation of categories of properties is also justified by the different needs of description. So,

1. Description of properties in general —in addition to ID (LR unit number) and location— is enhanced when other descriptive data can be added such as nature (building, building site, plot…), land use, even size (metric system preferably) although boundaries should prevail in any case if they have been laid down by mutual consent of the parties and faithfully.
2. Description of cadastral parcels is backed by mapping and endowed with data provided by specialists, surveyors, usually in an exhaustive way. A UNECE report ("Land Administration in the UNECE Region", 2005) indicates: "Data in a cadastre may include: geometric data (coordinates, maps); property addresses; land use; real property information; the nature and duration of the tenure; details about the construction of buildings and apartments; population; and land taxation values. Data may relate to single plots of land or may cover many properties, as in land-use zoning…" As these data are accepted by the owners (given the functional differences remaining between cadastre and registration of titles), and embodied in the ownership title, this can be very useful to complete the physical description, although if an eventual imposition of the cadastral description were not accepted this may lead to misunderstandings and the undesirable situation of divergence between cadastral boundaries and legal boundaries, so damaging the interests of the owners and the certainty of the ownership titles.

3. Apartments or flats as land register units have specific aspects. Requirements of identification and description should comprise relevant data such as postal address of the building, storey or floor, housing use or different use, size and data suitable for the relationship between the apartment and the block where it is located, such as share or average in the condominium and a reference to the title number or register ID of the building. The more data are added to the description, the more accurate it will be. In fact the interests of the owners of apartments seem first and foremost focused on the description of the apartments on which their exclusive right falls. However, we must not forget that in the condominium there are also rights with respect to the communal elements, including the building site, albeit they are different types of properties or rights and involve different requirements for description

4. Due to their particular complexity, special properties often require exhaustive even technical descriptions that give a precise idea about them. In the event of uncommon extension or surface (a highway or pipeline), it would be appropriate to indicate their UTM coordinates and use maps as main data of description, so that their identification is able to be made on cartographic maps. Nevertheless, there is also important information concerning the pieces of land which form a special property in the event they are subject to a different legal regime (private ownership/public domain) or the rights that fall on them are of a different nature (public domain, possession, use, administrative concession).

5. For those special property rights which become LR Units, nomen iuris seems very relevant, but in this event the requirements of description are reduced to the right itself.

3 ▸ THE PART OF INFORMATION RELATED TO OWNERS

1. Approach to proprietorship

In the structure of land register information that conventionally we call ABC, part of section B is devoted to including relevant data about the owners.

The paradigmatic kind of proprietorship is ownership but there are other main rights on the basis of which the registration information is structured, as discussed below. We may assume that the type of main right will be identified by the registry information. In any case, the following explanations are valid for any kind of proprietorship.

Information on who owns a property is crucial for the most elementary reasons. A land register system should unmistakably indicate who the owner of the properties is, object of the information. This is the main requirement. No registry information would be valid if it did not identify the right owner.

This item of data is a necessary condition but not sufficient. It seems relevant to reflect not only the identity of the owner but also other information data that give an idea of the extent or reach of the powers of disposal of the owner, for instance related to insolvency or a legal inability. Users should be properly informed not only about the name of the owner but also if there are restrictions registered on this person affecting his/her powers of disposal, so that they can find out if the owner is in a position to transfer the full ownership or not. Otherwise the error would be as serious as ignoring or mistaking who the owner is, given that information issued would conceal data in accordance with which a transfer of a property could not be carried out, or not completely, or only after fulfilling certain requirements, for instance a judicial authorisation.

Although this type of information on personal restrictions of the owner is not always available —it depends on the organization of every land register system—, it would be deplorable not to include it if it were available.

For similar reasons it seems a better option to add some other relevant attributes to the

information on the owners which could facilitate more complete information.

Thus, the main observation about what information on owners should be like is that, insofar as possible, it should comprise all relevant data on the persons of the owners apart from the name or identity card as long as a given land register system has available data in this respect.

This approach is not as simple as dealing with the identity of the owner (an issue that sometimes seems difficult enough in itself) but is aimed at making secure transactions. Certainly, negative consequences could occur if we ignored the existence of relevant data in the land registers, which are not exactly burdens or limitations on the property given that they are not encumbrances, but restrictions on the person of the owner, normally as a result of registry notices entered by virtue of judgements or deeds, even information crossed with other registries different from the land register (civil status for example). The idea is that the extent of the ownership is shown in a way as comprehensive as a given land register system allows, avoiding omissions or inaccuracies that may invalidate, restrict or alter a transaction, with potential detriment to the legal security.

2. Elements of information on ownership

The elements or items of data that we could consider with respect to the owners, information on proprietorship, or relevant data of Section B, would be the following:

1. Kind of proprietorship or main right

First of all, it is very important to qualify the kind of ownership for the purposes of suitable information.

This involves identifying the main right (of section B) falling on the object (on the property, in section A). So, full ownership must be distinguished from bare ownership and other situations of limited ownership. In some cases the land register systems may include trusts here.

Also, it seems necessary to point out or lay down the different levels or degrees of a registered title if a land register system so establishes them, through its proper indication —absolute, freehold…—

From a functional point of view, the holdership of some property rights, which (exceptionally) are object of the information in a main way, seems close to ownership. It is the event of the leasehold, time-sharing units and so on, in accordance with the criteria of the land register systems that envisage this possibility.

Choosing one of them, leasehold may be the main right of registry information given that leads, in England and Wales (although it is not the only case), a marketable title in the event of long leaseholds, recognized in all European systems (according to the Study "Cross border acquisitions of residential property in Europe". So, leaseholds may be independent titles and

marketable and consequently are logical to be considered as main rights in the so called section "B".

Along with individual ownership there are situations of co-ownership or joint ownership. In this event it is important to identify all co-owners or joint owners as part of the information, as well as shares in co-ownership, inherent to them. So, information should cover owners and shares if that it is the case, but concerning the effects of the type of community in which owners participate, it would seem to be out of the scope of the present study.

2. Data of the owners

The core information of Section B is the name of the person who appears as owner or proprietor of the LR Unit referred to in Section "A".

For purposes of identifying owners adequately, information usually includes data related to the persons. The aim of ensuring the identification of owners is general among the LR systems but there are not so many commonalities in this respect.

To facilitate a flexible way of identification there should be included at the very least the following data:

— Natural person: 1. First name, surname. 2. ID or other identification number, even date of birth. 3. Name of the husband or wife in the event of acquisition for matrimonial community.

— Legal person: 1. Name (including kind of company). 2. ID. 3. Business address.

Likely there might be admitted some other data so that identification of owners becomes indubitable, insofar as they are available and data policy allows. It is important to avoid what could be called the "John Smith problem", when a name gets to be so common or usual that it becomes impossible to find out who he or she is among so many others, in practice normally solved adding some more identification data (ID, name of the spouse…) when they are available.

3. Entitlement

It does not seem irrelevant the information about the basis of the acquisition of the owner, that is to say, related to the contract or other legal act by virtue of which he or she became owner.

The information data of the purchase contract which founds the right of the owner are registered and available for purposes of information in many land register systems. There is an important reason to do so and it is the different level of protection granted by law to purchases, depending on it being for a valuable consideration or not. If owners purchased by virtue of a contract that implies a valuable consideration, e.g. a sale or swap, normally the law grants them a higher level of protection than others free of charge, e.g. a donation.

This seems sufficient reason to consider the important data related to entitlement of the owners. But obviously the fact of being provided or not depends on their availability in a given land register system.

4. Deed of acquisition

Information of deeds of acquisition or transfers is also relevant, for purposes of evidence, fit to be used in legal or court proceedings and also formal justification of the ownership in case of conveyancing.

5. Restrictions

Restrictions that in a direct or indirect way may affect the properties should be reflected in land registers beyond any doubt. A sale may be rendered useless if a legal restriction on the transferor, or on the property sold, has been ignored.

First of all it is important to stress that different kinds of restrictions can exist. Given the European systems, restrictions may be part of section "A" (e.g. legal limitations) or "C" (e.g. judiciary restrictions), but there are also restrictions concerning the persons of owners or proprietors. The latter should be part of section "B". Some relevant restrictions on the person of the owner are the following:

- Restrictions on capacity of the registered owner: legal inabilities
- Indications on bankruptcy or insolvency (potentially different types)
- Restrictions on owner's powers to disposal established by judiciary orders

There may be discussions about whether the place of such restrictions is in "B" or in "C". Diverse responses can be made. Systems may distinguish restrictions on the persons themselves or restrictions on properties, placing each in a different section or part of the information, or may make a choice to unify all possible restrictions in a single Section (likely, section "C")

Restrictions of the person of the owner nearly always come from judgements.

6. Conditions and deadlines

In several LR systems information is included about the conditions on which the ownership depends on:

- Condition antecedent or suspensive
- Condition subsequent or resolutory

Probably it is a case quite similar to restrictions. It makes sense to include conditions in

section “B” as data concerning main rights registered or entitlement or to be considered restrictions affecting the property and taken to the part of information that collects all type of encumbrances or limitations, or Section “C”.

Moreover, it might be necessary to foresee the cases of temporary ownership or ownership under deadline which may take place by disposition of law or particularly by the will of the parties. It seems important to bind a possible deadline to the main right and consequently to include this information in the section related to proprietorship.

4 ▸ THE PART OF INFORMATION RELATED TO MORTGAGES AND ENCUMBRANCES

Assuming the structure of registry information conventionally called *ABC*, its part of section C would be devoted to collecting all type of charges, burdens or restrictions encumbering the property or LR Unit, which is the “object” or connecting factor, axis of Section “A”.

1. Kinds of encumbrances

Legal diversity is huge in this scope across Europe. Property rights, charges or restrictions on properties —or other LR Units— have varied nature, origin and classifications and are rooted in the legal traditions of the European countries. Certainly there are cases of rights in rem shared by the different legislations, even to some extent closely equivalent judiciary restrictions in common, but differences are meaningful in any case.

This approach will include the main cases of potential elements of information of Section C. It must be admitted that this classification may seem somewhat generic. In the absence of further detailed study, the extreme legal diversity, so many particularities, do not allow us to be more specific without forcing the results or leaving out a part of the encumbrances or restrictions.

1. **Mortgages**

Mortgages in European systems can be collateral or not, and can even appear disconnected from the loan, but their importance is maximum for the legal traffic. One can expect all registry information to include this issue in a marked way.

In turn, information on mortgages should be as complete as possible, identifying its main elements. At this point, information is uneven because several factors, such as the nature of the mortgage in a given national property law or the availability of the data of the organization of a given land register system are relevant.

We may discuss what aspects of mortgages are adequate to provide an idea of their extent, but the land register systems do not coincide with them. Likely some main data on the mortgages are

- basis of the obligation guaranteed (e.g. a loan);

- sum or sums of responsibility guaranteed by the mortgage (some systems provide information distinguishing the amount corresponding to the main debt and the one to interest rates, or other amounts also guaranteed that are different from those, while some systems provide information on a global amount of the debts covered by the mortgage without distinguishing the different items guaranteed, others indicate nothing in this respect);

- deadlines;

- identification of the parties: mortgagee/mortgagor; creditor or moneylender and borrower or debtor…

However there are land register systems that do not even regard some of these data as a part of the information on the mortgages and others in which they are not available, although considered part of the ordinary content of the mortgages. So, flexibility should be paramount and it would be wise to study the property law particularly in these cases.

Another relevant aspect of mortgages is their rank, relevant to know the legal preference, to put it this way, the hierarchy or priority of a mortgage with respect to the other burdens encumbering a given property. Information should allow us to know what the rank is between mortgages or between a mortgage and other registered rights in rem. This item of information seems crucial. Errors or ignorance about this potentially jeopardise the interests of the creditors. A sort of registry information including several mortgages (or other burdens, which may also be aggressive for a current ownership) without providing at a time enough information about their rank, would definitely be misleading.

Rank or legal preference of a given mortgage over other mortgages or rights will often come from the date of registration, but it may be modified by agreements or judicial alterations of it in accordance with each one of the LR legislations. If agreements existed, registry information should also cover or consider them to provide an accurate idea about legal preference. In any case, it seems unnecessary to insist more on this point, rank of mortgages is particularly regarded as relevant information for legal purposes and of the legal traffic of transactions.

2. **Property rights**

Property rights are also quite heterogeneous according to the systems. The more frequently quoted property rights registered may be the following.

- *Servitudes or easements*

Servitudes or easements are widespread across Europe. First and foremost they usually have a (shared) legal nature of rights in rem or property rights. Therefore the suitable place for them within a structure ABC would be section "C", as a part of the real rights encumbering a given property.

However, sometimes they are taken to the description of the property (section A), appearing as limitations of such property. It happens particularly in the event that the servitudes are due to public interests.

- *Usufruct*

Usufruct is also quite widespread (although we should not forget that in Britain this right does not exist), albeit a broad casuistry may arise because its legal content varies depending on the national property law systems. It seems adequate to include it in the part of the information devoted to publishing encumbrances that we call conventionally section "C".

The nature of right *in rem* is indisputable; however, since usufruct is considered the part that is missing on the bare ownership, it is not unlikely or absolutely inadequate that usufruct appears in section "B" linked to a bare ownership given.

- *Use and habitatio*

There is a variety of rights of use which fall on a dwelling or rooms within it, often intended for family needs, even linked with effects of the marriage. In principle they should be considered rights opposable to third parties in the broadest sense and included in the part of encumbrances (Section "C"), because in any case this involves limitations to the ownership.

- *Superficies*

The Study on *Cross Border Acquisitions* indicates that "elsewhere on the continent most systems have long recognized some form of superficies, giving rights in the building but not in the land". The right of superficies normally in a first stage certainly grants a real right in land that encumbers it as any other right *in rem*. Once it is exercised on the land is when it gives a real right —quite similar to a temporary ownership— on the building.

So, it is to be expected that the creation of the right of superficies leads to a registration of it as a real right or right *in rem*, and consequently appropriate for the part of the information devoted to publishing encumbrances that we call conventionally section "C". Later, once exercised, the status of this right changes and may lead to a sort of a new main right, a temporary ownership that would lead to a new real folio and a new title or register number, of course marketable, therefore becoming a new object (to be considered for purposes of description of properties in section "A" and with repercussions on the part of information intended for proprietorship or main rights, conventionally called section "B".

For the sake of transparency it seems relevant to clarify the possible stages of the superficies and probably to keep the relationship between all the sections of the information involved by exercising this real right.

- *Leasehold or lease*

Leaseholds or leases are usually registered when they are long leaseholds or at least they are granted for a period not too short. In principle they should be considered a right opposable to third parties, regardless of their nature of real right or not and, insofar as entered in land registers, included in the part of information intended for encumbrances (section "C".

However, leasehold may be the main right of registry information given that it may lead to (as in England and Wales) a marketable title in the event of long leaseholds, recognized in all European systems (according to the Study "*Cross border acquisitions of residential property in Europe*"). So, leaseholds may be independent titles and marketable and consequently it is logical for them to be considered as main rights in the so called section "B".

- *Other rights in rem*

Across Europe there are other types of real rights, like diverse classes of real encumbrances, or emphyteusis (4), or less common ones although potentially object of information. In some systems *trusts* could be considered as such.

3. Judicial restrictions

Given their decisive influence on the legal status of the properties, it is beyond any doubt that judicial restrictions established by judgements should be included in land register information, at least as long as they are available.

Of course, there might be some conceptual problems because judicial restrictions on the properties may come from legal actions either on the property or on the person of the owners. The latter theoretically would lack the effect in rem but in practice land registers must provide information about all types of restrictions insofar as available.

Regardless of the issues of the nature of actions that have caused registrations by means of judgements, from the strict perspective of the land registration, there are certain commonalities that in some way enable the suggestion of a classification of judicial restrictions or charges in their registry aspect as ***notices*** or ***caveats*** (LR entries made by virtue of judicial orders). We find interesting this attempt of taxonomy for the purposes of judicial cooperation (implementation of Regulations Brussels I 2012 recast, Successions or Insolvency, and also measures within the framework decisions in criminal matters). The types would be the following:

1. involving attachment or seizure of a property due to a court proceeding in which the fulfilment of debts or obligations is pursued (*notices of seizure/ attachment*);

2. for purposes of claims about ownership of rights *in rem* about properties (*notices of claims or dispute*);

3. for purposes of freezing ownership or banning the disposal of the property (*notices of prohibition or limitation of the authority of disposal*);

4. warning about the foreclosure or enforcement procedures affecting the property (*notices of foreclosure/enforcement*);

5. indicating the confiscation or forfeiture of the property (*notices of forfeiture* or *confiscation*)

6. warning about aspects of the proceedings of insolvency or bankruptcy (*notices of insolvency*).

This is not an exhaustive collection at all but simply a list of usual or more common *notices*. Of course other types of notices/judicial orders can be registered or have more than one effect.

The usefulness of this classification may be to facilitate the implementation of guidelines of recent European legislation leaning towards the application of "***closest equivalent judiciary measures***", given that national legislations have measures with different proceedings but often with similar or equivalent purpose.

Of course, it may have its importance also for the purposes of Semantics.

4. Other restrictions

The category of "other restrictions" is potentially very heterogeneous and a challenge for future developments of the structure of the template. It is aimed at

- Rights or interests affecting properties but either not included in previous categories or of controversial or indefinite nature.

- All kinds of administrative charges or limitations over properties. Maybe fiscal burdens among them (in this respect, we can observe very different legal answers of the European legislations: remarks, notices, real encumbrances, legal mortgages…).

- Privileges over the properties due to different legal sources.

So, although allocating a part free seems advisable —even inevitable—, for the sake of transparency it would be important to continue building subcategories or subdivisions. Better than a hotchpotch in any case.

2. Rank or preference between charges

Finally, it would certainly be relevant to find criteria to organize encumbrances within the means of information (excerpts, certificates) and it seems clear that there is also a widespread idea about what registry rank or priority is, based on the rule of date of registration as a common criterion to set it.

Rank or priority amongst registered encumbrances appears a relevant question to lay down the legal status of the properties, and it would be very useful if land register systems provided information about this particular issue, allowing us to find out the paramount burdens as easily as possible. In several LR systems regular information indicates what the mortgage rank is, as a general rule or upon request.

Date of registration appears as the most usual way of finding out the preference of registered real rights or burdens, but it is important to warn about the possible changes in priority rank by means of agreements of the parties or as a result of judicial procedures.

5 ▸ OTHER RELEVANT ASPECTS

These guidelines do not exclude other relevant information, such as might be on pending documents, i.e., those deeds that have come to the registration of the property but have not yet registered. Unquestionably, such information is important to users of the land registries, who can expect the legal status of the property of interest to change as soon as the pending document is recorded.

Moreover, it is not necessary to stress the importance of legal warnings, and in particular those on data policy. Also, disclaimers play an important role in the information because they allow the user to know the exact legal value of the information provided.

It is obvious that any approach to a European initiative of exchanging registry information should be backed by clear and sufficient reference information (so relevant from the legal point of view) as accurate as possible, to be drawn up and disseminated by the relevant organizations to issue the registration information through the European networks (as ELRN).

If the goal is to improve mutual understanding in a way that further alignment of registry practices can take place, we cannot ignore the important role of semantics, which so far has enabled the progress of legal techniques such as the concepts of the *closest equivalent rights in rem* (EU Regulation 650/2012) or *closest equivalent judicial measures* (Brussels I *recast*). An important result of Semantics may be *semantic fields* (or data fields) for gathering similar or nearby registry placeholders, which could be placed and managed to form categories of information and labels.

REFERENCES

Sparkes, Peter. *European Land Law*. Hart Publishing. Oxford and Portland, Oregon. 2007

Van Erp, Sjef (JHM) (Maastricht University). Akkermans, Bram (Maastricht University). *Cases, Materials and Text on National, Supranational and International Property Law*. Hart Publishing. Oxford and Portland, Oregon. 2012

Ruoff, Theodore B.F. *An Englishman looks at the Torrens system. Sydney: Law Book Company of Australasia Pty Ltd. 1957*

Clarke, Sandra, and Greer Sarah. *Land Law Directions*. 2nd Edition. Oxford University Press 2010

Cross border acquisitions of residential property in Europe" *(Directorate General for Internal Policies Policy Department C: Citizens' Rights and Constitutional Affairs).* http://www.europarl.europa.eu/RegData/etudes/STUD/2016/556936/IPOL_STU(2016)556936_EN.pdf

Land Administration in the UNECE Region. *Development trends and main principles*". Geneva, 2005

Reference Information on the draft of ELRD of IMOLA project can be seen in http://www.elra.eu/network/

The use of the IMOLA Template in deed systems

BY JAN MOERKERKE

Member of the ELRA Board

1 ▸ PREFACE

The Imola project aims to produce an electronic form that allows citizen from the different EU countries to get information out of the land registries.

Initially it's being developed for systems using the real folio, where queries start from the location of the land.

Since in Europe there are different countries that handle the personal folio, where queries start from the owner, there should to be an adaption of the form for these systems as well.

In order to develop a form one has to be informed about the existing systems and their properties.

Therefore I will start explaining the fundamental properties of the "Deed" system. Afterwards I'll try to compare with the "Title" system and the "Public Faith" system, which situates itself between the two former ones.

This comparison will be done from a theoretical point of view. Since we see that practically no system used in whatever country fits 100% under one of the three mentioned categories. Finally, I think that we should try to catalogue most cases as being merely one of these types.

I will also briefly highlight the standards a good system should meet and the strengths and weaknesses of all systems.

Next to that we come to the Belgian deed system and the recent rather interesting changes of approach.

In the end I'll try to make some recommendations for an "Imola" form, suitable for our system. But merely I hope that stirs up a group discussion based on a broader view.

2 ▸ THE DEED SYSTEM

Fundamental for a deed system is the fact that it is not the title that is recorded in the Registry, but the deed.

To understand the difference there's needed some extra information. Most countries where some kind of a deed system is applied have a causal system.

For immovable properties the intention of moving the ownership from one hand to another is taken up into the deed. It results in several obligations as well for the alienator as the acquirer.

A has to deliver the goods, hand over the possession a.s.o. . B has to pay the price as principal duty.

If all these conditions are met, one can deduct that the "Title" of property has gone over. The deed itself is never proof that the legal consequences intended by the parties, actually did take place.

Of course the same principle goes for the transition of rights as superficie, easements…… On the contrary transition by inheritance happens " ab intestat", which means by the simple fact that somebody dies.

All of this has important consequences for deed registration. This means that registering a deed never can give someone perfect surety of his "Title" , in the meaning of being entitled.

It informs contracting parties about the existence of agreements in the past , expressing the will to handover property. Whether this has really taken place depends on the fact if the contract has been properly executed. Did all parties fulfil their obligations?

The deed, a document that describes one isolated transaction, is registered. It is evidence that a particular transaction took place. But it is itself no proof of the legal rights of the involved parties, and by consequence no evidence of it's legality.

Thus, before dealing safely can be effected the alleged owner has to trace his ownership to a good root of title. Generally spoken this means that all obligations following out of the contracts written down in the deeds in fact have been executed over the period needed for obtaining prescription (generally between 10 and 30 years). Of course this needs all parties involved to be granted with the power of acquisition or alienation. So, for every deed one has to ask as well the question if the alienator is entitled to act as owner and as well does he have the legal authority to sell?

There fits in the role of a professional, mostly the notary, being a public officer, but also other legal practitioners with experience in the matter. The deeds the notary and the parties sign have the advantage to enjoy authenticity. This means that they reflect the truth, at least for as far the parties are honest, if not, bad faith is proved. This is very important for later investigation by parties wanting to contract.

Out of this theory it may be clear that the guarantees a deed system delivers, only can be

very limited.

In fact it only gives insurance on registerable but not registered facts and about the existence of a contract on a certain fixed date. That is why it is often also called a negative system with a passive role for the Registrar. Generally in this system there is little investigation by the Registrar before entering the deed in the registry. If the deed meets to some standards, prescribed by local law, he takes it up into his documentation. Again this a theoretical thesis as we'll see further on how systems have been adopted to meet with the requirements of offering certainty..

The main goal is to advise third parties of the fact that parties have created a legal fact with the intention of having a legal consequence, and decided to register it. Generally it's compulsory in order to affect third parties. People (bona fide) can rely on that.

