

**РОССИЙСКАЯ ГОСУДАРСТВЕННАЯ БИБЛИОТЕКА  
RUSSIAN STATE LIBRARY**

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**Library-Bibliographical Classification (LBC) –  
the National classification system  
of the Russian Federation**

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## Preface

The Library-Bibliographical Classification (LBC), which is the National Classification System of the Russian Federation, is considered as one of the largest universal classification systems according to the opinion of International Society of Knowledge Organization (ISKO). The LBC is the newest classification system applied in the world today. It appeared in 1960-s, whereas Melvil Dewey's Decimal Classification (DDC) was submitted in 1876, the Universal Decimal Classification (UDC) – in 1895–1905, the Library of Congress Classification (LCC) – in 1912, S. R. Ranganathan's Colon Classification (CC) – in 1936. By its semantic power the LBC can be compared with the UDC. The LBC belongs to the combinative systems (as well as the UDC); its capability cannot be measured in the quantity of main schedules divisions because the quantity of combinations with divisions of auxiliary classification tables is immeasurable.

The system's newness indicates its science-based structure and the accordance between its content and the contemporary level of science development and social practice. The LBC is a permanently developing system. The LBC has a broad range of options available – for scientific, public (termed “mass” in the USSR before 1991), regional libraries as well as full, medium or abridged schedules – presented now both in books and in machine-readable (electronic) form.

None of existing classification system could have survived that sort of severe social upheaval which had fallen to the lot of the LBC. Created in the USSR, it fully reflected the ideology of Soviet society. Only few years needed to accomplish the task of deideologization of its content entirely and to ensure the process of modernization, in fact, the updating of all the structure and contents. As a result, there came a schedules different from the Soviet LBC for its structure and content. In 2001, the commencing issue of the Medium LBC schedules appeared (the publishing is still proceeding: 6 of 9-10 issues have already been published). It is hard for libraries to have time to master each new issue of the schedules: the changes are so significant that it can even be necessary to start new ranges of catalogs, to restructure the book collections completely.

The LBC is the National classification system of the Russian Federation. It adequately covers history, philosophy, economics, and geography of Russia, art and culture of its peoples, doing that as completely as no foreign classification could do. The LBC is now used in 95% of libraries in our country.

The LBC has been remaining unknown for the classification community because of the natural language barrier – it is just several Russian-speaking specialists abroad who

know the system. In this information review we try to tell our foreign users about the LBC, the history of its development, dissemination, variants and editions, content and structure, combinative and other possibilities.

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## **Historical background. Steps of the development**

Libraries of the Russian Federation had not generally had any systematic catalogues until the early 20<sup>th</sup> century. Only in the biggest libraries of Russia, some original classification systems, developed by their Librarians, were in use. In the beginning of the century, the Librarian of the Imperial Public Library in Saint-Petersburg, A. N. Olenin (1763–1843) issued the “Practice of a new bibliographic order” (1808). In 1826, F. F. Reiss (1778–1852) submitted the “Disposition of the Imperial Moscow University library”. In the foreign department collection of the Library of Saint-Petersburg Academy of Sciences, the oldest library in the country, the system invented in 1841 by K. M. Baer (1792–1876), its Librarian, was in use. K. K. Foight (1808–1873) realized the “Plan of library disposition” (1834) in the Kazan University Library. All these systems fundamentally differed one from another in their structure, their authors had developed them without any methodological basis, and the requirements of library technology had not been taken into account. In fact, they were classifications of sciences, but not of documents.

Any joint recommendations on stock organization for the network of libraries of «zemstvo» (a district council in Russia in 1864–1918) had not been developed. Published guidelines of that time said that “books should be arranged on the shelves according to the branches of science; textbooks separate from novels and narratives”.

Having been born in the USA, the DDC never came to Russia, but the future UDC, which was then called “Decimal Classification of the International Bibliographic Institute” (DC of IBI), began to spread quickly since the beginning of the 20<sup>th</sup> century due to advocacy of B. S. Bodnarsky (1874–1968), an outstanding Russian bibliographer.

After the Great October Socialist Revolution, libraries of Russia went to the jurisdiction of the Main Department of Political and Educational Work (the Glavpolitprosvet), led by N. K. Krupskaya (1869–1939). The Glavolitprosvet belonged to the People’s Commissariat (Ministry) of Enlightenment. A. V. Lunacharsky (1875–1933) was its People’s Commissar. According to the governmental decree on Centralization of librarianship in the RSFSR (3<sup>rd</sup> November 1920), all libraries formed a joint library network. On the 21<sup>st</sup> January 1921, the Glavpolitprosvet decreed that the DC of IBI became obligatory for all libraries of the republic. A «Special Committee» of the Glavpolitprosvet prepared an abridged version of the DC of IBI (55 pages). In 1927, the 2<sup>nd</sup> issue (75 pages) proceeded, in 1931 – the 3<sup>rd</sup> issue (67 pages). The libraries’ reaction was negative (the Glavpolitprosvet were receiving letters started with words like: “It is not what we need” or “We want a Soviet classification”).

In a painful argument of that time between Systematic and Subject Catalogues, the latter, in which it was difficult to keep on checking ideology, was winning. But at the

Meeting on Theoretical questions of librarianship and bibliography (December 1936), N. K. Krupskaya said: “The main catalogue of Soviet libraries is alphabetical, leading catalogue is systematic. Subject catalogue is an additional catalogue; its organization is not required”. In a short time after the Meeting, almost all libraries’ subject catalogues were abolished, and a lot of library employees became political prisoners.

In order to find a solution to the classification problem, N. K. Krupskaya addressed to the prominent bibliographer L. N. Tropovsky (1885–1944), the head of the Department of bibliography of the Moscow State Library Institute (MGBI). In 1930, journal «Библиотековедение и библиография» (Library science and Bibliography) (1930. – №1–2. – P. 26-34) published an article by L. N. Tropovsky titled “The tasks of Soviet bibliography”. In its part of “Classifications questions” the current situation had been analyzed.

L. N. Tropovsky wrote that the Soviet Republic had the right to hold its own classification system, that this new classification system had to be built in accordance with the requirements of the classification of science, and that this question should be worked over by specialists-philosophers\*.

L. N. Tropovsky placed high emphasis on the necessity of connection between the general philosophical classification of science and the library classification. Philosophers of the country began to work on this question. At the same time, library specialists had to understand the needs of library practice, analyze bad experiences with the use of other classifications, and take all the best from the classification experience of the world. The new classification could be designed only by a large group of specialists from some of the biggest libraries. That group needed to get organized and set on the right track. Those specialists should be preliminarily instructed. We did not have such a group. It would take years to accomplish such a serious task.

**These principal statements, which were expressed in print by L. N. Tropovsky in 1930, enable us to regard Lev Naumovich Tropovsky as the prime, head mover of the future LBC and 1930 as the year of commencement of work on the new classification.**

In 1933–1934, N. K. Krupskaya had numerous meetings with L. N. Tropovsky. It was clear that the new classification would not be developed quickly. L. N. Tropovsky was entrusted with an urgent alteration of the DC of IBI.

L. N. Tropovsky’s project was published in the “Красный библиотекарь» (The Red Librarian) journal (1934. – № 7. – P.51–60; № 8. – P.55–62). Comments and suggestions were arriving in Moscow from practical librarians of different regions. In 1938, L. N. Tropovsky’s schedules were published. They were also issued in 1939, 1942, 1944, and 1946 (posthumous edition). Z. N. Ambartsumyan (1903–1970), his follower, prepared schedules for children’s and school libraries (1941, 1947). For the rest of his life, Z. N. Ambartsumyan continued his teacher’s work; the schedules for «mass» (public) libraries were republished under his editorship, with his corrections and amendments, in 1955, 1959, for region libraries – in 1963. The schedules for children’s and school libraries were republished in 1960 and 1964. All those editions went down in history under the name “Tropovsky-Ambartsumyan Schedules of Library Classification”. Thus the time lapse that gave an opportunity to develop a new classification system had been formed.

