THE FRENCH LAND ADMINISTRATION

FROM THE ORIGINS TO OUR DAYS

GENERAL TAX DIRECTORATE
1. **BACKGROUND**

The French Cadastre derives from the napoleonian Cadastre and applies to all urban and rural properties (built or not). The literal information is strictly linked to the geographical one. A plot is defined as an entity linked to an owner and to a fiscal division, following the napoleonian concept. Basically, the cadastre has a fiscal function evoluting to an informative function and having, additionally, a certain probative function. The "Conservation des Hypothèques" Bureau keeps and manages the Land Register.

The Cadastre is homogeneous on the whole French metropolitan territory with some small discrepancies for the Alsace-Moselle cadastre whose juridical character is more pronounced through the existence of a Register Book and the obligation to mark the plots.

Until the revolution of 1789, the cadastre kept an essentially local nature in France despite various attempts at the contrary. The kings Charles VII, Louis XIV and Louis XV envisaged in turn the project of a regular cadastre, the basis of a coherent tax system applicable to all the country.

The lack of finances, the shortage of sophisticated instruments and methods, the resistance of the great vassals, and the disparity of the provinces (customs, languages, measures ...) made these attempts fail.

Only a few provinces provided themselves with an institution whose advantages are quite clear.

On the eve of the revolution, the basis of assessment of the tax relied on the same method as that laid down by Roman law : declaration by owners of the content and income from their property, under the supervision of commissioners.

2. **THE CADASTRE UNDER THE REVOLUTION**

At the very opening of the States General of 1789, 73 electoral assemblies of the Nobility and 58 of the Third Estats, demanded the realization of a general cadastre, the only system capable of putting an end to the existing arbitrariness.

The Constituent Assembly, by the law of 1 December 1790, abolished the former taxes - tallage, twentieh, capitation, and tithe - and replaced them by a single tax.
However, this law did not lay down the establishment of plans.

The decrees of 21 August and 23 September 1791 finally authorized the department directories to lay down the survey of the parcel plan of the territories. However, the execution of this survey, payable by the communes was to remain limited.

The law of 22 brumaire year VI (12 November 1797) completed and extended by the organic law of 3 frimaire year VII (23 November 1789) created the direct taxes administration in charge of fair application of the tax.

However, a general parcel cadastre was not envisaged at this stage.

The system was still based on the declarations made by owners.

The Administration finally acknowledged the need for a general operation to determine the content of each property and its income, but the cost of such an operation and the time needed made the public authorities abandon the project.

A decree of the consuls of 12 brumaire year XI (3 November 1802) decided on a "general cadastre by masses of crops" in 1915 communes. A plan drawn up to the scale of 1:5000 presented the situation of the territory of these communes in masses marked out by natural limits. In each of these masses, the owners declared the content of the parcels owned.

As the operation gave rise to complaints by the mayors, general councils and owners, it was abandoned after five years work.

The general surveying of all the parcels of the territory therefore became essential.

3. **THE NAPOLEONIC PERIOD**

The law of 15 September 1807 was at the origin of the French parcel cadastre.

Commenced in 1808, the works progressed rapidly until 1814 and then more slowly from 1814 to 1821. after 1822 they took place at a swifter pace and were completed in 1850 in continental France. They continued after this date in Corsica and in the annexed territories (Earldom of Nice and Savoy).
The parcel cadastre, called the "old cadastre" remained unaltered however as no updating was provided for.

The parcel situation was to be transformed with the general evolution of the rural economy, and the development of towns, roads and railways, etc... It became essential to update the plan (keeping the cadastre up-to-date).

An extra-parliamentary commission in charge of studying the questions raised by the reform of the cadastre was created in 1891. Its works were completed in 1905 without having received legislative sanction.

Nevertheless, their usefulness cannot be denied as they inspired the works which finally led in 1955 to the reform of real estate registration and to the new rules applying to the renewal of the cadastre and speaking it up-to-date.

Finally, the law of 16 April 1930 laid down an exceptional revision of the evaluation serving as the basis for the property tax of undeveloped properties. It set out the prerequisite of a general renewal of the old cadastral plans, chargeable to the State, and keeping them up-to-date on a permanent basis.

4. **THE RENEWAL OF THE CADASTRE**

The law of 1930 limited the complete redrawing of the cadastre to the sole communes where it proved necessary for the basis of assessment of property tax.