Generally the register is public. In fact this is a primary need to fit with the goal.
Sometimes registration is constitutive. Which means that it's one of the obligations that have to be fulfilled before there can be a transition of property.

Mostly there is a personal folio, although this is not essential. In Europe roots to the fact that countries that in time started using the system practically all have the French "Code civil" as their origin.

Next to this civilian instrument there is generally a cadastre in which, on a parcel based index, the state gathered some information on immovable property mainly in order to collect taxes. If this is done meticulously enough it can serve as a base to describe properties in deeds, no more no less.

In time the deeds mostly were meticulously entirely copied and indexed. Nowadays this is a question of electronically kept databases, which deals with a lot of former shortcomings of the system.

3 ▸ THE TITLE SYSTEM

The system is often called "Torrens system" relating to Sir Robert Torrens who as first implemented the system as a part of a land reform in South Australia in 1885.

The legal consequence of the inscription, being a fact, covers the right. So the right itself, together with the name of the rightful claimant and the object of that right, with it's restrictions and charges, are registered. The fact that a right is described in the register means you are "entitled " to it.
It is the manifestation of constitutiveness of inscription.

The "Mirror principle" guarantees that the register is a mirror to the judicial state of the property.

The "Curtain principle" means that an interested person does not have to investigate the underlying contract or former contracts in order to be sure about the transferable rights.

The register itself is an authoritive record kept in a public office.

It is at all times final; which sometimes only leads to financial compensation after a wrongful inscription.

It is generally composed by three sections. Parcel/owner of the right/ encumbrances. There is only one register including a map and property registry register. Research in it is parcel based.(Real folio)
To that there is referred to topographical maps that tend to be (too) little detailed.

Mostly registration is not compulsory.
It often exists next to an older less performing system, offering less guarantee

Before inscription there is severe investigation. Afterwards inscription guarantees the clear and unambiguous consent of the former owner. The registrar controls as well if the contract meets the standards to let the transfer take place and the existence of encumbrances of different kind. This investigation can be very time consuming. On the correctness of items and on forgotten inscriptions the state offers a guarantee.

That is why the system is often called positive in which the Registrar has a very active role in the acceptance to inscription.
In order to provide contracting parties with some security in between there can be a preliminary inscription offering security in relation with third parties, similar to that in a deed system.

Nevertheless, the guarantee is not total because there are practically always "Overruling interests". These are exceptions to the rule that only registration covers a valid right and are blemish to the completeness of the register and are likely to be kept to a minimum.

4 ▸ THE "PUBLIC FAITH" SYSTEM (fides publica) (Offentlicher Glauben)

Even more than the two other definitions this term is only known by professionals. It offers security in a degree somewhere in between the two others. Nevertheless it is interesting to catalogue it apart since most of European called "Title systems" in fact belong to that category.

When buying under this system,
* in good faith
* from a registered alienator
* who is not restricted (see Vormerküng)
* nor contradicted (see caveats- Widerspruch)
one is protected so far that the state guarantees the authority to of the former known owner to alienate.

This has to be controlled by the Registrar and gives him a rather active role.

It is a protection against trespassing the limits of the authority to dispose of a registered owner. The lack of authority to dispose of the alienator is purged.

Here as well in some cases there is possibility to ask for a provisional registration. It offers a similar protection as deed systems do. It is conceived as a constructive notice to third parties.

Registration is in most cases constitutive for the transition of the right.
This means that as long as the registrar did not agree to enter the transaction in the register, the contract is pending.

There is also protection against any damage caused by not being informed about a fact that should have been registered but is not.

In these systems there are some possibilities to register forms of opposition if one does not agree with the indications in the register (wiederspruch) . This system is not that final as we saw it is in title registration. On this point it is comparable with deed systems where a margin annotation can prevent third parties from the fact that there is a summon to obtain the termination of the contract and the verdict to it.

There is no insurance for all other legal facts that are mentioned in the deed.
Again here it is not the title itself that is registered.

On the other hand many countries do indeed have legislation extending the guarantee.
So it is on the balance of a positive or negative system .

The register is mostly kept in court and is parcel based. The documents that have to be presented to the register must be seen by legal private practitioners (notaries or lawyers)

5 ▸ STRENGTHS AND WEAKNESSES OF BOTH DEEDS AND TITLE SYSTEM

Since the “Public faith” system is a compilation of the two others , only the last ones will be taken into account. Before comparing we should make a survey to what standards a system should meet to be effective.

First of all there is the question, why do we register after all?
The answer is quite evident. With movable property, possession and in relation to that ownership, is mostly obviously remarkable for contracting and third parties. Which is impossible with regard to immovable property. Think for instance at the delivery, an important part in the transition of property

That is why, by describing it in contracts and putting up a register we try to set up a mirror to the property itself. By extension it provides evidence for the owner about the property and its encumbrances. This is the first requirement banks set before even thinking about granting a loan. Afterwards comes the importance of priority rights as a debtor, guaranteed by a mortgage.

If we know that loans are often the start or in every case a support of the economy we see the importance of a reliable property registry system.

This is as much a fact for a European couple wanting to buy the family home, as it is for someone in a post- war situation who wants to set up again his business without cash ,or as it is a family father living in a slum and just wanting security of tenure over the house he lives in or the piece of land where he wants to put up a tea plantation , for which he needs a micro- credit.

These examples illustrate that there is no "best" system. In every specific circumstance the most appropriate system should be taken into account. We all know that the system should be effective and as cheap as possible. But these demands mean totally different things in the City of London and in the Savana in Africa. The same goes for the need of clear boundaries.

I'd like to refer to the FIG (federation Internationale des Geomètres) statement on cadastre, which goes as well for property registry.

a) Security: The system should be secure such that a land market can operate effectively and efficiently. Financial institutions should be willing to mortgage land quickly and there should be certainty of ownership and parcel identification. The system should also be physically secure with arrangements in place for duplicate storage of records in case of disaster and controls to ensure that unauthorised persons cannot damage or change information.
b) Clarity and Simplicity: To be effective the system should be clear and simple to understand and to use. Complex forms, procedures, and regulations will slow the system down and may discourage use of the system. Simplicity is also important in ensuring that costs are minimised, access is fair, and the system is maintained.
c) Timeliness: The system should provide up-to-date information in a timely fashion. The system should also be complete; that is all parcels should be included in the system.
d) Fairness: In development and in operation, the Cadastre should be both fair and be perceived as being fair. As much as possible, the Cadastre should be seen as an objective system separated from political processes, such as land reforms, even though it may be part of a land reform program. Fairness also includes providing equitable access to the system through, for example, decentralised offices, simple procedures, and reasonable fees.
e) Accessibility: Within the constraints of cultural sensitivities, legal and privacy issues, the system should be capable of providing efficient and effective access to all users.
f) Cost: The system should be low cost or operated in such a way that costs can be recovered fairly and without unduly burdening users. Development costs, such as the cost of the adjudication and initial survey, should not have to be absorbed entirely by initial users. Low cost does not preclude the use of new information technologies, as long as the technology and its use is appropriate.
g) Sustainability: There must be mechanisms in place to ensure that the system is maintained over time. This includes procedures for completing the Cadastre in a reasonable time frame and for keeping information up-to-date. Sustainability implies that the organisational and management arrangements, the procedures and

technologies, and the required educational and professional levels are appropriate for the particular jurisdiction.
Taking these recommendations into account each community should choose how they arrange security of tenure and property registry.

Sometimes it may be enough to be secured as a group. Examples exist to protect a community form forced evictions. Several solutions, not necessary hi- tech, are very accessible and yet mean a big change. African examples show that even a simple document where the person is identified with a photograph and fingerprint and a satellite picture can make a world of difference between security or none. Especially
Un- Habitat has been very active in that domain.

Finally, when trying to compare systems we will always end in the comparison of title and deed systems and person based or parcel based documentation.

Purely theoretically seen I think we cannot deny that a parcel based, title system seems to offer the most security. In most literature it is written with some sort of a religious belief. I used to think like that myself. Yet, after some years in practice, I had to admit that a lot of prejudices against the deed system were wrong.

A parcel bound system certainly has its advantages. One can divide an existing parcel in 100 pieces, as well horizontally as vertically. Full ownership can be shortened by encumbrances; there can be a joint ownership between 100 persons; there can be bare ownership and enphyteusis But in the end when we count all rights together we still keep 100% property
A personal system cannot guarantee that, and overruling rights are more likely to occur.

On the other hand, IT solutions have solved a lot of the problem. The advantage of an easy way to put indexes by up going parcel numbers does no more exist since data bases are that performant that they can search on all data and filter them.

And finally, when it comes to countering that religious belief, shouldn't we fundamentally ask the question for whom do we register? In favour of the parcel or in favour of the person? So, since databases are so flexible right now, shouldn't the person be the first ID?

Indeed, the curtain principle and the direct guarantee on the ownership of the title give certainty. It seems to offer security after little investigation before conveyancing. But on the other hand, society gets that complicated that the information that is kept in a title register is by far not sufficient to form a clear idea about the property. For instance, an existing easement to use a well might be much less important than environmental information or urbanistic regulations.

Where a title system should make it possible to make simple private agreements, we see that this is scarcely done without the help of professionals due to complication.

Theoretically a deed system demands every time an investigation to the root title. This may seem to be a hard job, but generally it causes not many problems to rebuild the situation to

the moment prescription is enough to prove ownership.
The benefit of the mirror image a title system has again seems to be less in practice than in theory.

For professionals it is not much cheaper to do the research, but the organization of the system is certainly more expensive.

On the other hand, the curtain principle might make it for contracting parties and third parties more difficult to see the whole contract since it is not necessary to archive them

Furthermore, certainly not all existing title registry systems offer compensation for damages.

Above all this country using the deed system often make the use of a professional compulsory. Notaries deeds have the power of authenticity, which gives some guarantees.
Forced by law they have to ask some information from all sorts of authorities and from the seller. If, later on, it becomes clear that he has lied, automatically it is an as bad faith proven fact.

Investigation of all sorts can be obliged about relevant items as urbanism, soil pollution, degree of thermal insulation, leases, future expropriations a.s.o.

In deed system the investigation of the title has to be performed up to the root. Generally it has to be done for a period sufficient enough to obtain ownership by prescription. The notary offices prove to be very well organised to do that investigation. Furthermore it can be forced by law to take up a history of property in the deed for the whole period.

If this is reported in the deed, it can be consulted by everyone.

Deed systems are generally public and it's characteristic to guard the deeds themselves or certified copies.

Surely in time keeping up such an archive was difficult Deeds had to be transcribed by hand or later copied.

This was a work of monks with consequence that much information, not strictly necessary as evidence for the title transfer was copied also. On the other hand practice learns that a lot of this information is particularly interesting to get a good view on the property in its whole. There were huge amounts of paper in moist cellars. There was always a danger of loss a.s.o.
Again the storage capacity of computers is nowadays that huge so that the disadvantage is swept away.

Title systems aim to produce a clear situation. Deed systems try to collect the necessary information in order to be able to clear up difficult situations.
Hence daily practice has taught me that there is very little discussion on ownership and that defective deeds with sometimes very unclear clauses referring to former deeds don't seem

to produce problems.

So, why put energy into solving problems that finally likely will not even occur! This is unfortunately what a title system tends to do.

The duty a registrar has only to inscribe a title when there is no doubt on the legality, does imply that an in-depth research is necessary. This takes time. In title systems where registration is constitutory this means that there is a vacuum and the decision about property is pending. This produces insecurity.

On the other hand, again with the help of IT , deed systems succeed in quicker and quicker registration., even simultaneously with the execution of the deed might not be impossible.

Generally title system seems to be the best way to start when one has a clear canvas; when there is a first inscription. Of course we should start to think on what will happen when we move to other planets but on earth there are no such places left. In time this option has been taken by colonial powers.
But they overruled shamelessly existing systems, based on customary law. As a result the fact that much of the last ones were unwritten and also were conceptually different, these rights were denied. This is a situation we cannot accept any more. Customary law also often does not know the concept "ownership" and puts more emphasis on "Tenure". We have to take into account that it is not the law that should adapt to the property registry system but vice- versa.

Conclusion is that it is not the system itself that is relevant for the performance, but the way it is organized. It's all about security. Here follow some recommendations:

* the description in contracts of parties and goods should be unambiguous and preferably laid down by law. For deed systems it is preferable that cadastral numbers in deed also reflect to the future situation

* Whether it is in title system in the register itself or in deed system in a cadastre it is necessary to have sufficiently detailed parcels for the whole covered area. Of course the degree of detailing may vary.

* Registration should be compulsory. It is the only way third parties can get a clear view.
* Registration should happen soon after conveyancing

* Organise a system so that all changes of property of immovable goods are inscribed, including for instance inheritances.

* try to inscribe all (legal) fact that are relevant at the time being.
More than getting proof on some items, registry systems should be more or less an open source for all sorts of relevant information, resulting in security

* The assistance of a legal expert (notary or lawyer) is a added-value. They at least should have a clear view on the entire contract that contains the transition of property. A good contract delivers a security that goes far beyond what registry may offer

* Make research easy . Nowadays databases are that powerful so one has the possibility of different approaches

6 ▸ THE BELGIAN SYSTEM

Belgium clearly has a deed system and there is no intention whatsoever to change it, since it has proven its workability.

Nevertheless lately there have been several improvements and in the near future some changes should result in a better security for parties.

The main result of registration is that it affects also third parties. They cannot deny the existence nor the priority some legal facts get by inscription or transcription of the deed.

Furthermore there is a specific protection against double sales before registration.

It is a personally kept system. Originally based on an alphabetic system. Nowadays referring to a national register in which every citizen, company and foreigner who has some interest gets a number.

Purely for administrative reasons the database which makes an inventory also mentions the parcels, but not in a unique way . This makes a parcel based research possible though unreliable.

It is negative since it only guarantees for legal facts that should be mentioned in excerpts and are not and furthermore for some well-defined facts.

Legally seen it is still a documentation that is held by the Land Registrar himself and he is personally responsible for the damage caused by wrong information. But that system is to be changed in the upcoming years.

Deeds used to be entirely transcribed in but nowadays are kept as PDF files in a very secured system.

The documentation is open to the public but consultation is not free.

Encumbrances and eventual objections are inscribed as annotations to the deed. They are kept the same way in the documentation and, if still relevant, are present on excerpts. Deeds of bailiffs in a procedure of seizure are kept in the same way.

Generally speaking only deeds referring to property transition due to contracts under living are inscribed.

By law some juridical facts are also, for instance leases for more than 9 years or containing discharge for more than 3 years.

Entries in the registry are only possible through deeds, drawn by notaries or other legal persons granting the power of authenticity.
The way how persons and parcels are described in deeds are legally prescribed, as well as a lot of other legal facts that concern the property.

Generally information out of the registers is given by excerpts, delivered on paper.. But full copies of deeds are available too.

The system relies on a quite detailed and digitally kept cadastre, covering the entire surface.

A main defect remains the absence of property transitions due to inheritance being inscribed in property register. Of course being " ab intestat" is the main legal ground to that. But the public is not served by that explanation.

It is an absolute necessity to book the effects of inheritance as well, in order to provide security sufficiently. So, it is very positive to read in the governmental statement of the actual government that such a measure should be considered. Of course this must be realized at the lowest cost.

7 ▸ RECENTLY THE SERVICES ARE IN A PROCESS OF A QUITE BIG TRANSITION, AS WELL LEGALLY AS TECHNICALLY AND AS AN ORGANIZATION.

The property registry offices (bureau des hypothèques/ hypotheekkantoor) used to be part of the Ministry of Finance; together with the cadastre that had a surveying and fiscal role and an office called "Registration" that dealt with the fiscal consequences of transition of immovable property and was responsible for publicity on personal rights (f.i leases)

Due to a change in constitution the fiscal role became a regional competence.
So the service had to re- invent itself a bit.

At the same time it came clear that we should dispose of central database collecting all information on immovable property. So the "Agency of patrimonial documentation" was born.
It consists of the three formerly known directories. There was taken a fundamental option to merge them where possible and in this way avoid double or triple work. In order to make this possible the terrestrial area of competence of the three sections has become the same.

In term of organization it was a huge change. It took some 10 years of preparation. But now we see the results on the field. The database "Patris" exists and is linked to another database containing all information on the person.

The idea is that the information is collected in a unique way in these databases and that

everyone who needs information, to which he is legally entitled, can collect it here, without bothering people again.

For instance if we get our tax bill it is already partly filled in with information out of these databases.
Connection to other databases is also possible. So right now there is also a direct line between notaries and the agency. They can consult the same data we do.

Also for the property registry this fundamental option has some consequences.

Our offices used to work stand alone in jurisdictional units. The IT was locally built and kept. Right now our system changes to a nationally kept one.

Since 2014 the databases of the Chamber of Notaries and the Administration are connected. Legislation has changed so that it became compulsory for notaries to present deeds for registration electronically. Together with that, the time to do so has generally become 15 days, coming from generally 2 months a few years ago. In practice we see that deed are presented much earlier than that, sometimes even on the day it was signed. This certainly serves the security.

Going a step further there is decided that the property registry offices are to make new entries and changes of property in the central database "Patris", using a program (Stipad) that is working in co-operation with the database Property Registry is using (Hypo)
It is an option to make both merge and at least to make new entries the same for the two of them.
"Hypo" was the database working round registered deeds and was very accurate but working with the person as a base. The starting resources of "Patris" were the cadastral information, which was parcel bound and accurate enough for fiscal purposes.

The recent changes are intended to merge both databases as soon as possible and for now at least trying that entries for fiscal purpose, match with the ones for civilian purpose at the property registry office. To that purpose it is the employees of the Property Registry office that makes the inscription in both registers with the high quality standard they are used to. This extra work makes a reorganization of the offices internally necessary.

It is the option of the agency to make research in the property registry system also possible on the parcel, through an interconnection between the two of them.

I am greatly in favour of all the changes since they serve a more modern idea on security in the domain of immovable property. It is not only the "property" question, which in European countries generally poses no problems, but merely the limitations due to all sort of legislation that are indispensable to know. I think we must be able to register in a way that some kind of "Google" research of the property will make decisions possible with a broad view. We must not try to guarantee too many things since tomorrow it might become clear that exactly these guarantees don't matter anymore economically.
The Belgian solution to require from notaries to implement a lot of, actually relevant, information into their deeds is very positive to that process.

In practice our deeds are signed after control of the notary and give, in an authentic way, information on the transfer of ownership but give among others also information about lease situation, urbanism, soil pollution, matrimonial regime, public and private pre-emption rights, a.s.o..

Since the registry is fully public this is practically seen a very performing system. Of course a high responsibility rests on the notaries which act very professionally. Without obligation but pushed by IT systems a sort of a canvas of a deed is used by notaries. For a professional it is very clear to consult.

Recently there has been implemented a method to deal with a better description of the goods in deeds so that they can be entered in the registry without any confusion.

Notaries have to describe sold parcels in their deeds referring to the cadastral number. Only when parts of parcels were involved in the transaction, he had to describe them as "Part of parcel x ". After mutation a new number was given in the cadastral documentation. This was one of the problems on giving parcel based information out of the property register since the known number did not correspond with the actually existing one. Surveyors maps often were necessary to clear the situation.

Therefore surveyors and notaries are now obliged to declare the intention of alienation to the cadastre and deposit the surveyors map. The previewed new number is given by cadastre and in the deed the new number has to be inserted.
Next to that apartments are given also a unique number in the same way. In the deed where the internal division is formed, the future numbers are entered, specific for each apartment. Both these measures are very interesting for security since there can be no more confusion about the sold property in future.

Also concerning parties strict demands are legally fixed for deeds. In the database on persons identification "Sitran" the main id is the national number every citizen gets. Companies and foreigners get an equal number.

If transferring parties mentioned in a deed are not traceable in this database registration can be refused.

I think these are a few examples of a modern way deed systems deal with increasing security.

8 ▸ DEED SYSTEMS AND IMOLA

Remains the final question. How can we produce an "Imola" form, useful for deed systems as well?

Regarding the guarantees offered by a deed system, I see no problem. A simple "Disclaimer" with the necessary general information can be sufficient.

There are more problems with the person based indexation. Searches in database of the land registry are only reliable giving up the name of the owner of a right.

For instance, Belgian database does offer possibilities to search by parcel numbers as well. But you will only get a right answer in 95% of the cases, which is not enough.
One could go through the cadastre by asking who is the owner of a particular parcel. Again in 95% you will get necessary information on the name of the owner. Since cadastre was originally meant as a fiscal database it met its goal when somebody, among the owners, was found to pay them.

So, in a certain query one might get the answer that the owner is "MR. X and others", which again is not enough for civilian use. For the future there might be no problem anymore since the system "Stipad" we introduced in 2015 enters by cadastral number, each owner, with the particular part he owns.

In title system one can ask the simple question, giving up a parcel number: "Who is the owner and what are the encumbrances?". You will get a clear answer.

Turning the question around in a person based deed system does not work at all!

It should be formulated in the following way to get a valuable answer:
I give you a name. Is this person known in your documentation? If yes, the query can be limited to specified goods.
If necessary one can extend the query a former owner over a given period. In that case the registry office examines the deeds and reconstructs former situations.
The answer will be that you obtain an inventory about all fitting deeds, describing the main features. If necessary, getting a full copy of the deed is possible.

Furthermore, the usual ABC division, we find in title systems, does not at all appear in deed systems and users of deed systems have difficulties to categorize legal facts and rights in it.

Unfortunately, for the time being I see no other possibility than developing an extra form! Or at least make it possible that a query starts as well by entering a name in section B and get an answer about the deeds a particular person is known in, in the area covered by a specific office.

Protection of personal data in the context of registration of real rights

BY MIHAI TAUS

Member of the ELRA Board

The concern for privacy and personal data protection is natural, but recent technological developments required new approaches to this topic. As a matter of fact, personal data protection measures is required since the use of computers. From that point, there is a constant concern for that field. Here are some milestones:

- 1970 – first data protection law in Hesse, Germany
- 1980 -Recommendations of the Council Concerning Guidelines Governing the Protection of Privacy and Trans-Border Flows of Personal Data
- 1995 - Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data
- 2001 - Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000
- 2002 - Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 2008 - COUNCIL FRAMEWORK DECISION 2008/977/JHA
- 2012 - Commission proposed a comprehensive reform of data protection rules to increase users' control of their data and to cut costs for businesses
- 2015 -On 15 December, the European Parliament, the Council and the Commission reached agreement on the new data protection rules, establishing a modern and harmonized data protection framework across the EU. The Regulation shall apply 2 years after its formal adoption by the European Parliament and Council.

The new regulation brings new tools for a better protection of personal data:

- easier access to your own data: individuals will have more information on how their data is processed and this information should be available in a clear and understandable way;
- a right to data portability: it will be easier to transfer your personal data between service providers;
- a clarified "right to be forgotten":when you no longer want your data to be processed, and provided that there are no legitimate grounds for retaining it, the data will be deleted;

- the right to know when your data has been hacked: For example, companies and organizations must notify the national supervisory authority of serious data breaches as soon as possible so that users can take appropriate measures.
- better cooperation between law enforcement authorities.

In order to avoid any confusion some terms should be defined:

- Data: information (in an electronic form that can be processed by a computer).
- Personal data: any information relating to an identified or identifiable natural person.
- Processing of personal data: any operation or set of operations performed upon personal data (collection, recording, consultation, ...).
- Data controller: the person, public authority, agency or any other body which alone or jointly with others determines the purposes and means of the processing of personal data (e.g. the Land Registry itself, the ministry, ...).
- Data subject: the person whose personal data are being processed (e.g. the proprietor, the mortgagor and mortgagee, ... entered in the land register).

Probably presenting a parallel evolution of data protection laws and land registry would have been more effective for a better understanding of the contradictory overlap between data protection legislation and land registries; land registry uses personal data such as names, addresses of natural persons, PINs, data "behind the curtain", or other kind of personal data I might missed. The main purpose of land registries is to make public erga omnes the immovable rights over real estates, as a tool to protect the right itself and the third parties as well. How to deal between the protection of personal data and publicity of personal data as the right over an immovable? The approach to this issue vary widely from a strong protection (only the proprietor may apply for information regarding his/her personal registered assets) to very relaxed policies (anyone is allowed to query for information. "Intermediary" approaches supposes mainly a legitimate interest to apply for information.