\*These words of L. N. Tropovsky had a great meaning: in 1925, the “Dialectics of Nature” by F. Engels (1820-1895) was first published in Moscow in Russian and German languages. It contained several dozens of collected articles, notes, and fragments (1873-1886). There was a fragment “Forms of Motion of Matter” (1880-1881) among them which presented Canon of the classification of science.

In the early 30-s, the problem of a Soviet classification creation was constantly discussed at library meetings, conferences, and congresses. The work was in hand in the Moscow Public Rumyantsev Museum (since 1924 the Lenin State Library, later the Russian State Library), in the Library of the Academy of Sciences, and in the Saltykov-Schedrin State Public Library. These three largest libraries later shared the responsibility to design the Soviet Library-Bibliographical Classification.

The first period of the LBC history includes the years from 1930 to 1951 and is associated with the name of E. I. Schamurin (1889–1962), a prominent Soviet scientist. He was charged to coordinate and lead the allied collective of three libraries. E. I. Schamurin managed to persuade party bodies, cultural officials, librarians, and library specialists that there was no task more important to the country than creation of a unified library-bibliographical classification for all libraries of the country. E. I. Schamurin said: “We are developing a unified, i.e. one only system for all libraries, from the smallest one to the largest, including special and subject fields’ libraries. We begin with systems structure planning, its first divisions, and then it will be amplified, detailed, expanded, and developed”.

E. I. Schamurin used to be a strong-willed, resolute leader, able to select, qualify, and train personnel. He would by all means dismiss anyone who was dubious, hindering in the work, academically weak, as well as those who were too strong and opposed any of the leader’s principles and rules. E. I. Schamurin perfectly realized that he should first of all isolate himself from L. N. Tropovsky. In all his lectures and speeches, in his numerous articles in press, E. I. Schamurin, highly appreciating the work of L. N. Tropovsky, would point out that the latter was engaged in a different area of “socialist library construction” providing the libraries with schedules that they could use until the LBC was ready. E. I. Schamurin emphasized that there was no time for distractions. For this reason, neither L. N. Tropovsky nor Z. N. Ambartsumyan, who was working with him, ever took part in the LBC work of E. I. Schamurin. E. I. Schamurin’s authoritativeness bore fruit, and sometimes it was not positive.

In 1938-1940, under the direction of E. I. Schamurin, a research and practice seminar on classification questions was permanently working in the Lenin State Library (LSL). Two times a week, a specially selected group (16-18 people) would assemble for 4 hours to listen to invited speakers. Almost no one of the group had library education. Olga Pankrat'evna Teslenko (1911–1974) was elected as the group leader. Some of the invited speakers were from Leningrad. Those who completed the course would permanently stay in the LSL staff.

For the time of the Great Patriotic War, the work on the LBC paused. However, as early as in May 1947, a plan of cooperative work of the three libraries was discussed, and, in January 1948, the general structure was approved. The first project (a large-size bound book in an edition of 1000 copies) was sent around libraries in October 1949. No comment

arrived. It turned out that the title-pages of the books had the mark “Ex. №...”, and all the books had been enumerated for purpose of comments control. According to the instructions of the Glavlit (Main Administration of Safeguarding State Secrets in the Press), all enumerated on title-page editions should be placed only in restricted-access library collections... An express republication was prepared and, in 1951, issued. Many libraries wrote in comments that there already were good Schedules of Library Classification. The necessity of a new classification was called into question.

The Central Committee of the Communist Party of the Soviet Union became acquainted with the projects as well. At the same time, the project of schedules under the editorship of Z. N. Ambartsumyan was ready. All libraries of the country were working using the Tropovsky-Ambartsumyan Schedules of library classification, library institutes and schools were teaching their students by those schedules. At a private meeting, a decision was made to dismiss the subject of “a unified classification for all libraries” and to give up this project. The administration of Lenin State Library was recommended to disband the group of E. I. Schamurin and to outplace its members in other departments charging them with a practice job. If the Library needed to solve its-own problems it could do it by keeping a small collective for that purpose. The network of mass libraries should not be affected.

In 1951-1953, there was not an article about the new classification.

### **Editions and variants of 1960 - 1990-s**

A new era of the LBC developing is associated with the name of O. P. Teslenko, who had more than dozen of specialists rallied round her. Others had been “outplaced”. Many departments of the Lenin State Library were headed by the staff members who had been trained at that seminar before the war.

At first, O. P. Teslenko tried to prove that the creation of the LBC would not contradict the goals set before mass libraries. Three libraries of Moscow region (all of them are within the boarders of Moscow city today) carried out an experiment. In 1955, schedules for mass libraries were published in an edition of 500 copies. The reaction of highest ranks was strict: the administration of the Library was rebuked and once again recommended to keep attention on its-own catalogues.

Bonifatii Mikhailovich Kedrov (1903–1985), a famous scientist, gave the greatest assistance to O. P. Teslenko with “the LBC rescue”. In 1947, he started consulting the group of developers. B. M. Kedrov contacted the Presidium of the Academy of Sciences of the USSR, advised to find in the Ministry of Culture of the RSFSR (Russian Soviet Federative Socialist Republic) officials who could give some support. Following his recommendations, O. P. Teslenko met Vasilii Mikhailovich Striganov (1920-1985), Deputy Minister of Culture of the RSFSR. Vasilii Mikhailovich visited the LSL, had a meeting with the collective, and fully realized the difficulties of the problem. The Presidium of the Academy of Sciences made decision to support the development of the LBC entirely.

In February 1959, according to the order of the Minister of Culture of the Russian Federation, the Editorial Board on the LBC publication was formed. V. M. Striganov agreed to become its president. He not only took responsibility for the LBC for several

decades ahead, but also very soon grasped classification theory as well as the majority of specialists, maybe even better than some. The Libraries' new Director Ivan Petrovich Kondakov (1905-1969) declared at his first meeting with colleagues that he considered development and publication of the LBC as the most important goal entrusted to the LSL. Member of the Editorial Board B. M. Kedrov, corresponded member of the Academy of Sciences of the USSR, reached favorable decisions of the Presidium of the Academy on principal points.

The LBC first edition was under elaboration for almost ten years. I. P. Kondakov's firm insistence and managerial abilities assured the success of the undertaking. O. P. Teslenko, the LBC editor-in-chief, had been put in charge of the academic side of the work. Total output volume of the first edition (1960-1968) in 25 issues (30 books) made more than 600 publishing sheets (1 p.s. = 40 000 typographical unit).

Nobody noticed when the tasks set before the LBC developers had changed: the question of development of "a unified system for all libraries of the country" had been removed from the agenda. Efforts were made to create a depth detailed classification system which would be aimed at the largest universal and special scientific libraries. Set later, the problem of making abridged variants became a real challenge and took many years.

The LBC development began in three libraries in Moscow and Leningrad (more than five hundred qualified library specialists in total). The operative administration of the huge team was exercised by the deputy director Feoktista Sergeevna Abrikosova (1907-1983). The Lenin State Library undertook the full range of activities on the text and alphabetical-subject indexes general editing and on the publishing as well (the first edition was published on the Libraries' typographical equipment; the technical editing, the typeset and other polygraphic processes were all provided by the library staff).

Some appropriate divisions were included in the structure of the Processing and Catalogues Department. The Main Working Editorial Board (16 specialists), led by O. P. Teslenko, was formed. Moreover, most qualified specialists of the department, along with performance of their current compilation duties, were involved in 10 specialized editorial councils. List of the councils will be of interest: Editorial council of structure, Editorial council of theory and history, Editorial council of historical periods, Editorial council of special standard subdivisions and plans of dispositions, Editorial council of general standard subdivisions and overall divisions, Editorial council of territorial standard subdivisions, Editorial council of notation, Editorial council of recommendations and references, Editorial council of wording, Editorial council of alphabetical-subject indexes.

