

## **The national citation index as a platform to achieve interoperability of a national journals repository**

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### **Introduction**

In Serbia, there is a specific organizational framework for disseminating S&T information. The central position in the system is given to the locally published journals (LPJs) selected and indexed in the SCIndeks: The Serbian Citation Index. The chronic problem of SCIndeks maintenance is the lack of timeliness in journals publishing and irregular delivering of newly published issues for indexing. To solve this problem the national Journals Repository (JR) was established in the National Library of Serbia (NLS) and integrated with SCIndeks, as well as with its derivatives [1]. Here, we describe the benefits from such an operation.

### **National journals repository**

The primary purpose of JR is the long-term preservation of LPJs full texts in electronic form. Preservation is organized according to principles of the best library practices. Storage of the journal issues was made obligatory for all publishers (co)financed by the Ministry of Science of the Serbian Government. Government-supported journals make the vast majority of LPJs of scientific character published in Serbia.

Journal issues are sent in electronic form by the publishers as camera-ready issues converted into *pdf* format. They are parsed to be archived in JR as individual articles. Content of the archive is managed by a simple web interface. Search is possible only for the fields relevant to the operators, i.e. those related to identification, control of coverage and timeliness of publishing. Full text of articles is indexed, but the search itself is left to SCIndeks search engine. SCIndeks also takes care of article full texts usability statistics. The only function of JR is to serve as a persistent digital archive of LPJs included in CrossRef system and SCIndeks.

### **doiSerbia: Serbian journals included in CrossRef**

Some Serbian LPJs are equipped with Digital Object Identifier (DOI) and included in CrossRef system. The service (doiSerbia, [www.doiserbia.nbs.bg.ac.yu](http://www.doiserbia.nbs.bg.ac.yu)) is in custody of the National Library of Serbia. Journals to be supported are selected annually, based on Impact Factor aggregating citations received in both SCIndeks and Web of Science (WoS).

### **SCIndeks: The Serbian Citation Index**

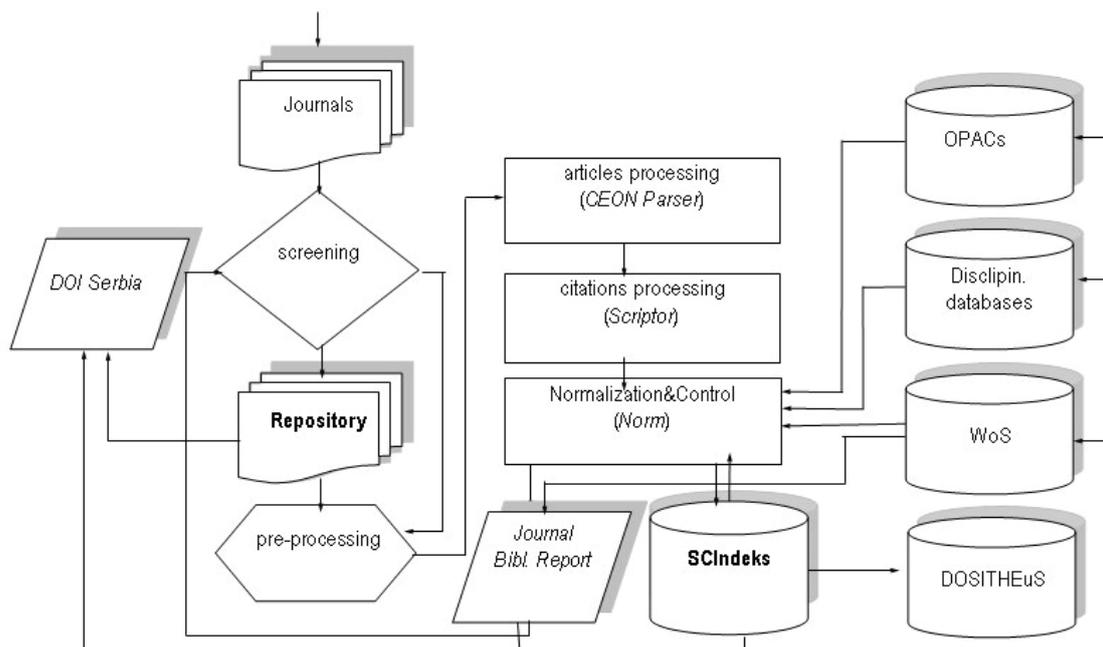
The SCIndeks ([www.scindeks.nbs.bg.ac.yu](http://www.scindeks.nbs.bg.ac.yu)) [2] contains metadata including references of all articles published from 2002 on in about 350 listed LPJs. Selected social science journals are fully covered from 1991 on. Papers from Arts&Humanities journals are in the process of retrospective digitization for the period from 1996 on. SCIndeks is developed and maintained by the Centre for Evaluation in Education and Science (CEON/CEES) and is fully supported by the Serbian Ministry of Science.

The metadata in SCIndeks are given in *OAI PMH* format, with built-in support for extended *Dublin Core*. Advanced search is possible within all SCIndeks fields including article full texts available in the JR.

### **Information management and utilization**

When deposited in JR articles are ready for use in CrossRef system. To be indexed in SCIndeks they have to pass extensive processing, ending with most information

normalized, mainly through linking with bibliographic records kept in local OPACs, disciplinary databases (e.g. Medline) and ISI WoS products (see the diagram).



Information refined this way are used as a ground to generate indicators of journal impact and quality. Those are published annually by CEON/CEES in the Journal Bibliometric Report (<http://nainfo.nbs.bg.ac.yu/kategorizacija>), a web publication analogous to the ISI Journal Citation Report. The SCIndeks data are transferred online to a more complex system (DOSITHEuS) based on a standard (CERIF) ensuring interoperability with systems based on the CRIS: Current Research Information Systems architecture. DOSITHEuS is intended for both communication and evaluation purposes.

## Conclusion

Integration of JR and SCIndeks improved functionality of both resources. JR was made searchable through powerful SCIndeks retrieving functions, while SCIndeks became a multipurpose resource, combining advantages of citation indexes and full text databases. What makes this solution worth considering is that interoperability of a repository is achieved indirectly, though integration, i.e. differently from what is generally recommended within OR community. In a certain context, such as the one described here, indirect interoperability seems to be more beneficial way of reaching the same goals in developing repositories in a developing country.

## Literature

- (1) Šipka P. (2006) Integrating system of research information at the national level: Cross-linking citation index and a CRIS-compliant database, in Kutlača Đ. (ed.) *SNTP/06 Sistem naučno-tehničkih i poslovnih informacija*, Beograd: NBS, pp. 35-41 (in Serbian)
- (2) Šipka (2005) The Serbian Citation Index: Context and content, in: *Proceedings of ISSI 2005*, Stockholm, Sweden, July 24-28, ISSI and Karolinska Univ. Press, Stockholm, pp. 710-711