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D3.3 Interconnection with ECLI Search Engine

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PU	Public	X
CO	Confidential, only for members of the consortium (including the Commission Services)	
EU-RES	Classified Information: RESTREINT UE (Commission Decision 2005/444/EC)	
EU-CON	Classified Information: CONFIDENTIEL UE (Commission Decision 2005/444/EC)	
EU-SEC	Classified Information: SECRET UE (Commission Decision 2005/444/EC)	

Revision History, Status, Abstract, Keywords, Disclaimer

Revision History

Revision	Date	Author	Organisation	Description
–	20.05.2018	–	–	Start of indexation of ECLI sitemap files containing metadata of the decisions of Bulgarian courts in ECLI XML format in a preproduction environment
0.1	31.05.2018	Hristo Konstantinov	APIS	Draft of Section 1 and 2
0.2	06.06.2018	Yanka Ivanova	APIS	Draft of Section 3
0.3	06.06.2018	Hristo Hristov, Tenyo Tyankov	APIS	Review, supplements and edits
–	30.08.2018	–	–	Completion of the indexation of ECLI sitemap files of Bulgarian court decisions in a preproduction environment; start of indexation in production environment
–	31.08.2018	–	–	Interconnection with ECLI search engine established and Bulgarian case law made publicly available
1.0	31.08.2018	Hristo Konstantinov	APIS	Final draft

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Abstract (for dissemination)	This document provides a concise overview of the ECLI-BG project activities related to the establishment of interconnection between the Bulgarian national case law portal – the Centralised Web Interface for Publication of Judicial Acts, and the ECLI Search Engine on the European e-Justice portal. The interconnection between the two portals is realised through the so-called Integration module, which generates Sitemap files from the ECLI metadata documents provided by the Conversion module developed within the framework of ECLI-BG project. In this way, the Bulgarian court decisions are made available to the so-called DG Justice crawler, which exposes them to the indexation and publication tools of the ECLI Search Engine. Thanks to the established interconnection, the ECLI Search Engine provides EU-wide access to Bulgarian case law.
Keywords	ECLI, ECLI Search Engine, e-Justice Portal, Interconnection, Case law, Bulgaria, Centralised Web Interface

Disclaimer

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1 Introduction

The establishment of interconnection between the Bulgarian national case law portal – the Centralised Web Interface for Publication of Judicial Acts (hereafter “the Centralised Web Interface”), and the ECLI Search Engine on the European e-Justice portal is one of main objectives of the ECLI-BG project. Thanks to this interconnection, the decisions of the Bulgarian courts have become available to legal professionals and citizens throughout the European Union.

From a technical point of view, the interconnection is a process of transferring data from the Centralised Web Interface to the ECLI Search Engine on the European e-Justice portal managed by Directorate-General for Justice and Consumers of the European Commission (hereafter “DG Justice”). This data transfer is ensured by exposing the data through an integration tool on the supplier side (“the ECLI provider”) and its gathering through the so-called DG Justice crawler. The integration tool takes as input properly formatted ECLI XMLs and generates a valid Sitemap structure and a robots.txt file. The crawler of DG Justice is implemented with regards to the Sitemap protocol specifications available at <http://www.robotstxt.org> and <http://www.sitemaps.org/protocol.html>. Its task is to gather the data provided by the ECLI provider and to transfer and copy them to the ECLI Search Engine document repository.

2 Development of an Integration module establishing interconnection with the ECLI Search Engine

The work related to the establishment of interconnection between the Bulgarian national case law portal – the Centralised Web Interface, and the ECLI Search Engine is part of the activities of Workpackage 3: “ECLI Implementation and Interconnection with the e-Justice Portal”. This workpackage is led by the project coordinator APIS.

The first task of APIS’ team was to discuss with IT experts of the Bulgarian ECLI coordinator – the Supreme Judicial Council, what will be the preferred technical solution for the establishment of the interconnection:

- Use of the existing integration tool of Directorate-General for Justice and Consumers of the European Commission (DG Justice) offered free of charge under the EUPL license¹, or
- Development of a proprietary software tool, which will become exclusive ownership of the Council.

According to the IT experts, the second option is considered as more feasible since the software of the Centralised Web Interface is based on .NET technologies.

¹ The text of the license is published on: <http://ec.europa.eu/idabc/eupl>.



Although, this architecture does not exclude the integration with the Java Application of DG Justice, the installation of Java SE Platform on the current server of the Centralised Web Interface may cause some problems. In addition, the Council has always stick to the policy to implement only proprietary software solutions ensuring vendor independence and owner control over the provided information services.

