

## **Domain 1 Research Questions**

## **Case Study 18:** Computerization of Alsace-Moselle's Land Registry

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**1.1**. What types of documents are traditionally made or received and set aside (that is, created) in the course of artistic, scientific, and governmental activities that are expected to be delivered on-line? For what purposes? What types of electronic documents are currently being created to accomplish those same activities? Have the purposes for which these documents are created changed?

- (1) Ordinance of inscription: document that dictates what information is to be inscribed in the land register. It is written and signed by a judge and is, therefore, considered to be authentic documentary evidence within French evidence law.
- (2) Inscription within the register itself, transcribed by a land registry clerk and also signed by a judge in order to verify that it accurately reflects the information in the ordinance.
- The documents are created and set aside in compliance with French real estate law that requires the juridical status of a property be publicly available within a land register to interested third parties.
- Before the creation of the electronic database, no electronic documents were created in the specific process of registry inscription and publication. Individuals had to visit land registry offices in person in order to view an inscription. The ordinances are paper documents and the inscriptions are contained with bound paper registers.
- The purposes for which these documents are created have not changed. The motivation for computerizing the land registry is to allow for remote access, speedier processing times and increased storage capacity. Furthermore, the region is very proud of its land registry tradition (unique in comparison to the rest of France) and there is a feeling that the computerization project (so heavily invested in from a monetary standpoint) will ensure the continuation of this local real estate registry system in the future.

**1.2**. What are the nature and the characteristics of the traditional process of document creation in each activity? Have they been altered by the use of digital technology and, if yes, how?

- The traditional process of document creation is as follows:
  - A request for inscription in the land register is initiated (e.g., notary)
  - $\circ$   $\;$  The request is dated and an ordinance project is created
  - The judge verifies the ordinance project
  - The judge signs the ordinance project into an actual ordinance
  - A land registry clerk transcribes the information from the ordinance into the register
  - The judge verifies the accuracy of the inscription in the register by signing it
  - The land registry clerk provides confirmation to the initiator of the request that the request has been accepted
- The process has been altered with the use of digital technology:
  - Requests for inscription (RIN) are received electronically using custom software that will connect to the land registry database in order to retrieve the information relative to the property in question (most of the properties will already be registered in the database)
  - Once the request is received it is dated and an electronic file is created containing all associated documents as scanned image files
  - An ordinance project is prepared and is transferred to a judge's in box in the form of an XML document
  - The judge verifies the information and after identifying him/herself through a fingerprint scan and a smartcard containing his/her private signature key, electronically signs the ordinance project
  - Once the judge signs the ordinance project, an ordinance is created (XML document) and the relevant fields in the database (serving as the electronic land register) are updated automatically

**1.3**. What are the formal elements and attributes of the documents generated by these processes in both a traditional and a digital environment? What is the function of each element and the significance of each attribute? Specifically, what is the manifestation of authorship in the records of each activity and its implications for the exercise of intellectual property rights and the attribution of responsibilities?

- In the paper based land registry system:
  - The ordinance is a paper document listing the information to be transcribed to the land register; it is authored by the judge, who dates and signs it
  - The Feuillet is an administrative paper form printed on two pages and bound into registries and is comprises of several elements:
    - Individual reference number for the parcel of land
    - Identification of the land owner (name, maiden name, date and place of birth, and occupation)
    - Section 1 Propriété: registers the cadastral reference of the property, its address, nature (e.g., land, housing), reference to the previous owner's

feuillet, reference to the ordinance that transferred the property to the present owner and the nature of the transfer (e.g., sale, donation)

- Section 2 Charges et Restrictions au droit de disposer: restrictions on the property are listed if relevant
- Section 3 Hypothèques, Séparation des Patrimoines: mortgages and liens are listed if relevant
- The judge is the author of the ordinance and the inscription in the feuillet; personally liable for the accuracy of the information in the register and the ordinance
- In the computerized land registry system
  - The ordinance is an XML document and the information contained in the document is delineated in fields using XML tags; form and function remains largely identical and the judge is still personally responsible for the accuracy of the information
  - The registry is converted to an Oracle relational database with the feuillet's different sections becoming the base tables and links are established between the tables to establish relationships between relevant entries; the information in the database is presumed to be accurate based on the fact that the tables are automatically updated by the system once a judge signs an ordinance project, creating an ordinance relevant to a new request for inscription
  - Scanned images of the paper feuillets, ordinances and other documents are TIFF files; images containing inactive entries are stored on optical media and may be accessed through the database
  - The judge remains the author of the ordinance and the information in the registry is based on the ordinance; the GILFAM is responsible for the maintenance of the database system