A simple updating of the plan was laid down in the other commune when the value of the framework of the old cadastral plan was acknowledged as sufficient and when the parcels had not undergone too many modifications since the beginning. The renewal laid down by this law is today completed. This is still not the case in the departments of Alsace and Moselle where the renewal of the Napoleonic cadastre has been undertaken pursuant to a German law of 31 March 1884.

The principle of renewal was reintroduced within the framework of the reform of real estate registration of 1 January 1956 making it compulsory for properties to be designated by their cadastral identifiers in any act subject to real estate registration formalities (this is the case in particular of notarial acts).
There are now close relations between the cadastre and the real estate file held at the mortgage registries, recounting the legal events of property (in Alsace-Moselle, the system in force is that of the property book held by a magistrate, inherited from German law).

Finally, a law of 1974 authorizes a further renewal of the cadastre, called a "revision" whenever required by the lack of adaptation between the plan and the evolution of the parcel fabric.

- 1807 15th Sept cadastre Act
- 1930 16th April Cadastre Act
- 1959 Jan 7th Decree on updating rateable values
- 1974 18 July cadastral renewal
- 1771 edict on mortgage
- 1804 Civil Code
- 1949 land taxation
- 1955 4th January mortgage information
- 1965 law 65-557 on co-ownership of buildings

5. **THE CADASTRAL TODAY**

An EXHAUSTIVE, PERMANENT, DESCRIPTIVE and EVALUATIVE inventory of landed property, the cadastre reflects the civil status of built and undeveloped property.

Its main missions are:

- fiscal (evaluation of real estate, determination of the bases for property taxes, identification of the taxable owners),

- legal and property related (identification and physical description of properties),

- technical (establishment of the cadastral plan and keeping it up-to-date, topographical pictures essential for the identification and physical description of the property if question).

The cadastre represents:
- 7500 agents including 1500 surveyors,
- 313 offices or property tax centres spread throughout France,
- 4 regional data processing centres with a property specialization and which update the documentation,
- 4 photogrammetry workshops: Saint-Germain-en-Laye, Rennes, Marseille and Toulouse for the production of cadastral plans from aerial photographs,
- the Cadastre National Documentation Service located at Saint-Germain-en-Laye and which deals in particular with the industrial reproduction of cadastral plans, the archiving or reproduction matrices, and the edition of the cadastre register or microfiches,
- the Ecole Nationale du Cadastre in Toulouse providing the basic professional training of agents.

It also manages:

- 590,000 plan sheets,
- 34,5 million communal accounts of owners,
- 96,7 million parcels,
- 35,5 million premises,
- 5,7 million names of localities,
- 680,000 names of roads.

6. **THE MAIN CHARACTERISTICS**

In France, the main characteristic is that the approach is from the fiscal side. Thus responsibility for the registration of property in the Land Register and the Cadastre is under the control of the Ministry of Economic Affairs, Finance and Industry (MINEFI) and is discharged through the 354 mortgage offices (land registry offices) and the 315 cadastral offices.

All contract preparation and the decision on legal acceptance is carried out by the Notary Public. The Notary public then presents the Deeds to the Land Registry Office for registration. The Land Registry only receives a summary of the Deed, the original is given to the applicant. A detailed survey plan is produced by the private surveyor. This is checked in detail by the cadastral office before acceptance.

**Basis of registration**

The basis of registration is the Registration of the Deed, except in 3 French departments (Bas Rhin, Haut Rhin and Moselle, where a German type landbook system is operational)

**Objects of Recording**
The Object of Recording is the Deed of transfer, servitude, easement or charge. This is recorded at the Land Registry Office (also called the “Mortgage Office” in French). The boundary information is recorded by the 315 cadastral offices.

Valuation
This is the responsibility of the Ministry of Economic Affairs through the Land Offices. Property valuation and land taxation are considered to be extremely complicated in France, and are not discussed in any detail in this presentation.

Mortgage
Mortgages are recorded at the Land Registry Office (Mortgage Office), in the same manner as any other charge, restriction, servitude or transfer, by the lodging of the Deed and the cross reference to the parcel in the cadastre. This is under the authority of the Ministry of Economic Affairs, Finance and Industry. However, they are recorded in a separate Mortgage Register.

Apartment Registration
Transactions involving apartments are registered in the same manner as any other transaction involving a real estate object. There are some differences in the procedure, and in the agreements/documents that are needed to support the process.

