“An ounce of prevention is worth a pound of cure”

This old English proverb, also used by Benjamin Franklin, offers an incisive picture of the nature and the advantages, in terms of lower costs and better results, of systems that base their efficiency on preventing problems occurring, rather than resolving problems once they have arisen.

This is particularly true in the case of the advantages offered by legal real estate trading systems based on guarantees and compulsory procedures for the protection of the public interest. Applying informatics and e-conveyancing to legal trading represents a risk, and it is necessary to make a realistic assessment of the problems. Unfortunately, the attitude of non-experts when faced with how to approach e-conveyancing, swings from blind acceptance to refusal, for lack of knowledge that they cannot or will not overcome. This means that technical experts control the migration from traditional to electronic systems, as well as choosing the procedures that will rule the new system. The technical procedures, in most cases, constitute real rules of conduct, and therefore, legal rules. This lack of a combined knowledge of technology and legal rules has further negative effects, such as the potential of the new instrument not being used fully, or the related risks not being assessed and prevented.

From this point of view, it is necessary to consider defining ways of using the electronic instrument in applications with full legal value, of defining its positive and negative potential, in order to assess its application to the transfer of property. This article considers the issues in relation to the Italian experience of determining a procedure for notarial deeds, which has proved to be successful in exploiting the opportunities of migration to electronic systems, thanks to the adoption of a gradual approach.

The characteristics that are theoretically desirable for traditional and computerised land registers as compared to civil law countries will be considered first, followed by an assessment of the requisites of a modern land register as well as the advantages and the disadvantages of a system based on the intermediation of persons delegated by the government, such as the Latin notaries.

Economic and social function of land registers and conversion into digital data

In terms of percentages, real estate assets amount to between half and three quarters of the national assets in most world economies. These data demonstrate that there is a need for an adequate system for the protection of real property in the public interest. The method used by many legal systems to protect real property is to maintain a public land register. However, from the theoretical point of view, a public register is not indispensable for an efficient system. Therefore, this article will consider the reasons that make legislative policy for the protection of real estate trade through public registers the preferred choice, also in the light of a general trend towards this model at the international level.†

† Of interest on this subject is the project EULIS (European Land Information Service) joined so far by Sweden, Finland, England and Wales, Scotland, Norway, Austria, Holland and Lithuania. Detailed information is available on-line at http://www.eulis.org.
An incomplete optional land register does not guarantee reliability of transactions in so far as there is no certainty as to the trustworthiness of its contents, or its maintenance over a long period of time.

The first element to examine when assessing the effectiveness of a land register is whether deed registration is compulsory or optional. An incomplete optional land register does not guarantee reliability of transactions in so far as there is no certainty as to the trustworthiness of its contents, or its maintenance over a long period of time. In countries such as some common law countries, where deed registration is optional or does not offer a guarantee of efficiency for the records in the register (for instance because the results of public registers are not conclusive evidence), the results are disappointing.

Land registers have three main socio-economic functions: a fiscal function, to protect property rights and to protect legal trade for the sake of the public interest. The fiscal function of land registers has historical roots dating back to France in Napoleonic times. It was at that time that a complete cadastre system to identify and classify all land ownership was created and exported to the countries conquered by Napoleon. The cadastre system is not as highly developed where this need was not as imperative. Tax purposes are, however, a characteristic that all land registers share to a lesser or greater extent.¹

The second aim is to protect private property in all its forms, and these may vary greatly throughout the world.² But, though this is the typical function of public land registers, it does not necessarily correspond to practice. The historical genesis of the various public registers that exist at national level, the laws, and the level of organizational efficiency, make it necessary to assess the measure and the conditions of its credibility.³ The diversity of the legal systems is the main element to consider. In a system based on consensus between the parties for transfer of ownership, the role of a public register is different in comparison to that of a public register in systems where transfers must be completed through public registration. For each method of registration, mechanisms must be in place to provide for the effective transfer of real estate, while also providing for the correction of mistakes or attempts at fraud.

