EXTENSIONS AND CORRECTIONS TO THE UDC

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Extensions and Corrections to the UDC gives notice of the officially authorized changes to the Universal Decimal Classification (UDC), proposals for future change, contributions to the UDCC from interested parties on topics related to the UDC and other relevant information. Issue 36-37 is the last issue to appear in print. Subsequent issues will be published in digital format only and will be available from the UDC Consortium Website.

The Extensions and Corrections to the UDC 36-37 (2014-2015) was prepared by Aida Slavic.

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Preparation of the First UDC Abridged Edition in Belarusian

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Abstract: The paper presents the project of the translation of the standard English UDC abridged edition held in the UDC Consortium translation database and preparation of the first abridged UDC edition in the Belarusian language. The Belarusian edition is published as a book (paper edition) and comprises over 10,000 classes and a subject-alphabetical index. The authors discuss some difficulties encountered in the process of the text translation and revision and explain the specific approaches by which these have been resolved. An overview of the situation regarding the classification systems used by Belarusian libraries is also provided.

1. Introduction

UDC is a comprehensive and detailed classification with well-balanced levels of divisions and subdivisions, which is widely used by libraries all over the world. Its main advantage is in its being maintained and continuously improved and extended by by an international body of classification experts. Belarus does not have its own national classification system. Nowadays libraries in Belarus use one or all of the following UDC tables: the 4th full Russian edition in 10 volumes prepared by the All-Union Institute for Scientific and Technical Information (VINITI) of the Russian Academy of Sciences; annual publications of the changes made to the UDC reference table made available at the beginning of each year; and an abridged Russian edition in one volume. Along with the printed edition, the Belarusian indexers frequently use the UDC database created by the Russian National Library for Science and Technology (in Moscow). The Acquisition Department of the National Library of Belarus (NLB) makes sure that all Russian UDC editions and all extensions and corrections to the UDC published by VINITI are obtained as soon as they are issued and that these are made available to indexers in the National library. NLB also have access to the Russian UDC database maintained by VINITI which is acquired via the state institution "I.S. Lupinovich Agricultural Library of Belarus" of the National Academy of Sciences of Belarus (BeIAL). The database contains all the changes made to the Russian-language version of the UDC in 2013. The NLB specialists constantly monitor information on new editions of UDC, changes, and additions through the Russian-speaking UDC Forum.

In early 2012 the NLB together with colleagues from the Republican Scientific and Technical Library (RSTL), and the Fundamental Library of the Belarusian State University collected information on UDC users in Belarus. The survey showed that in our country at the beginning of 2012, there were 178 UDC users including 7 national libraries, the National Book Chamber of Belarus, 121 science and technology libraries, 35 university libraries, and 14 republican medical scientific and practical centers. Unfortunately, there is no information on how widely UDC is used in school libraries (primary or secondary education).

Undoubtedly, the new abridged UDC in Belarusian and its continuous updates will provide an opportunity to carry out information organization and retrieval of national information resources on a qualitatively new level as well as an opportunity to apply classification scheme more consistently in library shelf arrangements and card catalogues where these are still being maintained. The translation of UDC into the Belarusian language will allow wider application and implementation of

the scheme which can lead to improving interoperability and enhancing subject access to collections in our country as well as in an international information exchange. Belarusian UDC edition is likely to encourage development of retrieval systems including individual library OPACs, union catalogues and bibliographic databases. In the long term, the availability of the Belarusian-language UDC tables will provide the integration of the UDC database with the Electronic Information Resource (EIR) of the national bibliography of Belarus, which implies the use of the UDC tables in Belarusian as the EIR search mechanism.

2. Phase 1: Translation of UDC Summary¹

In 2011 the Laboratory of Speech Recognition and Synthesis of the United Institute of Informatics Problems (UIIP) of the National Academy of Sciences (NAS) of Belarus worked on the project of the Digital Library for Schools (Hetsevich et al., 2012: 389-394). The purpose of the project was not only to create a repository of learning materials essential in supporting school education, but also to create the most user-friendly interface for such a system, which is impossible to imagine without perfect categorization of the content. UDC, certainly, looked an ideal solution for this task. However, as it has been mentioned before, the UDC version in Belarusian did not exist. The project team concluded that the translation of UDC into Belarusian would be a good solution. This led to the first step i.e. the translation of 2400 classes of UDC Summary into Belarusian (Figure 1).

