# The AGRIS – www portal for agrarian sector and countryside (www.agris.cz)

AGRIS – www portál pro agrární sektor a venkov (www.agris.cz)

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**Abstract:** The project of the AGRIS WWW portal proposes from its very beginning to establish a platform for providing information from the spheres of agriculture, food industry, forestry and from other areas related to the countryside. The main objective is to provide access to the already existing information sources, to run its own news service and to help with publishing of the information to the subjects that have limited conditions for electronic (Internet) presentation. This leads to creating of a complex block of information from the industry. This block is to serve for improving availability of the respective information for managers, public administration, students, teachers, consultants and other users.

Keywords: ICT, Internet, portal, agriculture, agrarian sector, information, services

**Abstrakt:** Projekt WWW portálu AGRIS si od počátku klade za cíl vytvořit platformu pro poskytování informací z oblasti zemědělství, potravinářství, lesnictví a z navazujících odvětví zahrnujících venkovský prostor. Cílem je zpřístupňovat již existující informační zdroje, vytvářet vlastní zpravodajství a napomáhat zveřejnění informací od subjektů, které mají omezené podmínky pro elektronické (internetové) prezentování. To vede k vytvoření jednotného bloku informací z daného oboru, a tím ke zlepšení jejich dostupnosti pro řídící pracovníky podniků, státní správu, studenty, pedagogy, poradce a všechny další uživatele.

Klíčová slova: ICT, Internet, portál, zemědělství, agrární sektor, informace, služby

Information servers (web sites) of many institutions and companies started to appear on the Internet in the Czech Republic with the development of the IT and with the world trends. The agrarian sector was no exception. The particular servers are characterized by a different concepts and a very different quality of provided information and services. The servers are not usually linked to the other servers. On the other hand, these servers provide duplicate information or the information that is not updated. These problems are not rare even when we evaluate the servers of government institutions, public administration, universities, and research institutes.

The requirements of access to top-quality information risen by the business area users and users form the public are still more and more apparent. Also the total absence of an integrated information source is increasingly shown up. This state results in the absence of the relevant information for business purposes, limited infiltration of scientific results and research into the practice and inefficient support for consulting.

#### HISTORY OF THE AGRIS PORTAL

On the basis of the above-mentioned facts, the research and development of a portal solution for information services of an agrarian sector started at the University of Agriculture in 1999. The general situation analysis in the Czech Republic and in the world, long-term research in ICT sphere and implementation in agrarian sector environment were the base for the AGRIS project. The project brought a new and innovative solution. The core of this solution lies in the development of agrarian WWW portal as an integration platform and access gate to the Internet in agrarian sector and countryside.

#### SPECIALIZATION OF THE AGRIS PORTAL

The project of the AGRIS WWW portal proposes from its very beginning to establish a platform for providing information from the spheres of agriculture, food industry, forestry and from other areas related to countryside. The main objective is to provide access to the already existing information sources, to run its own news service and to help with publishing of the information to the subjects that have limited conditions for electronic (Internet) presentation. This leads to creating of a complex block of information from the industry. This block is to improve the availability of the respective information for managers, public administration, students, teachers, consultants and other users.

The whole portal solution is thoroughly based on general principles. It is modular and open. Therefore, there is no problem with its implementation into any other sector or industry. The portal solution represents the third form level as regards the present structure of Internet services (Figure 1). Research and development of the agrarian information system has been pointed at this target goal from the very beginning.

The goal of the solution is to create a specialised information system for the needs of the agrarian sector that secures higher competitiveness of agrarian companies

and food producers – generally and also in relation to access to the EU structures.

The whole system is based on the unified informatics concept of the Ministry of Agriculture of the Czech Republic. It is continually adjusted to all the needs appearing during the pre-access negotiations with the EU. The entire solution should secure two basic levels; it is the integration of sources and the integration of services.

The integration of sources in relation to concept of the AGRIS portal is demonstrated in Figure 2, integration of services in Figure 1.

