WEBERHOFER ● GMBH

1 The evolution of EUSODA

At the end of the 1990s the firm of Weberhofer developed a database together with SozialRuf Wien (Social Hotline Vienna) of the City of Vienna so as to make the data used by the organization available to a broader public via the internet. From the outset the contents were treated in a form accessible to the disabled and consistent with WAI.

In 2000 the idea was born of offering the data in multilingual fashion. In order to reach this objective, it seemed sensible to develop the database as an EU project. The project proposal 'EUSODA – the European Social Database' was elaborated and submitted to the EU Commission in Luxembourg within the scope of the eContent programme.

Of the about 200 projects submitted, 8 were selected, including EUSODA, which was funded with a total volume of over € 1,000,000. The partners of the firm of Weberhofer in the project included the cities of Vienna, Lisbon and Bologna, the Spanish region of Huelva and the German Foundation Demokratische Jugend.

In the course of this 25-month project Weberhofer GmbH developed the prototypes of a software programme specialized in administrating a multilingual, regionally structured 'semantic network'.

Between 2005 and 2007 the prototypes were developed into a fully functional software programme.

1.1 References

http://www.socialinfo.eu
http://sozialinfo.wien.gv.at
http://hilfe.wien.gv.at
http://frauenratgeberin.wien.gv.at
http://eusoda.sigadel.com
http://eusoda.cm-lisboa.pt

2 The EUSODA system

EUSODA was developed in order to structure a large quantity of information in a keyword system and make it available to the public via the internet. The focus was originally placed on systematizing data from the social field: counsellors and those seeking support were to be able to find useful information as quickly as possible. However, the flexible keywording system enables data of all kinds to be classified and made accessible.

EUSODA views itself as an information system: without much effort users can obtain information on different topics:

- Who offers counselling or support
- Where the support is
- When support takes place
- What the prerequisites are for receiving specific services
- What other relevant information there is on a topic

For this purpose the operators of the system classify all the information in a keyword system. Currently, it comprises about 500 concepts relevant for the social field. The system is available in 15 languages and is being expanded constantly.

The information is also arranged in a geographical grid so that the user can look for contents that are interesting for specific regions.

2.1 The keyword system as a semantic network

The EUSODA keyword system is hierarchically structured and consists of

- Leading issues

- Keywords

- Synonyms and

- Cross references

The chart below shows keywords and their synonyms and cross references between the keywords. The keywords 'nursery school' and 'crèche' can be seen as sub-keywords under 'day care for children'
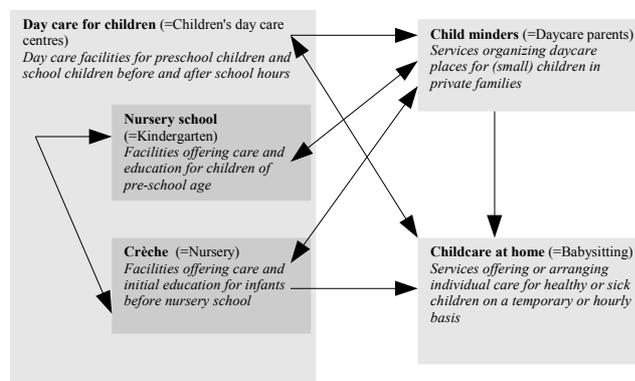

Illustration 1: The relationship between keywords

Every keyword can be assigned to one or more of the roughly 20 leading issues. This way, persons unfamiliar with the system can obtain the information they want quickly.

2.2 Multilinguality

The entries in the keyword system are linked and currently available in 15 languages.
When the information is collected, the keywords are formulated in one language and the keywords are then automatically available in all the other languages. This way the information compiled can be made accessible to very many people with a minimum of administrative effort.

2.3 General contents

As a CMS (Content Management System), EUSODA is also in a position to administrate editorial content, e.g. the homepage of an organization. Here translation tools are also available to enable offering the information in all desired languages.