The third element is the nature, the conditions and the costs of judicial protection. An efficient and economic legal system may partly compensate for the lacunae or the lack of a public register.

The most relevant piece of information is the actual efficiency of a system in terms of certainty and speed of trading. It is suggested that a public register that safeguards real estate ownership adequately may be considered to be a best practice model to protect ownership and real estate trade, and to ensure that those individuals involved in the system have equal opportunities.

First, the ability to exchange of real estate is made easier, which arguably makes it easier to market land and therefore has the ability to enhance the property, by ease of sale and purchase. A public register offers the ability to provide for certainty in the process of buying and selling property. Real estate is also a source of wealth in so far as it is a universal collateral instrument. The banking system fosters access to credit where there is collateral; real estate is considered by far the most reliable security, it is a source of credit and therefore of economic development. Thus, the general importance of having efficient public real property registries is evident. A public register also enhances the value of property. Property that can be marketed easily and securely, and can be used as collateral, is more desirable, particularly to real estate operators. It fosters the distribution of wealth in so far as it creates equal opportunities for all those who operate on the real estate market. An efficient public land register guarantees all this without unjustly favouring those with more money and influence. This creates public interest in highly developed and orderly economic relations, with a system where it is the state authority that is the

¹ Refer to the report Doing Business in 2005, and the information principles in the project EULIS.
² The economic and associated issues relating to property rights are discussed in Doing Business in 2005. This definition is accepted in so far as it is suitable for the purpose of the present article.
³ The report Doing Business in 2005, 33 - 40, gives a clear picture of the difficulties for the less developed and emerging countries, from the complexity of systems that ascertain real estate ownership, or from the slowness and the confusion of public real property registers. It seems correct, from this point of view, to assess the number of procedures needed to transfer property, the time needed, the overall cost of tax levies, of intermediation and the legal costs. What is lacking is an assessment of the influence of these factors on the real estate market.
guarantor of the certainty of transactions. The public register is an instrument of preventive guarantee that the state offers the community to the safeguard real estate rights.

The functions stated above constitute guidelines for the assessment of changes to the processes applicable to public land registers. This means that, at least in the initial phase, it is necessary to use traditional procedures along side the new systems. The effective adoption of computerised systems as primary instruments used to carry out legally valid procedures, and in particular to draft electronic documents attesting to the ownership of property rights and the keeping and up-dating of the registers that record the history of such rights, entails recognition of the legal validity of the document and of the electronic registers. This recognition presupposes and requires revisiting the entire theory of the document from the legislative and the legal point of view, having eliminated the implicit assumption that there exists only one fundamental type of document: the paper document, and only one attribution criterion: the manuscript signature. These considerations have specific relevance for the assessment of the land register system. The introduction of electronic documents and telematic procedures is sustainable only if, while speeding up activities, it does not reduce the security of the system, seen as the essential element for efficiency. If the introduction of the electronic document improves security and the users perceive this, the introduction of new instruments will be a beneficial factor. Otherwise, it may destabilize the system.

**Structure of Land Registers and e-conveyancing systems**

The aims of land registers, previously defined from the political-economic point of view, may be achieved through various different technical and legal instruments. Registers based on the new technology are no longer subject to one of the main traditional constraints for the setting up of land registers: that is, based on a geographical territory. The advent of information technology has changed this completely, in so far as centralized registers with the possibility of remote access make the system more efficient and cheap, and make it possible to adopt disaster recovery systems while enabling the creation of local offices.

The contents of land registers can be summed up as comprising the following three elements: persons, objects, and relations. A register must first of all identify the person who holds the rights. This entails a correlation with registry offices and business registers, providing error-free data input.