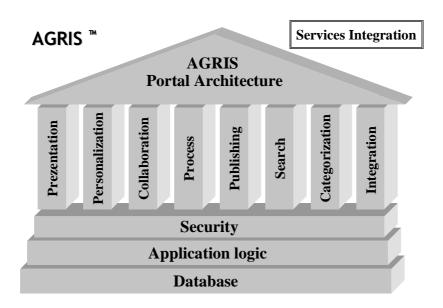


Figure 1. Conception of the portal solution AGRIS (services integration)

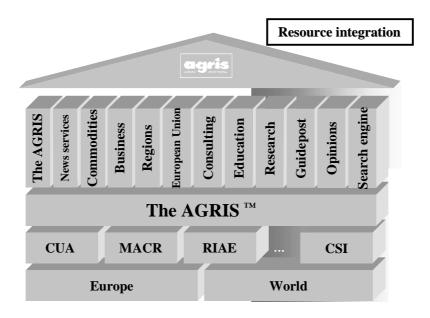


Figure 2. Conception of portal solution AGRIS (resource integration)

#### IMPLEMENTATION OF THE AGRIS PORTAL

Before the commencing of the analytical labour, SWOT analysis was elaborated in the year 1999. Its objectives were to define all the main aspects of the research and the implementation of the solution in the university environment, primary target specialisation in the agrarian sector, and the influence of the external conditions. The analysis confirmed the advisability and importance of finding solution to the given problem. The analysis conclusions were proved during the following years (Table 1).

## Information accessible through the agrarian www portal:

- updated news reporting of the portal itself, the CTK service, monitoring of the national and regional press, prepared events, information of the Ministry of Agriculture
- business information actual prices, graphical process, exchange rates and units conversion, time development since 1995
- expert articles the possibility of full-text and domain search, archive
- scientific publications electronic journal AGRIS online, scientific conference textbooks
- database of companies unique database of agricultural companies
- links to specialised servers sector segmentation, possibility of references enlistment, evaluation of the best servers TOP AGRIS

#### Services accessible through agrarian WWW portal:

- AGRIS Info sending of ordered information from portal AGRIS by an e-mail
- distribution of information enlisting of information on www sites of partner organisations
- -A-web application for creating of self-presentation WWW pages of agricultural companies, easy operation, fast actualisation, connection to central databases
- the creating of WWW advantageous creating WWW pages for companies
- Education computer courses (beginners >>advanced >> professionals)
- Consulting in the field of ICT utilisation

#### **CONCLUSION**

A brand new version of the AGRIS portal was started at the beginning of 2003. This version is based on the long-term research of the given issues, key findings and approved principals. As regards the development level, the portal represents a new generation of the solutions of the agrarian WWW portal AGRIS. Apart from a brand new design, the overall size of the portal is extended, the structure of the sections is modernised and optimised, the entire solution is based on the usage of XML. A brand new program solution has been developed. It has a perspective to be competitive in the following years.

Table 1. Starting point of the AGRIS portal

#### Strenght Weakness - objectivity a independence of the academic environment - potential problems caused by the specifics of an academic - wide professional background at all faculties (FEM, FA, ...) environment (lower flexibility, unclear competence) - professional quality in IT limited own financial sources - support by management of the university and faculties - limited possibilities of commercial activities of the academic - establishment a continuous innovation of the technical environment background (servers, internet connection, software, ...) - many contacts in the Czech Republic and abroad (universities, institutions, firms) - experience in providing consulting and information services - wide background in human resources (teachers, doctorate program students, other students) Opportunities Threats - fast development of the Internet technologies - resort lacking the central concept - non-existence of any similar solution (agrarian sector, ...) - poor support of the competent government institutions - planned access to the EU - very unsatisfactory economic situation in the agrarian sector - fast acceptation of modern IT (academic environment) (lasting for a long time) - demand for top-quality, actual and certified information - very poor level of HW and SW and communication - demand for specialized services equipment of most potential users - non-existence of any integrated information source - the restriction of Internet development in the Czech - very limited ability of providing information by public Republic (the Czech Telecom monopoly, communication infrastructure, ...) institutions and research institutes,... - potential averseness to provide information a cooperate (the concern related to many state and public institutions) limited knowledge of the problems and incompetence



Figure 3. Agrarian WWW portal AGRIS

The agrarian portal AGRIS is currently the most often visited information source within the resort. It is to become a basis for the integrated information system of the resort. The proposed solution offers an opportunity of active participation in the development of modern information society.

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