General structure of the publication, with a separation into issues, was approved (some issues were divided into parts):

- 1 Foreword to the LBC. Introduction
- 2 А Marxismus-Leninismus
- 3 Б/В Natural sciences as a whole. Physico-mathematical sciences
- 4 Г Chemical sciences
- 5 Д Earth sciences (geodesical, geophysical, geological and geographical sciences)
- 6 Е Biological sciences
- 7, p. 1Ж Engineering and technology as a whole

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|-------------|--|
| 7, p. 23    | Energetics. Radioelectronics   |
| 8 И/К       | Mining engineering. Technology of metals. Machine building. Instrument making  |
| 9, p. 1Л    | Chemical technology. Chemical and food industry  |
| 9, p. 2М    | Technology of felled timber. Consuming goods industry. Printing production. Photographic and cinematograph engineering                                 |
| 10 H        | Building industry  |
| 11 O        | Transport industry   |
| 12 П        | Agricultural industry and forestry. Agricultural and forestry sciences   |
| 13 P        | Public health. Medical sciences  |
| 14, p. 1С/Т | Social sciences as a whole. History. Historical sciences   |
| 14, p. 2    | History. Historical sciences. Т3(2) History of the USSR  |
| 14, p. 3    | History. Historical sciences. Т3(4/9) Foreign history  |
| 14, p. 4    | History. Historical sciences. Т4 Archeology. Т5 Ethnography  |
| 15 Y        | Economics. Economical sciences   |
| 16 Ф6/7     | Polytical parties. Other socio-political organizations<br>[In the first edition of the LBC, no other subdivision of the political science was covered] |
| 17 X        | State and law. Juridical sciences  |
| 18 И        | Military science. Art of war   |
| 19 Ч        | Culture. Science. Enlightenment  |
| 20 III      | Philological sciences. Belles-lettres  |
| 21 ИИ       | Art. Art studies   |
| 22 Э        | Religion. Atheism  |
| 23 Ю        | Philosophical sciences. Psychology   |
| 24 Я        | Universal content literature   |
| 25          | Tables of standard subdivisions  |

In the first edition of the LBC, only 219 people from 15 organizations were indicated as the book's authors. The Scientific Principle was a basis during the LBC development. From the very outset, it had been decided that the schedules should conform to the level of science of the 1960s. To deliver on this task, scientists and specialists were needed. Schedules on a preliminarily classified (by professional librarians with a subject educational level) subject field were scrutinized by scientists. Over 800 scientists in total (academicians, corresponded members, doctors and candidates of science) acted as experts and reviewers. Each subject issue of the schedules contains information about the experts, reviewers, and supervisors of the development project.

When it became clear that the Russian letters notation of the main row (first divisions) of the LBC would be a serious obstacle to the LBC schedules' prevalence, especially in foreign countries, and in some national Republics of the USSR as well, the Working Group on the LBC notation (Z. N. Ambartsumyan became its chief) was created in the Lenin State Library by the order of the Ministry of Culture of the USSR. For a year and a half (1966-1967), a great amount of research work had been carried out, however, the Working Group was not able to achieve the ultimate goal. In 1969, a decision was made: the notation of the main row in the LBC schedules for mass libraries should be numerical.

The project was prepared by a member of the Working Group E. R. Sukiasyan. One of the variants was suggested. The structure of the LBC was not changed. A small percentage of the classification numbers gained an extra sign. The numerical notation put the LBC classification numbers into a shape different from the classification numbers of other systems with numerical notation: in the LBC: two first figures of the classification number were followed by a separating point. The numerical notation was welcomed by libraries.

By the middle of 60s, the question of an urgent creation of schedules for special branch libraries, of which there were thousands within the country, whereas universal or multidisciplinary libraries numbered no more than several hundreds, came up point-blank. A decision was made to downsize the schedules approximately to a sixth part of their full volume. The abridged LBC schedules for scientific libraries (in 5 issues, 6 books) were published in 1970-1972, and an alphabetical-subject union index to this variant of the schedules was issued in 1975 as a separate volume. All the books were bought up despite the fact that the conception of this variant had almost never been discussed with librarians. It later became clear that foreign experience, the experience of the Universal Decimal Classification (UDC) first of all, had been learnt poorly. UDC Special (subject fields) Schedules had already been renowned, they united the full texts of the field-specific and related classes and the abridged (more or less, depending on the practical requirements) texts of other classes.

In the beginning of 1967, the Program on creation of an edition of the LBC schedules for regional and public libraries was enacted. The document directed to publish the abridged editions for regional and public libraries as unified schedules with numerical notation that would include all fields of knowledge.

Z. N. Ambartsumyan initiated a decision to organize a preliminary preparation for the LBC schedules' implantation into mass libraries of the state. For this purpose the regular (third) edition of the "traditional" Library Classification Schedules was prepared for mass libraries, keeping old structure and notation. However, all the content had been entirely revised: new sections appeared, some wording changed. These schedules were issued in 1968, and libraries immediately started editing their systematic card catalogues. Properly speaking, it was a "secretly" organized wide-range frontal activity on the forthcoming conversion of the catalogues into the LBC schedules system.

In 1969-1971, projects of the schedules for mass libraries were discussed many times. Only at the end of 1976, a one-volume LBC edition was passed for printing in a huge edition of 37 thousand copies (in 1986 it was republished). The LBC schedules for children's libraries were issued in 1977. Published in 1987, the second edition, revised and enlarged, was addressed not only to children's libraries but also to school ones, which constituted the biggest library network of the county. The LBC schedules for regional libraries appeared in print in four volumes with numerical notation in 1980-1983. Lack of the alphabetical-subject union index in this edition caused great difficulties when using. At the initiative of local-lore bibliographers, the Working Group on creation of local-lore LBC schedules was formed in 1982. After many discussions and disputes, these schedules went to print in February 1989.

Publications of the LBC schedules for mass libraries translated into languages of different nationalities of the USSR were launched in all Soviet Republics in 80s-90s. Tak-

ing into account languages of the peoples of Russia (for example, the Tatar language), 34 such editions are known.

**The LBC and the automated search.** In 1971-1972 in the Lenin State Library, under the direction of Vsevolod Yuryevich Nevraev (1926-1974), projecting on applying of the LBC in computer systems started. For the first time ever, the idea of computer information search using the element-by-element method of the LBC classification numbers was suggested and successfully realized by experiment. In combinative classification systems (such as the UDC and the LBC), a classification number consists of some structural elements, which together adequately and multiple-aspectly break out the document's content. Some methods of element-by-element indexing were found, a computer would make proper search and give information. Shortly after V. Y. Nevraev's accidental death, the work on this matter was laid aside, and the collective broke up. The element-by-element classification search quietly began to get forgotten. The Subject Access, with a weak version of indexing by key-words, became leading in the USSR and abroad. However, the priority of our country in the matter of development of the element-by-element search technology was preserved by a number of publications in 1976. Lucita Sanches Mehido and Elena Nikolaevna Fadicheva defended their doctoral theses.

**Extensions and corrections to the LBC.** In 70s-80s, there were published more than 200 issues of Extensions and Corrections to different variants of the LBC schedules. The schedules' editors were quickly responding to actual events in domestic and foreign life, to development of science and technology. The sections of biology, philological sciences, sociology, the schedules of special standard subdivisions, some fragments of the schedules of general standard subdivisions, and some others were republished.

According to world-class experts, the LBC is among the systems which actively and quite appropriately react to all changes in science and social practice. This opinion may probably seem debatable, unless you know that in other universal systems the process of deteriorating comes to pass much passively.

**The State Prize Award** for Science for the series of works of "The Library-Bibliographical Classification" (1981) became a notable event in the history of Russian library-bibliographical science. Here is the list of Laureates of this State Prize: the LBC chief editor Olga Panktat'evna Teslenko (1911-1974) (posthumous); deputy minister of culture of the RSFSR Vasilii Mikhailovich Striganov (1920-1985); Nina Platonovna Zhurzhalina (1921-2015), Svetlana Pavlovna Ivanova (b. 1928); Olga Vladimirovna Danilova (1938-1985); Irisa Gevondovna Khandzhyan (1909-1997); Antonina Vasil'evna Benevolenskaya (1917-2005); Valentina Grigor'evna Zemlyanskaya (1936-1978); Ekaterina Petrovna Romannikova (1918-1999), all the people listed above had worked in the Lenin State Library; Aleksander Alekseevich Panov (1907-1981), the Library of the Russian Academy of Sciences; Galina Florent'evna Naumenko (1922-2010) and Vadim Lvovich Pariyskiy (1921-2006) from the Saltykov-Shchedrin State Public Library.

