



InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

Areas That Should Be Covered Validated

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

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(with input from Geneviève Sheppard)
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Creator of the Fonds		
TOPIC	SPECIFICS	SOURCE
Name	Le Livre Foncier d'Alsace-Moselle. "The creator of the records used to be each registry office...however, following the computerization of the system, the creator is the one responsible for maintaining the database system, that is, the GILFAM."	FR, pg. 11
Location	Alsace-Moselle region, France; the region, which comprises three administrative departments: Haut-Rhin, Bas-Rhin and Moselle.	FR, pg. 1
Origins	The region fell under German jurisdiction between 1871 and 1918. The registry was established in 1891 under German law, and recognized under French law in 1924 (limited sovereignty). The area was controlled again by Germany between 1940 and 1945. The registry is organized following a mixture of German and French principles and procedures. Further information about the origin of the land registry is in the Final Report, pg. 10.	FR, pg. 1 FR, pg. 9 FR, pg. 10
Legal Status	Government (legal) department	Inferred
Legislation	Rapport no. 109, Sénat, 4 décembre 2001; Rapport no. 3597, Assemblée Nationale, 13 février 2002; Loi 2002-3006; "Loi du 13 mars 2000 relative à l'adaptation du droit de la preuve aux technologies de l'information et à la signature électronique"; Journal Officiel de la République Française; "Instructions du 21 décembre 1972 relatives à la tenue du livre foncier", (n.d.); Archive law of January 3 1979; The Alsace-Moselle region's Code of Juridical Organization; Law of June 1, 1924; Decree of 18 November, 1924 Decree of 14 January, 1927.	FR, pg. 7, 9-10
Norms	Information not available in the Final Report.	
Funding	GILFAM is funded by, "a special tax levied on all real estate transactions."	FR, pg. 9
Resources	The paper registries are distributed between 46 sites (31 in Alsace, 15 in Moselle), corresponding to a community.	FR, pg. 11
Governance	French real estate law requires the land registry; management and operation fall under the authority of the Ministry of Justice. The registry is operated by 36 land registry judges and 150 clerks.	FR, pg. 1 FR, pg. 11
Mandate	To make the juridical status of property (including mortgages) publicly available (<i>publicité foncière</i>) by means of transcription.	FR, pg. 1, 12

Philosophy	The need to provide an effective mechanism to uphold, “the principle of publicity, which secures respective third party rights on the same estate.”	FR, pg. 9
Mission	Information not available in the Final Report.	
Functions	<ul style="list-style-type: none"> • Administration • Making property rights public • Finalizing real estate transactions • Legal verification of inscriptions in the registry 	FR, pg. 11
Recognitions	Information not available in the Final Report.	
Activities Resulting in Document Creation		
Administrative & Managerial Framework		
TOPIC	SPECIFICS	SOURCE
General Description	In the paper system, The judges author the ordonnances and sign the inscriptions (“feuillets”). The inscriptions are transcribed into the registry by the clerks. In the electronic system, the judge does not sign inscriptions any longer. The clerk prepares an ordonnance which the judge signs and this ordonnance is stored as a separate file, and the act of signing also automatically updates the fields in the database.	FR, pg. 11-14, 18
Type of activities	Issuing ordonnances, completing inscriptions, financial affairs, corresponding, coordinating activities among the various registry offices...	Inferred
Documents resulting from activities	Ordonnance of inscription: dictates information to be transcribed within register. Written and signed by the land registry judge. Considered to be authentic and superior documentary evidence under French evidence law. Inscriptions within the register (“feuille”): transcribed by clerk, and individually signed by a judge. The inscription is presumed valid until proof of the contrary. Details of the workflow for both the paper-based and electronic systems is available in the Final Report, pg. 11-14 and 18. Also, various administrative documents: letters, e-mails, financial...	FR, pg. 4 FR, pg. 1 FR, pg. 4 FR, pg. 11-14, 18 Inferred
Existence of a RM and/or archives program	The land registry is required by law to maintain records within a records management framework, and an archives program. The archive law of January 3, 1979, prescribes that records must eventually be given to the Archives de France.	FR, pg. 1 FR, pg. 6, 27
Individuals responsible for preservation	While in the land registry, GILFAM is responsible for preservation. The records should be transferred to the Archives de France after a certain amount of time (depending on agreement).	FR, pg. 6 FR, pg. 27-28
Existence of Preservation Strategies	Two possibilities are discussed in the report. 1. GILFAM acts as custodian and must transfer inactive records to an archival database that it maintains. 2. Define an XML schema and import inactive records to into a relational database sufficient to fulfill needs of researchers (less complex model)	FR, pg. 27
Legal Requirements and Constraints	The legal requirements for the land registry as a whole are also concerned with the administrative activities and records.	FR, pg. 1 FR, pg. 7 FR, pg. 9
Normative Requirements and Constraints	As specifically related to the administrative activities and records, this information is not available in the Final Report.	

