

Universal Multiple-Octet Coded Character Set
 International Organization for Standardization
 Organisation Internationale de Normalisation
 Международная организация по стандартизации

Doc Type: Working Group Document

Title: Proposal to encode historic currency signs of Russia in the UCS

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Status: Individual Contribution

Action: For consideration by JTC1/SC2/WG2 and UTC

Date: 2011-07-12

Block: Currency Symbols

Ѡ	U+20BB	IMPERIAL RUBLE SIGN	· used in Russia from the 18 th to 19 th century
КО	U+20BC	IMPERIAL KOPECK SIGN	· used in Russia from the 18 th to 19 th century
Ѡ	U+20BD	COMBINING MUSCOVY RUBLE SIGN	= combining imperial ruble sign · used in Russia from the 17 th to 18 th century
Д	U+20BE	COMBINING MUSCOVY Denga SIGN	· used in Russia from the 17 th to 18 th century

Properties:

20BB;IMPERIAL RUBLE SIGN;Sc;0;ET;;;;N;;;;
 20BC;IMPERIAL KOPECK SIGN;Sc;0;ET;;;;N;;;;
 20BD;COMBINING MUSCOVY RUBLE SIGN;Mn;230;NSM;;;;N;;;;
 20BE;COMBINING MUSCOVY Denga SIGN;Mn;230;NSM;;;;N;;;;

1. Introduction

The ruble (Russian: рубль) is the currency of Russia since the 13th century.

Here, symbols used for the ruble and its subdivisions used in the eras of the Tsardom of Russia (1547-1721, also known as the Tsardom of Muscovy) and of the Russian Empire (1721-1917) are proposed.

Since 1710, the ruble is subdivided into 100 kopecks (Russian: копейка).

Altyn (алтын) and Denga (деньга, earlier денга) are other subdivisions of the ruble, which later were equivalent to 3 kopecks and ½ kopeck.

Russian cursive handwriting in 17-19th centuries used a special notation for currencies used in that period. This notation originated from the corresponding abbreviations, however was

developed into the symbols too different with their shapes and placement from the original abbreviations.

The ruble symbol is based on a cursive form of the first letter of its name (р), employing a swash to the right, overlaid by a vertical form of the second letter of its name (у).

The other symbols are basically ligatures of the first two letters of the names of the currency units they denote.

In the 17th century the Cyrillic letters were used as digits. The signs of ruble (proposed U+20BD), altyn (already encoded U+2DF6), denga (proposed U+20BE) were placed above the Cyrillic letters to mark them as currency amount (Fig. 1). They did it on the same manner as combining titlo (U+0483) marked Cyrillic letter to be a digit. [2]

In the 18-19th centuries Arabic digits were introduced; at the same time ruble and kopeck signs started to be written right to digits and placed usually as superscript, however sometimes with underline and dashes below it (thus showing a glyph variation comparable to that of U+00AA FEMININE ORDINAL INDICATOR). We want to emphasize, that due to said underline and dashes in some writing styles, such signs couldn't be simply produced by means of text processor from already encoded characters. Our font doesn't contain such underlines and dashes for simplicity. See fig. 4 and 5). They continued to be ligatures. However, they were widely used in handwriting only. The only usage of printed superscript ruble sign is Magnitsky's "Арифметика, сиречь наука числительная..." [1] (Fig. 2).

By the end of 19th century the usage of such signs eventually declined. Now they are a subject of paleography and historical interest.

2. References

1. [Магницкий Л. Арифметика, сиречь наука числительная с разных диалектов на славенский язык переведенная и во едино собрана, и на две книги разделена.](#) — СПб, 1703.
2. Синчук И. [Многоликий знак рубля](#) // Журнал «Нумизматика», ноябрь 2006 (№ 12).

3. Examples and Figures

Fig. 1: An example of combining currency letters. Act of embossing copper as coins [2], early

18th century. In the third row, the forth column we see CX ^{ex} B ^{re}

Полу	Литва	Сто	Литва	Литва
Сма	Литва	Сто	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва
Литва	Литва	Литва	Литва	Литва

Fig. 2: The printed usage of superscript ruble sign, 1703. [1]

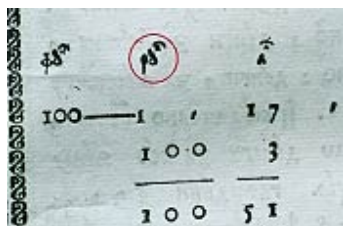


Fig. 3: The handwriting of superscript ruble sign. An inventory from 1826. Note, that here apart from superscripts ruble and kopeck signs have double underline.