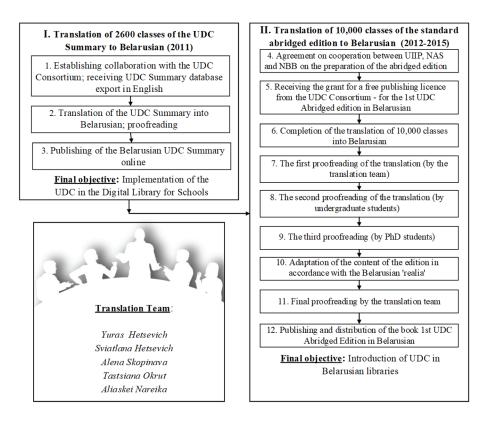


Figure 1: Project plan for the preparation of the Belarusian abridged edition

¹ UDC Summary is a selection of over 2600 UDC classes translated in over 50 languages available in an online translation database and released for use and distribution under the Creative Commons Attribution Share Alike 3.0 licence (Multilingual Universal Decimal Classification Summary. Online ed. The Hague: UDC Consortium 2011. (UDCC Publication No. 088). Available at: http:// www.udcsummary.info/php/index.php).

The first phase involved three stages:

Stage 1: Obtaining the export of the UDC Summary i.e. the original English-language text from the UDC Summary translation database.

We approached the UDC Consortium expressing our wish to start a translation project and to begin with the translation of the UDC Summary into Belarusian. We were presented with two options: to translate directly using online translation interface or work on the spreadsheets offline and send this to be uploaded and available at the UDC Summary website. For practical reasons the offline translation options provided us with an easier way of controlling and double checking the data prior to upload. Upon request we have received the spreadsheet containing data in English from the UDC Consortium.

Stage 2: The translation of the first set of UDC classes from English into Belarusian, and revision of the results.

In 2011 when the translation project started the UDC Summary comprised over 2400 classes (later in 2012 and 2013 this was extended to over 2600). The initial 2400 classes were translated into three stages i.e. exports with three levels of details: a) captions and including notes; b) exports containing notes; and c) exports with examples. After one level of the translation was completed, this was sent to the Consortium for upload and exports with further details were sent to us. The core team of translators included researchers from the UIIP of NAN of Belarus: Yuras Hetsevich (PhD degree in technical sciences) and Sviatlana Hetsevich (master's degree in philology). Later the translation agency of Aliaksei Nareika joined them, and four students of the Belarusian State University who underwent practical training. The different backgrounds of the team members proved valuable in handling the specifics of UDC content and difficulties with which it lends itself to translation due to its universal subject coverage and the large amount of specialist terminology from various subject domains.

Stage 3: The publication of the first Belarusian-language version of UDC (2400 classes).

At the end of 2011 the final version of the Belarusian UDC with 2400 classes was send to the Consortium and this was uploaded and was promptly available online. The final contained not only over 2400 captions but also over 700 including notes, 100 scope notes, 90 application notes and 100 examples of combination (Figure 3a). Apart from the fact that the first, albeit small, UDC schedules in Belarusian were accessible on Web they were also incorporated in the prototype of the Digital Library for Schools for educational purposes as it was originally planned. Thanks to the translation, it became possible not only to classify resources in the digital repository on a deeper level but also to expand this with an innovative interface function which included voicing descriptions of UDC classes with the help of text-to-speech synthesis.

3. Phase 2: Translation of the Standard UDC Abridged edition

The standard UDC abridged edition database contains almost four times more classes than the UDC Summary. The preparation and the production of the abridged edition book is significantly more complex. Therefore, we managed this project (from its start to the final book production) in nine phases as detailed in this section.

Stage 1: Finding partners for the preparation of the complete content of the standard UDC abridged edition in Belarusian.