2.4 Institutions and general information

Designations and details such as addresses, contact information, opening hours and a description are contained on every institution and on data of a general nature.
There is also the possibility to offer all the information in multilingual form. If this possibility is not utilized, a search can at least be done in all languages via the register.

2.5 Query via the internet

All the information stored can be consulted by internet users – as long as it is labelled public. A query can be made either via the EUSODA keyword system or via the integrated full-text search. The full-text search is carried out via an integrated search machine – Apache Lucene. The search takes not only keywords and institutions, but also synonyms and cross references into account.
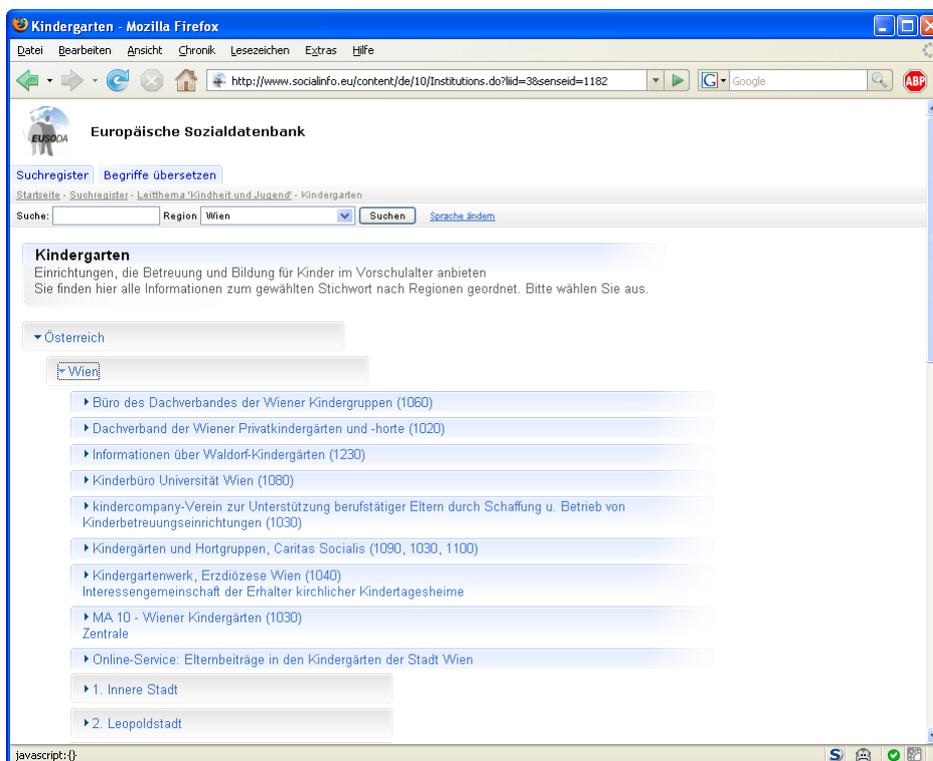

*Illustration 2: Part of the search result for 'nursery school' in Vienna*

2.6 The link to the European Social Database

As a community project, the keyword register is constantly updated and further developed by all the participants in the system. The most topical keyword system is available to all partners through a continuous data exchange with the European Portal. To obtain a central contact point for social data in Europe, local portals can send their data to this portal, thus contributing to European networking.

3 Web appearances

EUSODA makes it possible to use the data compiled for different web appearances. Hence the individual departments of an institution or region can present all the data or a desired segment of the total data quantity on separate homepages in their own design.