The Deed is registered at the Land Registry (Mortgage Office) and the floorplan, building footprint is provided to the cadastral office who approve it before acceptance. The cadastral office simply archive this information and refer to it by parcel number. On a yearly basis, cadastral information updates are supplied to the municipalities, who maintain their own copies of the cadastre data by regulation.

Openness of the Records
The records are completely open to the public.

Guarantee.
The public notary guarantees the content of the Deed and the Land Registrar is also responsible for the content on behalf of the administration in law.

7. TECHNOLOGY

• The French system is mostly contained in the Ministry of Finance, which has its own applications and networks.
• Maintenance of cadastral data and land registry data is decentralised to the land registry and cadastre offices (more than 300 of each) 
• The land register and cadastral data are linked by property identifier. 100% of the land registry records are available in computerised extract form 24% of all cadastral maps are available in digital vector format. (scheduled for completion in June 2003)
• Municipalities do not yet have access to cadastral and land register data on line, but it is planned for the near future.
Accurate good quality sales and price information is monitored and published by a special department (dept of state property of the Ministry of Finance)

8. **THE CADASTRE AT THE SERVICE OF USERS**

From the outset users have had access to the cadastral documents.

Anybody can consult these documents and obtain copies at the cadastre offices.

A copy of the cadastral registers is also consultable in town halls.

Copies and extracts from the register and the plan are given for various purposes:

- people seeking fiscal information (basis of assessment of local taxes ...) or property information (situation and contents of property ...),

- accomplishment of real estate registration formalities for property transfers.

Microfiches ... à leur demande : Microfiche and cadastral register each containing the same quantity of information. (In the cadastre offices all information is already on microfiches. Town halls are equipped with this facility on request).

Furthermore, some users have access to "mass" information on microfiches and magnetic disks. This selective and closely supervised circulation concerns only regional or local authorities, administrations and organizations under public control.

9. **THE CADASTRE AND LOCAL AUTHORITIES**

The cadastre is the instrument of direct local taxation: it localizes, identifies and describes property and taxpayers. It determines the evaluations serving as the bases for the tax and various levies corresponding to the services rendered by authorities.

These evaluations are adjusted annually in terms of certain parameters (rents, inflation); they are furthermore periodically revised to take account of the evolution of the rental market. Finally, the cadastre takes a permanent inventory of changes affecting the tax bases (new constructions, construction additions, demolitions, changes in the nature of crops ...).

The cadastral plan, an essential instrument to localize and identify real estate (parcels, buildings, highways, etc...) is redrawn when the density and economic value attained by the property fabric so require.
This is why the cadastre is a privileged partner of local authorities for which it also provides other services:

- providing communes with a copy of the cadastre, comprising register information (the cadastral register is available on microfiches) and the plans. This documentation is updated every year.

- sale of magnetic disk files of property: the cadastral information is keyed into computers and enables authorities to have a better approach to the use of land, to create local development strategies and to choose property and agricultural policies,

- establishment of the standardized cadastral plan (P.C.N.).

The cadastre is also developing a policy based on agreement with authorities which equip themselves with territorial data banks making use of cadastral information.

10. **THE REVISION OF THE CADASTRE**

The revision of the cadastre consists in redrawing the renewed cadastral plans which have become unsuitable of hard to use (scale too small, lack of precision). The case arises mainly in areas which have undergone large-scale urban development.

The new plan is based on land or photogrammetric (i.e. made using aerial photographs) surveys with acknowledgement of limits in the presence of owners.

Delimitation operation.

**SEQUENCE OF WORKS**

Overall network works

Whatever the survey method, the coordinates of a certain number of stable points within a site must be known (steeples, water towers ...): this is the overall network.

Furthermore, in order to use photogrammetry, the planimetrical and altimetrical coordinates of additional points in the site must be determined, visible on the photographs.
With these points air photographs can be coupled to obtain a stereoscopic vision of the land, i.e. with an illusion of depth and relief.

PLOTTING

Aerial photographs are made use of by means of very high precision equipment called stereoplotters. This equipment enables drawing at the same time as the observations, a "stereominute" which is a draft of the future plan.

DELIMITATION

The position of property limits are given by owners to the surveyor in charge of the revision works.

On this occasion, the latter makes measurements to complete and adjust the stereominutes obtained by plotting.

COMMUNICATION OF THE REVISION RESULTS

The revision results are sent to owners.

People can find out about and make any comments on the new plan which is held at the town hall.

For each new plan sheet obtained at the end of the revision a reproduction matrix is made which subsequently serves to print the various copies of users, i.e. the local cadastre office (which keeps the permanently updated plan and which can make copies for users) and the town hall.