The second essential element of a land register is the clear identification of the property. Today, the best available identification systems are those that use electronic and computerized applications to detect and identify the real estate present on the territory, this being the modern evolution of cadastres. However, a cadastre makes sense only if it is complete, because this is the only way a register can help resolve conflicts between competing rights. In many countries, cadastres do not exist, and it is necessary to use alternative systems. Moreover, a public register should, ideally, contain all the relevant elements for real estate trading (building permits, respect of health, environmental and safety rules for property and systems). The real and the personal element make up the traditional criterion that differentiates the various types of land register. The cadastral register is based on things (real estate), and the real estate registry can be based on things, as in Germany, or on persons, as in France and Italy. Whichever system is used, a registry can only be searched when the correct criteria are known. This criterion becomes meaningless with computerized systems, due to the multiplicity of access keys.

Electronic registers are able to offer information that is more detailed and make it possible to make better-targeted searches with less effort, but this presupposes a correct implementation of the system, which includes the necessary regulatory modifications.

The third element of a land register is the relation between persons and objects, and therefore the right claimed by the holder over the property. These contents of the register, and the way in which they are presented, depend mainly on the individual legal systems. In principle, it can be stated that registers fulfil their function fully only if they offer a comprehensive and easily consulted definition of the rights over a property, which must be ruled by a closed number (meaning a limited number of rights subject to being recorded, such as ownership, mortgage, or other rights that are recognized by law) if the register is to be workable.5

Public real property registries must also guarantee updating and consultation times that are compatible with trading guarantees: this means real-time access and immediate updating. Access to the service must be

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financially sustainable, and proportionate to the benefit deriving from it, which is not always the case when the public register is administered by central government that uses it to contribute to its internal revenue. The crucial question is updating and modifying the data in the public register: it carries out its role correctly only if it receives complete data and on time, but above all only if the data entered into the public register is truthful. Access to modify data in the public register is therefore the focal point of the whole system. It must offer guarantees as to technical competence and personal reliability as well as a suitable system of responsibility. The solutions used to solve these problems are:

a) Administrative control of data input on the part of the administrator.

b) Notarial control over the document to be entered in the register.

c) Judicial control over data input in the register.

In any case, entering data without one or more of these controls is inadmissible as well as not allowed in countries with a longer tradition in the field of public registers.

Migration to an electronic system includes the need to check the adequacy of the controls and the specific characteristics of the new instrument. Indeed, if data input in the public register is reserved to persons who have specific qualifications, it will be necessary, prior to the entry, to carry out a check into the provenance of the document or the data to be entered. Ideally, this must be carried out by an identified person to whom the entry shall be ascribed, and who has the necessary qualifications. Finally, it must be noted that the public register must be controlled by regulations that foster the protection of its integrity and the value of the data. In legal terms, there must be a privileged trust in the public register, which must receive protection from the legal system.

Converting Land Registers into digital data: process requirements and regulations

Converting land registers into digital data is an excellent test for the legal and organizational problems of e-government. To carry it out, it is necessary to solve the main problems relating to electronic document management. This highlights the activities that are carried out between persons, between persons and general government, internal general government problems, the relationships of users of electronic registers and documents (and therefore relations with undetermined third parties), and the resolution of disputes and conflicts relating to rights. Furthermore, experience teaches that checking an activity on the basis of electronic documents must necessarily cover the entire life cycle of the document, from the moment of its creation, and the instruments used for that purpose, to its preservation or elimination. This check, from the jurist's point of view, must cover all points of legal relevance on the one hand, and the contents and the efficiency of the regulations on the other.

In a completely new field such as the one under study, when creating applications, the following two elements must be taken into account: a sufficiently sophisticated and secure technological system (but also sufficiently simple to be accepted by the end user), and a regulatory context able to ensure a degree of protection at least no lower than the previous one, and to be perceived as such.