**The LBC implementation into a library practice.** Since 1965, according to decisions of the librarianship governance, the implementation of the first edition of the LBC schedules into a library practice started across the country. The decision of the Ministry of Culture was supported by the Library Commission at the Presidium of the Academy of Sciences of the USSR, by the All-Union Central Council of Trade Unions, by the Ministry

of Higher Education and Specialized Secondary Education of the USSR, by the Chief Political Directorate of the Soviet Army and Navy. The Lenin State Library was charged with the scientific-methodical management of the project. A number of All-Union and Republic meetings were held; practice seminars were organized in some regions of the country. A lot of manuals for libraries were published. A similar work would take place right after issuing of each derived variant of the schedules.

**The LBC abroad.** O. P. Teslenko was the first person who gave an objective analysis to the LBC, to its structure and content; the analysis occurred in the additional chapter, published in Leipzig in 1967, to the second volume of E.I. Shamurin's "Essays on the history of library-bibliographical classifications" (the first volume had been issued in 1964). Expressly for publication in the German Democratic Republic (GDR), O. P. Teslenko had written the final chapter «Die Klassifikation in der UdSSR von 1958 bis 1965», which supplemented the text of the monograph. The chapter has never been published in Russian translation.

In 1986, a dedicated to the libraries of the USSR special edition of the English journal "Library World" (London) was issued. The topics of the articles were determined by editors. The article by E. R. Sukiasyan «Problems of classification in Soviet libraries» (Library world (London). – 1968. – Vol. 69, № 815. – P. 275–279) had its final part dedicated to the LBC. It revealed the LBC's combinative characteristics, its capability to reflect in a single classification number a considerable quantity of attributes.

At 1960s in Bulgaria, in the GDR, and in Czechoslovakia, groups of the LBC supporters had already appeared; a translation of some selected issues of the schedules started. In 1970 in Bulgaria, a decision was made to consider the LBC as a uniformed information retrieval language for scientific libraries of the country. The main trouble was the graphical correspondence of eleven letters in Cyrillic and Roman alphabets (A, B, E, K, M, H, O, P, C, T, X), which caused elementary problems in communication.

In 1974 in published monograph "Grundlagen universaler Wissens-ordnung: Probleme und Möglichkeiten eines universalen Klassifikationssystems des Wissens" (Munich: Verlag Dokumentation, 1974. - XVIII, 366 p.) (Basic Foundation of Universal Knowledge Organization: Problems and Opportunities of Creation of a Universal Knowledge Classification System), Ingetraut Dahlberg (Germany) gave a description of constructional principles and structure of the LBC, a list of its main divisions, highly evaluated its retrieval and technological parameters. During the same period of time (December 1974), Gudrun Fröschner defended her doctoral thesis "Application Problems of the Soviet Library-Bibliographical Classification in Libraries of the GDR".

Starting from 1974, international conferences where assembled specialists in the field of library classification from Bulgaria, Hungary, the GDR, Poland, Romania, the USSR, Czechoslovakia, and Yugoslavia were regularly held. Unfortunately, many regulations put forward in the conference reports were not deeply analyzed later. Without a unified solution, each country had to solve the problem of Russian letters notation in its-own way. For example, in the Bulgarian and Vietnamese editions, the Russian letter "Б" was replaced by the Roman letter "B"; in the German edition, transcriptional methods were applied (the letter "И" was replaced by the combination "Shch"). The logical row of the LBC's principal divisions was broken.

In 80s, the LBC took firm positions in a lot of countries. Many countries implemented several editions of the LBC. The full schedules were translated and published in the GDR, Bulgaria, Slovakia, and Vietnam. A one-volume edition was issued in Cuba, while in Bulgaria an edition of 4-5 volumes was being made ready. There was some information that the LBC schedules were being translated in Spain and Japan.

In 1990, G. Helbig issued in the Federal Republic of Germany own project of classification for scientific libraries which used the principles of the LBC structure. During 90s, a discussion was being held in the Germany about a possibility of using of the LBC to elaborate a new classification system for scientific libraries of the country. Moscow knew that, any move made by our country would have given a result. But everyone realized that the move would have resulted in deterioration in the relations with specialists from the GDR, where the LBC schedules were still being published (the GDR Scientific Libraries Methodological Centre issued the German adaptation of the LBC schedules in 1983-1991). Obviously, our colleagues from the Germany too understood it.

In the late 80s, the international cooperation between specialists on classification systems reached a new level. In July 1989 in the FRG, the International Society for Knowledge Organization (ISKO) was created; Soviet experts were invited to be member of it. E. R. Sukiasyan was elected as a Member of the Scientific Consulting Council and as a Consulting-Editor of the ISKO's official organ "International Classification". For the ISKO First International Conference (Darmstadt, Germany, August 1990), E. R. Sukiasyan made a paper on the subject offered by the Organizing Committee: "Description and Analysis of the Library-Bibliographical Classification". The demonstration of the LBC's combinative and searching possibilities aroused great interest of the audience. The ISKO experts included the LBC among the largest universal systems of global importance. This paper was published in the Proceedings of the Conference.

We do not really know how many libraries of the former Socialist Commonwealth Countries (those are present-day Bulgaria, Slovakia, Hungary, Romania, and Vietnam) still work using the LBC schedules, also we are unaware if the LBC ranks are kept in Cuba. The well-established scientific and methodical relations have been destroyed. The recovery process depends on us in many respects: if the LBC develops and the schedules are printed then the contacts will be re-established anyhow.

The reinforcement of the LBC positions in modern Europe and America strongly depends on when and to what extent the LBC schedules translated in English, the main language of the classification community, will be published. It is reasonable that our country is the one which has to implement this project. The translation will allow the LBC to be included into the range of sources that are constantly studied and analyzed by the specialists in the field of classification history and theory. There is not a funding source for such a large-scale project in Russia. We can only hope for a sponsorship from abroad. We are ready for collaboration.

**The LBC in a new period of history.** Every classification system has to adequately reflect the realities of the modern world, the development of science and contemporary practice; but the LBC was put into the conditions of change of ideology of the target society, which made the task of its modernization tenfold more complicated. Not a single classification system in the history of mankind had ever had to meet such a challenge.

In the early 90s, we found ourselves in a new country. The LBC, being created in the Soviet Union and satisfying propaganda tasks of the socialist society, right away became unsuitable for library practice. Ideological and content categories of the book flow had changed; the new environment had made them mismatched with assessments and formulations given in the LBC.

Some of the former Soviet Republics solved this problem radically: they converted their collections and catalogues to the UDC (Lithuania, Latvia, Estonia, Georgia, Moldova, partly Ukraine). Other countries preserved the LBC, though the operative acquisition of corrections and extensions almost ceased.

Maybe, we should switch to the UDC, which had “conquered the world”? We approached to the situation assessment quite objectively. The UDC is in use far from “everywhere” (for example, the application field of the DDC is four times larger). Neither public nor school libraries can work by the UDC. Why cannot our country have its-own National Classification System which will reflect our history and philosophy, our great culture? There are internal national systems in the USA (the DDC and the LCC), Sweden, and China. Other countries have to deal with some internationally-spread systems such as the UDC and the DDC. There is not an international system for the whole world. The UDC and the DDC are owned by private, nonprofit organizations – the UDC Consortium and the OCLC Forest Press.

Any attempts to represent the LBC as a product of an “ideological demand” are baseless because the ideology used to be just one of its characteristics. It is impossible to ignore its other characteristics – first of all, the structural and technological, and combinational ones – as well as its informative value. The LBC’s technological capabilities are much bigger than search needs of a card catalogue. The LBC has got the undeniable advantages which have not been yet implemented in computer information searching at all.

