**EULIS – Ambitions, Bottlenecks and Policy Solutions for a European Land Information Service**

Peter LAARAKKER, the Netherlands and Stefan GUSTAFSSON, Sweden

**Key words**: e-government, land information.

**SUMMARY**

Within the eContent Programme of the European Union, national land registries with computerised systems have started a co-operation in a project called European Land Information Service (EULIS).

There is an increasing interest in the real property financial market, at least among consumers, to be able to carry out international transactions more frequently. This does however require a possibility to get access to up-to-date and reliable information on land real property across national borders in an easy way. The project aims at proposing how an electronic European Land Information Service can be designed, what obstacles there might occur and how these can be overcome as well as showing the functionality of the proposed outcome through a demonstrator. In this way it will be possible to illustrate what a future end user interface might look like. Among other things, a service like this will contribute to establishing a single market for housing credits. The project will also study how a service will affect the property market, and the actors in the market.

In order to establish the foundations for a European service of this kind a number of issues have to be solved. Among these there are questions related to protection of privacy, technical solutions, standards and standardisation.
1. INTRODUCTION

Within the eContent Programme of the European Union, national land registries with computerised systems have started a co-operation in a project called European Land Information Service (EULIS).

There is an increasing interest in the real property financial market, at least among consumers, to be able to carry out international transactions more frequently. This does however require a possibility to get access to up-to-date and reliable information on land real property across national borders in an easy way. The project aims at proposing how an electronic European Land Information Service can be designed, what obstacles there might occur and how these can be overcome as well as showing the functionality of the proposed outcome through a demonstrator. In this way it will be possible to illustrate what a future end user interface might look like. Among other things, a service like this will contribute to establishing a single market for housing credits. The project will also study how a service will affect the property market, and the actors in the market.

In order to establish the foundations for a European service of this kind a number of issues have to be solved. Among these there are questions related to protection of privacy, technical solutions, standards and standardisation.

2. PROGRESS

2.1 Eulis Homepage http://www.eulis.org

The EULIS project aims at developing a demonstrator of a future European Land Information Service. The overall objective is to provide access to information across borders via the Internet, thereby creating better conditions for professional actors in the market as well as for private citizens. The project deals with questions about content of the service, standards, protection of privacy, pricing, billing, security, technical solution and exploitation. The project illustrates the positive effects of having land information available across borders and can be seen as a measure to improve the single market for financial services, at the same time as the possibilities for private sector companies to exploit public sector information is increased.
2.2 Core Information

Naturally, the land information itself will be presented in the EULIS service. Initially this will be made in the origin language. If, in the future, information can be translated will be a question for discussion perhaps beyond this project’s duration, as national concepts not always are comparable, especially from a legal point of view.

As the legal framework and the information contents in the registers in the participating countries differ, efforts have been made to make the actual information understandable and explained in English. When it comes to headers in register outputs these are explained. The most common phrases are given as well. Also basic descriptions of legal concepts are made, as well as descriptions of routines and effects of registration at real property conveyance and mortgaging.

The register contents are described in a systematic, structured way, the same for all participating countries. This enables a possibility to use the same model for presentation of the national conditions in the EULIS service. This also makes it possible to compare different legal aspects concerning real property between the countries.

Besides explanations of register contents and transaction routines, the EULIS service will contain explanations in English of national legislation and contact information to authorities involved in the real property transactions.

2.3 Conditions for the Proposed EULIS Service

The project has identified and compared national rules for access to information, and use of information. The main purpose has been to provide the participating countries insight in the differences that exist among them with respect to the publicity issue. Therefore, the project does not aim to discuss a most ideal situation for EULIS. However, if the Consortium Members agree on a preferred model of EULIS, the findings provides information on the steps to be taken, for the publicity issue, in order to come to such a preferred model. Below the principles that may be adhered to in an EULIS setting are provided.

There are in the service chain three different actors: national LRC supplier (NS), Eulis service and Foreign supplier (FS). Each actor plays its own role with its own terms and conditions.