11. THE CADASTRE AND DATA PROCESSING

Between 1986 and 1990, the Tax Office progressively, introduced the Application MAJIC 2 system (2nd generation of updating of cadastral information) in 315 property tax centres in the country (CDIF).

Under MAJIC 2:
- each cadastre department is equipped with screens-keyboards and printers connected to the central computer of one of the 4 Regional Property Data Processing Centres,

- office tasks are almost totally computerized, providing users with always updated extracts from the register documentation.

- by means of a conversational mode, magnetic documentation can be directly consulted on the screen-keyboard, updated and editions can be started, a "dialogue" takes place between the agent and the data processing system according to a predetermined scenario,

- changes observed (transfers, modifications, creations ...) are integrated instantaneously in the documentary base, in "real time". Therefore, when the magnetic disk documentation is questioned, the last known situation is always given.

Furthermore, the cadastre possesses microfiches presenting the situation on 1st January and corresponding to the property tax assessment list of the year in question.

In an entirely other area, the Tax Office is computerizing its topographical techniques by:

- computer-aided photo interpretation,

- magnetic recording and automatic use of measurement made during land surveys (position calculations, transfer determination of contents).

Concerning the management of plan data, the cadastre is accompanying the initiatives of local authorities which are equipping themselves with territorial data banks and which therefore use the computerized cadastral plan as a means of geographical localization. At the same time, the cadastre is developing a management and circulation project for the plan computerized data, with a uniform vocation throughout the national territory. This project is part of the long term aim to integrate topographical data in a single system grouping all the information relating to real estate and its rightful owners.

Satellites already enable determining network points. They are also opening up the prospect of detecting changes in the nature of crops, new constructions, and additions to constructions, in a rapid, modern and economic manner.
12. **STAFFING**

- The French system uses a government based staff of almost 7500 (this does not include the cadastral surveyors who do the site surveys)
- Additional players
- Lawyers. There are only a small number of legal companies involved
- Notaries there are 7600 public notaries in France employing more than 40,000 people in 4561 practices.
- Licensed Private Surveyors, there are an estimated 2200 private surveyors active in cadastral surveying, (note the public surveyors also carry out this work)
- Valuation for sale is carried out by private valuers and by Notaries
- Valuation for tax purposes is carried out by the cadastre valuers
- There are an estimated 20,000 real estate agent companies. Most of these companies also carry out valuations for private sales.

13. **INFORMATION CONTAINED IN THE CADASTRAL DOCUMENTATION**

As usual, the cadastre information content is graphic and alphanumeric or documentary. The graphic information is contained in the cadastral maps cut to cadastral sheets of 75 x 105 cm. The alphanumeric information is regrouped in a set of files with multi-criteria access possibilities.

The graphic information:

The reference administrative unit, used for the cadastre setting-up and conservation is the Commune. The cadastral maps are a set of map sheets with a map index of the cadastral sections.

The cadastral mapping is done at scales varying from 1:5,000 to 1:500. The most frequent ones being 1:1,000 for the urban areas and 1:2,000 for the rural areas. Their information content is as follows:

- Limits of the Communes,
- Limits of the cadastral sections,
- Limits of the plots,
- Communication networks and their designation,
- Hydrography,
- Buildings,

And, optionally:

- Plots marks and fences and their neighbouring status (shared property or other),
- Topographic details like grid, geodetic points, etc.

The plots surveying is done by plotting the limits marks on the field where they exist. When they are not materialised, they are plotted thanks to the information given by the owners. Each land use type within a plot is considered as another fiscal subdivision and each has its own identification code.
The buildings are represented by their projection on the ground. Buildings are identified through a character added to the plot identification code. This character, recently created, refers to the Owners File.

**The documentary information:**

In addition to the cadastral maps containing the above described graphic information, the Cadastre is made of a set of documents displaying the information needed for the fulfilment of its various missions. The Section File and the Cadastral Matrix are kept along with complementary documents to facilitate their manipulation and consultation.

The Section File is the legend of the cadastral mapping. It shows, for each plot the following information:

- Cadastral identification by the map number,
- Reference of the Real Estate File inscription number,
- Address
- Cadastral content (official acreage),
- Number of the owner in the communal list,
- Indication of the plot changes of ownership (numbers of the successive owners, date of plot creation, transformation or elimination).

The information above are kept in a series of files and in a loose-leaf register. This documents are completed by a microfilmed Plot Table containing, for each real-estate, the references of its localisation in the Owners File.