In the aggregate, all these characteristics had brought the LBC among the largest universal classification systems of the world. The ISKO experts made a suggestion to accept the worldwide typology of publishing schedules simultaneously with a machine-readable master copy which could provide the basis for creation of full, medium, and abridged editions of the schedules. We logically came to another decision: not to publish the full LBC schedules in a book form any more. For their storage, it is better to use some modern electronic media. Having necessary programs and equipment, the full schedules can be gradually converted into the detailed ones (with combined classification numbers and complex concepts). In other countries, this machine-readable master copy is called Master-reference file and is based on a classification format. We have the classification format with – in our domestic RUSMARC-format.

Recently, another opinion has reappeared: “Why do we need a classification at all? Keyword searching is enough...” It must probably mean that the books on freely available bookshelves (that is a real prospect by the way – there is no alternative in our information society) will be arranged in a keywords alphabet...

By the early 90s, the confrontation between the UDC and the LBC, which occurred in our country in the 60s, had ended forever. Nowadays, classification systems grow in conditions of friendship and cooperation between the specialists. It has been proved that a

search by means of two or three systems is much more convenient for scientists and specialists.

## **Description and analysis of the LBC as a classification system**

Laying aside philosophical foundations of the **LBC structure**, we are going to show you its structure in general, in contemporary interpretation:

### **1 General scientific and interdisciplinary knowledge**

*Publishing plan 2018*

### **2 Natural sciences**

*Publishing plan 2016. Structure of last edition (1980)*

#### **20 Natural Sciences in general**

#### **22 Physical and mathematical sciences**

22.1 Mathematics

22.2 Mechanics

22.3 Physics

22.6 Astronomy

#### **24 Chemical sciences**

24.1 General and inorganic chemistry

24.2 Organic chemistry

24.4 Analytical chemistry

24.5 Physical chemistry. Chemical physics

24.6 Colloidal chemistry (physics-chemistry of disperse systems)

24.7 Chemistry of high-molecular connections (polymers)

#### **26 Earth sciences (geodetic, geophysical, geological and geographical sciences)**

26.0 Earth in general

26.1 Geodetic sciences. Cartography

1 Higher geodesy; 2 Geodesy. Topography; 3 Phototopography. Fotogrammetry; 4 Applied geodesy; 17 Cartography; 26.18 Cartographic materials [*special table*]

26.2 Geophysical sciences

0 Geophysics in general; 1 Physics of the Earth's interior; 2 Hydrology; 3 Meteorology

26.3 Geological sciences

01 Geochemistry; 03 Mineralogy; 04 Petrography; 08 Dynamic geology; 09 Tectonics (structural geology); 21 Volcanology; 23 Historical geology; 24 Geosynoptics; 25 Minerals; 26 Hydrogeology; 28 Permafrostology; 29 Engineering geology; 54 Marine geology

26.8 Geographical sciences

2 Physical geography; 9 Regional geography. Local studies

26.9 Earth sciences – regional section

- 28 Biological sciences**
- 28.0 General biology
- 28.1 Paleontology
- 28.3 Virology
- 28.4 Microbiology
- 28.5 Botany
- 28.6 Zoology
- 28.7 Anthropology
- 28.8 Embryology, Human anatomy and histology
- 28.9 Biophysics, Biochemistry, Animal and human and physiology
- 3 Ж/О Engineering and technology. Technical sciences**
- 30 Engineering and technology, technical sciences in general
  - .1 All-engineering disciplines; .2 Design; .3 Raw and other materials. Materials science; .4 Constructions; .6 General technology. Fundamentals of industrial production; .8 Installation, operation, repair of machinery and industrial equipment; .9 Reconstruction and modernization
- 31 Power engineering
- 32 Radio electronics
- 33 Mining
- 34 Technology of metals. Mechanical engineering. Tool engineering
- 35 Chemical technology. Chemical production
- 36 Food production
- 37 Wood technology. Light industry production. Housekeeping(?). Printing production. Photographic and cinematographic engineering
- 38 Construction engineering 39
- Transport engineering
- 4 Agriculture and forestry. Agricultural and silvicultural sciences**
- 40 Natural-science and technical fundamentals of agriculture
  - .0 Agricultural biology (agrobiology). Agricultural ecology; .1 Agro-physics; .2 Agricultural meteorology; .3 Soil science; .4 Agrochemistry; .5 Agricultural microbiology; .6 Agricultural melioration; .7 Mechanization and automation of agriculture. Aircraft and space equipment in agriculture; .8 Agricultural constructions; .9 Agrogeography (agricultural geography)
- 41/44 *Plant growing*
- 41 General plant growing
- 42 Specific plant growing
- 43 Forestry. Silvicultural sciences
- 44 Protection of plants
- 45/46 *Animal husbandry*
- 45 General animal husbandry
- 46 Specific animal husbandry
- 47 Hunting
- 48 Veterinary science
- 49 Agriculture and forestry of certain areas

## **5 Health care. Medical sciences**

- 51.1 Social medicine and the organization of health care
- 51.2 Hygiene
- 51.9 Epidemiology
- 52.5 General pathology
- 52.6 Medical virology, microbiology, and parasitology
- 52.7 Medical immunology. Immunopathology
- 52.8 Pharmacology. Pharmacy. Toxicology
- 53.0/57.8 *Clinical medicine*
- 53.0 Clinical medicine in general
- 53.1 Allergic and immunity-related diseases. Clinical immunology
- 53.2 Hereditary diseases
- 53.4 General diagnostics
- 53.5 General therapy
- 53.6 Medical radiology and roentgenology
- 53.7 Anesthesiology and resuscitation science
- 54.1 Internal diseases
- 54.5 Surgery
- 55.1 Infectious and parasitic diseases
- 55.4 Phthisiology
- 55.5 Rheumatology
- 55.6 Oncology
- 55.8 Dermatovenerology
- 56.1 Neuropathology. Neurosurgery. Psychiatry
- 56.6 Stomatology
- 56.7 Ophthalmology
- 56.8 Otorhinolaryngology
- 56.9 Urology
- 57.0 Medical sexology
- 57.1 Gynecology
- 57.3 Pediatrics
- 57.4 Geriatrics
- 57.8 Chronomedicine
- 58 Applied branches of medicine
  - .1 Forensic medicine; .2 Marine and undersea medicine; .3 Arctic and Antarctic medicine; .4 Tropical medicine; .5 Aviation medicine;.6 Space medicine; .9 Military medicine

## **6/8 Social and human sciences**

### **60 Social sciences in general**

- 60.0 Social philosophy
- 60.5 Sociology
- 60.6 Statistics
- 60.7 Demography
- 60.8 Social management

60.9 Social protection. Social work

### 63 History. Historical sciences

.0 Theoretical bases and methodology of the historical science; .1 History of the historical science; .2 Source study. Auxiliary historical disciplines (source study; archaeography; genealogy; heraldry, emblem studies; diplomacy; historical geography; historical metrology; numismatics; paleography; papyrology; sphragistics; historical chronology; epigraphy)

63.3 History

63.3 (0) World history

63.3 (0)2 Primitive society

63.3 (0)3 Ancient world

63.3 (0)4 Middle Ages (from the 5<sup>th</sup> to the 15<sup>th</sup> century)

63.3 (0)5 Modern History (from the 16<sup>th</sup> century to 1918)

63.3 (0)6 Contemporary History (from 1918 to the present day)

63.3 (0 = ...) History of certain peoples that live dispersedly in various countries

E.g.: 63.3 (0=51) History of the Armenians

63.3 (051) History of Eurasia

63.3 (2) History of Russia

63.3(4) History of Europe

63.3(5) History of Asia

63.6(6) History of Africa

63.3(7) History of America

63.3(8) History of Australia and Oceania

63.4 Archeology

0 Theory and history of archeology; 4 Archeology of certain historical periods; 8 Archeology of certain territories; 9 Comparative archeology

63.5 Ethnology (Ethnography)

0 Theory and history of ethnology; 1 Historical ethnology; 2 Ethnology of modern peoples; 7 Comparative ethnology; 8 Related ethnological disciplines (ethnopedagogics, ethno-linguistics, ethnosociology, ethnopolitical science, ethnoecology, ethnic religious studies, ethnogeography, etc.)