Based on these recommendations of the IT experts of the Bulgarian ECLI coordinator, APIS assigned the development of a proprietary integration module as a separate task in the subcontract concluded in the framework of Activity 3.1 of Workpackage 3. Thus, the subject of the subcontract envisages two main responsibilities of the subcontractor:

- Development and implementation of additional functionality of the Centralised Web Interface needed for the introduction of ECLI within the portal;
- Development and implementation of an integration module establishing interconnection between the Centralised Web Interface and the ECLI search engine on the e-Justice portal.

As a third subsidiary task, the subcontractor must provide warranty support for the newly introduced software modules by the end of the ECLI-BG project.

The subcontract was concluded on 21 December 2017. The Bulgarian company Abbaty AD, which is performing the maintenance of the Centralised Web Interface under an agreement with the Supreme Judicial Council, was chosen as a subcontractor.

After completion of the work on the Conversion module (Activity 3.2 of Workpackage 3) in the end of PM10 (April 2018), the subcontractor started its incorporation within the Integration module. The development of the Integration module has started few weeks before that. Passing through several internal tests, the consolidated version of the Integration module was reported to be ready for testing in real conditions in the end of PM11 (May 2018). Thus, the process of establishing interconnection with the ECLI Search Engine on the e-Justice portal started in the first days of PM12 (June 2018).

3 Testing and putting into operation the integration with the ECLI Search Engine

The following table presents the time history of conducting the tests of the Integration module and the process of establishing interconnection with the ECLI Search Engine.

Date	Activity
23.05.2018	Integration module reported to the IT experts of DG Justice for being ready for testing
28.05.2018	An updated version of the Excel file with the ECLI codes of Bulgarian courts sent to the IT experts of DG Justice
31.05.2018	First unsuccessful attempt for indexation of Sitemap XML files with ECLI XMLs of 5,000 decisions of Bulgarian courts



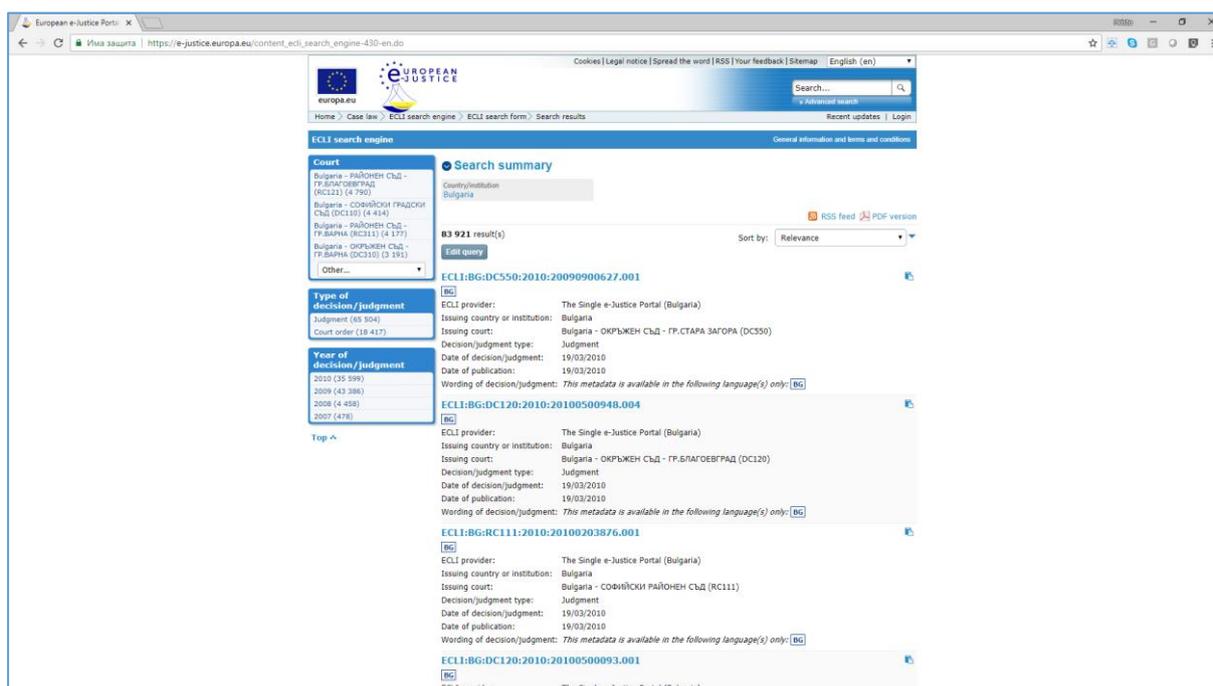
04.06.2018	Successful indexation of the Sitemap XML files with ECLI XMLs of 5,000 decisions of Bulgarian courts
06.06.2018	Successful indexation of the initial package and of a new package of 5,000 decisions. Successful tests of the operations “Deletion” and “Update” applied to a few decisions
07.06.2018	A link to the preproduction (contractor’s) environment sent by IT experts of DG Justice so that APIS can test the functionality of the ECLI Search Engine based on the 10,000 indexed decisions
19.06.2018	Full batch of approx. 1,7 Mio decisions extracted from the Centralised Web Interface after 10 days of processing and prepared for indexing by DG Justice crawler
20.06.2018	Sitemap fetch in the internal environment of DG Justice successful. Indexing on the preproduction environment scheduled
22.06.2018	Unsuccessful indexation in the preproduction environment
28.06.2018	Indexation in the preproduction environment restarted
04.07.2018	After several unsuccessful attempts for indexing of the ECLI sitemaps and intensive bilateral correspondence, the errors in ECLI XMLs have been identified. However, renewed generation of all ECLI XMLs required for their fixing
11.07.2018	A new full batch of approx. 1,7 Mio decisions extracted from the Centralised Web Interface has been generated with corrected errors in the ECLI XMLs. New re-indexation scheduled
12.07.2018	Successful start of the indexation of the full batch of approx. 1,7 Mio decisions
19.07.2018	A link to the search interface of the contractor’s environment sent by IT experts of DG Justice so that APIS can test the functionality of the ECLI Search Engine based on the 350,000 indexed decisions
25.07.2018	Successful tests of the indexed decisions in the contractor’s environment performed by APIS team. Two minor issues raised before the IT experts of DG Justice: the metadata field “Publisher” is not indexed and the name of the ECLI provider must be written as follows: “Единен портал за електронно правосъдие – България (Single e-Justice Portal – Bulgaria)”
21.08.2018	Successful indexation of 1,462,766 decisions so far; error related to the indexation of 2018 decisions encountered
22.08.2018	Renewed generation of the ECLI XMLs of 2018 decisions
30.08.2018	Successful indexation of the full batch of approx. 1,7 Mio decisions in the contractor’s environment. Start of the indexation in production environment and “go-live” with the Bulgarian decisions on the e-Justice Portal proposed by the IT experts of DG Justice and confirmed by APIS team members