In March 2012, the UDC Consortium offered a free use of the translation database of the Standard UDC Abridged Database to UIIP researchers, and announced a free publishing licence grant for the first edition in a national language. This grant was occasioned by the 20th anniversary of the UDC

Consortium and Belarus was eligible as no UDC editions in Belarusian were published in the past. To be able to benefit from this opportunity it was necessary to purchase a pre-publishing UDC MRF licence (worth \in 300) that regulates access to an extended set of UDC data and last but not the least it means that a further 7000 classes had to be translated. In the same month, this opportunity was represented at the international scientific and practical workshop "Local History of Libraries: the Territory of Great Opportunities and Prospects" which was hosted by the NLB and was dedicated to the development of national library resources. Still in order to find the financial support for UDC complete translation into Belarusian and its publishing, the UIIP negotiated not only with the National Library of Belarus, but also with the National Book Chamber. As a result, in November 2012, the NAS of Belarus and the NLB concluded an agreement for the purpose of information cooperation.

Stage 2: Receiving the licence grant

In October 2012, the NLB, and UIIP – received the grant license for publishing the first abridged Belarusian-language UDC edition.

Stage 3: Frist phase of the translation of the abridged UDC edition.

The core team of translators was extended with new members: Alena Skopinava (master's degree of philology), and Tatsiana Okrut – both are certified specialists in the field of computational linguistics. A significant fact is a considerable amount of information was translated by Lyudmila Kuharava – an entirely blind, however a highly qualified specialist in the field of translation theory and practice. Also we involved five students of the philological departments of the Belarusian State University. We believe that such practice has an extremely positive influence on professionalism of future experts. Thanks to hard work and unprecedented devotion to this project by the entire team, in March 2013 the first version of the translation of the complete set of 10000 classes of the UDC abridged edition into Belarusian was finished.

Stage 4: The first revision and proofreading by the core team of translators.

The primary revision of the first version of the translation, as well as the correction of mistakes and misprints was carried out by the translators themselves. Special attention was given to those UDC divisions which were translated by students. In April 2013, the team celebrated the fulfillment of this stage of works in an informal, yet solemn atmosphere.

Stage 5: The second revision and proofreading of the first Belarusian UDC abridged edition.

After the completion of stages 3, and 4, the revision and proofreading started with no delay. We think that a perfect translation is not just one containing no grammatical or semantic mistakes, but also one which is entirely understandable to the maximum number of actual and potential users. We consider students to be those who, not being professionals yet, possess a flexible and lively mind which lets them look into the very essence of one or another term or notion. So we gave them the task not only to keep looking for mistakes and misprints, but also to simplify some translation equivalents. But still the final decision on the adoption of alterations proposed by students is made by the central team of translators.

Stage 6: The third revision and proofreading of the first Belarusian UDC abridged edition.

The revision and proofreading works at stage 6 will be focused on the appropriateness degree of one or another term used as a translation equivalent. Of course, this can be done only by experts for specific subject fields. We approached and collected feedback from colleagues in Academy of Sciences of Belarus with relevant scientific degree. We believe that their support was essential for the quality of our translation, and a weighty reason for its introduction in the institutions at any level.

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Stage 7: Adaptation and broadening of the Standard UDC Abridged Edition to the 'realia' of the Belarusian people.

The use of UDC in the Belarusian libraries implicates an inclusion of the the Belarusian 'realia'. The term 'realia' is used here as defined by Vinogradov to denote everything that contains national background (Vinogradov, 2001: 103-111). According to Vinogradov, there are the following types of realia (with some potentially possible names of classes in relation to Belarus):

I. Social 'realia':

- 1. Housing, property (e.g. Property relations in Belarus)
- 2. Clothing (e.g. Belarusian national clothes)
- 3. Food and drinks (e.g. Peculiarities of the Belarusian cuisine)
- 4. Kinds of labour, occupations (e.g. Unemployment in Belarus)
- 5. Monetary system (e.g. Financial system of Belarus)
- 6. Measurement units
- 7. Musical instruments, folk dances and songs (e.g. Dudka as the Belarusian national instrument)
- 8. National holidays and games (e.g. Kaliady Celebration)

II. Ethnographic and mythological 'realia':

- 1. Ethnic and social communities and their representatives
- 2. Deities, fabulous creatures, legendary places
- III. 'Realia' of the natural world (e.g. Red Data List of Belarus, the Białowieża Forest):
 - 1. Animals
 - 2. Plants, sceneries, and landscapes

IV. 'Realia' of the state and administrative division, and public life:

- 1. Administrative units, state institutions, public organizations, parties, etc.
- 2. Industrial and agricultural enterprises
- 3. Military and police subdivisions and ranks
- 4. Civil professions, titles and ranks

V. Onomastic 'realia':

1. Anthroponyms

Stage 8: The final revision and proofreading of the first Belarusian UDC abridged edition.