It should be noticed that title systems have a kind of native personal data protection system expressed by the principle of curtain. These systems ensure publicity of the right, but not of the deed and there is no need to go behind the curtain to check on the deed, as the certificate of title contain all the information about it. So, the personal data contained by the deed, which are not subject of publicity are protected. Of course, this is not the main application of that principle, but as long as there is no need to look beyond the registration, personal data are under certain protection.

However, the problem is to find the right balance between the way the personal data is processed and the publicity as an outcome of the registration in a land registry system. At least, these few things about the Data Protection Directive are to be mentioned:

1. Personal data must be processed fairly and lawfully. This reflects the need for accuracy and precaution when manipulating personal data. it also represents data controllers's liability.

2. Personal data shall not be kept in a form which permits identification of the data subject for longer than is necessary for the purpose for which the data were collected and/or processed. Although easy understandable from a general approach, it is completely different and hard to apply from the land registry point of view, as long as the relation between the data subject and the object represented by the immovable shall be stored permanently. If applicable, the role of the land registry might be jeopardised. It is very important to define - from the land registry perspective- how long is too long to keep the personal data. The answer is not an easy one if one would try to apply the same rules as for other data controllers. For the land registry it is never too long to keep the information, as the principle of resoluto iure dantis, resolvitur ius accipientis may occur. This is just an argument in order to open a debate on this topic, but there are a lot of different reasons to find the solution of temporary storage of the information as inapplicable to the land registry. On the other hand, it shouldn't be ignored that the law stipulates that the personal data shall not be kept "longer than is necessary for the purpose for which the data were collected and/or processed". Well, for the land registry, to keep the information permanently is necessary for the purpose for which the data were collected and/or processed and the law shall regulate this exception.

3. Personal data shall not be transferred to a third country unless that country ensures an adequate level of protection for the rights of data subjects in relation to the processing of personal data. This should be a topic to be taken into consideration when developing the land registries interoperability framework.

These are just a few rough ideas brought up by thinking of land registry and protection of personal data in the same time. Some questions rises:

- Shall the Land Registry be an exception to data protection legislation? Why or why not? If YES, at what extent? How to regulate this exception or how to make the personal data protection entirely applicable by the land registry?
- How Land Registry comply with Data Protection?
- Does "right to be forgotten" applies to land registry?
- Should the owner be informed if someone accessed its data? In what circumstances? Any exceptions?

As a conclusion, due to the interference between personal data protection rules and land registry rules, special regulations shall be adopted in this respect. Otherwise there is a potential risk that either data protection legislation or the land registry to be undermined, transforming an excellent step for protecting the privacy into a weapon against the good faith.

The Land Registrar as a Legal Professional

BY FERNANDO P. MÉNDEZ

Director of International Relations of the Colegio de Registradores de España and Associate Professor at Universidad de Barcelona.

1 ▸ OVERALL APPROACH

If someone visits the E-Justice Web Portal of the European Commission a section designated as "Legal Professions and Judicial Networks" can be easily surprised. If that person clicked on a subsection titled "Legal Professions" it reads as follows:

"Within the different legal and judicial systems of the Member States of the European Union (EU), there is a wide range of legal professions such as lawyers, notaries, judges, prosecutors and judicial officers. Members of legal professions do not hold the same titles in all Member States, and their role and status can vary considerably from one Member State to another."

Land Registrars, as we immediately notice, are not listed among the Legal Professions –or Legal Professionals- in the European Union.

Located a little lower on the same website there is another section titled "Registers". If we click on that section three subsections show up: 1-Busines Registers, 2-Land Registers and 3- Insolvency Registers.

Focusing on the Land Registries, as these are the specific area of interest of ELRA, we can notice that the activities carried out by those represent an important share of all the E-Justice projects, sponsored by the European Commission to further the development of Electronic Justice, like the work in progress currently in execution by ELRA: Projects IMOLA and CROBECO- and the Multiannual European E-Justice Action Plan 2014-2018.

For all the above and considering the role played by the Land Registry and the Land Registrars – in spite of their institutional diversity within the EU- it is shocking to find that the Land Registrars have been omitted from the Legal Professions list of the E-Justice Portal.

2 ▸ CONSEQUENCES

The consequences of this omission implies, in essence, the exclusion of Land Registrars from the diverse working groups dealing with Networked Justice or Online Justice, sponsored by the European Union, as it can be easily spotted looking at the Multiannual European E-

Justice Action Plan 2014-2018, among other documents, where Land Registrars have been excluded, among others, from the following matters:

a.- Cooperation with Judiciary Authorities and Legal Professionals.

No form of cooperation from Land Registrars is foreseen.

b.- Registries.

There is no reference to Land Registrars in the Multiannual Plan, to nobody's surprise, when dealing with National Registries in support of the Justice Administration, such as Land Registries, especially those configured as registries of rights.

c- Semantic Web.

The same happens, ultimately, when dealing with the cross-border exchange of legal information, despite being a matter that directly involves the Registries, and not only the Land Registries- also business and civil registries-.

Information from the Land Registry is – no doubt about it- legal information, and finding an interoperable legal semantic is, as we'll see, an important element to facilitate the cooperation in the field of Land Registries and to achieve a useful and meaningful Interconnection of Registries.

All these consequences are in connection with legal matters in the online medium, but the same attitude can be found in the offline world in different legal projects and drafts from the European Union which affect, either directly or indirectly the Land Registries.

Fortunately, these consequences are mitigated thanks to the existence and activity of ELRA, playing the role of interlocutor before the EU Authorities. So, even Land Registrars are not acknowledged as part of the legal professions roster of the E-Justice Portal, ELRA is carrying out two projects financed by the EU, which are essential in the field of Registry Interconnection, such as IMOLA and CROBECO and, within the former, an important effort in the field of semantic interoperability in order to facilitate the cross border exchange of information from the land Registry, which always entails legal information.

3 ▸ WHAT'S THE REASON BEHIND THIS EXCLUSION?

By "exclusion" I am talking, not only, about the absence from the list of Legal Professions of the E-Justice Portal, but, in general, about the lack of participation in working groups which contribute to the drafting of legislative projects which directly affect the Registries and, also, substantial legislation affecting acts and legal contracts on Real Estate that, to bigger or lesser extent and/or legal reach, decisively determine the content of the Land Registry entries.

In a first approach –and this communication aims at being just that: a first approach- we can attribute this exclusion to two reasons:

- The European Union lacks competence over the Land Registry, according to art. 345 of the 2007 Treaty on the functioning of the EU.

- Land Registrars do not carry out a legal function, and therefore they're not considered legal professionals.

Let's examine, even briefly, each of these points:

3.1.- The European Union lacks competence over the Land Registry

Article 345 of the 2007 Treaty on the functioning of the EU states that: *"The Treaties shall in no way prejudice the rules in Member States governing the system of property ownership."*

This article implies that legislation governing the ownership of real estate is the exclusive competence of Member States. However, it is not as clear as it may appear at first glance, as pointed out by current president of ELRA Mr. Lewis:

Regarding the Land Registry, art. 345 severely limits the Competence of the EU. If we deem anything relating to the definition of property rights, its configuration as a fundamental right, or not, the determination of its content, of its legal protection and the system, or systems, of conveyance as part of the Statute of Property Rights – then the choice of a certain Registration System over other systems, the different value of the Registry entries and the different Registry information instruments, including the legal statute of Land Registries- is the exclusive competence of Member States.

This seems to be the interpretation followed by the European Legislation itself. From this perspective, it's logical that the E-Justice Portal does not list Land Registrars among the Legal Professions of the EU.

However, it doesn't appear like all aspects related to the Land Registry can be excluded from the sphere of competence of the European Union. For instance, the requirements to access Land Registry Information remain, at least in part, the competence of the EU, as it deals with privacy and data protection legislation of the Union, without prejudice of the particular requirements established by national legislation.

On the other hand, it can be seen that one of goals of the Multiannual Action Plan 2014-2018, is to *"provide a unique access point, by means of Interconnection, to the information of the national Registries… to facilitate the Administration of Justice"* and among such registries are, of course, the Land Registries.

This Goal must put into context, as we'll explain, with the provisions in the field of International Judicial Cooperation set forth by the Treaty on the functioning of the EU (art 67).

As we'll see, legal cooperation among the different Member States, as far as Land Registries

are concerned, is not limited to a mere exchange of Registry Information, but also to possibility of both Judiciary and Non Judiciary documents originated in another Member State to enter the Land Registry, as long as they pass the corresponding test of legality.

Considering all the above, the assumption that the EU lacks competence over the Land Registry, in accordance to art. 345 of the Treaty on functioning of the European Union, it does not exclude its –although limited- competence in, at least, two of the examined cases.

3.2.- The idea that the profession of Land Registrar is not a legal profession because it does not imply a legal function.

This second point could explain the absence of the Land Registrars in the Legal Professions List of the E-Justice Portal.

If the previous point was true from a material standpoint, acknowledging certain competence of the European Union with regard to the Land Registry, this second point lacks –in my opinion- the slightest justification. However, the depiction of the Land Registry provided in the E-Justice Portal may be misleading, as it states:

"Land Registries constitute a very important source of information due to their official nature.

Land registers help to facilitate land-related administrative tasks of citizens, legal professionals, state authorities, private companies and other interested parties. The official register information is open (in a majority of EU countries) to banks, creditors, business partners and consumers in order to enhance transparency and legal certainty in European Union markets."

Whoever reads the description found on this website, will hardly understand what is a Land Registry and –especially- what is its goal or what it does, that is: what is its function, or why it helps to facilitate administrative tasks, as cited above between quotation marks.

From reading the previous website one would get the impression that the Land Registry serves a consultant, rather than a function with legal effects and, therefore, a legal function.

For further information at an European scale, the website refers to a link containing information about EULIS and ELRA, two organisations with very diverse size, constituency, nature and areas of work which are not Land Registries, even though they're closely related to the Land Registries, especially ELRA- in spite of what the spotlight is focused on EULIS.

For further information at national scale it provides a series of links with a very succinct information about each country, which not always clarifies the value and effects of the Registered entries, and rarely provides any information on whether the Registry conducts any kind of legal supervision, to a bigger or lesser degree, of the documents- with regard to the Registries of documents-, or real rights –when dealing with Registries of rights- susceptible of registration.

If the *E-Justice* Portal does not clarify neither the goals and function of the Land Registry, nor the value and effects of the Registry Entries, nor whether a certain degree of legal supervision is required to obtain registration -of documents or rights, depending on the system- and on top of that, it states that the Land Registry helps to facilitate consultant tasks, it can hardly be inferred from such wording that the Land Registry serves a legal function, to some extent and also that the function of the Land Registry is a legal function –to a bigger or lesser degree- depending on the registration system and the Civil System of Conveyance of property and other real rights over real estate in force in each country. It can also be difficult to infer from the depiction of the E-Justice Portal, that Land Registries are in fact, essential instruments to the efficacy of Court Rulings and Decisions, especially in civil matters, and thus, in International Judicial Cooperation.

4 ▸ FUNCTION OF THE LAND REGISTRY AND LAND REGISTRARS.

4.1.- Factors behind the current misconception about the role of the Land Registry.

Probably, two of the factors which contribute more heavily to the current misconception of the Land Registries are:

4.1.1.- Considering Real Estate Registration Law as Land Law, instead of being the legal branch that regulates the Land Registry and, more precisely, the value and effects of the entries recorded at the Land Registry, which belong to the System for the transmission of ownership and other real rights over Real Estate, with varying degrees of protection depending on each country's system.

Real Estate Registration Law, indeed, is not interested in Land itself by in Real Estate, that is: Registered Properties, or what it is the same: property Rights over Real Estate. The identification of the plots of land is considered useful as long as it helps the delimitation of property rights, where a detailed description is not required beyond a clear abuttal of adjacent properties, since from the perspective of the Land Registry, properties are not defined by geographical or architectural configurations but by the physical projection of the right of ownership which ends where the adjacent proprietor's right starts. That is why the so called "physical delimitation" is nothing but a "legal delimitation" of the physical space.

The law governing registration, in its substantial aspect, which establishes the value and effect of Registry entries, is part of Patrimonial Civil Law, in particular of the System for transmitting and acquiring property and other real rights over real estate, and its protection. This is the reason why Land Registries, according to art. 345 of the TFEU remain out of the sphere of competence of the European Union.

This is the essential nature of all registration systems, regardless of the Conveyance System –v.gr. causal or abstract-, the determination system for real rights –numerus apertus vs numerus clausus-, or the type of registration system- Registry of Rights, Documents, or some intermediate approach- with a higher degree of protection of real rights on the Registry of Rights, over the Registries of Documents.

The implementation of the Real Estate Registration Law demands the establishment of an

Institution: The Land Registry, which may be organised according to several models. The fact that the origin and different historical evolution in each country has caused this institution to play other roles –in taxation for instance-, or the technical advances allow for the use of georeferencing and physical description of the properties, or the access to multiple information related to the territory should not distract us from what it is its main goal: being part of the property conveyance system and protecting rights on real estate with varying degrees of intensity. The notion of a conveyance system is essentially legal, as is the notion of property and other real rights on real estate.

The organisation of the Registration System –to achieve the described goal- allows the production of certain by-products, some of them certainly relevant, especially if we are dealing with a Registry of Rights.

However possible and desirable the obtention of such by-products may be, it is necessary to underline that the Land Registry Organisation –and, within that, the requirements for registration- must be designed to pursue its specific goal in the most effective and efficient manner, an objective which in no way should be altered or compromised in the pursuit of by-products, which may be useful for other goals of administrative nature, related, for instance, with Land Administration, but at the cost of introducing inefficiency in the Registration Procedures or, what's the same, in the System for the Transmission of Real Rights on Real Estate and, therefore, in the Real Estate and Mortgage Markets.

In other words, nothing should distract the Land Registries from pursuing its specific goals. Subordinating such goals to other alien motivations equals to subordinating the principal to the accesory, to blur and denaturalize the nature of the Land Registry and to hinder its ability to serve the goal it was created for.

Probably, the trend of putting at the same level the goal of the Land Registry with that of other institutions which deal with the territory, something the concept of Land Administration is accountable of, has largely contributed to the consideration of Real Estate Registration Law as Land Law, making it difficult to identfy its true nature: Being an Instrument to make transactions, simultaneously, secure and agile in a context of impersonal exchange, as we find in modern free market economies, thus enabling the efficient development of Real Estate and Mortgatge Markets.

4.1.2.- Land Registries, although they all pursue the same goals, do not serve the same functions.

Indeed, not all Land Registries serve the same functions, that is: do the same things. This functional diversity accounts for, to some extent, the existing misconception about the role of the Land Registries.

4.2.- Goals and functions of the Land Registry.

Historically, modern Land Registries appeared subsequently to the demise of the Old Regime and the "liberalisation of the land" from its feudal ties, to allow for the development of the mortgage market. But, to that end, it was necessary that ownership and other real

rights on real estate became, simultaneously, secure and easily transmitted. It is very difficult, especially in a context of impersonal transactions.

This instrumental goal is not easy to obtain in an impersonal society, as modern societies are, and as the European societies were by the end of the XVIIIth Century. The main reason lied in the subsistence of the roman principles of "iustus titulus" and the "reivindicatoria action". With those elements being prevalent in an society with impersonal exchange, an unavoidable trade off between secure rights and ease for transmission exists. To try to resolve or mitigate this problem, States adopted various solutions, following the patterns that defined the Institutional evolution:

1.- Some States (France) kept the roman principles, although in order to mitigate the trade off, introduced the "Conservateurs des Hypothéques", granting priority to the entry –the relevant date of the document containing the act or contract transmitting a real right on real estate is that of the entry at the office, and not that of the document itself- and also the effect of opposability –only published documents are opposable, and those that haven't been published cannot be opposed to those which have. That way, the purchaser has to worry only about rights deriving from published documents, which reduces uncertainty. It does not eliminate, however, the need for retrospective research of titles, always doubtful. The introduction of the so-called "effet relatif" later helped to diminish uncertainty and, this way, also mitigating the trade-off.

In this kind of Registration Systems the check of compliance with applicable legislation conducted by the "Conservateur" usually focuses on the observance of formal requirements set in the legislation for that act or contract, without assessing the substantial legal compliance of the act or contract, as well as the compliance in its case of the "effet relatif". It also covers the interpretation of the contents of the Registry in case a certification is applied for.

2.- Other States (Spain, Austria, Germany…) opted for a more direct intervention in the conveyance system by implementing a Registry of Rights, with Public Faith or Indefeasibility of the entries. In the case of Germany a system of abstract transmission, followed by registration was put in place. In Spain instead a causal transmission system followed by tradition, was chosen, with registration as requirement to achieve an indefeasible right in rem, which effectively isolates the acquisition from any potential harmful circumstances which were not registered –pretty much like the german Vomerkung- This meant introducing in the real estate sphere the same rules of protection devised during the middle ages to foster the commerce of chattel and movable goods: the "Lex Mercatoria", by removing the "revindicatoria action" against any person who acquired from the registered owner following the procedures of the Land Registry.

In these systems the legality check by the registry varies. In Germany they check the compliance with the formalities of the documents, the formal consent, the obstacles which may exist according to what is recorded at the registry, and also the suitability of the real right to gain access to the registry, as the system of numerus clausus applies. The registrar is not obliged to assess the substantive legal compliance of the act or contract, although it is no clear whether or not he could place an objection if a serious non-compliance was

detected. The registrar is not obliged to conduct this material assessment as the contract is not considered to be part of the conveyance, which requires the mere formal consent. In any event, at least inter partes, a conditio could exist.

In Spain, the Land Registrar, in addition to applicable formalities to be observed, must check the material compliance with the law of the act or contract, before registration, as the system is of causal nature and Registry entries enjoy the effects of legitimacy and indefeasibility. That includes the assessment of the legal suitability for registration of the real right, as the system of numerus apertus operates in Spain, although subject to strict conditions. This function is relevant also in the sphere of cross-border transactions, as it is up to the registrar to adapt into Spanish law equivalents, any real rights contained in foreign documents.

Between both kinds of Registration Systems –Rights of Documents- there are several mixed or intermediate systems, where the function of the registrar to check the legality highly varies, although almost exclusively being an ex ante control, as it can be seen at the European Land Registry Network of ELRA's website. In all instances, but one, registrars are legal professionals, usually highly qualified and highly ranked within their administrations, with a significative prevalence of adscription to the judiciary – http://network.elra.eu/?cat=107, see "process of registration"-. In all cases a legality check is performed.

Such legality check is limited to formal requirements of the documents, in some cases, but most go further and include the assessment of legal compliance of the contract according to the material legal requirements of national law.
The function of the registrar varies depending on the kind of registry, on the legal transmission system is causal or abstract and on the system of property rights is clausus or apertus . In a deeds system, the registry does not shows any entitlement. It only shows documents. However, a registration in a registry of rights shows the entitled person because is part of the process of the generation of the entitlements in rem of property rights on immovables.

In a causal system, the contract or juridical act is part of the transmission –justus titulus- but they are not part of it in an abstract system. This is why in a causal system with a registry of rights the legality check of the registrar usually reaches the justus titulus , but this legality check does not reach it in an asbtract transmission system, even with a registry of rights system, nor in a causal transmisión system with a registry of deeds.

4.3.- Land Registries are, therefore, Legal Institutions and Land Registrars are in charge of a legal duty.

Land Registries are then Legal Institutions, the function of the Registry is legal and the Registrar, considered as the person in charge of overseeing the legal compliance of the application for registration, is who authorizes the entries and certifies the contents of the registry, thus carrying out a legal function, while being a legal professional, particularly close to that of a Judge when dealing with Registries of Rights.

For these reasons, Land Registrars should be included among the Legal Professions listed

on the E-Justice portal, along with the other professions currently included (judges, prosecutors, lawyers, notaries and court officials) and take part of the various workgroups dealing with projects related, not only with the organisation of the Land Registry, but also of connected institutions and regarding the material law in accordance to which the legality checks are performed by the registrars, according to their national legislation.

5 ▸ LAND REGISTRY INTERCONNECTION WITHIN THE EUROPEAN UNION: SEMANTIC INTEROPERABILITY AS A KEY FACTOR.

5.1- A preliminary issue: the extent of legislative competence of the European Union regarding the Land Registry. The Cooperation of the Land Registry as a manifestation of the Judicial Cooperation foreseen in the TFUE

On the other hand, being the Land Registry a part of the property rights system of each country, its regulations corresponds to the State, not to the Union, according to art. 345 TFUE, which does not prevent them, however, from serving as legal cooperation instruments within the European Union, in the framework foreseen by art. 67 TFUe.

We have abundantly mentioned art 345, so we will focus on art. 67 TFUE, especially in paragraph nº4 which states:

"4. The Union shall facilitate access to justice, in particular through the principle of mutual recognition of judicial and extrajudicial decisions in civil matters."

All of it "with respect for fundamental rights and the different legal systems and traditions of the Member States" as paragraph n.1 of the same article states.

his norm must be completed with the provisions of art. 81-1 of TFEU, which states:

1. The Union shall develop judicial cooperation in civil matters having cross-border implications, based on the principle of mutual recognition of judgments and of decisions in extrajudicial case.

It is worth noting that these provisions were not newly introduced with the TFEU, as they were also present in the previous treaties. Indeed, art.67 matches the former art.61 of the Constitutional Treaty of the European Union (TCE) and former art. 29 TUE and art 81 correspond to former art.65 TCE.

These provisions determine the extent of the legislative competence of the European Union in Registry related matters: within the boundaries established by art. 345 of TFEU cooperation in Land Registry related matters, is another aspect of the legislative competence in Judicial Cooperation, especially, although not exclusively, in civil matters, as set forth in articles 61 and 65 TCE .

In other words, cooperation in Land Registry matters is but a manifestation of the judicial

cooperation foreseen in the different European Treaties, set out by different Regulations, and an instrument to make it effective in the sphere of property rights over Real Estate.

5.2- The Land Registry Interconnection foreseen within the E-Justice Initiative.

The Multiannual European E-Justice Action Plan 2014-2018, when dealing with the Registries, focuses exclusively on "National Registers included in the Justice Sphere… to facilitate the access to and the administration of justice, establishing to that end a single access point by means of interconnection of such Registries". Among the Registries foreseen in the Action Plan are, no doubt, the Land Registries, and the interconnection among them can only aim at fulfilling the provisions of the Regulations drafted to develop the existing Treaties on Judicial Cooperation.

Number 20 of the aforementioned plan, makes the interconnection dependant on the compliance with legal and technical requirements at national scale, which can be interpreted in accordance with the view that such conditions are the competence of each State.

This also would explain why the Working Party on Land Administration (WPLA) of E-Justice, has opted for a scheme where participation in the Land Registry Interconnection is strictly voluntary, not carrying any negative consequences over the States which decline to participate.

In any case, whatever technical approach is used for Land Registry Cooperation, including in its case the voluntary interconnection, such cooperation will always require the understanding and knowledge of the meaning of the Registry Entries- which we usually designate as "Land Registry Information"

5.3.- Land Registry Cooperation as a matter of legal semantic interoperability. The prevalence of National Legal Systems in the sphere of Real Estate Property Rights.

Challenging as the technical complexities of this cooperation may appear, they pale in comparison with the legal intricacies involved. A proper understanding of the Land Registry entries require that not only the procedural aspects of each national registry are understood, but also its patrimonial civil law, its taxation law, the rules of civil and administrative procedure and a long etcetera.

The legal system on each country bases itself on the principle of completeness as a method for self-integration. Additionally, in relation to certain matters – property on real estate- the legal systems do not usually allow for the application of any legislation but its own, and in this field legal systems not only are diverse, but repel one another in essential features, as certain figures admitted in one country are rejected in others and, at best, regulated in a different manner.

None of that is whimsical, but the sediment of a long and painstaking historical process. The different ways in which property is conveyed, the configuration of property rights, especially on real estate, that we know today, are the result of a Roman/Germanic Matrix,

the disputes of Noblemen with their Sovereign, of the Noblemen amongst themselves, and of the commoners against the Noblemen, the King or even the Church, also of the rise of the bourgeoisie, de liberal revolution that brought the old regime to an end and the process of liberalization of the land that occurred throughout Europe since the end of the XVIIIth Century and all the XIXth Century, with varying results in each country, depending on the correlation of forces of the different stakeholders, as well as the emergence of the so called "social function of property" which spread across the European legal systems since the beginning of the XXth Century.