### 65 Economics. Economic sciences

.01 General economic theory; .02 History of economic thought; .03 Economic history (history of economy); .04 Economic geography and regional economy; .05 Management of economy. Economic statistics. Accounting. Audit. Economic analysis. Planning. Forecasting

65.2/4 Sectors and branches of economy. Interindustry complexes

65.20 Economic sectors

65.22 Real estate economy

65.24 Labour economy

- 65.25 Prices. Pricing
- 65.26 Finance
- 65.27 Insurance. Social insurance. Social security
- 65.28 Economy of natural resources, of environmental management, and of environmental protection
- 65.29 Business. Enterprise. Economy of organization of an enterprise (a firm)
- 65.30 Industrial economy
- 65.31 Construction economy
- 65.32 Agricultural economy
- 65.34 Economy of forestry. Economy of forest exploitation
- 65.35 Economy of fishery. Economy of fishing industry
- 65.37 Transport economy
- 65.38 Communication economy
- 65.41 Government procurements (state order)
- 65.42 Trade
- 65.43 Industry of hospitality and tourism
- 65.44 Municipal economy
- 65.45 Melioration economy. Water economy
- 65.47 Advertising economy
- 65.49 Welfare economy
  - 5 Health care economy; 6 Economy of social protection, social work; 7 Economy of culture, science, education; 85 Art economy
- 65.5 World economy. International economic relations
- 65.6 Economy of developed countries
- 65.7 Economy of developing countries
- 65.8 Economy of socialist countries
- 65.9 Economy of certain countries and regions. Economy of World Ocean

## **66 Politics. Political science**

- 66.0 Political science
- 66.1 History of political thought
- 66.2 Politics and the modern political situation in general
- 66.3 Domestic situation. Domestic policy
- 66.4 International relations. Foreign policy. Diplomacy
- 66.6 Political movements and parties
- 66.7 Social movements and organizations

## **67 Law. Legal sciences**

- 67.0 General theory of law
- 67.1 History of legal thought
- 67.3 History of state and law
- 67.4 Branch (special) legal sciences and branches of law
  - 00 Constitutional (state) law; 01 Administrative law; 02 Financial law; 04 Civil and commercial law. Family law; 05 Labour law and social security

- law; 07 Natural resources law. Environmental (ecological) law; 08 Criminal law; 09 Criminal-executive law; 10 Procedural law. Court procedure
- 67.5 Branches of knowledge adjacent to jurisprudence
- 67.7 Judicial authorities. Law-enforcement authorities in general. Legal profession
- 67.9 International law. Law of certain countries
- 68 Military arts. Military science**
  - 68.0 Military science in general
  - 68.1 Military policy. Military doctrines
  - 68.2 Theory of military art
  - 68.3 Military historical science
  - 68.4/7 Armed forces
    - 68.4 Armed forces in general
    - 68.5 Certain kinds of armed forces, branches of military forces and services
      - 1 Land forces; 2 Air Forces; 3 Naval forces; 4 Strategic missile forces; 5 Space forces; 6 Airborne-landing forces; 7 Border-security and internal-security forces; 8 Special forces (forces for some special operations); 9 Other military services
    - 68.7 War economy. Rear services and support of armed forces
    - 68.8 Military equipment. Technical and special military sciences
      - 1 Technical means of maintenance of troops and military equipment; 2 Military radio electronics. Technical means of military administration; 3 Geodesy in military science. Military topography. Photography in military science. Military photogrammetry; 4 Military meteorology; 5 Military geology; 8 Military geography; 9 Other technical and special military sciences (military ecology, military statistics, etc.)
    - 68.9 Civil defence
- 7 Culture. Science. Education**
  - 71 Culture. Cultural science
    - .0 Theoretical (fundamental) cultural science; .1 Historical cultural science; 71.4 Applied cultural science
  - 72 Science. Science studies
  - 74 Education. Pedagogical sciences
    - .0 General pedagogics; .1 Pre-school education. Pre-school pedagogy; .2 General educational pedagogics. School pedagogics; .3 Education of adults. Andragogy; .4 Professional and special education; .5 Special schools. Correctional (special) pedagogics (surdopedagogics, tiflopedagogics, oligophrenopedagogics, logopedics, etc.); .6 Specialized branches of pedagogics (subject pedagogics, comparative pedagogics, ethnopedagogics, social pedagogics); .9 Family education. Family pedagogics
  - 75 Sport and physical education
  - 76 Mass Media (MM). Book industry
  - 77 Cultural and leisure activities
  - 78 Library, bibliographic, and scientific information activities

- 79 Protection of historical and cultural monuments. Museology. Exhibition busines. Archiving
- 80/84 Philological sciences. Fiction**
- 80 Philological sciences in general
  - .4 Special philologies; .7 Rhetoric; .9 Textual criticism
- 81 Linguistics
  - .0 General linguistics; .1 Applied linguistics; .2/.8 Special linguistics. World languages
- 82 Folklore. Folklore studies
  - .0 Theory of folklore; .3 World folklore. Folklore of certain countries and peoples
- 83 Literary studies (theory and history of literature). Literature of certain countries and peoples
- 84 Fiction (literary works)
- 85 Art. Art studies**
- 85.03 Art history
- 85.1 Fine arts and architecture
  - 0 Fine arts in general; 1 Architecture; 2 Arts and crafts; 3 Sculpture; 4 Painting; 5 Graphics; 6 Art photography; 9 Other forms of fine arts
- 85.3 Art of music and spectacular arts
  - 0 Art of music and spectacular arts in general; 1 Music; 2 Dance; 3 Theatre; 4 Mass performances and pageants; 5 Circus; 6 Variety art; 7 Motion picture art; 8 Artistic radio and television broadcasting
- 85.7 Other types and forms of art
- 85.8 Art editions [*a special table*]
- 85.9 Musical compositions (printed music) [*a special table*]
- 86 Religions**
- 86.2 Religions in general. Religion studies
- 86.3 Certain religions
  - 1 Early forms of religion. Religions of the Ancient world; 2 Mandaicism. Zoroastrianism. Yazidism. Manichaeism; 3 Hinduism. Jainism. Sikhism; 4 Confucianism. Taoism. Shintoism; 5 Buddhism; 6 Judaism; 7 Christianity; 8 Islam (Moslem); 9 Other religious movements, organizations, and sects
- 86.4 Mysticism. Magic. Esoterics and Occultism
- 86.7 Freethought
- 87 Philosophy**
- 87.0 Philosophy in general
- 87.1 Metaphysics. Ontology
- 87.2 Gnoseology (epistemology). Philosophy of science
- 87.3 History of philosophy
- 87.4 Logic
- 87.5 Philosophical anthropology. Axiology
- 87.6 Social philosophy

Alternative. See 60.0

87.7 Ethics

87.8 Esthetics

## 88 **Psychology**

.1 History of psychology

.2 General psychology

.3 Psychology of personality

.4 Developmental psychology

.5 Social psychology

.6 Pedagogical psychology;

.7 Medical (clinical) psychology

.8 Psychology of labour and professional activity

.9 Experimental (applied) psychology

## 9 **Literature of universal content**

*Publishing plan 2018. Structure of last edition (1982)*

1 Bibliographic aids; 2 Reference resources; 4 Series, collections; 5 Periodic and proceeding resources; 6 Illustrative resources and materials; 7 Training resources; 8 Standards and technical regulation; 9 Popular scientific editions

Development of the structure is complicated by loads of traditions, most of all by libraries which apply both numerical and letter notations. For the schedules, it would be more rational to use the centesimal notation (00 – 99) instead of the decimal one; this way of notation is applied in the systems most progressive today. We now think that our system's intrinsic logic, its step-structure and hierarchical building-up can and will provide the logical search from up to down, from general to special, both in handled (in traditional card catalogues) and in automated conditions. We know how it should be done. We are constrained by lack of programs which could fully comply with the principles of the classification search. But it is a matter of time. Such programs shall come tomorrow.

We have to permanently advocate the retrieval possibilities of the LBC, to explain that the LBC is not a dictionary, not a set of notions, but a system which shows their paradigmatic, their internal rather than external essential relations.