It is not possible here to examine fully the entire process of defining a model; the main elements, from the regulatory and the technological and organizational point of view are:

a) Document creation: legal rules and technical instruments that guarantee reliability, stability and durability are needed;

b) Undersigning and ascribing: the author must assume authorship and responsibility for the document; the actual instrument used shall be an electronic signature, which must guarantee the exact attribution of the document;

c) Qualifications and role: the document to be entered in a public register must carry within it a guarantee of its reliability; the way many systems have chosen to achieve this objective is by entrusting document creation to qualified persons, and it is therefore necessary to set up a system that checks qualifications, duties and powers (included in the electronic signature, at least in the present state of technology);

d) Transmission: the document must then be transmitted to the public register; this requires instruments and rules for the transmission as well as mechanisms to ascertain the time of transmission;

e) Data input: the operation must be carried out by qualified persons, and only the entry of documents that meet all the required form and substance requisites must be allowed, respecting the order in which they have been presented, therefore logging must follow set rules;

f) Access and consultation: The data and the documents conserved in the register must be available for consultation in real time;
g) Conservation and archiving: the data must be conserved securely and classified in such a way as to render them available over time.

All these activities, needless to say, must be regulated correctly from the point of view of the legal rules, the process, and the electronic instruments.

Types of Land Register

In view of rendering the various land registers more homogeneous, it will be useful to examine briefly the main characteristics of land registers, with special reference to the civil law countries, where these are more developed, with a special stress on the elements that the various types of registers have in common or do not have in common, also compared to countries with a different tradition. Land registers reflect their genesis and their historical development, and cases of local legislation departing from existing basic models often acquire fundamental importance. It can however be said that, at least in the last two hundred years, the trend has generally been towards an upgrading of the role of land registers as a fundamental source offering absolute certainty for the verification of property rights. Therefore, it becomes evident that the constitutive or declaratory effectiveness of property resulting from public registers (so as differently ruled by the German and the French system), and the moment the transfer takes effect, become questions of lesser importance compared to the moment and the way in which protection of rights are achieved.

The first main difference between public register models is that between civil law and common law systems. In civil law systems there is a fundamental separation between the models that are inspired by French law (Belgium, Italy, Spain, Portugal and Latin America), and those that are inspired by German law. The former are based on legislation that bases the completion of contracts on consensus between the parties, and abandon the Roman law principle of delivery (or consignment) as being the moment of completion. Registration in a public register is effective from the point of view that is declares registration and therefore ownership. This does not mean that the consensus principle denies or reduces the effectiveness of public registers, simply that no element that is intrinsic to consensus is required between the parties to the contract. In this model, the function of public registers is ensured not by the effectiveness of registration, but by the fact that third parties can challenge the results. This model is based on a formal and a substantial control over the entry of data and documents destined to be made public. The title deed for registration in public real property registries shall always be a document by a public authority or one recognized by the state, and therefore endowed with privileged probative effectiveness such as to determine public trust. In contractual relations between persons, a notarial deed shall be required, while to publicize the resolution of disputes, the ruling of a magistrate is needed.

The second model is the German one, in German, Austrian and Swiss legislation. The characteristic of this system is the presence of a different procedure based on the compulsory agreement or the real agreement in the notarial deed established form (Einigung or Auflassung for property transfers), and publicity in public registers (Eintragung) under the control of a magistrate, who has a constitutive effect or the effect of completing the transfer of ownership. Therefore, the two civil law models share some characteristics, and in particular they require a notarial deed, or a public document. The fundamental difference in the mechanism is partly mitigated by the methods used to correct errors. In Germany, once the registration is made public, the registration is, except in rare cases, irreversible. In France, publicity is related to the validity of the notarial deed or title in general. One element all property publicity systems have in common in civil law countries is the presence of adequate protection for individuals and for the entire real estate trading system.