In fact, the legal configuration of contracts, succession and, above all, property rights, displays the real DNA of each country. On top of that we have to bear in mind that the Land, comprised within certain boundaries, is the physical substract where the sovereignty of country rests. These are the real challenges involved in the Cooperation in the field of Private Patrimonial Law -especially relating to Real Estate- and therefore in the field of Land Registration, way more than the development of Technological platforms or, in its case, the physical description of the registered properties.

5.4.- Cooperation in the sphere of the Land Registry. The example found for instance in Regulation (EU) No 650/2012 OF THE European Parliament and of The Council of 4 July 2012 on jurisdiction, applicable law, recognition and enforcement of decisions and acceptance and enforcement of authentic instruments in matters of succession and on the creation of a European Certificate of Succession

This reality is constantly apparent in the field of Private Patrimonial Law, especially in relation to Real Estate. For instance, Regulation (EU) No 650/2012 of the European Parliament and of The Council of 4 July 2012 on jurisdiction, applicable law, recognition and enforcement of decisions and acceptance and enforcement of authentic instruments in matters of succession and on the creation of a European Certificate of Succession, establishes that:

Art. 30 establishes the prevalence in real estate law of the "lex rei sitae" principle:

"Where the law of the State in which certain immovable property, certain enterprises or other special categories of assets are located contains special rules which, for economic, family or social considerations, impose restrictions concerning or affecting the succession in respect of those assets, those special rules shall apply to the succession in so far as, under the law of that State, they are applicable irrespective of the law applicable to the succession."

Art. 31 establishes the principle of "Adaptation of Real Rights"

"Where a person invokes a right in rem to which he is entitled under the law applicable to the succession and the law of the Member State in which the right is invoked does not know the right in rem in question, that right shall, if necessary and to the extent possible, be adapted to the closest equivalent right in rem under the law of that State, taking into account the aims and the interests pursued by the specific right in rem and the effects attached to it."

This operation, always tricky, will vary in its difficulty depending on, among other concerns, whether the different legal systems have adopted a numerus clausus system to rule the configuration of Real Rights, or requiring a high degree of tiypicity in such configuration, as usually turns out to be inevitable when dealing with iura in rem, however allowing for the possible creation of new types of real rights as long as certain requirements are met. In Spain, the Legislation assigns the task of conducting the adaptation to the Land Registrar.

Article 1.2.l places the competence over the Land Registry on each Member State and, therefore, any related provisions will fall outside the scope of the Regulation:

"any recording in a register of rights in immovable or movable property, including the legal requirements for such recording, and the effects of recording or failing to record such rights in a register."

As a consequence if, for example, a conflict exists between the presumption of public ownership, established in art. 69.2 of the Regulation, and the registered ownership backed by the public faith of the Registry of a Member State, the latter will prevail.

Article 69.5, by the way, creates a document, the European Certificate of Succession, that is suitable to be registered, notwithstanding with the provisions of art 1.2k & l, that is and for this purpose, the requirements of each national legislation in relation to the Land Registry which will prevail under all circumstances.

Also, art. 66.5 states that *"For the purposes of this Article, the competent authority of a Member State shall, upon request, provide the issuing authority of another Member State with information held, in particular, in the land registers, the civil status registers and registers recording documents and facts of relevance for the succession or for the matrimonial property regime or an equivalent property regime of the deceased, where that competent authority would be authorised, under national law, to provide another national authority with such information"*,

Usually, such national authorities will be the Land Registrars.

These provisions reveal that:

1- Cooperation in the field of the Land Registry is an instrument of the Judicial Cooperation aiming at making the latter effective.

2.-Judicial Cooperation –and, therefore, Land Registry Cooperation- in relation to Private Patrimonial Law of a Member State, especially in the field of property rights on real estate, can only operate within the permitted extent of each State's legal system, inside its own framework of real estate patrimonial public order.

3.- Cooperation in the field of the Land Registry can allow for the creation of European-Wide formal registrable titles, always subordinate to the requirements of each State's legislation on Land Registry.

4.- The access to Land Registry Information is the competence of each Member State.

5.- When a Real Right, admitted in one country, but relying on a property located in another State Member, is presented at the Land Registry for registration, it will need to adapt itself to the most similar real right admitted in the jurisidiction where the property is located.

6.- Cooperation in the field of Land Registries will always rely on the knowledge and understanding of the contents of the Registry entries.

This lasts demand, entails a profound knowledge of Patrimonial Law, especially relating to Real Estate, of the countries involved, as to the make them legally interoperable to some extent. And this is, as a consequence, undoubtedly the most challenging obstacle for Land Registry Cooperation.

5.5.- Cooperation and Interconnection. Land Registry interconnection depends of legal interoperability.

Ultimately, Cooperation in the field of the Land Registry depends, essentially, on the legal interoperability, not just between diverse registration systems, a relevant although secondary detail- but among different, and frequently incompatible, legal systems in the field of Patrimonial –especially in Real Estate-law. This means that without legal interoperability it is not possible to attain an effective cooperating among the Land Registries of different Member States, without prejudice of the auxiliary role that the technical interconnection may play in order to manage the legal interoperability, which is the real challenge and does not depend at all on whether a technical interconnection among Registration systems exists, or not.

The French-German "non-paper" of September 7th 2015, presented during at the Working Party Meeting warns, precisely, of the risks of uncertainty and legal confusion to be expected from a technical interconnection of Land Registries, as is:

"The information entered in a national land register is undoubtedly closely related to that national legal system. Accordingly, the information represented in one register is not necessarily comparable to information in a register of a different member state. The envisaged cross-border access to national registers could thus create the false impression that the information contained in the registers would be comparable. For citizens, providing different types of information without including legal details that can only be provided by Experts from the national legislations would be a source of legal uncertainty and confusion."

The non-paper points out, quite rightly, that the Feasibility Study relies on a misconception with regards to the importance and difficulty of the legal interoperability in the field of Land Registry Cooperation.

The study appears to be influenced by the misconception that the linguistic gap could easily be overcome by machine translation (p.53) or by a supplementary multilingual glossary

(p.53). Both mechanisms add to the impression of a seemingly transnational usability of the portal. However, both would be either materially misleading or (at best) rather useless. For many legal terms, there simply are no equivalents in all member states. A correct understanding of legal terms and Concepts necessarily requires in-depth knowledge of a member states legal system rather than machinistic or standard translations. Concerns about the project´s consequences in terms of liability are increased by the issue of the reliability of translations"

5.6.- Project IMOLA- Interoperability Model of Land Administration, as a means to facilitate Land Registry Cooperation by supporting Semantic Interoperability.

Land Registrars have been aware, all along, that the key issue in the field of Land Registry Cooperation, lies in the semantic interoperability in the legal field, and of the difficulty of such interoperability. For this reason ELRA, Colegio de Registradores de la Propiedad, Mercantiles y Bienes Muebles de España and the Dutch Kadaster devised the IMOLA Project: –Interoperativity Model of Land Administration-.

On the website of ELRA devoted to the IMOLA project, this perspective is clearly set out:

"There is a need for a standard means of accessing basic land registry information within the EU. Yet, the cross-border exchange of information between European land registries is complicated. Differences in national legislation and divergences inherent to the practice of land registration are the main causes of this complexity. Therefore, a need for a standard means of accessing basic land registry information within the EU, paired with the availability of explanatory material and the training of practitioners to improve the understanding of foreign legal systems, is evident.

Common points do exist and offer the possibility of defining a structure of key information shared by the majority of land registry systems. IMOLA project, subsidized by the EC Civil Justice Programme, will perform in-depth research on these common key points, develop interoperability solutions that will make the differences understandable to the professionals participating in real estate transactions, and facilitate cooperation with other networks in order to contribute to the development of a European real estate and mortgage market."

The Feasibility Study, however, is not aware of the importance of the Legal or Semantic Interoperability, relegating it to a point that makes it trivial, by focusing on the technical interconnection as the key element of Land Registry Cooperation, which constitutes, in my opinion, a grave mistake.

This is due, among other factors, to the fact that the Feasibility Study has been conducted without the participation not only of Land Registrars, but without the engagement of any of the Legal Professions listed in the E-Justice Portal, in spite of this project, foreseen in the Multiannual European E-Justice Action Plan 2014-2018, stems directly from art. 67 TFEU. And what's more, in spite of what is claimed in the Feasibility Study, ELRA was never approached for consultation, which casts legitimate doubt on the seriousness of the Study.

The fact that no jurists or legal professionals have taken part in the project for the Interconnection of the Land Registries, also explains the fact that such interconnection is conceived not only among such Registries, but also encompasses the National Cadastres on an equal footing with the Registries (r.1 list), which allows the study to overflow the field of what many countries understand for their "registration system" without any academic base or any other backing for that matter, to reach a conception of the Land Registry in its "broadest meaning".

In some countries Registries and Cadastres are separate institutions with varying degrees of coordination, in other they are "merged organizations",. The Feasibility Study, in fact, does not respect the different national solutions, over which the UE has no competence at all, but by including not only ownership and lien information from the Land Registry, but any type of relevant information from a geographical or territorial perspective on equal footing with that of the Registry without providing any justification, it is assuming as its own model a reality only actual in the Netherlands, Denmark, Sweden and Finland, which no doubt are important States, but in the context of the European Union mean a small population with lower Real Estate transaction rates, when compared with other larger and more active real estate markets.

The attitude of ELRA is, very differently, respectful and prudent, according to the article 345 of TFEU . In its web site we can read:

"Land registries determine property rights and, to be effective, their decisions need to be recognised by the courts. This means that, like the courts, although land registries act on behalf of the state, they must be independent of it. The issues that land registries need to consider typically have a high legal content and, for land registries to be effective, their staff must be suitably trained and qualified.
Most states have, in addition to a land registry, a mapping agency and a cadastre. The functions of the land registry, mapping agency and cadastre are complementary but different. Mapping agencies exist to record topography whilst the cadastre's primary purpose is fiscal. Some countries have found it administratively convenient to combine the functions in a single organisation."

IMOLA, on the other hand, is a project set in motion by ELRA with financial support from the European Commission and, more specifically its template, which is in a very advanced state of development, is very useful instrument to facilitate the Cooperation in the Field of the Land Registries, regardless of the actual presence of a technical interconnection and, in its case, to avoid that interconnection from becoming a fiasco. Ultimately, as important as the physical technology may be, the key of a successful cooperation is always Institutional and, therefore, legal.

Property registration: challenges for the future

BY JAN MOERKERKE

Member of the ELRA Board

The analysis, conclusions and recommendations of this report do not necessarily reflect the views of ELRA.

A coherent property system is of utmost importance to the free market mechanism. Hernando De Soto, the well- known Peruvian economist and thought leader in the field, states in his book "The mystery of capital":

"Without an integrated formal property system, a modern market economy is inconceivable. Had the advanced nations of the west not integrated all representations into one standardized property system and made it accessible to all, they could not have specialized and divided labour to create the expanded market network and capital that have provided their present wealth."

"People in developing countries own assets in defective forms: houses, but not clear titles; crops, but not deeds; businesses, but not statutes of incorporations. Without formal representations, assets are dead capital."

In order to be in the market movable property often does not need a formal representation. Possession and in relation to that, ownership, is generally quite clear for contracting and third parties. For immovable properties this isn't all that clear and when one wishes to consider them as negotiable market objects, there has to be some form of unified representation. That is why already ages ago states felt the urge to organise this market, installing a set of well defined "Rights in Rem" and organizing a formal property system. A nation-wide organised property registration system is an important part of it. By describing it in contracts and organizing a registration system we set up a mirror to the asset itself, which should provide third parties equal guarantees as there generally are for movable property. By extension it provides evidence for the owner about the property. This is the first requirement banks set to accept immovable property as collateral for a loan.

Quite soon the instrument of mortgages, offering priority rights in case of seizure, became a representation for a pledge without possession and the documentation was generally conceived to work as one unity with property registration, being a caveat (warning) for an encumbrance on the property. Considered that loans are often the start, or in every case a support, of the economy we see the importance of a reliable property registration system.

The need for marketable property, with a proper generally accepted value, is as much a fact for a European couple wanting to buy the family home, as it is for someone in a post- war situation who wants to set up again his business without cash, or as it is a family father living in a slum and just wanting security of tenure over the house he lives in or the piece of land where he wants to grow a crop, for which he needs a micro- credit. So, reliable property registration is undoubtable one of the key issues to obtain sustainable real estate markets.

If that is not the fact real estate becomes a dead capital instead of being the basis of credit market; mortgages do not give enough security as a base for lending money; taxes based on property cannot be raised properly and fair; insecurity of tenure results in a lack of investments; there is a constant risks of land grabbing; investors are reluctant and want too big guarantees before being prepared to invest; foreigners are afraid to invest in real estate; and courts have to face numerous disputes concerning real estate. All of this of course is very detrimental to the economy.

But, just as everything else, property registration systems act in a constantly changing world. What seemed right a decade ago may not be suitable anymore in the next one. This is partly due to technical evolutions, but also partly due to a different way of thinking about and organizing of society. Before trying to analyze the effect these changes have for existing and new property registration systems from a practical point of view, we try to compare the existing systems in a more theoretical way. In general Western world uses 3 systems, the "Deed" system, the "Title" system and the "Public Faith" system, which situates itself between the two former ones. We see that practically no system used in whatever country fits 100% under one of the three mentioned categories and should be catalogued as fitting merely in one of these types.

1 ▸ THE DEED SYSTEM

Fundamental for a deed system is the fact that it is not the title that is recorded, but only the deed. Deed system generally, but not necessarily, goes together with the causal legal system.

For immovable properties the intention of moving the ownership from one hand to another is taken up into the deed. It results in several obligations as well for the alienator as the acquirer.

A has to deliver the goods, hand over the possession and so on. B has to pay the price as principal duty.

If all these conditions are met, one can deduct that the "Title" of property has gone over.

The deed itself is never proof that the legal consequences intended by the parties, actually did take place. The same principle goes for the transition of rights as superficies, easements……

On the contrary transition by inheritance often happens "ab intestat", which means by the simple fact that somebody dies. All of this has important consequences for property registration which cannot give someone perfect surety about his "Title", in the meaning of

"Being entitled".

It informs contracting parties about the existence of agreements in the past, expressing the will to handover property. Whether this has really taken place depends on the fact if the contract has been properly executed. Did all parties fulfil their obligations? The deed, a document that describes one isolated transaction, is registered. It is evidence that a particular transaction took place. But it is itself no proof of the legal rights of the involved parties, and by consequence no evidence of its legality.
Thus, before conveyancing safely the alleged owner has to trace his ownership to a good root of title. Generally spoken this means that all obligations following out of the contracts written down in the deeds in fact have been executed over the period needed for obtaining prescription (generally between 10 and 30 years). Of course this needs all parties involved to be granted with the power of acquisition or alienation. So, for every deed one has to ask as well the question if the alienator is entitled to act as owner and as well does he have the legal authority to sell?

There fits in the role of a professional, mostly the notary, being a public officer, but also other legal practitioners with experience in the matter. The deeds the notary and the parties sign have the advantage to enjoy authenticity. This means that they reflect the truth, at least for as far the parties are honest, if not, bad faith is proved. This is very important for later investigation by parties wanting to contract.

Out of this theory it may be clear that the guarantees a deed system delivers are limited.
In fact it only gives insurance on requested to register but not registered facts and about the existence of a contract on a certain fixed date. That is why it is often also called a negative system with a passive role for the Registrar. Generally in this system there is little investigation by the Registrar before entering the deed in the registry. If the deed meets to some standards, prescribed by local law, he takes it up into his documentation. Again this theoretical thesis as we'll see further on how systems have been adapted and offer sufficiently certainty.

The main goal is to prevent third parties of the fact that parties have created a legal fact with the intention of having a legal consequence, and decided to register it. Often it is compulsory in order to affect third parties. People (bona fide) can rely on that.

Generally the register is public. In fact this is a primary need to fit with the goal. Sometimes registration is constitutive. Which means that it is one of the obligations that have to be fulfilled before there can be a transition of property. Often there is a personal folio, although this is not essential. In Europe it roots to the fact that countries that in time started using the system practically all have the French "Code civil" as their origin with great importance for civil society.

To be sufficiently performant these systems have to offer legally at least a guarantee against double sale and should be able to document priorities for mortgages and other burdens. Generally the date of registration creates priority. That is why in registers the date of deposit is a crucial identifier. In time the deeds were meticulously entirely copied and indexed. Nowadays this is a question of electronically kept databases, which deals with a lot of former

shortcomings of the system.

Next to this civilian instrument there is generally a cadastre in which, on a parcel based index, the state gathered some information on immovable property mainly in order to collect taxes. If this is done meticulously enough it can serve as a base to describe properties in deeds. Nowadays, mostly due to technological evolutions, we see that cadastres and land registration services tend to grow to one another. This is a very positive evolution, as far as the entities are able to save their own identity. This matter will be discussed later on.

2 ▸ THE TITLE SYSTEM

The system is often called "Torrens system" relating to Sir Robert Torrens who as first implemented the system as a part of a land reform in South Australia in 1885. The legal consequence of the inscription, being a fact, covers the right. So the right itself, together with the name of the rightful claimant and the object of that right, with it is restrictions and charges, are registered. The fact that a right is described in the register means you are "entitled "to it. It is the manifestation of constitutivenes of inscription.

The "Mirror principle" guarantees that the register is a mirror to the judicial state of the property. The "Curtain principle" means that an interested person does not have to investigate the underlying contract or former contracts in order to be sure about the transferable rights.

The register itself is an authority record kept in a public office. It is at all times final; which sometimes only leads to financial compensation after a wrongful inscription. It is generally composed by three sections, in an ABC structure; parcel/owner of the right/ encumbrances. There is only one register including a map and property registry register. Research in it is parcel based. (Real folio) To that there is referred to topographical maps that tend to be (too) little detailed. Mostly registration is not compulsory. It often exists next to an older less performing system, offering fewer guarantees.

Before inscription there is severe investigation. Afterwards inscription guarantees the clear and unambiguous consent of the former owner. The registrar controls as well if the contract meets the standards to let the transfer take place and the existence of encumbrances of different kind. This investigation can be very time consuming. On the correctness of items and on forgotten inscriptions the state offers a guarantee. That is why the system is often called to be a positive one, in which the Registrar has a very active role in the acceptance to inscription. In order to provide contracting parties with some security in between, there can be a preliminary inscription offering security in relation with third parties, similar to that in a deed system. Nevertheless the guarantee is not total because there are practically always "Overruling interests". These are exceptions to the rule that only registration covers a valid right and are blemish to the completeness of the register. They are likely to be kept to a minimum. In essence this system does not go along with prescription being a legal way to obtain or lose property. However due to practical reasons, we see that a lot of countries using the "Title" systems have legislation that in one way or another accepts it anyway.

3 ▸ THE "PUBLIC FAITH" SYSTEM (fides publica) (Offentlicher Glauben)

Even more than the two other definitions this term is often only known by professionals. It offers security in a degree somewhere in between the two others. Nevertheless it is interesting to catalogue it apart since most of European called "Title" systems in fact belong to that category.

When buying under this system, in good faith, from a registered alienator, who is not restricted (see Vormerküng), nor contradicted (see caveats- Widerspruch), one is protected so far that the state guarantees the authority to of the former known owner to alienate. This has to be controlled by the Registrar and gives him a rather active role. It is a protection against trespassing the limits of the authority to dispose of a registered owner. The lack of authority to dispose of the alienator is purged. Here as well in some cases there is possibility to ask for a provisional registration. It offers a similar protection as deed systems do. It is conceived as a constructive notice to third parties. Registration is in most cases constitutive for the transition of the right. This means that as long as the registrar did not agree to enter the transaction in the register, the contract is pending. There is also protection against any damage caused by not being informed about a fact that should have been registered but is not.

In these systems there are some possibilities to register forms of opposition if one does not agree with the indications in the register (widerspruch) . This system is not that final as we saw it is in title registration. On this point it is comparable with deed systems where a margin annotation can prevent third parties from the fact that there is a summon to obtain the termination of the contract and the verdict to it. There is no insurance for all other legal facts that are mentioned in the deed. Again here it is not the title itself that is registered similar to the "Deed" system. On the other hand many countries do indeed have legislation extending the guarantee. So it is on the balance of a positive or negative system.

The register is mostly kept in court and is parcel based. The documents that have to be presented to the register must be seen by legal private practitioners (notaries or lawyers). It generally is supported by detailed maps with great attention to boundaries.

4 ▸ STRENGTHS AND WEAKNESSES OF BOTH DEEDS AND TITLE SYSTEM

Since the "Public faith" system is a compilation of the two others, only the last ones will be taken into account.

First of all, we must be clear: there is no "best" system! In every specific circumstance the most appropriate system should be taken into account. We all know that the system should be effective and as cheap as possible. But these demands need totally different approaches in the City of London and in the Savana in Africa. The same goes for the need of clear boundaries. Before comparing we should make a survey of to what standards a system should meet to be effective, all of this from a rather theoretical point of view. Further on we will try to confront it with nowadays reality.

I would like to refer to the FIG (Fédération Internationale des Geomètres) statement on

Cadastre, which goes as well for property registry.

a) Security: The system should be secure such that a land market can operate effectively and efficiently. Financial institutions should be willing to mortgage land quickly and there should be certainty of ownership and parcel identification. The system should also be physically secure with arrangements in place for duplicate storage of records in case of disaster and controls to ensure that unauthorised persons cannot damage or change information.

b) Clarity and Simplicity: To be effective the system should be clear and simple to understand and to use. Complex forms, procedures, and regulations will slow the system down and may discourage use of the system. Simplicity is also important in ensuring that costs are minimised, access is fair, and the system is maintained.

c) Timeliness: The system should provide up-to-date information in a timely fashion. The system should also be complete; that is all parcels should be included in the system.

d) Fairness: In development and in operation, the Cadastre should be both fair and be perceived as being fair. As much as possible, the Cadastre should be seen as an objective system separated from political processes, such as land reforms, even though it may be part of a land reform program. Fairness also includes providing equitable access to the system through, for example, decentralised offices, simple procedures, and reasonable fees.

e) Accessibility: Within the constraints of cultural sensitivities, legal and privacy issues, the system should be capable of providing efficient and effective access to all users.

f) Cost: The system should be low cost or operated in such a way that costs can be recovered fairly and without unduly burdening users. Development costs, such as the cost of the adjudication and initial survey, should not have to be absorbed entirely by initial users. Low cost does not preclude the use of new information technologies, as long as the technology and its use is appropriate.

g) Sustainability: There must be mechanisms in place to ensure that the system is maintained over time. This includes procedures for completing the Cadastre in a reasonable time frame and for keeping information up-to-date. Sustainability implies that the organisational and management arrangements, the procedures and technologies, and the required educational and professional levels are appropriate for the particular jurisdiction.

Taking these recommendations into account each community should choose how they arrange security of tenure and property registration. Sometimes it may be enough to be secured as a group. Examples exist to protect a community form forced evictions. Several solutions, not necessary hi- tech, are very accessible and yet mean a big change. African examples show that even a simple document where the person is identified with a photograph and fingerprint and a satellite picture can make a world of difference between securities or none. Of course, World Bank and UN-Habitat have great experience in that field.

When trying to compare systems we will always end in the comparison of title and deed systems on one hand and person based or parcel based documentation on the other. Purely theoretically seen we cannot deny that a parcel based, title system seems to offer the most security. In most literature it is written with some sort of a religious belief. I used to think like that myself. Yet, after some years in practice, I had to admit that a lot of prejudices against the deed system were wrong. A system with a numbered geo-spatial known parcel

as primary identifier certainly has its advantages. One can divide an existing parcel in 100 pieces, as well horizontally as vertically. Full ownership can be shortened by encumbrances; there can be a joint ownership between 100 persons; there can be bare ownership and enphyteusis. But in the end when we count all rights together we still keep 100% property. A personal system cannot guarantee that, and overruling rights are more likely to occur. Also indexing on a name is very difficult since there may be different spellings. On the other hand IT solutions have solved a lot of the problem. The advantage of an easy way to put indexes by up going parcel numbers does no more exist since data bases are that performant that they can search on all data and filter them when necessary.