**The system of the LBC tables (standard subdivisions)** had been made taking into account the achievements of foreign classification theory and practice, in the first place of the UDC with its uniform structure. In order to convey some new concepts, the UDC's auxiliaries had been changed during the development of the LBC tables of general and special standard subdivisions. The system of standard subdivisions of general use and the quite extensive system of standard subdivisions of special use were created. A number of the UDC's identification symbols passed on to the LBC to perform similar functions.

Let us have a look at the tables of **standard subdivisions of general use**.

**The general standard subdivisions** are applied when it is necessary to reflect some characteristics in a classification number (in accordance with a classification formula). Their identification symbols are lower case letters of the Russian alphabet followed by numeric endings. A demarcation point should be put if there are two successive letters, for example: Г.я2 Reference Book of Chemistry.

### *Thematic general standard subdivisions*

- в** **Philosophy and methodology of science**
- в3 Terminology and nomenclature of science
- в6 Methods of scientific research
- в63 Methods of theoretical research
- в633 Classification. Typology. Taxonomy
- г** **History of science**
- д** **Personalia**
- е** **Organization of science**
- ж** **Scientific and cultural relations**
- и** **Science and production**
- к** **Management. Economics. Statistics**
- к1 Legislative and directive materials
- к11 Laws
- к2 Organization of management. Governing bodies
- к4 Planning and forecasting
- к6 Coordination
- л** **Organizations and institutions**
- л0 Congresses, conventions, conferences, meetings
- л611 Museums
- л63 Archives
- л8 Research trips (study tours)
- м** **Festivals. Competitions. Holidays**
- м8 Significant dates. Calendar days. Celebration of anniversaries
- н** **Organization and protection of labour**
- н6 Occupational health and safety
- п** **Personnel and staff. Profession. Human resource management**
- п5 Professional ethics
- п7 Bonuses and rewards. Honorary titles
- р** **Studying and teaching of a science, a discipline. Special education**
- р4 Training of scientific personnel
- р7 Professional development
- р8 Self-education
- с** **Technology and organization of research and practical activities. Material and technical support**
- у** **Invention and rationalization. Patenting**
- ф** **Scientific information activities. Popularization and promotion of achievements of science and technology**
- ц** **Standardization**
- ю** **Sources for studying of a subject of research**

### *Formal general standard subdivisions*

- я1** **Bibliographic resources**

*The term 'resource' means: either document in book or in electronic form*

- я2 Reference resources**
- я3 Statistical resources**
- я4 Collections. Collected works**
- я5 Serial resources**
- я6 Non-text materials**
- я7 Educational resources**

*Special subdivisions for я7*

- 1 Textbooks
- 2 Lectures, abstracts of lectures
- 3 Chrestomathies. Books for reading
- 4 Exercise resources
- 5 Resources for laboratory researches and other practical trainings
- 6 Educational resources for advanced studying of a subject
- 7 Educational resources for programmed studying
- 8 Educational resources for studying of non-core disciplines
- 9 Other educational resources (for correspondence training, etc.)
- я70 Educational resources for preschool children
- я701 ABC-books
- я71 Educational resources for elementary school
- я72 Educational resources for secondary and high school
- я73 Educational resources for higher school (universities, etc.)
- я75 Educational resources for systems of courses, special schools for adults, and mastering technical schools
- я77 Educational resources for professional development
- я78 Educational resources for self-education
- я8 Technology regulations and standards**
- я9 Popular-scientific resources**

**The territorial standard subdivisions** are applied to indicate some physiographic or political characteristics in a classification number (in accordance with the classification formula). Their identification symbols are digital and alphabetic characters in parentheses. Some selective examples:

- (0) Whole world. All countries**
- (00) Polar countries
- (001) The Arctic Region
- (007) The Antarctic Region
- (01) The Northern hemisphere
- (03) The Western hemisphere
- (2) Russia. The USSR (1922-91)**
- (2-2Мос) Moscow
- (2-2Спб) St. Petersburg
- (2Рос) The Russian Federation
- (2Рос-4Мос) The Moscow Region (1929-)

- (23) European Russia
- (235.21 Volga) Volga, river
- (3) Foreign countries in general**
- (4) Europe**
- (4Бол) Bulgaria
- (4Вел) Great Britain
- (5) Asia**
- (5Афг) Afghanistan
- (5Инд) India
- (6) Africa**
- (7) America**
- (7Арг) Argentina
- (7Вен) Venezuela
- (7Сое) The United States of America
- (71) North America
- (74) Central America
- (77) South America
- (8) Australia and Oceania**
- (9) The World Ocean. The oceans and seas**
- (91) The Arctic Ocean
- (912.1) The Barents Sea

The special standard subdivisions attached by a hyphen (-) are applied to express some administrative and territorial characteristics, for example:

- (...-2) Cities and other inhabited localities
- (...-4) Territories and regions (in foreign countries – lands, provinces, states, cantons and so forth)
- (...-6) Autonomies
- (...-9) Historical regions

The plans of disposition attached by comma (,), an identification symbol, are applied to express some physiographic characteristics, for example:

- (...,23) Lakes
- (...,51) Oil- and gas-bearing basins
- (...,85) Straits
- (...,99) Islands

**The standard subdivisions of social systems** are applied to denote some groups of countries according to their social systems. The identification symbol is an apostrophe (‘) (in accordance with the classification formula):

- ‘6 Developed countries
- ‘7 Developing countries
- ‘8 Socialist countries

**The language standard subdivisions** are applied to indicate in a classification number (in accordance with the classification formula) some groups of languages or a single language. The identification symbol for them is an equal-sign followed by digital designations. Some selective examples:

=40	The Indo-European languages as a whole
=412	The Slavic languages
=411	The East Slavic languages
=411.2	Russian
=415	The West Slavic languages
=415.3	Polish
=416	The South Slavic languages
=416.2	Bulgarian
=42	The Baltic languages
=43	The German languages
=432	The West German languages
=432.1	English
=432.4	German
=45	Greek
=461	Latin. National (vulgar) Latin in general
=47	The Romance languages
=471.1	French
=472.1	Spanish
=473.1	Italian
=51	Armenian
=60	The Caucasian languages
=601.1	Georgian
=754.2	Japanese
=80	Artificial (international, auxiliary) languages
=801	Esperanto

**The ethnical standard subdivisions** are applied to indicate in a classification number (in accordance with the classification formula) some ethnical conceptions (peoples, nations). The identification symbol for them is an equal-sign followed by the number of corresponding language from the Language Standard Subdivisions Tables, all in parentheses. For example:

(=432.42) Germans  
                                     Bavarians, Gessenets, Saxons

The LBC is a combinative system of new generation. The system of standard subdivisions of general use is supplemented by a lot of special standard subdivisions (the identification symbol of hyphen (-)) and plans of disposition (the identification symbol of comma (,)). Application limits of the special standard subdivisions and the plans of disposition are clearly denoted (usually, right under the heading). Most detailed tables of special standard subdivisions are provided for some larger sections (history, politics, law, economics,

etc.). These tables can occupy dozens of pages and permit to make hundreds, if not thousands, of complex classification numbers.

The standard subdivisions enable to decrease the size of the schedules several times and to guarantee the uniformity of the classifying methods and, consequently, of the practical aspects of indexing. In spite of its rich combinative potential, the LBC was able to subdue the flexibility, typical of the UDC, and to remove a lot, but the main point is always demonstrated.

**The notation of the LBC** is very simple. Its notation resources include just Arabic numerals, common punctuation and mathematical symbols, and letters of the Russian alphabet (last editions apply only the small letters in the general standard subdivisions). Just as it is in the UDC, every tree numerals must be divided by a separating point (there is an exception for the first two numerals that substitute a letter). Of course, the “load” could be uneven sometimes (the notation of the frame on technology and engineering is overloaded, especially in comparison with the one on agriculture).