31.08.2018	First batch of 83,921 Bulgarian court decisions published and searchable from the ECLI Search Engine on the e-Justice Portal
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The delay in establishing the interconnection with the e-Justice Portal (on 31.08.2018 instead of 31.07.2018, which is the deadline provided in the project plan) was mainly due to the unexpectedly slow indexing of Bulgarian judicial acts in the contractor's environment (about 300,000 per week) and the need to restart the process several times.

The screenshot below presents the list of the first 83,921 Bulgarian court decisions as available on the e-Justice Portal on 31 August 2018.



The screenshot shows the ECLI Search Engine interface. The search results are as follows:

ECLI number	Provider	Issuing country or institution	Issuing court	Decision/Judgment type	Date of decision/judgment	Date of publication	Wording of decision/judgment
ECLI:BG:DC550:2010:20090900627.001	The Single e-Justice Portal (Bulgaria)	Bulgaria	ОКРЪЖЕН СЪД - ГР.СТАРА ЗАГОРА (DC550)	Judgment	19/03/2010	19/03/2010	This metadata is available in the following language(s) only: BG
ECLI:BG:DC120:2010:20100500948.004	The Single e-Justice Portal (Bulgaria)	Bulgaria	ОКРЪЖЕН СЪД - ГР.БЛАГОЕВГРАД (DC120)	Judgment	19/03/2010	19/03/2010	This metadata is available in the following language(s) only: BG
ECLI:BG:RC111:2010:20100203876.001	The Single e-Justice Portal (Bulgaria)	Bulgaria	СОБВИНСКИ РАЙОНЕН СЪД (RC111)	Judgment	19/03/2010	19/03/2010	This metadata is available in the following language(s) only: BG
ECLI:BG:DC120:2010:20100500093.001	The Single e-Justice Portal (Bulgaria)	Bulgaria	ОКРЪЖЕН СЪД - ГР.СТАРА ЗАГОРА (DC120)	Judgment	19/03/2010	19/03/2010	This metadata is available in the following language(s) only: BG

The indexation and publication on the e-Justice Portal of the rest of approx. 1,6 Mio Bulgarian court decisions is expected to complete by mid of September 2018, according to the IT experts of DG Justice.

Thus, the process of establishing interconnection between the Bulgarian national case law portal (the Centralised Web Interface) and the ECLI Search Engine was successfully completed on 31 August 2018.