And finally, when it comes to countering that religious belief, shouldn't we fundamentally ask the question for whom do we register? In favour of the parcel or in favour of the person? So, since databases are so flexible right now, shouldn't the person be the first ID? Searching on a name and a date of birth might be the most natural way of acting but IT specialists do prefer a unique ID number. This reflection goes along with the question whether land registration is organized to serve the state or the citizen or both.

Indeed the curtain principle and the direct guarantee on the ownership of the title give certainty. It seems to offer security after little investigation before conveyancing. But on the other hand society gets that complicated that the kind of information that is kept in a title register is by far not sufficient to make an over-all assessment on the property. For instance an existing and registered easement to use a well might be much less important than environmental information or urbanistic regulations which don't appear in the register. Where a title system should make it possible to make simple private agreements we see that this is scarcely done without the help of professionals due to complication.

Theoretically a deed system demands every time an investigation to the root title. This may seem to be a hard job, but generally in a well- kept documentation it causes not many problems to rebuild the situation to the moment prescription is enough to prove ownership. The benefit of the mirror image a title system has again seems to be less in practice than in theory. For professionals it is not much cheaper to do the research but the organization of the system is certainly more expensive. On the other hand the curtain principle might make it for contracting parties and third parties more difficult to see the whole contract since it is not necessary to archive them. Furthermore certainly not all existing title registry systems offer compensation for damages caused by false information.

Above all, countries using the deed system often make the use of a professional compulsory. Notaries deeds have the power of authenticity, which gives some guarantees. They can be forced by law to gather information from all sorts of authorities and from the seller. If, later on, it becomes clear that he has lied, automatically it is an as bad faith proven fact. Investigation of all sorts can be obliged about relevant items as urbanism, soil pollution, degree of thermal insulation, leases, and future expropriations and so on. The notary has to inform the parties on the result of it in his deed. And so it remains in the documentation.

In deed system the investigation of the title has to be performed up to the root. Generally it has to be done for a period sufficient enough to obtain ownership by prescription. The notary offices often prove to be very well organised to do that investigation. Furthermore it

can be forced by law to take up a history of property in the deed for the whole period. If this is reported in the deed, it can be consulted by everyone.

Deed systems are generally public and it's characteristic to guard the deeds themselves or certified copies. Surely in time keeping up such an archive was difficult Deeds had to be transcribed by hand or later copied. This was a work of monks with consequence that much information, not strictly necessary as evidence for the title transfer was copied also. On the other hand practice learns that a lot of this information is particularly interesting to get a good view on the property in its whole. There were huge amounts of paper in moist cellars. There was always a danger of loss and so on. Again the storage capacity of computers nowadays is that huge, so that the disadvantage is swept away.
Title systems aim to produce a clear situation. Deed systems try to collect the necessary information in order to be able to clear up difficult situations. Hence daily practice learns that there is fundamentally very little discussion on ownership and that defective deed with sometimes very unclear clauses or very bad geographical references do not seem to produce problems. So, why put energy in solving problems that finally likely will not even occur! This is unfortunately what a title system tends to do!

The duty a registrar has, only to inscribe a title when there is no doubt on the legality, does imply that an in-depth research is necessary. This takes time. In title systems, where registration is constitutory, this means that there is a vacuum and the decision about property is pending. This produces insecurity. On the other hand, again with the help of IT, deed systems succeed in quicker and quicker registration, even simultaneously with the execution of the deed is often possible.

Generally title system seems to be the best way to start when one has a clear canvas; when there is a first inscription. Of course we might start to think on what will happen when we move to other planets but on earth there are no such places left. In time this option has been taken by colonial powers. But they overruled shamelessly existing systems, based on for instance customary law. As a result of the fact that much of last ones were unwritten and also were conceptually different, these rights were denied. This is a situation we cannot accept any more. Communities also often do not know the concept "Ownership" and put more emphasis on "Tenure". We have to take into account that it is not the law that should adapt to the property registry system but vice- versa.

Conclusion is that it is not the system itself that is relevant for the performance, but the way it is organized. It is all about security. So far the theoretical approach. If we want to see how far they practically still meet with actual requirements, we have to take into account the rapidly changing world we live in, as well technically as socially.

Technical solutions have changed dramatically over the last decades and have offered a great set of new opportunities. IT solutions have made it possible to work with all kinds of indexed databases and lately we see the number of interconnections growing dramatically. Governments create "Base registers", to allow datasets to be combined and provide "One stop shops". Techniques in surveying have also changed a lot. Measuring land traditionally resulted in fragmented maps, being the outcome of a graphic transition. We now see the possibilities of satellite photography, global positioning and vectoring which results in a

direct and integrated representation of reality. For a lot of purposes the actual results of it are sufficient or only need some rather small detailing. But the technical possibilities still change rapidly. It is possible to include a lot of relevant geo-spatial information in platforms all using the same basic map. This way of representing is very easy to consult. Last of all the possibilities of smartphones, connected to the internet, are very interesting, since the penetration of this network is worldwide and reaches the most remote places, with positioning capacity. All these technologies get more and more common and inexpensive.

The traditional systems of property registration are based upon a western cultural background, either state or civilian driven with private property as fundament. In colonial period they were imported all over the world, overruling the existing systems that were rooted on oral tradition with often other concepts about ownership and property. The organisers hoped that the administrational organisation would gradually change the existing social relationship, which of course didn't work out. After this period a lot of states tried to maintain the system which gradually deteriorated due to a lack of social support. Nowadays we are aware that first of all the land laws and secondly the property registration systems should take into account other concepts as there are Islamic law and customary law in order to put up a sustainable system. Often these concepts are not easy adaptable in a parcel based information system and certainly not in a personal portfolio. We also see a huge urban drift all over the world. Already more than 70% of the population lives in cities. This puts a lot of stress on ownership and tenure situations in suburbs as well as in rural areas where the traditional relationships no longer exist. Both as well the traditional systems, offering security of tenure and ownership, and the known written systems face difficulties to find suitable solutions to include every right of every owner. In fact nowadays everybody sees the importance of a nationwide covering and centrally driven system, keeping into account local priorities.

On the other hand we see that a lot of states in the traditional western hemisphere feel that their system is too expensive and want to reduce costs and administrative burdens by combining services. They also are reluctant to offering state guarantee, especially when the system is in reality not fully secure. Offering this security indeed requires an impeccable organisation of public services. This is a very tempting situation to think about isolating or outsourcing the risk by means of privatisation.

Furthermore worldwide a lot of states fail in offering a strong structure where rule of law reigns. Nevertheless in these countries there often is a more or less flourishing economy and people want the same securities onwards immovable property.

Question is, does society want to be properly informed about transactions of immovable property and the burdens that weigh on the property or do they want to get security from the state about the ownership? Of course getting absolute security about something is nice and people feel comfortable with it. But in our very complicated world this very difficult to achieve. "Title" systems aim to give it. But we have to admit that even if the system covers the whole territory, only in a few countries every transition of property is caught by the system. Furthermore is the information that these systems provide too poor to deduct the economic value of the property, which is of course a very important demand. It only speaks about the "Rights in Rem", burdens, as seizures and mortgages and private easements.

We also see that the number of parameters that influence the value of a property has increased enormously. The directives of urban planning and land management, soil quality and eventually degree of pollution, degree of isolation, disaster risk, personal security of the area and reachability to schools, public transport and services are only a few of them. A lot of public easements also affect the value of a property. They generally are “Erga omnis” and are not documented.

To find a solution for these challenges one has to take in mind how most decisions for buying movable property are made in our actual demand and supply economy. When someone wanted to buy some shoes in a Far West town. There was only one shop and together with the limited choice. The shop keeper, through his expertise, offered sufficiently security on buying the right thing. But what about the E-commerce era? The Alibaba’s and Zalando’s of the world may have shiny advertisements but the decision whether we buy something suitable for ourselves remains also personal. How do we decide to buy or not, missing the expertise of the former shop keeper? Well, society provides us with, sometimes too much, information so that we can build up our own idea. Finally taking into account all relatively important parameters we can decide with sufficient security, be it often no 100%. By dividing the problem into pieces and finding the available information to solve them we find finally a solution for the whole problem. We compare the prices with the ones in a local shop, we evaluate the brand, we evaluate the web shop. Can we pay with a credit card? We look at internet forums and so on. But all together no one offers us full security, and yet we are pleased with that.

In this world a deed system fits much more. It is perfectly possible to oblige legal practitioners as notaries and lawyers to include a lot of additional information in their deeds and collect a lot of useful extra information. We have seen before that the disadvantages of this system for producing security over “Rights in Rem” and their beneficiaries have practically disappeared together with the emergence of a paperless society. The system allows also to achive different and overlapping pieces of evidence. If communities where other rights exist, for example customary rights or rights of use, simply manage to present them in written, this system allows it easily to archive them and, supported by law, potentially make them opposable to third parties. Of course this practice of collecting information which might not always be 100% secure does not provide full legal security. But we also see that for a vast majority of properties once there is publicity, no problems occur. If at a certain time conflicting interests evolve they may be solved by administrative or civil courts or simply by priorities included in the law. If the main job for property registration is keeping up documentation there is no need for legally trained personal. If law is clear enough on what kind of evidences it allows to be registered, there is no need for expensive registration nor do have all documents to be produced by expensive legal practitioners. All this must go together with measures that provide registration of every transaction over the country. This can only be reached if both imposed and socially accepted. People have to be aware of the necessity.

Therefore a national system needs to be supported locally. This demand meets one of the most important issues for land registration. Local legislation and taking into account practical possibilities are key issues. Benchmarking and using existing IT systems may be

very wise, but first of all regularly updates and continuity have to be provided. We have seen too many brilliant IT solutions, gathering information in an expensive way, deteriorating very fast due to the lack of regular updates. So it is important from the moment of designing system to keep this in mind. Keeping it simple is also very important. It may be seductive to choose state of the art IT solutions. But what about the expensive or not existing possibilities of updating the system itself. We also may not forget that it should be designed for easy public use. Also for the public administration it is of utmost importance that these IT solutions are written as user-friendly as possible. Property registration offices, certainly in urban situations, have to deal with large amounts of files. One useless mouse click in the workflow can in fact produce a huge time loss on an annual base. So, where possible, open sources and standard writing procedures should be used. Antagonist of course will argue that these systems do not provide enough privacy. They partly are right but isn't publicity the main role of property registration? Of course data can be misused. But the offences following out of it should be fought elsewhere. A lot of countries, especially the ones working with "Title" do not allow public access, or only very limited. The reasons the ones defending it have may not always be so unambiguous! Besides even in this domain we see a sociological evolution. The "Facebook" generation does not seem to make fuzz of privacy as former generations did!

The persons name may be the most natural way to make a research through a database but we often see that there is no unique way of writing it down or no exact date of birth or no exact date of establishment of a company. In that case IT systems also fail to link the holder of a specific right with the parcel. Specialists ensure that every private or legal person should be provided with a unique identification number that also can be used in a lot of other situations, for instance social security, contacts with the authorities, criminal records and so on. A location also has to be identified by a unique identifier, being for instance a cadastral number.

Nevertheless the information a deed or any other registered document offers remains static; only actual on the date of transaction. A lot of important parameters may change and not be up to date anymore at the time someone wants to consult the documentation. In order to make information dynamic it is very interesting to work in a geo-spatial way. This is the way Google Maps works in a commercial world. Since cadastres work geo- spatial from their start; why not take these maps as a basis to official information. The unique identifier for a property being the cadastral number that has been attributed, which refers to the image and the juridical representation of the immovable property. If an address can be added as identifier, all the better. Indeed this is, next to a name, often a well-known and accepted concept by the public.

Here again IT can help a lot. By linking updated information out of different geo- spatial organized databases, the cadastral map can be the platform for a lot of information. I want to refer to the Dutch system of "Public documentation on map" (www.pdok.nl) and to a lesser degree, the Belgian initiative "Geopunt"(www.Geopunt.be)

It allows one allocate the urbanistic zone, pre-emption rights, geological quality, height, distance to public transport, schools and so on, visibly, very adaptable to the way we have learnt to use our brain by using G.P.S systems and Google Maps. The only difference is that

here the digitalised cadastral map is to be used as platform and that the information comes from public administrations or is controlled by them. This offers a degree of security that Google Maps based commercial information does not offer. Also are digitalised cadastral maps updated in a continuous way and not after a periodical entire update. Although the layers, out of which the map might exist, not always seem to be relevant (see PDOK), it allows one to do research on the property in the same way decisions are made for buying on the internet. Is it safe enough to convey? What should be the price? In Belgium a former and pioneering equal system failed to be useful a few years ago. An outdated IT solution was used. But the main reason was the use of a non-digital and non-updated copy of the cadastral map as a platform. Also there was no clear difference between state-guaranteed and non-guaranteed information, followed by summons in court where the state was convicted for providing outdated information which caused financial loss. This lead to a lot of very interesting information simply being taken out of the system.

The IT possibilities and satellite photography for geo-spatial organized information of course are very interesting for existing cadastres. Also in a lot of countries we see that cadastres and property registration services seem to merge or at least tend to work more together. This is a very positive evolution since both services basically work with the same data. However they have a different approach and have a different role to play. Even if they work under a same structure, they absolutely have to keep their own identity, at least in an initial phase. Since their organisational cultures differ too much to simply merge. If one of the two absorbs the other, one risks losing quality.

Cadastres have a long tradition in countries with a Civil Code system. Their base was merely technical with the surveyor having a key role. The cadastre always has been a land information system that works basically geo- spatial. The aim was to measure up the whole territory in parcels and draw up maps of it. Every parcel being numbered and linked to written information on the owner, describing briefly the rights on this parcel. The main goal was to raise taxes but later on it became an instrument for land management, urban planning, land readjustment, land reforms and other administrative tools. In fact they mainly were organised to deliver a service to the authorities. Subsidiary principles go along with the reason why it was conceived. So generally there was not much interest for legal boundaries as their differences with geographically observable ones was not important enough to bother. This did not affect the possibility of raising taxes. The ownership interested the administration just as far it was possible to raise taxes from a supposed owner. It was rather sloppy when searching for the rightful owners especially in cases of joint ownership, usufruct and so on. Since the main goal was to raise taxes, related to immovable property, there always is some kind of valuation.

Although there always was a system of updating following the juridical and physical changes it remains difficult to update the value of assets constantly since there are several parameters to take into account. First there is the general evolution of prices and inflation. Secondly there is the local evolution in comparison with other areas. Thirdly the changes in the physical condition and minor construction works are difficult to follow. Since market value is strictly time based, for fiscal purposes it might thus be interesting to set up a simplified rating. When on the other hand one wants to dispose of an actual though sustainable value, experts have to come into the field. Their expertise, together with a

platform where as much as possible information is available, as well in written as geo-spatial, has to make it possible to make reliable valuations. A good expertise depends on the parameters there's used to compare with other market objects. Innumerable attempts to determine the value of real estate on a mathematical basis have at least partly failed. They usually create an algorithm, using objective data for a number of criteria. I've never seen a solution which was fully reliable simply due to the fact that not all relevant parameters were evaluated. As IT systems get more powerful it might be in reach for the future. All parameters have to be taken into account as well as their relation and importance. Nevertheless at the actual stage it should be possible to determine that way valuations that do need less accuracy, as f.i a base for taxation or subsidies.

Due to their origin cadastres always have always been very interested in using the most advanced techniques. They always have tried to produce better maps, in which they succeeded quite often. On the other hand field workers generally were more interested in how they survey than in what they survey. The civil side of property did not attire their attention too much. Furthermore the use of high end technical solutions may in a lot of situations be too expensive or not fit for purpose to cover the whole country.

Land registration is merely focused on giving a service to the citizen and the market. Taking into account different laws that affect the civilian situation of immovable property, it mainly wants to inform third parties about the juridical situation of the owner of a right in regard to a certain object. Depending on the system it also tries to provide evidence for the owner on rights in rem, easements, burdens on the plot and so on. In contrast with cadastres it always tries to provide legal security for the owner and the ones contracting with him.

In order to index the registered properties and provide some details there generally is some sort of mapping as well. But often without too much attention for the physical appearance of the property. The relation between the exact juridical right and the registered description is often (too) poor, as well for the description itself of the property as for the clauses of the contract.

Through registration a property gets a proper place in market economy. This causes the fact that in countries with very fragmented registration there is a huge gap between the value of registered and non-registered property, and by consequence the rental prices. Registration often is not obligatory and also tends to be too expensive in al lot of countries. This causes inequality between citizen and may be the cause of evictions.

Property registration offices are often related to Justice and try to offer security from a juridical point of view. They also take the fourth dimension, being time, meticulously into account. The date of registration is regarded as very definitive and changes to existing registration are only possible in very restricted cases. This attitude often causes conflict with IT specialists and surveyors who don't always see the importance of it. Nor are they sometimes sufficiently aware of the responsibility that goes along with providing information out of the land registers. Registrars on the contrary tend to be less interested in using geo- spatial information and prefer spoken language, which is not always the best way to explain something. Perhaps too often they act as a judge instead of being part of an administration, gathering and indexing information.

Although the documentation of both entities is up to now generally separated, it is quite clear that working together creates added value. Both they build it up around an object, a subject and the relation between the two of them. It also is better for public service when there is one single point of access for the citizen. Also the man in the street often does not see the difference between a cadastre and a property registration service.

Nevertheless if a successful partnership is to be set up it has to happen, keeping in mind the entire picture in order to be ready for the future. The traditional geo-spatial presentation cadastres use, allow to give information about the asset in a lot more condensed way then written language does. Along with photographic material a map allows you to describe boundaries, surface, configuration, orientation, situation, neighbouring properties and so on, very easily. For the description of the subject (the owner) registrars have a juridical tradition in persons law as well and seem to be better placed. They know about the various public and private legal persons. Although to get input for a global documentation it might be even more interesting to work with a third partner, being the office responsible for registration of persons in a country. When it comes to describe the relationship between object and subject property registration offices seem to have a better tradition. They know about business law, seizure law, mortgage laws, the consequences for property of matrimonial laws and so on. Although until now generally states organised property registration and cadastres themselves, it may be clear that a lot of the work may be outsourced. It can be to an independent and by preference self- supporting public agency. Even an entire privatisation might be possible as recently was discussed in the UK. A lot of possibilities are open, provided they are backed by a strong legal framework and the boundaries for responsibility are clearly set.

An attempt to design an administrative model that in a final stadium, eventually by gradually upgrading, creates a consumer friendly and reliable system for documentation on immovable patrimony, clearly should combine geo-spatial and indexed information out of linked databases, available partly at the cadastre and partly at the registrar's office. Here we can give a number of framework conditions.

First of all, before even thinking of gathering information, as well on map as in written there should be taken care about regularly updating. It should be technically possible to update the system easily along with a presented transaction. But also there should be pressure so that every transaction gets registered.

Property registration is merely an administrative act, even if due to legislation it asks an active input from the registrar that may look like a judgment. It is only possible if it can rely on unambiguous property laws, land laws, apartment laws, matrimonial laws, mortgage laws a.s.o. Definitely there should exist a glossary of all registrable rights, taking into account as much as possible as well property as tenure related rights in it. This is necessary in order to set up a relatively simple public administration where capacity building does not need the input of highly skilled personal. Out of this set the registrar should make a choice. In the majority of cases a title as " Full ownership" will be sufficient enough so that no doubt at all remains. But in the case that is not sufficient enough there is always the archived deed.

Also the system should be organised on a national base, with sufficiently local roots so that it is socially accepted in every part of the country. It should provide in an easy access for everybody, as well technically as financially. Making legally the existence of a transition depending on the prior registration of the contract is also a very good tool to get a full coverage of all transactions being registered. Judicially it can avoid a lot of trouble in the future. Naturally this effect must be widely known by all citizen, otherwise it becomes an instrument of discrimination. This is one more reason of the necessity of local involvement. Raising taxes on the transaction itself is not a good idea. People will try to avoid them and at the same time fail to see the implications of not registering for the future. Personally I am convinced consultation should also be entirely public. In order to avoid pure curiosity it should not be free of charge.

In an ideal situation there should be a unique identification in the documentation for every actual object, and every actual owner of every specific right on it. In combining the three one gets a unique set of information.

In general we know cadastral maps having unique parcel numbers. But to face the future it is absolutely necessary to think three dimensional, above and underground. If you want to use a unique cadastral number to cover a lot of information in the description of an asset in a deed, working two dimensional is not enough. Depicting for instance a construction erected with a building right on the upper floor of a building is impossible otherwise. As we said before a fourth dimension is necessary as well, since we should be able to trace the history of a parcel in time preferably on a minute to minute base. This certainly goes for property systems where acquiring through prescription is possible and where proof of ownership only can be provided by getting back to the root of title.

If one wants the cadastral parcel and number to be the unique identifier for an asset for the future at the time of a transaction, it has to be available at the time of conveyancing. So legally there should be elaborated a system that allows cadastres to provide contracting parties using the future number as description in the deed. So that by using it, there is no possible confusion. This is very important for later consultation of the documentation.

To every asset there should be linked a set of rights, attributed to one or more persons covering all together the full ownership, which should preferably also include all kinds of tenure. The system should allow every owner of a right to be identified personally in a unique way, as well for private persons as legal persons. This is a basic need to provide gender equality as well. Furthermore a system conceived like this is open to new sorts of partnerships that might arise in the future. When a person is known by a unique identifier, this number also makes it possible to get links to other databases and in this way get a view on the entire personal and patrimonial situation.

Of course this is very interesting for taxation matters but it may possibly conflict with the concept of privacy.

In a lot of situations all of this is impossible right now. But since getting full coverage of the area is far more important than extreme detailing, by law there might be foreseen possibilities for group rights and registration, possibly gradually evolving to personal rights.

IT systems also should be designed to easily produce the history of ownership till the root of title is found. Of course this criterion might only gradually be reached over time after starting up a system.

The link between object and person should be made at an exact moment. For security and informational reasons the period between conveying and registration should be as short as possible. A quick registration is an excellent tool to fight fraud, as well from people trying to sell a property twice as to the effect of mortgages, which generally take execution after registration. Actually it does seem to be possible in a lot of situations to do this almost at the same time. When deeds are prepared by legal practitioners it is perfectly possible to force them in fact to prepare the registration on line at the same date as they sign the deed. In order to avoid costs it is interesting, at all stages of the process, to ask administrative contribution from the citizen. Internet and mobile telephone apps can be very useful. Both they are challenge for a less cumbersome administration. In this context we certainly must pay attention to the use of the Block Chain technology, which is also used for the Bitcoin money system. In property registration it might allow people, by the use of apps, to register for them in a secure and very cheap way, with practically no interference of an administration. Just as the use of the bitcoin expresses the lesser belief in a strong state, offering monetary stability, the use in property registration matters may express the feeling that society itself is in a better position to organise security regarding immovable property than states are.

We see that different organisations have done some efforts in order to put up registration systems in developing countries. Generally these efforts start form the knowledge that the usual systems are not fit for the purpose in these countries. They all try to generate very down-to-earth systems, often using common technological solutions. Unfortunately they are often vulnerable because they fail in taking into account one or more of the basic demands as described before. Nevertheless since countries with a tradition of registration struggle with the actual execution, it might be very interesting to take these efforts also into account in order to re- organise systems and make them future proof.

Finally, without having proper solutions, I want to ask some attention for situations evolving in the last decade. The number of wars and territorial conflicts between states is greatly reduced. But the number of civil crises has increased dramatically. Where wars mostly had a clear beginning and a clear end, they often don't. In war periods the legal security of rights on immovable property is generally very poor and many irregularities occur. Restoring the property registration system afterwards is generally known as a post-crisis management tool. If not dealt with, it might be the reason of evolving secondary conflicts. International community has some experience in the field dealing with situations in former Yugoslavia, East Timor a.s.o., where at least the crises came to an end. But lately we see situations as in Iraq, Syria, Afghanistan, Somalia, Libya where no rule of law seems to exist anymore for over many years. Nevertheless people go on living in the country and try to build up an economy as much as possible. But due to the uncertainties immovable property is out of the market, which means a huge loss of general wealth. On the other hand, due to these crises there have never been more refugees in the world. Most of them are not in a position to defend their legal rights on their properties because of their absence.