**1.4**. Does the definition of a record adopted by InterPARES 1 apply to all or part of the documents generated by these processes? If yes, given the different manifestations of the record's nature in such documents, how do we recognize and demonstrate the necessary components that the definition identifies? If not, is it possible to change the definition maintaining theoretical consistency in the identification of documents as records across the spectrum of human activities? In other words, should we be looking at other factors that make of a document a record than those that diplomatics and archival science have considered so far?

- Applicable to the ordinances generated within the electronic system (XML documents)
- Inscriptions exist as information stored in separate tables; relationships become evident when queries are posed
  - Database constantly changes and is updated (record of changes do exist)
  - Problem occurs once try to 'remove' an inscription from the database because all that exist are separate pieces of data; does not fit definition of record adopted by InterPARES 1. The data can be brought together to view an inscription relative to a property in the course of business, but this is not 'saved' as a record (note: the diplomatic analysis conducted on the case study does identify the inscriptions, as digital elements contained within the database tables, as records. The diplomatic analysis argues that the inscriptions can be recalled at any time, have a fixed

content and form dictated by French law and are affixed to a stable medium, the database system)

• Question of the database itself being the 'record?' Firstly, it is never 'complete' and the purpose/result of the business transaction is the inscription (publication of rights pertaining to a property) contained within the database, despite the fact that in the computerized version the inscription is broken down into data in separate tables. In the paper version, the information was also broken down into separate tables, but all of the tables and information were contained across two pages (could be viewed as one document)

**1.5**. As government and businesses deliver services electronically and enter into transactions based on more dynamic web-based presentations and exchanges of information, are they neglecting to capture adequate documentary evidence of the occurrence of these transactions?

- Extensive login capabilities for recording all actions and transactions taking place in the system
- Thorough in terms of capturing documentary evidence; transactions are conducted within the system itself, information relative to all properties contained within database, ordinances also stored within the database (have also scanned existing paper documents)
- Every inscription may be traced back to the ordinance that mandated its registration in the database, scanned images are also linked to the relevant inscriptions
- The major issue is:
  - When an inscription is no longer 'current,' but needs to be preserved for patrimonial purposes and transferred to an archival authority, how is the relationship between the property and persons etc. captured (removed from the system and preserved)? The information in the registry is simply data stored in separate tables in the relational database. The ordinance may be preserved as an individual document, but the problem remains of how to preserve the 'registry,' the database or the information in the database so that relationships are evident.

**1.6**. Is the move to more dynamic and open-ended exchanges of information blurring the responsibilities and altering the legal liabilities of the participants in electronic transactions?

- Does not appear so in this case:
  - The judge is still personally responsible for the verification process and may be sued by the state if errors are made; the judge has sole competence for the creation and signature of ordinances and, thus, for inscriptions within the registry (this is why the judges, in particular, had to be sold on the computerization process—deep security concerns in case of tampering or system malfunction);
- The GILFAM, however, is responsible for maintaining the database system

**1.7**. How do record creators traditionally determine the retention of their records and implement this determination in the context of each activity? How do record retention decisions and practices differ for individual and institutional creators? How has the use of digital technology affected their decisions and practices?

- In the paper based system records were retained indefinitely, but were not transferred to an archival authority; the land registry offices maintained the registers
- Computerization has meant that retention periods must be instituted and records must be transferred to an archival institution
- The French public agency that deals with privacy issues (Commission Nationale Informatique et Libertés) mandates that all personal information be destroyed past the period for which it is useful for the purposes for which it was collected, except if its preservation is required for historical, scientific or statistical purposes. For the computerized system, the GILFAM must specify the length of time it will keep the records in the land registry and the method by which it will transfer the records to an archival institution
- No strategy has currently been worked out to transfer and preserve the registry records (preserve the relevant data and retain the functionality of the system in which the records reside)