In common law systems, the situation is substantially more complex and varied, which is also due to the very structure of the legal system, which leaves more room for an evaluation by the judge of the results of registers. The value of the case law precedent in these legal systems favours fragmentation and uncertainty as to the coercive power of register results, and several historic cases have shown this (like the substantial failure of Torrens system in some states of the USA). The system of verifying property in common law countries is traditionally based on title deed research and analysis, carried out by persons with professional qualifications rather than with powers conferred to them by a public authority. The intervention of these legal professionals still constitutes the best form of guarantee for real property in most cases. There are historical reasons why the cadastre system is less

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7 A.M. Garro, in International Encyclopedia of Comparative Law, Volume VI Property and Trust, Chapter 8 Recording of Interests in Land, (Tubingen-Dordrecht-Boston-Lancaster, 2004), 42.
developed than in civil law countries, and this too is an obstacle to the development of public registers. This system is the fruit of a different development and, in the eyes of a continental jurist, it gives rise to doubts as to its real efficiency as a preventive instrument of guarantee.

**Modifying the Register: qualifications of the certified persons in the Latin notary model**

The intervention of qualified persons for real estate transactions that ensures their effectiveness within the characteristics of the single system, is substantially common to all legal systems. In some cases this intervention is compulsory, in others it is optional, but it is always considered useful and desirable, and not only by the experts but also by the general public. In order to have more certainty in legal transactions, civil law systems have developed the person of the Latin notary, who throughout a century-long evolution, has come to assume the current function of a person entrusted by the sovereign powers (the state) with supervising the correct execution of certain legal acts that are particularly important for persons and for society. It is for these reasons, and for the independent nature and the extraneousness of the notary as regards the interests of the parties, that in civil law systems they are the only figure (with very few exceptions) allowed to draw up deeds meant for property publicity.

Latin notaries are qualified professionals selected by the state, and subject to control throughout the exercise of their profession, who carry out a two-fold function, which is different from the simple (and less onerous) authenticating function of public notaries in common law systems:

a) Drawing up deeds whose provenance and conformity with the law are certain, and which are therefore endowed with privileged faith.

b) Fulfilling, within the prescribed law limits, the interests of the parties, for whom the notary must be the guarantor of legality and a consultant who will fulfil their interests outside court.

This complex (not two-fold) function also justifies the notary's financial independence from government powers, and the placing of the financial burden of the service on the shoulders of the interested persons, and it appears to match the modern and "light" conception of sovereign power that can be delegated, within certain limits, to persons subject to rules and controls.

Conferring public authority to private persons produces well-ordered legal trading. In the real estate sector, this means undertaking preventive checks into the property before the transaction is carried out, certainty as to the validity of the transfer deed, since it has been drafted by a technically qualified person who is required to ensure that the deed corresponds to both the interests of the parties, and in the public interest. Latin notaries also ensure equilibrium between the various parties in the land registration system where it is possible for one organization to dominate through the control of relevant information. The new technologies make qualified intermediaries even more useful, given the difficulties and the risks inherent in this new instrument. This does not mean leaving the solution of such problems to experts in an uncritical manner, it is indeed a responsible approach with person identification, and procedures that make the new instruments secure for all. To achieve this, what is needed is not technical expertise as much as the ability to analyze the phenomena and identify the elements of risk and the responsibilities in the light of which transactions must be regulated. It is not a question of creating a new class of scribes with an exclusive and necessary competence, but rather to develop the means that will allow the technology to be used by all in a secure environment, and not exclusively by a few people. A legal intermediary, who knows how to use the new technologies in a secure manner, is a way of developing the trading system and preventing the formation of dominant positions by organizations that are capable, through their economic dominance, to obtain the necessary technological knowledge, and use it without adequate controls.

Moreover, the public register system, already at experimental level, shows that the most successful experiences are the ones that rely on figures such as the Latin notary. Where there is no intermediary, the reliability of public registers diminishes and the number of disputes increases, which results in substantial insecurity as to their credibility, so that first the users and then the jurists no longer consider them an exclusive source of transaction certainty. Therefore, the intervention of persons who are qualified and responsible for guaranteeing all the interests protected by the system ensures equilibrium and efficiency and the cost of this intervention must not be lower that the overall benefits it produces. Notaries also bear direct civil liability towards their clients. Cases involving notaries in various countries as well as some particularly significant data, such as insurance statistics, show that the intervention of a notary...
constitutes a financially efficient method of protecting transactions. Finally, control over notaries and the notariat on the part of government authorities is a further guarantee of reliability.