International community should find one way or another to take up a role in preserving the rights of the people living under this circumstances. First of all by backing up the existing legally valuable information, as there is available in the property registration offices and the cadasters. But also by making attempts to put up a continuously working security system outside the war zone. Perhaps the Block Chain technology might offer an affordable solution to deal with this problem.

References

- Handstad T.- *Designing Land Registration Systems for Developing countries* - American University International Law Review no. 3: 647-703 -2004
- *Global Campaign For Secure Tenure A Tool for Advocating the Provision of Adequate Shelter for the Urban Poor* -United Nations Human Settlements Program – UN Habitat Nairobi
- Deininger K. and Feder G. - *Land Institutions and Land Markets* - World bank publications 1998 -2014
- Nichols S.E.- *Land Registration: Managing Information for Land Administration* – Ph.D. dissertation, Department of Surveying Engineering, technical report no 168 – University of New Brunswick, Fredericton, New Brunswick, Canada 1993
- *Handbook on Best Practices, Security of Tenure and Access to Land* - United Nations Human Settlements Program – UN-Habitat, Nairobi Kenia 2015
- De Soto. H. - *land and Property Outside the West: a few new Ideas about fighting poverty* - Forum for development studies no 2 /2002 volume 29, Norwegian Institute of International Affairs & Norwegian Association for Development Research
- *Land Governance and Security of Tenure in developing countries* -Technical Committee on Land Tenure and Development- France 2009
- Sonin K. – *Why the Rich May Favor Poor Protection of Property Rights*- The William Davison Institute-University of Michigan Business School -William Davison Working Paper number 554- 2002
- *The Bathurst Declaration on Land Administration for Sustainable Development* - UN&FIG -
  FIG publication no 21
- Wallace J. -*Using Remedies to Secure Access to Land*- proceedings Expert Group meeting on secure land tenure: new legal framework and tools UNESCAP – Bangkok, Thailand 2005
- Tuladhar A.- *Innovative Use of Remote Sensing Images for Pro Poor Land Management* - proceedings Expert Group meeting on secure land tenure: new legal framework and tools UNESCAP – Bangkok, Thailand 2005
- Van Der Molen P. & Lemmen C. - *Unconventional Approaches to Land Administration* - proceedings Expert Group meeting on secure land tenure: new legal framework and tools UNESCAP – Bangkok, Thailand 2005
- Dale P. & McLaughlin J. – *Land Administration* – Oxford University Press Inc., New York 1999
- *Survey on Land Administration Systems* – United Nations Economics Commission for Europe, New York and Geneva 2014
- *Formalizing the Informal: challenges and opportunities of informal settlements in South-East Europe* - United Nations, New York and Geneva 2015
- Bogaerts T. & Zevenbergen J. – *Cadastral Systems , Alternatives* – Computers, environment and urban systems volume 25 – 2001 Pages 325-337
- Zevenbergen J. & Bogaerts T.- *Alternative Approaches for Successful Cadastral Systems* - Proceedings UDMS 2000 Delft p III.67- 76

- Rowton Simpson S. - *Land Law and Registration* - Surveyors Publications, London UK 1976
- Storme M. - *Property law in a comparative perspective* - Centre for Advanced Legal Studies - KU Leuven Belgium 2004
- Enemark S. - *Land Administration Systems - Managing Rights and Responsibilities in Land* conference papers - Map World Forum Hyderabath 2009 (ww.fig.net)
- *Land Administration in the Unece Region, developments trends and main principles* – United Nations, New York and Geneva 2005
- Zevenbergen J. – *Systems of Land Registration – Aspects and effects* – Ph.D thesis Technical University Delft Netherlands 2002
- Hespagna.J – *Development Methodology for an Integrated Legal Cadastre* - Publications on Geodesy 79- Netherlands Geodetic Commission Delft Netherlands 2012
- *Land Administration in Post Conflict Areas* – Proceedings of a symposium held by FIG Commission 7 , Geneva Switserland 2004
- *Cross Border Acquisitions of Residential Property in the EU: problems encountered by citizens*- European Union 2016 (http://www.europarl.eu/supporting-analyses)
- Sait S. & Lim H. – *Land,Law&islam: propery & human rights in the Muslim World* – Zedbooks London 2006

Prospective and Cautionary Measures in Brussels I Recast and Land Registration

BY FRANCISCO MAZUELOS

Magistrado Audiencia Provincial de Huelva (Spain)

Enforcing any judgment is considered as a sovereign act of the States. That principle is the basis of Article 24(5) of Regulation 1215/2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast): in proceedings concerned with the enforcement of judgments, the courts of the Member State in which the judgment has been or is to be enforced have exclusive jurisdiction. Our subject of consideration are only provisional and protective measures. In general, they may be explained as those measures intended to safeguard the rights to be recognized (and later enforced) in the future judgment, to maintain the status quo or even to anticipate the result of the judgment (we find clear examples in family matters: provisional custody, maintenance or administration until the final judgment is given). Normally, both the existence of the right and a risk of imminet infringement of that right must be established by the creditor and a security from the creditor is required too.

In this Regulation, known as Brussels I (a) or "bis" (BRIb), we find several rules related to measures in three different situations:

1 ▸ BY A COURT WITHOUT JURISDICTION AS TO THE SUBSTANCE OF THE MATTER

Application may be made to the courts of a Member State for such provisional, including protective, measures as may be available under the law of that Member State, even if the courts of another Member State have jurisdiction as to the substance of the matter (Article 35).

BRIb (and all the other European regulations that deal with recognition and enforcement of judgments) contain a provision that allows a court to adopt such measures even where the courts of that State do not have jurisdiction as to the substance of the matter. The possibility of taking such measures is subject to the internal law. It is the national law that rules whether a national court is able to order a measure although it is not followed by proceedings in that same State. Measures related to foreign proceedings are admitted in all the european States (in Spain, art. 722 LEC).

Typical cases could be recording in a Land Registry that an action on the validity of a purchase contract on a property is pending in another State where the defendant has his domicile, so that the purchaser may be obliged to return the property, or that the recovery of a debt may be later enforced by selling that property. The effect of publishing the measure in a Land Registry is similar: the judgment may be enforced despite a further purchase.
The jurisdiction, the procedure and the nature of the measure to be taken is ruled by the national law of the court. The measure is adopted in the same State where it has to be made effective or enforced. No recognition is necessary, no possibility arises on incompatibility between a measure adopted in one State that would be carried out in another one. In my opinion, that is the reason for this provision in BRIb, so that these measures have a territorial effect, as far as they are adopted and carried out in a single State.

With these conditions, these measures should pose no problem. But the real world is more complicated, for several reasons sush as:

- the variety of conditions and effects that each national law requires or provides for;
- the natural inclination of a party to seek the conditions that most favourably serve the applicant's interest ("forum shopping");
- a loose interpretation of the urgency factor by the courts;
- the tendency to widen the scope of the provisional measures and to include measures that do not necessarily require the existence of main proceedings, that is, summary proceedings that under the cover of provisional measures do not comply with the rules on jurisdiction by the application of Article 35 instead of Articles 5 and 7 to 26.

The European Court of Justice has put limits to the nature of provisional measures (now in Article 35) and has Stated its territorial effects: *"interim payment of a contractual consideration* [Leistungsverfügung, référé-provision, kort geding as was the case] *does not constitute a provisional measure within the meaning of article 24* [of the Brussels Convention, precedent of BRIb] *unless, first, re-payment to the defendant of the sum awarded is guaranteed if the plaintiff is unsucessful as regards the substance of his claim and, secondly, the measures sought relate only to specific assets of the defendant located or to be located within the confines of the territorial jurisdiction of the court to which application is made"* (van Uden judgment of 17 November 1998, case C-391/95, ruling nº 5 and para. 47 and 48).

Article 2(a) of the Regulation does not allow recognition and enforcement of these measures in another Member State.

2 ▸ BY A COURT WITH JURISDICTION AS TO THE SUBSTANCE OF THE MATTER

For the purposes of Chapter III *[recognition and enforcement],* ***'judgment' includes provisional, including protective, measures ordered by a court or tribunal which by virtue of this Regulation has jurisdiction as to the substance of the matter. It does not include a provisional, including protective, measure which is ordered by such a court or tribunal without the defendant being summoned to appear, unless the judgment containing the measure is served on the defendant prior to enforcement*** *(Art. 2 (a)).*

The *van Uden* judgment had already declared: "*It is acepted that a court having jurisdiction as to the substance of a case in accordance with Articles 2 and 5 to 18 of the Convention* [now 4 and 7 to 26 of the Regulation] *also has jurisdiction to order any provisional or protective measures which may prove necessary*" (para. 18 and ruling 1).

As to give evidence that these conditions are met, the party **shall produce:**

a) a copy of the judgment which satisfies the conditions necessary to establish its authenticity; and
b) the certificate issued pursuant to Article 53 (Art. 37)
containing a description of the measure and certifying that:

- the court has jurisdiction as to the substance of the matter;
- the judgment is enforceable in the Member State of origin; and

c) where the measure was ordered without the defendant being summoned to appear, proof of service of the judgment. (Art. 42.2).

In case a measure has to produce effects in another Member State, either because the assets are situated there of the person to which the order is addressed has his/her domicile in it, the measure needs to be recognised or enforced in that Member State.

Measures related to inmovable property in another Member State are not taken in proceedings on rights in rem, because these actions may only be dealed with in proceedings within the State in which the property is situated (Art. 24 (1)).

If the proceedings del with a monetary claim, the provisional measure may consist of the provisional attachment of an inmovable property to the result of the proceedings and to a future enforcement of the final decision. Publishing the measure in the Land Registry may be the normal way to achieve the legal effect of protecting the creditor against transmission, mortgage or encumbrance of the property. Recording the measure in a Land Registry does not imply enforcement, there is no need to use the powers of the State in order to force the will of a defendant who may resist to comply with a judicial order. Once an attachment has been ordered, that order may have access to the records of the Land Registry upon direct application to the Land Registrar by the interested party, even if the property is situated in another State. Recognition of the judgment by the Land Registrar is enough.

In Spain, we have had examples where the claimant had succeeded to have a measure issued by a court in another Member State, namely hypotèque provisoire and Sicherungshypothek (provisional or security mortgage). He has then applied, without success, for the measure to be registered, in one case to the Spanish court with territorial jurisdiction on the place in which the property was situated to enforce the order by having a national order issued by the Spanish court to the Land Registrar, in the second case directly to the Land Registry. Nowadays, in accordance with the new Act on Legal International Cooperation in Civil Matters, the registrar may examine the formal requirements and the existence of reasons to refuse recognition. Before entering a record, he must serve his decision, both on the applicant and the person against whom recognition is sought, who may challenge this decision.

Articles 37 and 38 of BRIb envisage invoking a judgment given in another Member State not only before a court but before another authority, so that no assistance of a court is necessary to get the measure published in a Land Registry.

Another type of possible measure is the prohibition to transmit or encumber the inmovable property, a measure legally foreseen in Spanish law. The freezing order or Mareva injunction in countries of Common Law is a measure of this type. But, while the Spanish measure is meant to produce effects in rem (once registered), the freezing order's effects are in personam.

Among the provisions that are common to recognition and enforcement (Chapter IV BRIb), we find Article 54: ***If a judgment contains a measure or an order which is not known in the law of the Member State addressed, that measure or order shall, to the extent possible, be adapted to a measure or an order known in the law of that Member State which has equivalent effects attached to it and which pursues similar aims and interests.***
Such adaptation shall not result in effects going beyond those provided for in the law of the Member State of origin.
Any party may challenge the adaptation of the measure or order before a court.

Recital 28 specifies that How, and by whom, the adaptation is to be carried out should be determined by each Member State. The Spanish Act on Legal International Cooperation in Civil Matters contains a similar provision in Art. 61, under the point of view of registration (as a question of incidental recognition) and states that it is the Registrar who will perform the adaptation.

In accordance with this provision, a freezing order with personal effects would not be published in a land registry producing thus effects in rem, beyond thoseprovided for originlly. Freezing orders have been enforced in certain States, specially with respect to bank accounts in Switzerland (Lugano Convention applies, not BRIb), where the bank in which deposits were held has been ordered by the Swiss court not to accept any disposition on them.

As far as to inmovable property is concerned, conservative seizure (embargo preventivo 727.1 LEC ES, sequestro conservativo 671 CPC IT), provisional attachment or mortgage (hypotèque provisoire 531-1 CPC FR, Arresthypothek § 932 ZPO DE that is carried out by registering a Sicherungshypothek) could be considered measures that are equivalent. We find cases where registration of these situations has been denied because there is not an exact equivalence, even in systems where the rights in rem are not a numerus clausus (like the Spanish examples I have quoted, RDGRN 12 May 1992 and 23 February 2004).

Nowadays, the provisions in Article 54 BRIb should solve that problem. Formal requirements for entering a record have to be met, nevertheless, to satisfy the requirements of the local Registry law.

Finally, the registrar may not examine the jurisdiction of the court. First of all, the refusal of

recognition should be object of application by an interested party (Article 45.1) and, secondly, lack of jurisdiction as a reason for refusal of recognition is limited to the rules of jurisdiction on "protected contracts" and the cases of exclusive jurisdiction (para. (e)). Rules on jurisdiction, including exclusive jurisdiction on rights in rem and the validity of entries in public registries (Article 24), refer to the object of the proceedings (the main proceedings in which the right or the registration is the subject matter of the claim), not provisional measures, which rules on jurisdiction are different. This construction is supported by the European Court of Justice: although arbitration is excluded from the Brussels Regulation (former by the Convention),"provisional measures are not in principle ancillary to arbitration proceedings but are ordered in parallel to such proceedings and are intended as measures of support. They concern not arbitration as such but the protection of a wide variety of rights. Their place in the scope of the [earlier] Brussels Convention is thus determined not by their own nature but by the nature of the rights which they serve to protect" (ECJ judgment of 17 November 1998, case C-391/95, van Uden, para. 33).

3 ▸ AFTER JUDGMENT IS GIVEN ON THE SUBSTANCE OF THE MATTER

Article 40

An enforceable judgment shall carry with it by operation of law the power to proceed to any protective measures which exist under the law of the Member State addressed.

Once judgment is given, measures to guarantee its enforcement are possible too.
The judgment may be only provisionally enforceable.
An important judgment on provisional measures after judgment was given by the ECJ on 3 October 1985, case 119/84 (Capelloni). If we adapt its references to the article 39 of Brussels Convention:

Art. 40 appears in section 2 of Chapter III of the Regulation, which is concerned with the enforcement in one Member Sate of decisions given in another Member State (para. 14).

The application of the requirements of the national procedural law of the court hearing the proceedings must not in any circumstances lead to frustration of the principles laid down in that regard, whether expressly or by implication, by the Regulation (para. 31).

Those measures are granted not on the basis of a summary procedure for authorization but rather on the basis of the legal effect with which a decision adopted in another contracting state is endowed by the Regulation (para. 34).

Article 40 does not prevent the party against whom those measures have been applied from taking legal proceedings in order to secure, by recourse to the appropriate procedures laid down in the national law of the court dealing with the matter, adequate protection of the rights which he alleges to have been infringed by the measures in question.

Therefore, a court of a State with jurisdiction to enforce the judgment has jurisdiction to

grant measures, even where measures are not foreseen prior to enforcement by its procedural law (they are not in Spain).

National law applies to the measures to be taken, and the only doubt could be whether other conditions should be met: appearance of right that is now clear, urgency that the words "by operation of law" do not suggest, providing a security not required for the main enforcement proceedings, authorization or ratification (Capelloni judgment denied this last requirement under Italian law).

In any case, cautionary measures proceedings are not standalone proceedings, so that, in my opinion, Article 40 does not allow taking measures where the applicant has not applied for enforcement or does not apply within a short time.

Blockchain-based Land Registry

BY JACQUES VOS

Kadaster

SUMMARY

In this paper the functioning of blockchain technology and the possible use or impact it may have on current Land Registry systems and the role of legal experts are described. October 31st 2015, the Economist wrote an article about the use of Blockchain as a 'Trust Machine', stating: "The spread of blockchains is bad for anyone in the "trust business" (…), such as (…) government authorities that are deemed sufficiently trustworthy to handle transactions". It was stated that land registries across much of the world are "badly kept, mismanaged and/ or corrupt". Blockchain technology should prevent the insecurity and injustice that are part of these land registries. The shared ledger technology should bring trust. Will this truly be the case? And will it be possible to replace well-functioning Land Registration systems (that are not corrupt and are kept and managed the proper way)? Will a blockchain-based system be less complicated and less expensive than the current well-functioning Land Registration systems? This study does only include developments until October, 31., 2016. It therefore does not describe or comment on more recent developments.

1 ▸ LAND REGISTERS: OBJECT – RIGHT - SUBJECT

The common pattern for Land Registration (systems) consist of a triple: Object (spatial unit) – Right (*rights in rem* or personal rights) – Subject (the title holder of the right that is related to the object). This triple is the basic structure for all well-functioning systems. It is not without coincidence that – amongst others – the key principles of the conceptual model for Land Administration, the Social Tenure Domain Model (STDM), for building a legal and regulatory framework are a *continuum of land rights* (rights, restrictions and responsibilities), a *continuum of land use right claimants* (persons and groups or entities)

and a *continuum of spatial units* (land, objects and units). This triple is also knowns as the ABC-structure, as this structure has (also) been identified during the IMOLA project, the project by which the European Land Registry Association aimed to produce a model for standardised land registry output, connected to explanatory material in different languages. In the IMOLA project ELRA has implemented Reference Information Fact Sheets to explain the meaning of Land Registry information in context and into detail. The ABC-structure is containing all information with regard to the object, the subjects involved, the most embracing right in rem (mostly: ownership) and the applicable other rights in rem, burdens and easements. In section A the Land Registry Unit is defined, in section B the Proprietorship is described and in section C the Encumbrances are explained into more detail.

2 ▸ COMPLEXITY IN LAND REGISTRATION: 'BUNDLE OF RIGHTS'

Things start getting complicated in case of plurality within each of these three parts of the triple. The most complex, yet not inconceivable situations are the cases where two or all three items within the triple are complex and/ or used in extraordinary cases. The *'bundle of rights'* can cause a lot of complexity, especially when combined with different shares in various rights. An example of this complexity is a case where there are multiple persons, each entitled to different shares in various rights (e.g.: a right of bare ownership, encumbered with the right of usufruct and a building right), with a mortgage right or seizure on the right of ownership or the building right, with regard to a building on a plot of land (parcel), which building has been divided into apartment rights. Will this fit in a Land Administration that is based on Blockchain technology? To answer this question I start by explaining what Blockchain is, what it does, what it needs and what elements and/ or actors possibly can be left out a Land Administration system.

3 ▸ THE CONCEPT OF BLOCKCHAIN

The concept of Blockchain technology can be divided into three different concepts:

a. An organisational concept: blockchain technology is aimed to cut costs and to make the use of Trusted Third Parties, such as Notaries, Banks and Governmenatl organisations superfluous. It is meant to give individuals control on the processes in the blockchain, without the use of a man-in-the-middle. In well-functioning Land Registry systems there are reliable Trusted Third Parties involved in the transfer of ownership of immovable property. Because of the design of the process of transfer of ownership in

these systems, the legal certainty is guaranteed and rightful claimants are protected. Apart from the registration of transactions, there is also a relationship between the transaction and the reality, the actual situation. It is questionable whether Blockchain technology can perform these elements as well or replace a well-functioning Land Registry, especially in cases where Land Registries are well-functioning and trusted by its users. In countries where there are no such (reliable) registries, the use of Blockchain technology perhaps seems more appropriate. This is why the use of blockchain is examined, amongst other countries, in Honduras and Ghana.

b. A concept of design: the creation of a reliable and accessible and/or public administration containing all kinds of transactions using the capabilities of the network organisation (just like the structure of the Internet, a network without a single point of failure). Blockchain technology offers a complete new perspective on how to keep a registration and to make information accessible (in a registration). This approach fits the self-reliance and it is interesting to take into account when designing new registrations, although there are not many Blockchain-based applications, especially in Land Registration matters, and little is known about potential drawbacks of this concept. In the Netherlands, Dutch Kadaster is doing some research on the use of Blockchain in cases of sharing specific data sets, concerning open data. If the technique seems fit for this purpose, these data sets will be put on blockchain, so everybody using these open data sets can see the dataset is put on the blockchain by (and therefore derived from the cadastral and land registry information from) Kadaster.

c. A technological concept: a technical solution to situations where multiple parties can perform transactions. There is a need for a decentralized solution that ensures reliability and consistency of information. There are several implementations of blockchain that may offer useful functionality. These applications possibly can provide opportunities to simplify current IT systems, underpinning and supporting a Land Registry system. Perhaps it is possible to realize new functionality at lower costs and with reduced complexity. At this moment Dutch Kadaster is working on a proof of concept for a blockchain-based method of signing and sending (or uploading) notarial deeds to the Land Registry office.

Bitcoin is the first and most known application of blockchain technology. It combines all three characteristics, it diminishes the role of the traditional banks and it ensures that the reliability is organised into a network and it provides a technological solution.

In 2008 an announcement was made and a paper was published on The Cryptography Mailing List at metzdowd.com by a (group of) member(s) under the pseudonym Satoshi Nakamoto, describing the bitcoin digital currency. In 2009 the first Bitcoin software was launched.

Later on Nakamoto handed over control of the source code repository and network alert key to Gavin Andresen and left the Bitcoin Community in secrecy. Since then the Community has expanded with new developers, working on Bitcoin. Although the real identity of Nakamoto is still not known, the used technique is open source. That is the reason why it does not seem to be very important who Nakamoto really is, although he, she or the group owns a *wallet* containing roughly one million bitcoins.

Blockchain is a technological solution to register transactions without the services of a Trusted Third Party. It is a type of consensus-based computing that facilitates Bitcoin and other services. It is often said banks, governmental parties, Chambers of Commerce and Land Registry authorities should keep an eye on Blockchain. It is even said these parties (perhaps) will be challenged (or even replaced) by this 'disruptive technology'. Various interested professional parties, including banks and Land Registry organisations, are examining and exploring the possible practical use of this technique. Blockchain has been described by analogy with the (old paper) process as a ledger. It is a method of recording data – digital ledger of transactions, agreements, contracts – anything that's needs to be independently recorded and verified as having happened. It knows who owns what at a certain time. It keeps track of transactions, it knows when a transaction took place and it ensures that there is always one single owner and no double usage of the same item or unit.

The phenomenon called blockchain has the following characteristics:

1. Shared databases. A blockchain is a shared database, copied on multiple databases that are all connected to each other. In the world of Land Registry it is common to use one source, one database with some back-up facilities.
2. Multiple writers. In a blockchain each and every transaction can be put in each version of the database. In the world of Land Registers, the transaction is updated in only one system. A copy of this transaction will be recorded in the back-up systems.
3. Distributed trust. Unlike existing Land Registry systems where the administrator is trusted, you don`t need to trust the administrator of a copy database. Blockchain is also described as *'shared single source of truth*'.
4. Disintermediation. It is possible for anyone to keep a copy of the database and execute a transaction on that database. In the current Land Registry systems there is always a trusted third party that updates the registration.

5. Transaction dependency. In a blockchain it is possible to create a dependency on another transaction. The blockchain can monitor the fulfilment of this dependency.
6. Timestamping. In blockchain it is possible to securely keep track of the creation and modification time of a document or transaction. No one, not even the owner of the document, is able to change the (content of the) document or transaction once it has been recorded, provided that the integrity of the timestamp facility is never compromised.
7. Transaction rules. To prevent any undesirable transactions taking place, blockchain can check whether the transaction is valid or not. In traditional (Land Registry) systems the Trusted Third Party is monitoring the validity of the transaction.
8. Validation. Blockchain logs all validated transactions in a sequence. It is a public register and unchangeable and therefore indisputable. In current Land Registry systems all transactions are part of a ledger and are traceable using an audit trail of some kind (validation).
9. Scalability. The Blockchain is easily expandable. Everyone who would like to upload a transaction on the blockchain can do so.