Finally the revision and proofreading works are fulfilled by the core team of translators, and employees of the Belarusian translation agency managed by Aliaksei Nareika.

Stage 9: The publication of the first complete Belarusian-language version of the UDC abridged edition (10000 classes).

At this stage, the complete translation and content adaptation of the UDC abridged edition was finalized. The quality of the translation was secured by the educational background of the core team,



Figure 2: Book cover of the first Belarusian abridged edition 2015

specialists with scientific degrees, professional indexers of the NLB, and experience of the specialized translation agency.

By publishing this edition we have created a tool for implementation and use of UDC not only in the above-mentioned institutions but in Belarus as a whole.

4. Intricacies of the Belarusian translation process

The majority of translators involved in the translation project had a background in philology and linguistics, and for them the most difficult area to work with were classes dealing with technical terminology e.g. machinery construction, metalworking, and engineering. This problem is further exacerbated by the fact that there are no comprehensive specialized reference books in Belarusian for such branches of sciences as botany (class 58), systematic zoology (class 59), and geochronology (common auxiliaries of time "..."). In order to provide a good quality translation, we had to use different sources of terminology: the most recent standard dictionaries, dictionaries of idioms, various glossaries, research articles as well as the Web. Whenever a certain topic difficult to translate was found in the UDC text multiple reference sources were checked. An addition to this, whenever required, we consulted specialists of the Document Indexing Department of the NLB.

English and Belarusian belong to different language families and have very little in common which obviously places more demands on the translators. This is an especially relevant issue when one takes into account the concise style of the UDC schedules which require short and clear sentences with wording kept to a minimum. Similar to all other Slavic languages Belarusian has no need of articles and requires less prepositions, but at the same time lacks gerund which frequently appears in English text of the UDC schedules. Thus styling of the text to have academic and intellectual rigor and accuracy but to remain concise and maintain clarity was not always easy for translators. Clearly, often additional descriptions needed to be added to avoid ambiguity and there were certainly many issues with terminology that did not have Belarusian translation. Such was the case with the name of languages, religions, geographical names and names had to be introduced in Belarusian in its vernacular form following necessary rules for transliteration to Cyrillic script.

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5. Conclusion

During the first phase (2011) of the UDC Summary work, we translated almost 3,300 UDC records, or nearly 37,000 words (Figure 3(a)). The work on the standard abridged edition, in the second phase from 2013 -2015, included almost 12,900 UDC records, no less than 90,000 words (Figure 3(b)).

Field	English	Belarusian	Field	English	Belarusian
Caption	2512	2384	Caption	10577	10577
Including	634	621	Including	1074	1074
Scope Note	107	103	Scope Note	241	241
Application Note	96	95	Application Note	332	332
Examples	103	95	Examples	669	669
<u> </u>	(a)			(b)	

Figure 3: Statistics of theBelarusiantranslation in November, 2011 (a), and March, 2013 (b)

Following the successful completion of the project in 2015, further cooperation is envisaged between the UDC Consortium, UIIP and NLB in order make use of the new edition and link this to the development of library information technologies and systems and national electronic information resources in Belarus.

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List of organizations

All-Russian Institute for Scientific and Technical Information of the Russian Academy of Sciences (http://www2.viniti.ru/).

Russian National Library for Science and Technology (http://www.gpntb.ru/).

National Library of Belarus (http://www.nlb.by/portal/page/portal/index).

I.S.Lupinovich Agricultural Library of Belarus (http://belal.by/).

Russian-speaking UDC Forum (http://forum.udcc.ru/forumdisplay.php?f=8).

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Republican Scientific and Technical Library (http://rlst.org.by/).

Fundamental Library of the Belarusian State University (http://www.library.bsu.by/?vpath=/about/ news/).

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National Book Chamber of Belarus (http://natbook.org.by/en/main.php).

Laboratory of Speech Recognition and Synthesis of the United Institute of Informatics Problems of the National Academy of Sciences of Belarus (http://ssrlab.by/).