Electronic Registers: The Italian model

The process of rendering the Italian real property registries computerized, meaning by this true property registers, cadastral registers and registration for fiscal purposes, began in the 1980s and has continued to this day, with periods of differing speed due to contingencies and to the need for a gradual approach. The first step in this process, between 1985 and 1995, was to introduce the electronic system in the real property registries, aimed at creating a national register that could be consulted telematically. During the same period, the process of computerizing and updating the cadastral data bank began, and was completed after considerable delays. This laid the foundations for unifying all public real estate data banks, in so far as the new laws ruling these innovations actually made the systems homogeneous.

The next step, which is a cutting-edge application today, was to introduce one single, telematic procedure to register and carry out mortgage formalities and register transfers and name changes on title deeds. This undoubtedly represented a historical turning point to unify procedures that had previously been within the remit of many different offices. It was, however, necessary to introduce the telematic system for mortgage procedures gradually. This was because of regulatory and organizational constraints derived from the paper-based system, which though often incompatible with the aims of the system, are unavoidable. A gradual procedure also had to be introduced because it became clear that introducing electronics and telematics in real property registries was a completely innovative application without any significant precedents, and that it was necessary to meet regulatory and organizational requirements so as to create a sufficiently reliable system as well as to set up the related infrastructure. Indeed, a real estate publicity system with e-conveyancing requires that the general provisions on real estate publicity in the civil code be respected (and possibly modified), and that the provisions that regulate the electronic procedure also be respected.

A summary of the process

As soon as the law on telematic real estate publicity was passed (1999-2000), the fiscal regulations and those ruling the publicity service were modified. At that time, legislation on electronic documents and digital signatures had already come into force but was not yet fully implemented, so it was possible to use the digital signature instrument to ensure that the signatory actually had power of signature. It was therefore possible in theory to create an electronic notarial document endowed with privileged faith and suitable for entering in the public registers. Sufficiently detailed legislation on the transmission of electronic documents was missing, with special reference to the transmission of public deeds, as well as efficient legislation on the conservation of electronic documents. It also became obvious that it was necessary to modify the civil law relating to real estate publicity, and in particular, the parts that ruled the keeping of registers, which had evidently been drafted exclusively for paper-based registers, and the setting of presentation priorities (for instance, if the same real estate is sold by the same owner to two people, the person to register first becomes the owner), which is a key element of publicity that requires adaptation to the new telematic instruments. Moreover, since administrative controls over data input had not been abolished, it became necessary to adapt them to the telematic procedure.

From the operational point of view, it was necessary to proceed gradually, in so far as the public registers were able to carry out a portion of the operations with e-conveyancing but they required a suitable preparation period to become completely telematic. These obstacles meant that, in the initial phase, in order to carry out mortgage formalities, it remained necessary to present a paper title deed (and therefore a copy of the public
The cost of the system is more than acceptable given the benefits it produces, in that it is better to have a good system in place to prevent fraud, rather than to let fraud take place and for it to be dealt with after the event.

deed or of the private document recorded and held by the notary) to the competent Real Property Registry and only at a later stage was the completely telematic procedure put into place. The system is only open to notaries, who certify their function through the digital signature issued by the Italian notariat certifying authority, which only issues these to practicing notaries. Therefore, at the moment, notaries use e-conveyancing and their digital signature that guarantees their function, to transmit the copies of the notarial deeds, the registration forms, the real estate publicity, and the property transfer registration. The forms are based on the XML standard, which is a non-proprietary computer system. The system (purposely reserved to notaries and other certified persons) immediately led to faster completion of all real property registry formalities, with savings in terms of staff and without any cost increases for the administration, and with a much more user-friendly procedure.