   This truly seems to be an ideal and unique functioning system. But is this underlying technology really unique and ideal? Can Blockchain be used in various cases? And would it be possible to run a land registry system on the Blockchain technology?

5 ▸ THE TECHNIQUE OF BLOCKCHAIN

The technique behind the blockchain consists of two main parts:

1. A distributed ledger. This ledger is a database with the complete history of transactions.
2. A peer-to-peer network (P2P network). Such a network is to be described as a decentralised communications model in which each party has the same capabilities. Either party can initiate a communication session. The P2P network allows each connection point (peer) to function both as a client and server.

These two parts combined create a *distributed ledger,* using several other (already existing) items or techniques, such as SHA-256 and *hashcash*. Timestamps, ledgers and digital signatures have been around for many years, but the combination has unlocked the opportunity for many new and consequential innovations.

The beginning of this 'history of transactions' is a first block which is called the *Genesis-block*. This first block is basically an empty state which everyone can agree on. This block (and all the transactions that are made afterwards) is saved in the 'database'. The database is shared on various computers that are linked ad random to other computers. These computers are called *nodes*.
To explain the way blockchain works, it is useful to refer to the use case of crypto-currency. The most common known is the Bitcoin. Strictly speaking, bitcoins do not exist. They are not tangible. There are *records* of transactions between accounts. These accounts, called *wallets*, are expressed in bitcoin addresses which are generated at random and consist of numbers and characters. That way, these accounts can be created immediately and completely anonymous. These wallets are secured by using encryption technology, as is done using a qualified electronic signature. The owner of the wallet is using his or her private key to sign the transaction. After that the transaction is begin placed on the network. The balance of these accounts can increase or decrease.

Once a transaction is created, it is broadcasted through the P2P-network by using the *nodes*. Because of the P2P-technology it is very difficult to find out who sends the transaction. This is where the technology differs from most registrations: trust is not needed (at this stage), the technique itself will bring trust by *mining* the transactions. The transaction will be added to a *pool* of pending transactions. Because of the (bitcoin)protocol the balance of the wallet cannot be retrieved at once. For this, older records in the blockchain have to be collected.

Blocks that are containing pending transactions are created approximately every ten minutes. It is done by creating a *hash* value on the pool of transactions. This is called *mining*. When adding a block to the network an order to the various transactions within the block is established and a cryptographic signature is added to the block. A cryptographic signature has two main characteristics. Both are critical to the security of the database. First of all, the signature establishes a link to the preceding block. The second important characteristic of the signature is the non-repudiation: if the order or a transaction itself within the block would change, the signature will not be the same any longer. This will be noticed within the network that encompasses this block. If any transaction in a block – or perhaps in the Genesis-block –changes, the signatures from all blocks following that change will also be(come) invalid. This means that Blockchain establishes an unchangeable permanent record of changes to the database.

When a new *node* appears in the network, it connects to the other *nodes*. These existing

nodes update that new node with the history of the database, so the new node is capable of presenting the history of all transactions, coming to the same conclusions as all other nodes in the network.

6 ▸ THE OPPORTUNITIES OF BLOCKCHAIN

The Because of the above mentioned features of blockchain technology, it might be possible to use the technology for other applications than crypto-currencies such as Bitcoin. For the *nodes* or the *ledger* it is irrelevant if a bitcoin is representing a value in USD or EUR. It is also possible to represent something completely different. Users can decide themselves for what units the Blockchain can be used.

It is known that the number of bitcoins is limited to twenty one million. Each bitcoin contains one million units (bits). Each *bit* is separately identifiable and programmable. That means every unit can be given specific properties. So, in theory it is possible to use the Blockchain technology for trading in Eurocents, in shares of companies, in Kilowatt of energy or votes for elections.

It is also possible to 'smarten' these specific units (e.g.: to employ the vote during elections for 2016 or to pay with the bits only for repaying tax debts). In such a case compliance will not be verified afterwards, but it will be programmed *in* the units and the system itself and therefore compliance can be checked in advance. It is also possible to program the units to automatically return to the issuing authority in case the unit is not used. One example could be sending back an unused vote during elections, in order to prevent misuse or incorrect counting. Furthermore it is possible to use the technique for earmarking the money (e.g. in case a grant is awarded by the European Commission or in case taxes have to be paid). This can save a lot of overhead costs.

The programmable and open nature of Blockchain allows to rebuild or innovate the financial or administrative processes. Processes can be made more efficient and more transparent. A few examples are:

1. Overstock. This American web-retailer tries to build a decentralised Stock exchange under the code name Medici, using a P2P structure. It should build a technical layer on top of Blockchain, in order to have the possibility to issue and trade in shares of Overstock and other companies.
2. 'World Citizenship'. With this experiment affordable decentralised passport services are created and investigated. This passport is meant to be used for identifying purposes between parties. Other parties are also working on *Blockchain-identification*.

3. Namecoin. With Namecoin a Blockchain based decentralised registration and transfer system is introduced. This should lead to an alternative architecture for the Domain Name Structure of the Internet, (mostly) governed by multinational and governmental entities. Namecoin can be used for access of websites, using the .bit domain and store identity information.
4. Pegged Sidechains. With the introduction of *Sidechains* using the Blockstream technology, new possibilities can be introduced and implemented without burdening the Blockchain technology too much. A Pegged Sidechain is a blockchain that validates data from other blockchains and enables bitcoins or other assets to be transferred between blockchains, fostering a new, open platform. These Pegged Sidechains are separated from the central Blockchain, although it is possible to exchange data between the two.
5. Permacoin. This initiative is introducing a new scheme 'to achieve a more broadly useful goal: *distributed storage of archival data*'. It requires clients to invest not just computational resources, but also storage for the public benefit (e.g.: data files of libraries).
6. Ethereum. Ethereum is a multi-purpose blockchain concept that offers a decentralised platform for developers to create applications that use the blockchain-technology. Its focus is to enable execution of smart contracts on a decentralized programmable open platform. It runs smart contracts: applications that operate exactly as programmed without any possibility of downtime, censorship, fraud or third party interference. It is meant for developing separate blockchains, based on a program language called Ethereum Script. By using Ethereum as a basis a digital artwork registry and marketplace (monograph), a trusted timestamp on top of Ethereum (Chronos), blockchain-chartered companies (Otonomos) and many other projects have started. Next to *smart contracts* Ethereum should enable financial applications, e.g.: opening a saving account, drafting a will and issuing shares. It is powered by a crypto-currency named Ether.
   Since there is no *single point of failure*, these applications should be very solid. As Ethereum promotes itself: *"Ethereum is how the Internet was supposed to work"*. The Ethereum product called *Frontier* helps developers to build software to store decentralised data. Yet, as we have seen during the DAO-hack, there might be a problem if there are no sufficient Governance provisions in case of a shared ledger technology based system where transactions can be made without the use of a Trusted Third Party.

It is clear that the Blockchain technology is (probably) fit for various purposes as mentioned in the previous paragraph. The functionality of Blockchain can be described as a digital *ledger*. It serves the same functionalities as a sound Land Registry system: it knows who owns what at a certain time, it ensures single-ownership and it knows when a certain transaction took place. It is possible to 'track back' and therefore it should be possible to guarantee title.

Compared with a 'classic land registration system', blockchain may even provide some additional certainty. Because of the shared databases there is security of back-ups. Trust is added by cryptographic proof and a decentralised database, especially in the case the current administrator (Registrar) is not trusted. It might safe costs because of remediation of intermediaries (Notaries or licensed conveyancers) or administrators (Registrars). It therefore can be judged as an alternative for the classical Land Registers.

Because of its transaction dependency, in the Blockchain, it is not possible for a non-owner to transfer ownership. Checks on ownership using Blockchain technology are processed automatically, using transaction dependency and transaction rules, whereas in current Land Registry systems checks on ownership are executed by the Registrar, mostly by scrutinizing the deed and comparing this information to the content of the land register in person. That means that in the majority of cases the data of the seller mentioned in the deed is compared in person to the data of the current owner in the land register.

One of the exceptions to this manual process is the computerized processing of deeds by using stylesheets, where the data with regard to the seller that is mentioned in the deed is automatically compared with the current owner as mentioned in the Land Register.

The only possibility for a non-owner to transfer ownership, using the Blockchain technology, could be the case where someone other than the owner uses the private key of the owner and uploads a transaction. However, there is a possibility for the owner to use a back-up system for his/her private pin-code in case of a crash of the used device (smartphone, tablet or computer). The *wallet* can be accessed by using a back-up that has previously been installed, although this back-up is executed by an intermediate. The often proclaimed risk that hackers can steal bitcoins, depends more on weaknesses with company security than the underlying core protocol itself. This in fact is no different than the DigiNotar-case as described in part I of this paper.

Furthermore the register is public and not to be changed since recording of the data is time-stamped and therefore indisputable. In current Land Registry systems this is applied by using time-stamps and audit trails. In case of the Land Registry system in the Netherlands,

the moment the deed is received by the Registrar is decisive. The deed will be registered, using the time the deed was received by the Registrar (priority). In theory it can happen that two deeds with regard to the same immovable property are received by the Registrar at the same time. In case this would happen, according to Dutch legislation, the time of execution of the deed is decisive. This time of execution is mentioned in the deed. In theory it could happen that two Notaries executed a deed with regard to the same object at the same time and sent is to the Registrar at the same time. Using the blockchain, one might think this is not possible. But in reality these situations happen quite a lot: a temporary situation of a so-called *fork* can occur in the Blockchain.

a. The fork in the blockchain

A *fork* is 'the situation where two chains exist with a shared genesis. These chains are identical up until the forking point, after which they exist exclusively in parallel (unless one is completely abandoned), creating two separate networks'. As is explained in the technical paragraph of this chapter, Blockchain is a de-centralized network, which by definition means there is no absolute 'correct' chain. Each *node* in the network downloads all the blocks to connect to a chain. The *node* will ask for the most current block. In the case two *miners* both have been working on a new block have published their block, there is a 'race' going on between these two blocks. Both blocks intend to be the most actual block causing one of them being the invalid block. The 'race condition' is that both blocks are valid, because they both are based on the most recent block until the moment of mining. The race seems to be won by both blocks, but the real winner will be the one that reaches the most *nodes*. For that reason, it is important to reach as many *nodes* as possible, as fast as possible. These *nodes* calculate and conclude the block is valid. Both of these blocks are valid since they have all of the consensus rules, sufficient proof of work, but only one block can be valid. At this particular moment there are two versions of the blockchain, two competing versions of history. To explain the situation of the *fork* a bit further, it is useful to add, pure fictional, a different color to both competing blocks. The miner that receives a (red) block starts working on the next one as fast as possible. Once this new (red) block had been created (*mined*), the new (red) block will be published as well. The other *nodes* will now check this new (red) block and will come to the conclusion that this block is the (red) successor of the previous (red) one.

The *nodes* that approved the new (blue) block will also ask for the newest block and find out that the newest block in fact is the (red) successor on the (red) block. They then come to the

conclusion that the (blue) block is invalid since this chain is one block shorter and will continue their validation on the red block and its successors. The longest chain has won and the block that did not have a successor yet is malicious and will be deleted.

A *fork* happens every day on average. A *fork* on a *fork* also happens every now and then. In April 2013 a new version of bitcoin was released, causing a twenty-six-block *fork*.
One of the most, or perhaps the most well-know fork situation has been the fork that was created during the DAO-hack. Because of this hack the equivalent of over 60 million US Dollars (in Ether, the cryptocurrency that is used on Ethereum) were lost. The perpetrator of the hack spotted a loophole in the Dao`s "smart contract" and made use of it.

b. Land Registry principles

Twaroch and Muggenhuber point out that a Land Registry system is successful when all partners involved (owners, banks, Notaries, et cetera) have trust in this system. This is independent from legal and technical solutions. For having trust a third dimension the organisational or institutional aspects of the system have to be taken into account.
In some (developing) countries people do not always trust the current system. In some cases there is fraud and corruption and in other cases there is a lack of quality. A blockchain-based Land Registry system may seem to bring a solution for these problems, although in reality it does not. The real challenge for these countries will probably be the initial identification of right holders and the creation of actual titles. Once it is known who is the actual owner of a certain parcel, the ownership of the parcel can be transferred. This initial phase will not be realised by using blockchain. Blockchain is designed as a '*shared single source of trust*', to exclude (mistrusted) governmental parties and banks, but it demands an empty stage which everyone can agree on as a starting point. This Genesis block will be the problem in the case of these countries, because there is no trust and so there will be no consent by all interested parties. In those cases a blockchain-based Land Registry will not work.

The principles of Land Registration are often divided into four:

1. Speciality principle: the concerned object ((immovable right regarding an) immovable property) and subject (the person (also the person behind the legal entity) must be unambiguously identified in Land Registration and consequently in the documents that are submitted for registration.

   In the blockchain the identification of a person is rather difficult. The technology was built *not* to share these data with the participants in the blockchain.

2. Booking principle: until the change or the expected right is booked or registered in the Land register, the change in real rights on an immovable property is not legally effectuated.

   The blockchain logs all validated transactions in a sequence. This means the system is fit for checks on ownership, titleholders and so on. This means blockchain can be in accordance with this principle. It is a matter of filling the empty first stage with assumptions which everybody can agree on.
3. Consent principle. This principle implies that the real entitled person who is booked as such in the Land Register must give his consent for a change of the inscription in the Land Register.

   This principle is met, since the owner of the asset has to sign the transaction in the blockchain, before it is uploaded to the network and put in a block.
4. Principle of publicity: the Land Registers are open for public inspection. Furthermore there is third party protection, for third parties in good faith.

   A blockchain is a shared database that logs all validated transactions in a sequence. It is a public register that is not to be changed and therefore indisputable. It is a '*shared single point of truth*', trusted by the users, but there is no third party protection.
   Furthermore there is the division of principles related to the registration of (Anglo-Saxon) titles. These three fundamental principles, identified by former chief land registrar, Theodore Ruoff are:
   1. the *mirror principle*. It states that the register of title is a mirror that reflects completely and accurately the current facts pertaining to the title. It reflects ownership and requires all rights to be registered. Although, in Land Registries sometimes there is a 'crack in the mirror' because of certain third-party rights (or 'overriding interests') that may affect a piece of land even though they are not registered and because in some cases unenforceable or obsolete rights continue to be registered.

      Not registered legal facts, affecting the immovable property, is not only the case in Torren`s based systems. It is also the case in the Netherlands, where it is not mandatory to register cases of prescription. This means that the owner mentioned in the cadastre registration is not always the real and current owner. The same applies to the registration of a certificate of inheritance. From a Dutch Land Registry perspective it is because of these shortcomings that it will be very

difficult to complete the first block (Genesis block) to present a current and actual situation.

2. The *curtain principle,* which means that the buyer can rely on the content of the registers. The purchaser (and anyone else drawing information from the land register) does not need to assure himself whether there are specific elements that are not shown. He or she does not need to investigate trusts and equities or search behind the title as depicted on the register.

   Since blockchain is using *accounts* instead of complete identification of (natural and legal) persons, the curtain principle is respected by the technology. Yet, this can also be mentioned as one of the biggest risks of this disruptive technology (for some legal systems): who is the owner of the plot, once it is part of the blockchain-based Land Register? In the Netherlands, the Notary has to identify and include all parties involved in the deed. The deed itself is registered, so all parties will be mentioned, unless a trust or some other (foreign) legal entities is involved. In those cases the Ultimate Beneficial Owner is not mentioned and known. It is proven that many criminals have been using these legal entities for laundering there money and buying property in the Netherlands and elsewhere. By using the blockchain technology the identity of parties can be hidden. Of course, there is the possibility to amend the system and demand publication (or the use of electronic) ID`s. Another possibility could be the use of a side-chain concerning blockchain-identification.

   In the Netherlands up until today one cannot completely rely on the information that is mentioned in the cadastre registration, although from an administrative point of view governmental parties have to rely on the cadastre registration and do not have to look into the Land Register any longer. From a civil law point of view, one has to scrutinize the deed lying underneath the information that is currently mentioned in the cadastre registration. This means that using the blockchain technology would not improve the legal certainty at once. Filling the first block in the blockchain would be done with the current information and for that reason this blockchain would not provide title: what is registered in the system, will be part of the system without any change. That would mean that the Dutch Land Registry system would remain a deeds system. For that matter, next to the previous titles, the current deed should be amended to the first block so everyone can check ownership. From a technical point of view, the legal system could easily be changed to a title system: after the creation of this (Genesis) block, amending deeds to the changes would no longer be necessary.

The Blockchain system relates every block to the previous one, so it is certain that the new owner obtained the land registry object from the previous owner. Legislation would have to be amended in a way that one may rely on the approved blocks (titles) in the chain. It would no longer be necessary to scrutinize all the previous titles (deeds) for defects with regard to ownership. The checks would have to be done once (Genesis block) and from that point on, the blockchain system, possibly combined with the use of the data derived from the various key registers would have to provide all checks that are currently done by Notaries and Registrars.

3. the *insurance principle*. Anyone who suffers loss because of a wrong reflection of the title through human frailty, must be put in the same position, so far as money can do it, as if the reflection were a true one. In other words, the accuracy of the register is guaranteed and any person who suffers loss as the result of the inaccuracy is indemnified.

   This is different in the Netherlands, because of the 'modernised' deeds system (or: semi title system). In case the wrong person is mentioned in the deed, the Notary who drafted the deed will of course be liable for this mistake. Kadaster is only liable when a mistake has been made while wrongfully updating the cadastre registration with information from the deed.

   In case of the use of the blockchain technique, the liability is uncertain or perhaps can be described as diffuse. In the (theoretical) case a mistake has been made in the computing process (e.g. a source code failure), the IT specialists who created the blockchain night be liable for this mistake. Challenges still exist to implementing this technology. There are still some scalability limitations and requiring updates for the core code of blockchain are proving highly contentious among developers. If the blockchain technology would be implemented by Kadaster for its own registration activities and processes, it will be Kadaster who is liable in case something would go wrong. Because of the semi-title system the implementation would not involve any additional liability. The Notary would still remain liable for the content of the deed and therefore for damages caused by defects in the deed itself. In case Kadaster would ask the notaries to use the blockchain technology, it would be wise to use disclaimers and/or terms of use, although in case blockchain is the prescribed method to be used, these disclaimers and terms of use are perhaps to be nullified. To pay any damage that may occur, it might be useful to require payments of fees from participants. Part if these payments go to the purchase of cyber insurance to

cover the participants for risk of loss. A possible other solution might be to require that each participant purchases certain insurance for itself and absolve all other participants of liability. Somehow an indemnity has to be paid for any loss. The answer to the question who would have to pay for the damages that may occur, depends on the way the blockchain would be implemented.

c. Governance of blockchain in Land Registry matters

If it would be decided that the blockchain would be the best solution to keep a Land Register system, there are various questions that should be answered with regard to governance of such a system. The first question is *who* would have to design and keep the Land Registry blockchain. Can this be done by the community? Or by an institute such as Kadaster? The next question would be whether this blockchain should be kept in a private, public or a hybrid format.

In case of a public Land Register blockchain, everyone can join the blockchain and use the software. It is the most reliable application of the blockchain technology because of the security offered by the use of a large number of *nodes.* Because of its globally accessible public ledger the information stored on the blockchain cannot be deleted or manipulated by any person.

Private blockchain

In case of a private Land Register Blockchain, one entity (Kadaster?) uses the blockchain technology to record transactions, overriding the underlying principle of blockchain of the creation of distributed trust by using shared databases. On the other hand, because of the poor number of *nodes*, the validation rules can be adjusted easily. Since being the only entity using the technology, consensus is met in an instance. This makes the system very flexible.

In case of a *private blockchain*, there is no *full* public and controlled network that is state machine secured by crypto economics (eg. Proof of work, Proof of stake). It is possible to create a system with more tightly controlled access permissions, modification rights and permission to read (certain elements). In the case of a private blockchain, writing permissions are kept centralized to one organisation (Kadaster). Reading permissions can be restricted or public. Since the Land Registers are completely open and available, in the case of the Netherlands read permissions would not need to be implemented.

One of the advantages of a private blockchain is the possibility to change the rules of a blockchain or to reverse a transaction. This could be the case when a Court ruling would mean ownership has to be re-transferred or in case apartment rights do no longer exist (and

the plot itself has to 'revive' from an administrative point of view).
The implementation of a private blockchain within Kadaster for the purposes of keeping the Land Register does not seem to have any added value. A new way of registration would have to be designed and implemented. Furthermore substantial computing power to *mine* has to be installed, especially with regard to the number of transactions that has to be uploaded and verified on a daily basis. Next to that, there is the same risk of being hacked as in a traditional system. Comparing the transactions with a public blockchain, transactions are cheaper in a private blockchain since they only need to be verified by a few nodes that can be trusted. It is not certain these costs are lower than the computing costs of a traditional Land Registry system. The only added value is the degree of cryptographic auditability, although this can also be implemented in another way (eg. A well-functioning audit trail, the use of a *four eye principle* during the registration process as well as quality verification after finishing registration). A well-functioning Land Registry system consists of a system of checks & balances. In most cases Registrars are checking the documents they receive from (licensed) conveyancers (eg. Notaries) and these conveyancers are checking the content of the Land Registers after updating. In fact, in the Netherlands, the Notary is obliged to check the Land Registers at three stages during the e-conveyancing process, so (s)he knows for sure the deed has been processed in accordance with the content.

Public blockchain

In case the Land Registry system would be replaced by a *public blockchain* anyone in the world can read the content of the blockchain. This is in accordance with the current situation in the Netherlands with regard to the (content of the) Land Registers, but it would not always match various other Land Registry systems. There are possibilities to have not all information (all contracts or deeds) available for everybody in the world. It is possible to create reading rights for specific parties. Furthermore it is possible to use privately administered smart contracts on public blockchains. There is also the possibility to create cross-chain exchange layers between public and private blockchains. By using these combinations different kinds of hybrid combinations can be realised.
In a public blockchain anyone in the world can participate in the consensus process. It is possible to contribute to determine what blocks (and therefore which transactions) get added to the chain. The current status of (ownership of) a certain plot of land is therefore a matter of the public. The strength of the public blockchain is the impossibility for the developers to make changes to the chain itself. This gives a certain level of trust to the users of the blockchain. A lack of policies supporting equitable rights for all, high costs to formalize properties, inefficient bureaucracies taking years to accomplish rudimentary tasks and

general issues with poor governance can be reasons to conduct research on the feasibility of blockchain for the creation of a Land Registry system. It is questionable whether these modern techniques will actually help creating a reliable Land Registry system. It seems very tempting to use blockchain technology in (less developed) countries where there might be fraudulent governmental parties, perhaps also conveyancers (notaries), surveyors and registrars. And of course it is possible to upload every transaction or first entry, once created, directly into the blockchain. But the real challenge on these countries seems to be the initial identification of right holders, the details regarding their rights, restrictions and responsibilities. Furthermore, ascertaining and documenting the geographical boundaries has to be realised in many cases. For these purposes many other possible solutions may be more suitable. Most of the time Land Registration systems in less developed countries should be cheap, fast and designed to meet the people`s needs ('Fit for purpose' approach). Blockchain technology cannot offer a solution for the deep political failings and corruption, but by starting to record each phase (survey, define and draft titles) in the blockchain, it could help. Once the title itself is registered, verifiable ownership is realised. As already mentioned, this can also be done by using different techniques, depending on the circumstances.

Hybrid blockchain

When using a hybrid Land Register Blockchain, a limited number of entities or persons is part of the blockchain. At this stage, Banks seem to be investing in a hybrid version of Blockchain technology where groups of banks will upload transactions to the chain to settle interpayment banking services. The same could perhaps work for the chain of transfer of ownership: licensed conveyancers or Notaries will work together with Registrars in a Land Register Blockchain. This could mean that a Notary or licensed conveyancer will upload a transaction and the Registrar will approve this (in his role of *miner*). After the mining is finished and the transaction is approved, the transaction is complete. As in the private Land Register Blockchain the principle of distributed trust may be frustrated, since the Blockchain is not open for everyone. Apart from that, the *miners* (Notaries and licensed conveyancers) may form an identifiable set and therefore can have discretion over the rules determining transaction validity. In such a case all participants have to implement and execute the new rules in exactly the same way.