14. **Fiscal Evaluation System**

The local taxation is based on the return (profit) instead of the value of a given property. The concept is the same as the one still in use in Spain although the method of of evaluation operates in a very different manner.

To use the return as a criterion supposes that the choice is made of a system which ensures the fiscal equality without the drawback of a frequent up-dating due to the variations of the market values in place and in time. The taxation system on real-estate does not aim at attaching a weight to its value. It weights on the potential income the property could produce. Thus, more emphasis is put on the equitable repartition of the fiscal burden between the owners than on the collection of a tax proportional to the property's real market value.
15. **EFFICIENCY OF THE CADASTRAL INFORMATION**

**Juridical effects:**

In Napoleon's mind, the Cadastre aimed at increasing the juridical security. It is why he endowed it with juridical effects. The cadastral documents, however, could not apply this concept in reality and their efficiency remains limited to the fiscal effects.

The Cadastre juridical value was reinforced in 1955 when the Land Publishing system was reformed. Starting then, a plot identification in the Real Estate File is done by its cadastral number. The Cadastre does not have the juridical efficiency of the Germanic Countries "Land Books". It does not report the juridical changes if they do not alter the property or its physical characters. The Cadastre, nevertheless, has a strong probative value. Links between the Cadastre and the Real Estate File have been reinforced to such an extent that the File could not be kept without an exact and up-dated cadastre.

The cadastre takes into consideration the changes altering the property when they entail a change in who is the real-estate tax payer. However, it cannot prove the transmission of ownership. Other juridical mutations or charges related to the properties are only taken into account if they are mentioned in the Real Estate File.

**The Real Estate File:**

From the administrative point of view, it is worthy of a mention that the Real Estate File, kept by the "Conservation des Hypothèques" Bureau in France is under the aegis of the Ministry of Economy, Finances and Budget, more particularly of the General Direction of Taxes to which the Cadastre belongs. Thus, both the Cadastre and the "Conservation des Hypothèques" Bureau belong to the same organism and are integrated into a single structure.

Starting in 1956, a new tool for a sound operation of the French Land Publishing system was introduced: the Real Estate File. It facilitated handling of the documentation and improved the Institution's general operationality. It is through this File that a perfect correspondence is obtained with the cadastral data.

The Real Estate File is contrived as an instrument to synthesise the information on mortgages. Created for an easier exploitation of the data regarding the Land Publishing it lacks any juridical value in itself. The mortgage protection is obtained through the completion of formalities and not through the mentions written in this file. Its shortcomings in terms of juridical efficiency do not diminish its importance in other fields. It is considered in France as the creation principle of a Land Book akin to the ones existing in the Countries of German traditions.
16. **Computerization**

The French Cadastre is entirely computerized nowadays allowing for an easy handling of an important volume of data: 35 million owners, 100 million plots, 35.5 million buildings and 600,000 street names.

The system in use for computerized management of the cadastre is named MAJIC. Except for the maps, it can edit automatically all the documents.

MAJIC allows not only for an easy handling of a large amount of cadastral information but it also made possible a decentralized use of the documentation and the automated realization of numerous tasks which were formerly worked by hand and almost impossible to conduct properly. As soon as 1990, all the Cadastre bureaux were provided with the computer facilities allowing them to have their documents produced in real-time. Data up-dating, access to information and production of documents for the public are done automatically.

Computerization of the cadastral cartography is less developed. In fact it had not been regarded as critical for the development of the cadastre fiscal mission considered as prevalent until very recently. However, at the beginning of the '70, the Cadastre has conducted experiences on the cadastral maps digitization and created Cadastre Topographic Files over some big cities.

Nowadays, maps digitization is undertaken by the Communes themselves (when interested by the creation of an urban data base) with the support and under the control of the Cadastre in order to make sure that, the standard criteria being respected, the data will remain interchangeable. The cadastre digitization is included in the Ministry of Economy, Finances and Budget's Computerization Master Plan and is developed in the Cadastre's Computerization Plan.

The final objective is to obtain a uniform computerized coverage of the whole territory, even if, at the moment, this coverage has been undertaken only in the urban areas. In some Communes where a cadastr e renovation is conducted, computerized process are in use to obtain computer-edited graphic documents. The decision to produce a digitized cadastral mapping does not mean that the Cadastre intends to set-up an universal data base but that it makes an effort to establish a basic information layer on which other organisms or administrations could build their own data base.