At the same time, it was possible to consult the real property registers of the entire national territory to verify ownership, now covering the last twenty years, also thanks to the painstaking recovery of paper documents. The system of conveyancing is highly secure. Indeed, in Italy, only 0.0029 per cent of all notarial deeds covering real estate transactions are disputed, (a Consiglio Nazionale del Notariato figure taken from data on the trend of claims relating to professional liability policies that are compulsory for all notaries).

The intervention a notary is not a secondary element in the system, but rather one of its fundamental characteristics: indeed, it becomes clear even when reading the relevant legislation that the system was devised to go hand in hand with the existence of a reliable intermediary, who has full knowledge and a mastery of the law and of the technology, which is a prerequisite for error-free land register entries. Also, the fact that there is a major fiscal element involved makes it necessary to have an interlocutor with considerable extraneousness and reliability characteristics. The result is a system that offers a high degree of efficiency and certainty of transactions as well as high speed of execution.

Conclusions

Civil law systems are marked by the fact that they have instruments that offer preventive guarantees concerning the effectiveness of the laws and the legal framework. Public registers are one of the main positive developments of the legal society of the last two centuries. Real estate publicity, as it has developed in continental Europe, with characteristics that are very similar throughout even though the initial conceptual models are different, offers the advantage of producing an appropriate degree of protection for property rights, and not only for their financial value, thanks to a procedure that is socially accepted. The cost of the system is more than acceptable given the benefits it produces, in that it is better to have a good system in place to prevent fraud, rather than to let fraud take place and for it to be dealt with after the event. From the financial point of view, public real property registers produce positive effects: better and more rapid marketability of the property, therefore easier access to the real estate market, usability of the property as direct or indirect collateral, and therefore easier credit as a factor of economic development, and finally, indirectly, an increase in the value of the property. One of the pillars of the system of property publicity in the civil law model is the intervention of the notary, who guarantees the quality and the validity of the data in the land registers, and protects the interests of the parties to the individual transactions, in accordance with the provisions of the law. Notaries supply the data needed...
to modify the register, and are professionally liable towards their clients, they are also under the control of the government. From this point of view, public functions being fulfilled by private individuals is proving to be an extraordinarily efficient instrument to solve many of the problems of the real property circulation system.

Applying informatics and telematics to public registers, far from being a mere substitution of technical instruments with other substantially equivalent ones, requires re-assessing the legal foundations, and the ability to assess all the relevant legal implications of the new system, which is both a technological and a legal process. It is also necessary to have comprehensive regulations covering the entire computerized procedure, which by its very nature means drafting a considerable amount of new laws, a task that is not always straightforward, as after an initial phase of law-passing there comes more law-adjusting on the basis of practical experience. In this new context, the intervention of qualified legal intermediaries, such as the notaries, constitutes an instrument for the protection of the accuracy and the fairness of transactions, and in particular for the protection of the weaker parties, but also, from a more general point of view, it is an instrument that helps the sector to develop.

The legislative and organizational course followed by the Italian property publicity system is basically representative of the experience of applying informatics and telematics to public registers. The first phase focused more on the technological aspect and on reducing the cost of public registers, required also to overcome a crisis situation, there followed another phase when the system became truly telematic, first for consultation and then for data modification, in other words, its development was gradual. In this way, it is possible to achieve a completely telematic system without jeopardizing technological or legal security, and without prejudice to the general requisites of the system and to the presence of qualified intermediaries to safeguard the functioning of public real property registers.

Finally, a modern system of electronic documentation, publicity, and legalization can be an incentive for international trade. To this end, the intervention of qualified legal intermediaries is necessary because they guarantee the formal and substantial accuracy of electronic transactions and the correct international circulation of documents with legal value in general and of public deeds in particular. Here again, the role of the modern notary is evident, and more efficient than that of the normal legal consultant.\footnote{Useful websites: http://www.notariato.it; http://ca.notariato.it; http://www.assocertificatori.org.}

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