When the current Land Registry system would be replaced by using a *hybrid* blockchain, used by the current stakeholders in the chain of real estate transfer, there could be a role for both the Registrar and the Notaries, bailiffs and/or other parties who are sending official documents to be recorded in the Land Register. The role of these stakeholders is to be

considered. It could indicate that (licensed) conveyancers check the ID of the persons involved and provide them with an electronic identity by which they can upload a transaction (transfer of ownership, a mortgage deed or a seizure) themselves. In such a case the role of the conveyancers is reduced from a legal professional scrutinizing all kinds of information and drafting a deed, seizure or other official document to a professional who is issuing e-ID`s. In such a case the Registrar would have to rely on the capacities and skills of the parties involved who are uploading the transaction themselves.
Another possibility could be the situation where the conveyancers are uploading the transactions to the blockchain and the Registrar`s *node*(s) will approve (the transactions in) the block.
A third possibility would be the situation where the conveyancers together with the Registrars would create a consortium that runs the blockchain. The conveyancers would upload the transactions and, together with the registrar, could be the validators. Each of them could operate as a node and a specific number of nodes must sign every block in order for the block to be valid. The risk of a 51% attack arising from some miner collusion does not apply in this case, since all validators are known, unless the current network of Notaries (and Registrars) would be threatened and their computers would be taken over by a hacking entity or they would somehow be prevented from seeing the actual longest chain. The less nodes are needed, the more risks can occur. It is possible to change a block when substantially more computing power can be used. All that has to be done is to compete by creating a longer chain than the current longest one. In case of the blockchain concerning bitcoins one has to build a chain with more than 436.739 blocks (or as much as there are today) in ten minutes (before the other chain will be one block longer).

In theory, an alliance of conveyancers could decide to give effect to another transaction by creating the longest chain. The right to read the blockchain can be public, depending on the legal system. In the Netherlands this blockchain would be publicly accessible, since the Land registers are open for everyone.

Again, as is the case with a *private blockchain*, transaction costs may be lower compared to a public blockchain, since less nodes are needed to verify the various transactions. These transaction costs may change in the long term with scalable blockchain technology that promises to bring back the costs of public blockchain.

Furthermore there is a possibility to quickly intervene manually, allowing the use of consensus algorithms which offer finality after much shorter block times. As is the case with

public blockchains, the question is how the Notaries and/or other (licensed) conveyancers will be rewarded for their 'approval services'. In the bitcoin blockchain the *miners* are rewarded by mining some bitcoins in each block. But with regard to a blockchain where *rights in rem* concerning Land registry objects are transferred, the miners cannot be rewarded by mining *rights in rem* or Land Registry objects (eg. square meters).

In all cases (private, public or hybrid blockchain) it is not guaranteed the system is completely democratic.

d. Diversity in Land Registry

To introduce a Land Registry blockchain in a country with a well-developed Land Registry system, it seems necessary to know and incorporate all existing *rights in rem* and all existing Land Registry objects in the first block, the Genesis block. If not all rights in rem and objects are incorporated in the system, there is no possibility to represent the actual situation with regard to the objects and *rights in rem* concerning all immovable objects. Of course there is the possibility to divide the content of the Land Registers into smaller units on a geographical basis (eg. Villages and cities), on the basis of the various rights in rem or any other way of division (eg. cables and pipelines in the soil or apartment rights or condominium). Depending on the way the content of the Land registers is divided, each (sub)division perhaps could (or even: should) be put in a new blockchain, some kind of a sidechain to the 'parent chain'. The parent chain could deal with (information regarding) transfer of ownership of a Land Registry object, where sidechains could be used for realising apartment rights or for the transfer of other *rights in rem*. In a sidechain it is possible to transfer an asset from the (original) parent chain to a sidechain, possibly onward to another sidechain, and eventually back to the parent chain, preserving the original asset. In Bitcoin terms: a bitcoin (in a sidechain) would remain a bitcoin (as derived from the parent chain), since any coin moved from Bitcoin could be moved back. Sidechains are able to support their own asset (eg. 'Eurocoin').

The use of sidechains would make it possible to divide a parcel (parent chain) into a set of apartment rights (sidechain). It would also make it possible to move back the object in the sidechain (apartment right) to the 'parent chain' (parcel), as an apartment building may be restructured or a usufruct or lease may end under specific circumstances (eg. death or passing of a period of time). The parcel (parent chain) cannot be changed or sold, since it is being preserved. It is 'locked'. This also seems very useable in Land Registry matters, since

a building cannot be divided into apartment rights in case it already has been divided into apartment rights. If one or more of the existing apartment rights should be subdivided into new apartments, there should be created a new sidechain with regard to the original apartment right(s) that now will be subdivided.

In a country where there is no *numerus clausus*, the introduction of a Land registry blockchain might even be more complex. In such a system new *rights in rem* can be created. Those specific rights should then perhaps be put in another sidechain. Another possibility might be the possibility to smarten specific units within the blockchain.

e. Providing actual and easy to understand information

Actual information

There should be consensus (in some way) about the content of the Genesis block. This means that, in case of a public Land Registry blockchain used by everyone (and not solely by Registrars and other professional parties), there should be consensus on the current situation. With regard to filling the Genesis block, existing and well-functioning title systems and Torren`s based Land registry systems would perhaps seem to be more fit for using the blockchain technology. In case (such) a Land Registry system is not complete – in many countries there are still first entries to be made – the blockchain might perhaps be less suitable. In those cases it can only be used for the registered parts of the parcels and objects. What isn`t registered, cannot be put in the Genesis block.

There is a risk of presenting information that does not represent the actual information. This can be the case during the *mining*-process as explained in chapter five. This process may take up to ten minutes. A more time-consuming uncertain period of time is the situation of a *fork* as explained in chapter seven. In such a case there is uncertainty about the title-holder, since there seem to be multiple title-holders at the same time, until the fork-situation is solved. In a 'classical' well-functioning Land Registry system there is certainty after the document has been received and the time-stamp has been placed. In case of the use of a sidechain, there are two more waiting periods:

1. The confirmation period: the period an asset (parcel) must be locked on the parent chain before it can be transferred to a sidechain. This period can take up to one or two days. After this period the transaction on the sidechain can be created.

2. The contest period: the period of time in which a newly-transferred asset may not be spent on the sidechain (to prevent double spending). Also this period can take up to one of two days.

During these waiting periods, the assets are locked at the other chain (parent chain or vice versa, the sidechain). This would block the conveying immovable assets for a certain period of time, while in a 'classical' Real Estate system the deeds are received and traceable, if not published straight immediately. For that reason in most Land registry systems it is possible to transfer multiple times in a short period of time, being able to investigate the actual (legal) situation.

Once the information is put on the blockchain, it is part of the (public) information. Besides the question if people can rely on the (legal sustainability of the) information, it is not certain if and how the actual and current situation with regard to the owner, the (various) right(s) with regard to the object can be presented. Or will it be just the chain of titles that is visible? In other words, data retrieval is a topic that is not yet put into practice. A current Land Registry system will show – despite complexity of connections between Objects, Rights and Person – the actual (legal) situation with regard to these three items. Will this be proven possible within a Land Registry system that is based on Blockchain technology as well?

f. Blockchain will not change a legal system

A Land Registry system cannot be changed from a deeds to a title or Torren`s system or vice versa by introducing a blockchain-based Land Register. It will not bring any changes in any system. What goes in, will come out. In case blockchain will be used in a deeds system, there will still not be issued any title by the Registrar. In case of a title system the title will be transferred by using blockchain; the title will not get lost.
Blockchain technology will not improve legal certainty with regard to the content and legal meaning of the first block. In a case where there is uncertainty with regard to the title holder, blockchain will not bring any changes. Improvement of the quality and the completeness of the Land Registers can be realised by recording new transactions and/or – depending on the legal system – titles in the subsequent blocks or by uploading new transactions in the first block. This is similar to a 'classic Land Registry system': by recording new deeds or transactions, the Land Registers become more accurate and give an actual overview of the current state of play.

There are possibilities to mislead or circumvent (parts of) the blockchain system in certain cases. It is possible to create incremental transactions, where two parties agreed on (multiple) small transactions *off-blockchain* and finally recording only one all-embracing transaction. This may save time and capacity in the blockchain *and* it does save cost, as for every transaction the *miner* receives a fee. The only precondition is the fact that the parties involved have to trust each other.

Finally, it is important to decide what will be stored on the blockchain. Will it be the data of the actual transaction (as is the case in a title system)? Or will it be the complete contract (as is the case in a deeds system, where deeds can be retrieved and scrutinized by everybody who wants to see the full content of the transaction)? Because of a maximum size of a block, it seems impossible to upload the original contacts on the blockchain at this moment. This can be solved by putting the *hash* value of the deed (or a so-called 'pointer') which refers to the original contract on the blockchain. The disadvantage of this approach is the need to store the corresponding deed somewhere safe (on a (traditional) server). Although the content of the deed is irrefutable because of the hash value, there is still the (same) risk of losing the document, as can be the case in a traditional Land registry system.

g. Preconditions and exotic transactions

In many cases there are preconditions that are of importance in the process of the transfer of ownership. It could be the spouse or co-owner who has to give consent to the selling of the marital property, the dissolving condition of funding or any other precondition parties agreed upon (transferring ownership, free of mortgages, seizures and other burdens). In a 'classic Land Registry system' it is the task of (both) the licensed conveyancer/ Notary (and/) or the Registrar to check whether the preconditions have been elaborated or not. In a blockchain system this scrutinizing of the deed will not take place by a person. It has to be done by the system itself. For this, it is possible to make use of a *smart contracts* infrastructure. Smart contracts are computer protocols that facilitate, verify or enforce the negotiation or performance of a contract, or that obviate the need for a contractual clause. Within this infrastructure 'each *node* acts as a title registry and escrow, executing changes of ownership and automatically checkable rules governing those transactions, and checks the same work of other nodes'. The code is the contract or code is law. Amongst else, replicated contract execution is implemented in Ethereum. There are centralised escrow intermediates and Distributed autonomous Companies or Corporations (DAC`s) that can do the same, although the fees are relatively high (three to six percent (3-6%)). The

precondition to use these escrow services is the existence of a currency in the same blockchain, so the intermediate can be paid, or perform a cross-chain transaction by using a private chain that can be verified by a public chain. As we have seen during the DAO-hack, a flaw in the contract can cause a lot of (legal) uncertainty, especially when there is no Trusted Third Party involved who is entitled to resolve the dispute.
The DAO on the Ethereum platform has learned that there is a need for good Governance provisions in case of a shared ledger technology based system where transactions can be made without the use of a Trusted Third Party.
By using so-called stylesheets in the Dutch Land Registry system (since 2008), scrutinizing of the deeds, fulfilling the checks and requirements for registration purposes and to a certain extent checking on meeting specific conditions is done in a different kind of way, but with the same result. One might say that these stylesheets are also smart contracts (the code, with certain preconditions, to transfer ownership).

8 ▸ CONCLUSIONS

Looking at Blockchain technology, many of the Principles of Good Governance in Land Administration can or will be met. The elements of transparency and efficiency as well as the history of transactions (chain of title) is present. Furthermore the unique identifiers (parcel numbers, identification numbers of (legal and natural) persons) can be stored. As transaction rules can be implemented, the validity of transactions can be checked. In current well-functioning Land Registry systems this is mostly executed by hand, by scrutinizing the deed. In some cases this can be done by computers, as is the case in stylesheet-based deeds in the Netherlands. The business rules incorporated in the stylesheet can be relatively similar to the transaction rules in the smart contract that can be used in the blockchain technology.
Therefore, one may conclude that in case a Registrar is planning to introduce automated processing of deeds, blockchain perhaps could be one of the possibilities. To ensure this is possible, further research is needed.

The introduction of standardised texts and clauses, combined with stylesheets, is a proven technique, although there some pitfalls exist and points of attention need to be taken into account.
In case of the implementation of a blockchain-based Land Registry system, one should not underestimate the complexity of the legal system, the meaning of the *rights in rem* (*numerus clausus* or not), the complexity and variety of different transactions and the proceedings of the legal professionals in the chain of conveying immovable property.

This complexity would even grow when a cross-border Land registry blockchain would be introduced. In such a case there should be an empty state which everyone can agree on. This empty stage would mean the objects are known and registered, the various rights in rem are known and registered and there is an agreement on (differences between) common law and civil law principles and causal and abstract systems. At this moment it is not sure whether all preconditions can be met. One of the possible risks is the transaction speed, especially since in the current Dutch Land Registry situation a deed of transfer can be processed completely automatically, without the interference of a human, in tenths of a second.
Sometimes technicians and other enthusiastic decision makers express their opinion that modern techniques can replace legal professionals quite easily. Without the cooperation of legal professionals, who indicate the legal meaning and its implications, these techniques will not be applicable in the right way. Implementation of such techniques would result in pure chaos.

To implement the blockchain technique, one does need the legal expertise of the experts in the field of (electronic) conveyancing. For drafting deeds this is the (licensed) conveyancer or the Notary, for updating the Land Register this is the Registrar. As I mentioned at the Cinder congress in 2012 in Amsterdam, lawyers should make use of modern techniques and have to become more inventive solution thinkers.

To ensure legal knowledge in future, for lawyers, also the lawyers from the 'classic generation', it is time to shake hands with the 'disruptive generation', a generation creating new technical solutions for different purposes. Whether legal proceedings and checks are executed by a computerised system or by hand, it is important that liability is covered. Furthermore it is important that someone is able to solve the problems that occur in case something might go wrong. The role of lawyers is not expected to be (completely) replaced by these disruptive technologies. People rely on technique, but want to revert to a lawyer in case of problems. In my opinion, Lawyers should be facilitated by modern techniques and computerized systems. Unlike Lessig I believe algorithms are no legislative measures. Yet, they can sure be of great help and simplify or fasten certain procedures. New (disruptive) techniques can be of (great) help in many cases, as long as it does not compromise the principle of checks and balances.

Once the role of the laywer is ignored, circumvented or neglected, the use of new technology (in Land Registry cases) will be truly disruptive. Legal expertise and a system of checks and balances is needed, as we have seen during the DAO hack. Although lawyers should make

use of modern techniques and have to become more inventive solution thinkers, it is clear that Land Registers are too important to be replaced by a technique that does not seem to be suitable or does not fit the needs of the public (yet).

news

- **XXII ELRA General Assembly**

Alasdair Lewis with the delegation from Land Registry and Cadastre of Turkey

The XXII ELRA General Assembly took place in Brussels on Friday 29th January 2015.

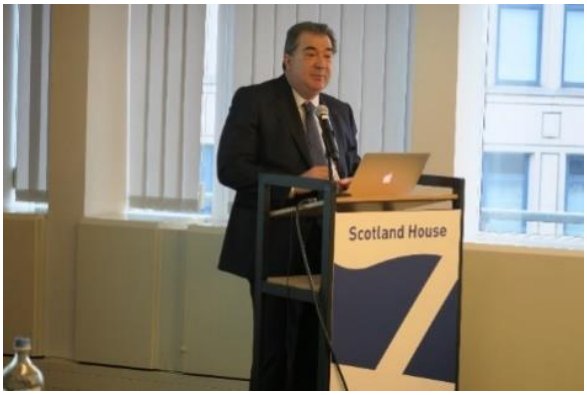
It was attended by representatives from 20 EU Member States and, on this occasion, the Court Administration of Latvia became a new ELRA member. Jānis Dreimanis proceeded to the signature of the Association Members' book following the provisions of the statutes.

ELRA welcomed representatives from the General Directorate of Land Registry and Cadastre from Turkey, who are also interested in ELRA activities.

Speakers from the European Institutions, University of Maastricht and other associations as the Secretary General of IPRA-CINDER and EULIS representatives also participated in the Assembly. Special mention deserves the presence of the new President of CNUE, Paolo Pasqualis, who accepted our invitation to join to our Assembly.

The XXII ELRA General Assembly focused on the European Certificate of Succession and access to the Registers. Moderated by Sjef van Erp, Professor of Law at Maastricht University, a panel discussion about this topic was organized with the participation of Stephan Matyk from DG Justice, European Commission, Isidoro Calvo Vidal from CNUE, and Ioanna Tzinieri, Greek Land Registrar and member of the ELRA Board.

Janis Dreimanis from Court Administration of Latvia



Fernando P. Méndez, Colegio de Registradores de España

After lunch, the session began with the presentation by Fernando P. Mendez, Director of International Relations of the Colegio de Registradores de España, on the figure of the Land Registrar as a legal profession.

Arnoldas Tomaševičius, Central Mortgage Office in Lithuania, and Piret Saartee, Centre of Registers and Information Systems of the Ministry of Justice of Estonia, made a presentation on a common European project on the European certificate of inheritance and access to registers. National implementation and creation of XML structure – IC RW project

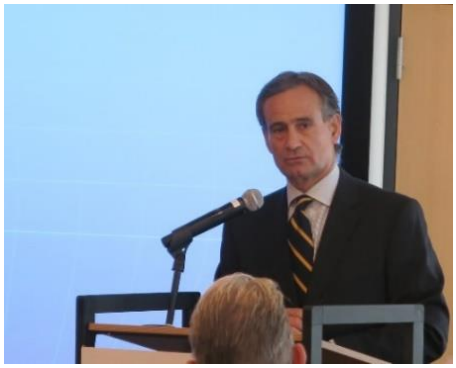
Panel on Succession Regulation

Mihai Taus, member of the board of ELRA and President of the Romanian Land Registry Association, gave a presentation on data protection and launched a series of questions of general interest, to be studied by a working group created for this purpose within the association.

- **IMOLA Closing Conference**

On Thursday, 28th January, day before the ELRA General Assembly, the IMOLA closing conference took place.

Among others, ELN Contact Points discussed about the IMOLA Template, the European Land Registry Document (ELRD) in the European context and the Interconnection of Land Registries.

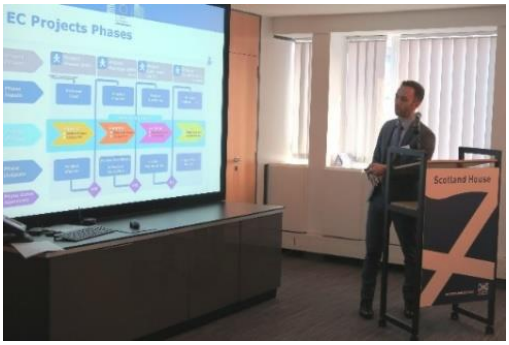


Council of the European Union, Mr. Fernando Paulino Pereira

ELRA had the honored to welcome Fernando Paulino Pereira, Chairman of the e-Justice working party of the Council of the European Union, and Georgios Paltoglou, DG Justice, European Commission. Both of them talked about the Interconnection of Land Registries.

Related to this issue, Sjef van Erp, Professor of law at Maastricht University and Member Executive Committee European Law Institute, draw a general overview of the IMOLA project in the interconnection.

Besides, on the one hand, Gabriel Alonso, Spanish Land Registrar and member of the IMOLA coordination team focused on the semantic aspects of the IMOLA project. And, on the other, Jesús Camy, Spanish Land Registrar and member of the IMOLA coordination team, made two more presentations: one about The IMOLA Template as an interconnection tool within the scope of judiciary cooperation, and another one about the technical aspects of the IMOLA Template.



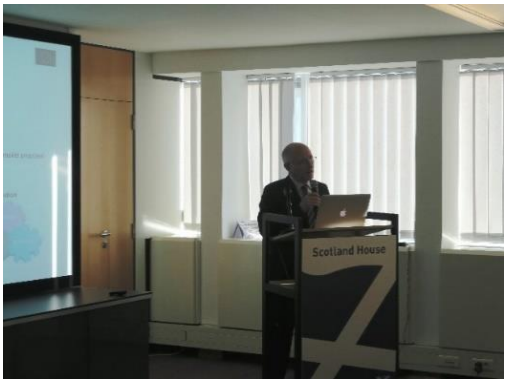
DG Justice, EC, Georgios Paltoglou

Finally, some ELRA Members discussed about the implementation of the European Land Registry Document in EU Members States: England and Wales by Joy Bailey, Italy by Agostina Lodde, Poland by Marta Rekawek and Finland by Henrik Ungern.

In February, the **IMOLA Questionnaire on Legal Effects of Registration** was sent to Contact Points.

In February 2016, IMOLA project was coming to an end and WS1 was reaching its goals. Thanks to CPs work, ELRA-ELRN was making an important contribution to the European Land Register background and mutual understanding.

Considering the terms of the IMOLA grant, the goals of the WS1 were to provide legal background for the template as well as a glossary and reference information to support its functioning.



Jesús Camy, IMOLA Project Manager

Once determined the legal aspects of the ELRD and designed a glossary to support it, the goal of drawing up suitable Reference Information (RI) was almost accomplished.

In this respect, for completing specifically the Fact Sheet of the Section "B" (proprietorship), CPs were requested to answer one question related to the types of ownership or main rights existing in your legislations in a brief way.

Besides, in order to complete this reference information (RI), another Fact Sheet related to the effects of registration was sent to CPs.

Afterwards, in March, the **4 Fact Sheets** were drafted (LR Unit, Proprietorship, Encumbrances and Legal value of the information) and the ELRN coordination team requested the CPs to completely review them.

These drafts were the main material for the IMOLA reference information (RI) along with the result of the draft on "Legal effects of the registration".


IMOLA Audience

All these issues are further developed in the section devoted to the IMOLA project.

• Activities ELRN (within the Framework Programme European Commission)

1st Workshop (Madrid, 14th – 15th April)
EU Regulation (UE) 650/2012 on Successions

Within the Framework Programme 2016, on 14th and 15th April 2016 took place in Madrid the 1st Workshop on EU Regulation (UE) 650/2012 on jurisdiction, applicable law, recognition and enforcement of decisions and acceptance and enforcement of authentic instruments in matters of succession and on the creation of a European Certificate of Succession.

On the first day, the Workshop focused on **Articles 66.5** and **69.5**.

On the one hand, as regards to the **Article 66.5**, the ELRN Contact Points discussed about the Information from land registries to Courts issuing Certificates, the Proceedings and judicial orders within scope of Article 66.5, the Judicial procedures for requesting LR information in application of Article 66.5 and Electronic forms and templates for exchanging registry information.

Besides, concerning **Article 69.5**, the Workshop focused on the Registration of the Certificate of Inheritance and the requirements for registration from the LR systems of the Member States. Furthermore, a panel discussion about the judicial perspective was organized.

On the second work day, the Workshop focused on the **Registration of the judicial decisions within the scope of the Regulation (UE) 650/2012**

Among other, the CPs discussed about the rregistration of the judicial decisions in successions matters, the scope of the rule of recognition without any proceeding (Article 39) with respects to Land Registries of the Member States, the protective measures (Article 19): judiciary orders which may lead to entries (notices, judicial restriction) into the land registers of the Member States, the closest equivalent judicial property rights and the registration of the judicial decisions within the scope of the Regulation (UE).

Furthermore, in May, the **Questionnaire "Certificate of Inheritance and Successions in LR"** was sent to CPs for their study.

This questionnaire focused on the Registration of the European Certificate of Inheritance (ECS) and other land register implications in Successions matters according to Regulation (UE) 650/2012. The Questionnaire was divided in two sections: Exchange of information within scope of Article 66.5 and Access of ECS to Land Registers Article 69.5.

2nd Workshop (Helsinki, 22nd - 23rd September)

Brussels I recast and framework decisions

in criminal matters in Land Registers

This 2nd Workshop on Brussels I recast and framework decisions in criminal matters in Land Registers was divided in two main sessions: Conclusions on the Regulation (UE) 650/2012 with respect to registration matters and Regulation Brussels I recast in the scope of the land registration.

Within the second session about Regulation Brussels I, the following points were discussed: Brussels I recast and land registration, recognition and enforcement of judicial resolutions: applicability in the scope of the land registration and protective and cautionary measures in Brussels I recast and land registration.

On the second work day, the Workshop focused on the Framework decisions in criminal matters

And finally, in September 2016, a **request on the European Certificate of Succession (ECS)** was launched.

Its objective was to provide information of cases of registration of ECS in CPs countries and countries and comments about this experience in their land registers.