2.4 Principles for Acquiring Land Register and Cadastre Data abroad via EULIS Service

- The client is connected to his national LRC supplier (NS). Via the EULIS service the client obtains data from the choosen foreign supplier’s (FS) system
- LRC data can (only) be requested via EULIS service through a special request, accessible through digital means
- FS (only) accepts a request for the acquisition and further use of its data when the intended use fulfils FS’s requirements.
- For feeing purposes, and for the decision to accept a request for acquisition and further use of FS’s data, the request should be accompanied with the identification of the requester.
- Users can not pass on the provided data to any other parties without prior consent of FS.
- A monetary payment is required.

The FSs are responsible for their data according to their national legislation. From consumer’s point of view the data must be equal reliable for foreign users as for citizens. The service chain must not make the delivered data unreliable. If something happens for technical or other reasons, the service must be responsible for that. Otherwise the service is not a trustable one.

- The claims against the data or service are given to the NS. In the service chain responsibilities are decided internally.
- The following liability statement is included in the contract: the client is liable to LRC for any losses LRC might incur to a third party through inappropriate use of the data by the client.
- The following liability waiver statement is included in the contract: we would not be liable to the client for any losses that the client or others might incur due to systems for which we are not responsible, and for any kind of faults or changes in the information within these systems after the information has come beyond our reach.
- Any value-added products that the client develops through use of the data either:
  - Requires our explicit permission prior to dissemination of the value-added products,
  - Vests an ownership interest in FS, or
  - Requires a royalty payment to FS.
- FS data cannot be separated from products that incorporate LCR data.

These restrictions are offered on a take-it or leave-it basis. Individual members may have fewer restrictions in place. All other aspects of the contract (format, update frequency, price, etc.) may be negotiated with the LRC concerned.

2.5 Privacy Principles

- For all requesters EULIS should allow access to its databases only through object data. EULIS does not accept requests from this group for overviews of the property of natural persons.
- For special user groups EULIS may allow access to its databases through subject data, and/or object data. It leaves it to the individual Consortium Members to decide on the specific groups.
- EULIS can provide a service through Internet for specific requests.
- EULIS can show through Internet at least the following data: address, property information, building information.

A problem may be in the definition of personal data. Every member of the consortium explains this differently. As a consequence the different interpretations of the explanation of the term personal data have resulted in different policies concerning access to LRC data.
among the Consortium Members. It is recommendable to harmonise the interpretation of the explanation of the term personal data.

2.6 Pricing and Financing

- The accomplished surveys show clearly that there are distinct differences between the participating countries when it comes to cost coverage, i.e. as a result of different models for subsidy and financing.
- The charged rates are often very diverse, dependent on the kind of information that is given and the way the information is delivered;
- The charged rates in the various countries don't vary much for comparable information delivery and are even more close together when the information is delivered digital.
- In the charged rates there is hardly a distinction visible between the types of customers.
- In almost every participating country the prices are set by the State; adjusting the prices is therefore not quite simple to achieve.
- The right to make decisions concerning the fixing of the prices for the service in the future will still depend on the individual countries.
- Since the project does not aim at changing or adjusting any rules or directives in price fixing, each country will continue to charge as it usually does for its current customers in accordance with existing procedures. The charged rates in each country respectively should be presented as meta information in the future service.
- The mere fact of opening up the price information and making the comparisons evident to the market and the customers may eventually give rise to a pressure on the price levels. As a result of this the conceivable pressure from the customers can be conductive to certain equalisation in the future.

The solution regarding pricing recommended by the project is that every country adapts the prices in such a way that the costs of the EULIS portal can be paid out of the incomes from delivering information (even if there is nobody who uses EULIS portal). In that way there is no difference in price for any user. The main reason for that is that this will guarantee price neutrality towards the national systems and promote the use of the EULIS service. This will also facilitate the contacts between the land information agencies and the customers. The benefit of this will probably far exceed the influence of the EULIS portal costs on the national system costs.

