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Building co-operative bibliographical databases in European ethics: the Slovenian contribution

The ethical implications of research and professional work in life sciences and biotechnology are increasingly gaining importance and the number of documents, mainly research and legal, on these topics is growing likewise. Specialised information tools operating in the field are in use for quite some time, and new national initiatives have started to improve the accessibility of literature in bioethics. However, no database existed in 2002 that could support research in ethics in life sciences and biotechnology taking into account the cultural, political and legal diversity of ethics discourse on the pan-European level.

In January 2002 the international network of bioethical institutions "Eureth.net" was established, funded by European Commission as a Quality of Life and Management of Living Resources Programme project in the fifth framework. At the beginning 18 centres from nine EU countries joined their forces. The development of two bibliographic databases started: "Euroethics" for ethics in medicine, and "Endebit" for ethics in biotechnology, each composed of records from several national databases. In order to achieve broader view on the European document production on ethical topics the then called "Newly Associated States (NAS)" were invited. Bulgaria, the Czech Republic, Hungary, Lithuania, Poland, the Slovak Republic, and Slovenia joined the Eureth.net consortium in 2003. The plan was to select local databases at NAS partners, download records with ethics topics, send them to Euroethics and/or Endebit database administrators, convert them to the common documentary standards' format, and upload them to the final databases. In Spring 2004 it became obvious that not many local databases at NAS partners' institutions exist, combined with the lack of time and resources needed to build them from the scratch. It was decided to build an intermediary database and data entry application that will replace missing local databases. Responsibility to build the system was entrusted to the Institute for Biomedical Informatics (IBMI) at the Faculty of Medicine in Ljubljana (Slovenia).

The data entry application, which was developed, offers users the possibility to contribute their records by using web forms and HTTPS protocol. The data are checked for presence of obligatory fields and correctness of controlled fields, and once the records are complete they are translated into XML and sent to common Eurethnet databases. Perl and JavaScript programs provide communications with database, data formatting and data checking on server and client sides. Converters were built for two centres that contribute their records as downloads from local databases. The MeSH and Thesaurus Ethics in Life Sciences thesauri are integral parts of the application thus minimising the possibility of introducing errors into the subject descriptions. By using the unicode character set it was possible to collect records written in Central, Eastern European and Baltic scripts inside the same database, but the greatest challenge was how to give the application the full functionality needed while minimising the amount of data transferred between the web browsers and the server.

It was shown that the web-based technology is the best choice for collecting of bibliographic records in a distributed environment even for complex database structures and especially when database administrator has no control over users' computing platforms. No installation of client software is needed, almost any PC with

web browser is good enough, and the web browser as a user interface is sufficiently intuitive even for non-computer-professionals.

The funding of the Eureth.net project was finished at the end of 2004, with the exception of NAS partners for whom it was prolonged for the next six months.

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