Technological Requirements and Constraints	The clerks and judges use personal (Windows) computers, running Web-based applications. For judges, the computers are also equipped with biometric identification peripherals and digital signature software.	FR, pg. 14
Digital entity being studied		
General Description	In 1994, the Groupement pour l'Information de Livre Foncier D'Alsace et de Moselle (GILFAM) was formed to oversee the computerization of the registry. GILFAM awarded a 60 million Euro contract to IBM and Parker Williborg to computerize the registry, creating a database called AMALFI (Alsace-Moselle Application pour in Livre Foncier Informatisé). AMALFI will initially be comprised of the transcriptions of 40,000 existing paper registries (10 linear km); each new database entry will be individually signed by a judge, using a PKI infrastructure combining biometric access and digital signatures.	FR, pg. 9 FR, pg. 4 FR, pg. 1
Type of activities	AMALFI will eventually allow the activities currently underway in the paper-based environment, such as issuing ordonnances, completing inscriptions, financial affairs, corresponding, coordinating activities among the various registry offices.	FR, pg. 4-5
Documents resulting from activities	Land registers are to be digitized, with the resulting image files transferred to Madagascar for transcription into the database (process has been completed).	FR, pg. 4
Existence of Preservation Strategies	All records within the land registry database must be kept according to law. Data relative to the inscriptions are kept within tables, linked through relationships. The ordonnances and digital signatures are kept as separate files, linked to the relevant inscriptions. The scanned images of the registers are kept on optical media, and are also linked to the relevant inscriptions. Inscriptions and ordonnances will eventually be transferred to the Archives de France, although an arrangement has yet to be made.	FR, pg. 27 FR, pg. 27-28, 29
Legal Requirements and Constraints	Although all laws applicable to the land registry apply to the digital entity, of particular importance is the "Loi du 13 mars 2000 relative à l'adaptation du droit de la preuve aux technologies de l'information et à la signature électronique," and the amended Alsace-Moselle registry law (2002). These laws have enabled the land register to be digitized, with digital signatures.	FR, pg. 10
Normative Requirements and Constraints	As specifically related to the digital entity being studied, this information is not available in the Final Report.	
Technological Requirements and Constraints	The land registry data is kept in an Oracle database, of which two copies are maintained. To enforce security, only one copy is accessible to users via the Internet; the databases are synchronized at the end of each day. Security is also secured through SSL technology. The clerks and judges use personal (Windows) computers, running Web-based applications. For judges, the computers are also equipped with biometric identification peripherals and digital signature software. Other technology includes plug-ins for commercial notarial software for integration with the land registry, and a PKI infrastructure, linking together all registry offices and the central database. The ordonnances take the form of XML files, defined through a DTD. The <i>feuille</i> t sections become the base tables of a relational database, which allows querying and listing of information. A third kind of digital entity is the scanned images of the 40,000 registers. These images take the form of TIFF files; they are stored on optical media and can be accessed through the database.	FR, pg. 14 FR, pg. 16 FR, pg. 14 FR, pg. 17

	Each inscription in the land registry is connected to a physical file, the annex, by means of a reference number.	FR, pg. 18
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