2.7 Market Prospects

Today, most activities based on land information as conveyance and financing are national. If an interested party wants to make investments in land in another country therefore establishing of partnership with representatives in the country concerned is needed. The EULIS service will probably not replace these routines, at least not in the beginning, but by providing easily accessible information about national legislation and conditions, contacts between partners will be facilitated. Furthermore, and not unimportant, it will be easier for the party that meets the customer to make early assessments of possibilities in every special case. This will speed up the decision-making process in a tangible and more cost-effective way.
The establishment of a joint European service will also make it easier for national land information agencies to provide information on the international market. The proposed solution to set up a regulation framework enabling licensed users in one country to access information from other countries and creation of security and billings routines in the EULIS service may also make it easier for the national agencies to get and maintain customers abroad. The primary interest that has been showed from other countries regarding the EULIS project seems to confirm this assumption.

2.8 The EULIS Prototype

To realise the ideas of EULIS the technical solution will be a portal.

![Figure 1 The EULIS Portal](image)

The portal architecture enables

- A slimmed EULIS system with most of the critical functionality in the national systems
- Reasonable maintenance costs for a possible permanent service
- Different levels of ambition when connecting to the service. The most easy solution is to present the current HTML interface from the national service. This can later on be developed in several steps.
- An adaptable connection to the service for future partners
- Development in smaller steps, making it easier to take care of user demands as they develop.
The functionality of the service can be described as follows:

<table>
<thead>
<tr>
<th>Step</th>
<th>User action</th>
<th>System action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The user logs in to a national service where he/she already is a licensed user</td>
<td>Authentication and authorisation of the user is made in the national system. The only need for accessing the EULIS service is that the user is a licensed user in a national system taking part in the service.</td>
</tr>
<tr>
<td>2</td>
<td>The user chooses the EULIS service</td>
<td>Logon to the EULIS portal. In the portal, the national system is considered as a valid user. Information about the transaction (identification of the user) is included for invoice purposes. Access to meta data about registers, legislation and land transactions is provided by the portal.</td>
</tr>
<tr>
<td>3</td>
<td>The user chooses origin of information wanted</td>
<td>Logon to the national system concerned. The EULIS portal is a valid user in the different national systems.</td>
</tr>
<tr>
<td>4</td>
<td>The user collects the information wanted</td>
<td>The national system presents the information through the portal to the user and returns information for invoice.</td>
</tr>
<tr>
<td>5</td>
<td>The user is invoiced by the national system.</td>
<td>The portal has functionality to keep track of transactions so that payment goes to the right information provider.</td>
</tr>
</tbody>
</table>

The project aims to have a fully functioning demonstrator of the service ready for evaluation by January 2004.

### 2.9 User Group, Promotion and Awareness

Two reference groups have been established in the project. One consists of customers representing different user categories in each participating country. The user group will be involved in the developing of the demonstrator 2003 and 2004. The second group consists of representatives from land information agencies in Europe. They will be continuously informed on the progress of the development work, and also have the possibility to discuss a possible future permanent service, also including other countries. Special attention has been paid to how certain legal obstacles can be overcome. The project has been presented at several conferences, meetings and also by articles in press. A great interest for the initiative and the progress of the project work has been noticed. The most important event during the year was probably the Granada Conference where EULIS was discussed in the sessions as well as between them. After the conference, the Permanent Committee on Cadastre has also been informed about the project’s progress.

### 2.10 Future Work

Next year focus will be set on developing the prototype of the EULIS service to a fully functioning demonstrator.
Demands and wishes from presumptive customers will continuously be gathered from the existing reference group.

As a preparation for a possible future service, the contacts with other land information agencies in Europe will be intensified. These contacts will also have impact on the development as the project intends to establish a solution that is possible to adopt and realise with a minimum of efforts for newcomers.

In February 2003 also a seminar series regarding different aspects on real property transactions will start.

**CONTACTS**

http://www.eulis.org

Mr. ir. Peter M. Laarakker  
Director Landinformation and Geodesy  
Cadastre and Land Registry Agency  
P.O.Box 9046  
7300GH Apeldoorn  
THE NETHERLANDS  
Tel. + 31 55 5285226  
Fax + 31 55 5285029  
Email: Peter.Laarakker@Kadaster.nl  
Web site: www.Kadaster.nl

Stefan Gustafsson  
Project leader EULIS  
Lantmäteriet  
S-80182 Gävle  
SWEDEN  
Tel. + 46 266 33 076  
Fax + 46 266 11 140  
Email: stefan.gustafsson@lm.se  
Web site: www.lantmäteriet.se