The 'original' of EUSODA and the different appearances of the City of Vienna are shown here as examples.
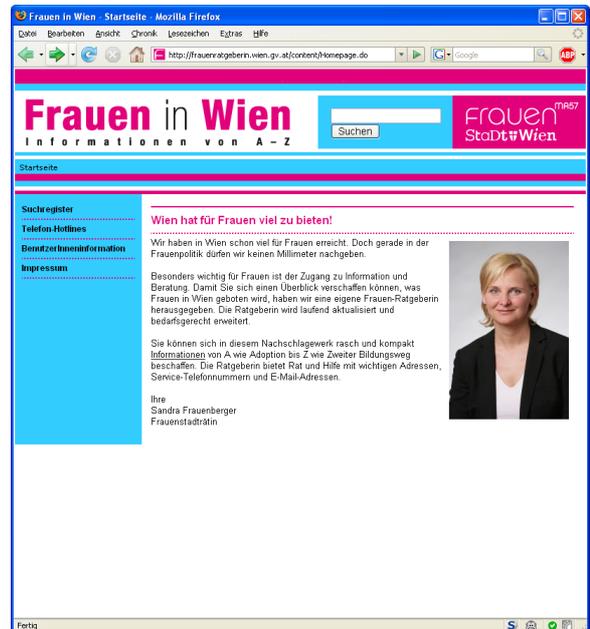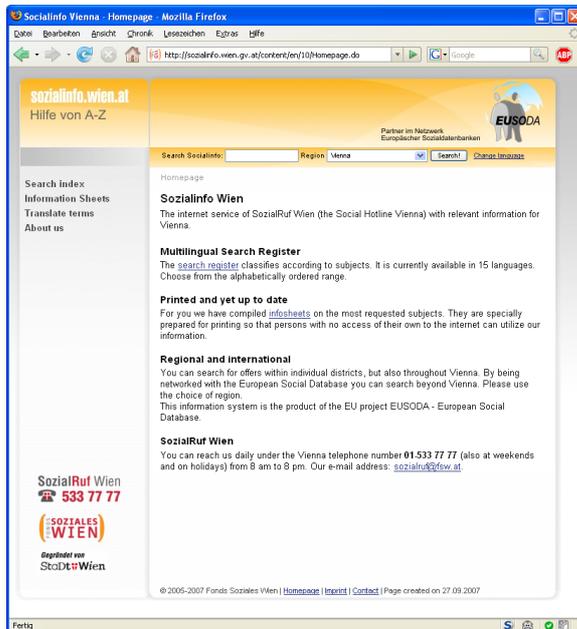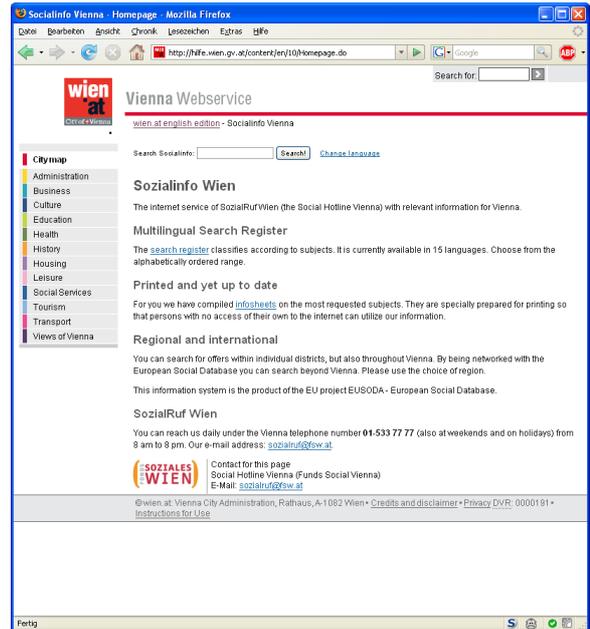
4 Technical information

A Java Application Server (Geronimo 1.1.x) is used as the basis. Java 1.5 SDK is a precondition for operating the software.

The data is stored in a relational database (PostgreSQL, MySQL, Oracle, DB/2 or MS-SQL).

To increase data security and enable several web appearances it is recommended to use a Reverse Proxy (e.g. the Apache Server) before the application.

Any 'up-to-date' server hardware with at least 512MB storage capacity is suitable for operating the software.

The installation of the software can be done in a few minutes on RPM-based Linux systems.