**Composition and structure of the classification division.** As it was supposed that in the huge library network of Russia the LBC schedules would be used not only by well-trained classifiers, a decision was made to give, if necessary, titles to subdivisions in the form of some explicated word combinations (syntagmas) discovering the meaning of the classification subdivision included in the classification number, for example:

**63.3(7Coe)2 Territory of the USA before the European colonization**

Sometimes the title of subdivision could perform referential functions as well (e.g. the years can be specified in parentheses):

**63.3(2)612,13 The third stage of the Civil War (Spring – November 1920)**

Short syntagmas can be repeated in schedules (usually within a class) after different classification numbers:

74.02	Didactics
74.102	Didactics
74.202	Didactics
74.320.2	Didactics
74.480.2	Didactics

It is easy to clear up the matter - you should use the higher division. Its index will show you the aspect:

Didactics 74.02
adult education 74.320.2
general education 74.202
higher education 74.480.2
preschool education 74.102

Some titles of classification subdivisions can include several common syntagmas:

47.287 Picturesque fishery. Aquarium

The classification subdivisions are provided with a system of instructional notes. Mainly, you can see there the content of the division (the way of formulating can be either explanatory or enumerative), for example:

51.230.7 Food hygiene in special environmental and body conditions  
    Food hygiene in working conditions, in space conditions, etc.

Classification subdivisions may include, if necessary, one or several instructional notes performing various functions and are usually brought into the text of the schedules by the use of some uniform (typical), repeatedly applied formulations. Here is the list of the main types of instructional notes:

– Clarification instructional notes:

*General literature*

*Under the classification number... the literature on... is collected*

*Under the classification number... and its subdivisions, the literature on... is collected*

*Under the subdivisions... the literature on... is collected*

*Under the classification number... is/are also collected*

*Under the classification number... and its subdivisions... is/are also collected*

*Under the subdivisions... is/are also collected*

– Demarcation instructional notes:

*...see the subdivisions... under the classification number of standard subdivision... of the plan of disposition...*

– Instructional notes on using the repeated classifying method:

*...has the repeated classifying... under the standard subdivision...*

– Instructional notes on using certain subject classifying methods:

*... primarily on ..., but if ... then on ...*

– Instructional notes on ways of specification:

*Subdivides by...*

*Subdivides like...*

– Instructional notes on subdivisions grouping:

*...in alphabetical order...*

*...in chronological order*

or on combining rules of the main schedules classification numbers:

*The classification number is formed by addition of the standard subdivision ... to the ...*

– Instructional notes on using methods of alternative choice

*Alternative. See ...*

*Alternative. See the standard subdivision ... in the classification subdivisions...*

– Limitation instructional notes:

*Applied in the subdivisions...*

*Not applicable to ...*

– Instructional notes that include the reference see... with a classification number, which refer to another subdivision.

**Combinative possibilities.** The LBC schedules allow showing within a single classification number up to ten different aspects of contents of a document. But unfortunately, this fact seems to be ineffective, if not detrimental, in a card catalogue. Only the first (left) elements of the classification number do “work”, the rest becomes lost.

Let us consider an example of classification number's structure by the schedules for scientific libraries: **K621-52.004.05-049.002,27-02(2)к6**. This classification number means "Materials on the coordination of scientific-research in the USSR in the field of projecting auxiliary equipment for the protection from oxidation in shops of mills of cold uninterrupted plate rolling of steel". The following content can be discovered from this classification number:

Engineering and technology. Technical sciences	Ж/О
Technology of metals. Mechanical engineering. Instrument making	K
Certain processes and industries of mechanical engineering and metal working	K6
Metal working by pressure	K62
Plate rolling	K621
Plate rolling equipment	K621-5
Rolling mills	K621-52
Cold metal working	.004
Uninterrupted metal working	.05
Auxiliary equipment	-049
Metal oxidation – protection from it	.002
Steel	,27
Projecting	-02
The USSR	(2)
Coordination of scientific research	к6

In a card catalogue, this document can be presented under the classification number K621-52. Other aspects can scarcely be shown. Otherwise, the potential of the multi-aspect notation is unveiled, with a feature-based classification search that can be realized only through an automated search. It is sufficient to carry out the search using any combination of two (three, four, etc.) aspects of subject.

**The alphabetical subject index** in the classification schedules adequately and with maximum fullness reflects the schedules' content and is a mandatory component of any edition of the classification schedules. The union index was published in the abridged schedules for scientific libraries and is to be in conclusion of the medium edition.

The alphabetic subject index is an auxiliary instrument providing a verbal "entry" into the schedules. The symbol of asterisk (\*) in the indexes means that the preceding standard subdivisions number was taken from the table with the number indicated after the asterisk. For example:

Composition  
 architectural 85.110,5  
 in advertising 85.127.64  
 in art ,01\*85  
 in juvenile literature 83.801.15  
 as a component of text 81.055.1; -51\*81.2/8  
 of a frame  
 in cinematography 37.950.20

in pictorial cinematography 85.370,770  
in photography 37.940.2  
in art photography 85.160,5  
of a folklore work 82.01; -1\*82.3  
of a literary work 83.011.5; -11\*83.3  
of a musical work 85.310,58  
technique of C. ,5\*85

## Conclusion

In the Russian Federation within the several next decades, the UDC, the LBC, and the State Rubricator of Scientific and Technical Information will fully maintain independence and will develop and functionate separately from each other. This will not prevent reduction to practice of coordination ideas, searching of ways of compatibility, conversion from one system to another.

There will take place broadening of field of application of the Rubricator, which is acquiring the importance of a national coordination system, a “switcher-language” that provides interaction for searching via classification numbers of other systems, the UDC and the LBC most of all. A version of the Rubricator with 5 levels will become accessible to everybody both in a book form and in a machine-readable form.

New editions of the Rubricator will be issued together with some methodical equipment and reference tools; design system of classification subdivision will significantly expand; classification formulas will be brought in. Structure of the index will be represented as a thesaurus, the main schedules will be consistently transformed into a system of an analytical-synthetic type with strong combinative and search capabilities.

Coordination bonds between organizations responsible for development of classification systems that are in use in Russia become stronger and more developed every year. A need is being felt to reestablish the interdepartmental collegiate body on classification systems.

It appears that beginning from 2020 – in the second edition of the Medium Schedules – it will be necessary to make some radical changes of the LBC, of its structure first of all. The retention of the main row of divisions created in 1960-s has become an obstacle to its structure development. The system will be able to develop only if it converts its main row of divisions to the centesimal structure. Can we know what tasks will come next? The preparation to the second extended and corrected edition of the Medium Schedules and issue-by-issue publication of it will begin right away. Even today we can already observe and register some new facts; it would be desirable to make some changes even today. After publication of the new to the LBC section “Interdisciplinary and General-Scientific Knowledge”, it will be necessary to reconsider a lot in the Schedules.

## **Bibliography**

### *Chronological order*

Sukiasyan E. R. Problems of classification in Soviet libraries / E. R. Sukiasian // *Library world* (London). – 1968. – Vol. 69, № 815. – P. 275–279.

Sukiasyan E. R. The classification system in conditions of automated retrieval / E. R. Sukiasyan // *Intern. cataloguing and bibliogr. control.* – 1989. – Vol. 18, № 1. – P. 13–15.

Sukiasyan E. R. Description and analysis of the Library-Bibliographical Classification (BBK / LBC) / E. R. Sukiasyan // *Tools for knowledge organization and the human interface : proc. 1st Intern. ISKO Conference, Darmstadt, 14–17 Aug. 1990.* – Frankfurt : INDEKS-Verlag, 1990. – P. 114–121.

Sukiasyan E. R. Homo Quaerens (The seeking man) : On the problem of development of the reader's cognitive capacities in the searching process / E. R. Sukiasyan // *Cognitive paradigms in knowledge organization : 2nd Intern. ISKO Conference, Madras, 26–28 Aug., 1992.* – Madras, 1992. – P. 15–22.

Sukiasyan E. R. Classification systems in their historical development: problems of typology and terminology / E. R. Sukiasyan // *Structures and Relations in Knowledge Organization : Proc. 5th Intern. ISKO-Conf., Lille, 25–29 Aug. 1998.* – Berlin: Ergon, 1998. – P. 72–79.

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