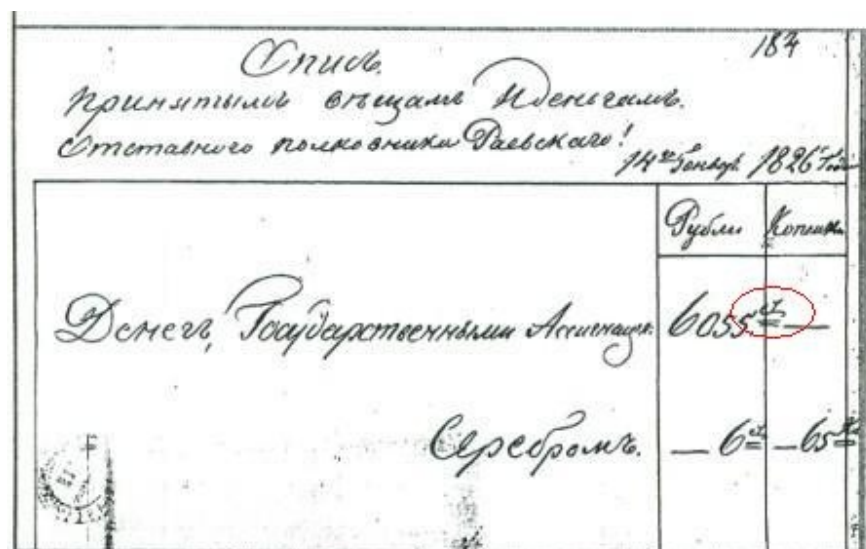


Fig. 4: The variety of ruble sign in the 19th century [2].

Прорисовки	Год	Источник	Прорисовки	Год	Источник	Прорисовки	Год	Источник
Лигатура с цифрой «0»			Лигатура с цифрой «1»			Лигатура с цифрой «6»		
	1824	Д. 82, л. 2		1828	Д. 205б, л. 39 об.		1822	Д. 302, л. 2 об.
	1826	Д. 205а, л. 13	Лигатура с цифрой «2»				1826	Д. 205а, л. 14 об.
	1826	Д. 205а, л. 16		1826	Д. 205а, л. 16		1826	Д. 205а, л. 27
	1824	Д. 205а, л. 93 об.		1826	Д. 205а, л. 27		1824	Д. 205а, л. 88 об.
	1828	Д. 205б, л. 38 об.		1827	Д. 205а, л. 254		1828	Д. 205б, л. 43
	1822	Д. 302, л. 8	Лигатура с цифрой «5»				1828	Д. 205б, л. 44 об.
	1822	Д. 302, л. 37		1826	Д. 205а, л. 16	Лигатура с цифрой «8»		
				1826	Д. 205а, л. 232		1827	Д. 205а, л. 88 об.

Fig. 5: The variety of kopeck sign in the 19th century [2]. Note, than in some cases it is not just superscript, but has dash(es) below, that are script dependent.

Прорисовки	Год	Источник	Прорисовки	Год	Источник	Прорисовки	Год	Источник
<i>Знак копейки</i>								
	1824	НИАБГ. Ф.6, оп.1, А.205а, А.88 об.		1834	НИАБГ. Ф.6, оп.1, А.453, А.45		1835	НИАБГ. Ф.6, оп.1, А.453, А.66
	1828	НИАБГ. Ф.6, оп.1, А.205а, А.479		1834	НИАБГ. Ф.6, оп.1, А.453, А.46	<i>Лигатура знака копейки с цифрами «0», «2», «3», «5»</i>		
	1828	НИАБГ. Ф.6, оп.1, А.205б, А.10		1835	НИАБГ. Ф.6, оп.1, А.453, А.61		1826	НИАБГ. Ф.6, оп.1, А.205а, А.13
	1828	НИАБГ. Ф.6, оп.1, А.205б, А.10		1835	НИАБГ. Ф.6, оп.1, А.453, А.61		1828	НИАБГ. Ф.6, оп.1, А.205б, А.37 об.
	1828	НИАБГ. Ф.6, оп.1, А.205б, А.24		1835	НИАБГ. Ф.6, оп.1, А.453, А.61		1828	НИАБГ. Ф.6, оп.1, А.205а, А.427 об.
	1828	НИАБГ. Ф.6, оп.1, А.205б, А.24 об.		1835	НИАБГ. Ф.6, оп.1, А.453, А.63		1835	НИАБГ. Ф.6, оп.1, А.453, А.65 об.
	1828	НИАБГ. Ф.6, оп.1, А.205б, А.25		1835	НИАБГ. Ф.6, оп.1, А.453, А.65		1826	НИАБГ. Ф.6, оп.1, А.205а, А.27

**ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹**

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from <http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for guidelines and details before filling this form.

Please ensure you are using the latest Form from <http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest Roadmaps.

A. Administrative

1. Title:	Proposal to encode historic currency signs of Russia in the UCS
2. Requester's name:	<i>Yuri Kalashnov, Ilya Yevlampiev, Karl Pentzlin, Roman Doroshenko</i>
3. Requester type (Member body/Liaison/Individual contribution):	<i>Individual contribution</i>
4. Submission date:	<i>2011-07-12</i>
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	<i>Yes</i>
(or) More information will be provided later:	

B. Technical – General

1. Choose one of the following:			
a. This proposal is for a new script (set of characters):	<i>No</i>		
Proposed name of script:			
b. The proposal is for addition of character(s) to an existing block:	<i>Yes</i>		
Name of the existing block:	<i>Currency Symbols</i>		
2. Number of characters in proposal:	<i>4</i>		
3. Proposed category (select one from below - see section 2.2 of P&P document):			
A-Contemporary	<i>B.1-Specialized (small collection)</i> <input checked="" type="checkbox"/>	B.2-Specialized (large collection)	
C-Major extinct	<i>D-Attested extinct</i>	E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic		G-Obscure or questionable usage symbols	
4. Is a repertoire including character names provided?	<i>Yes</i>		
a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?	<i>Yes</i>		
b. Are the character shapes attached in a legible form suitable for review?	<i>Yes</i>		
5. Fonts related:			
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	<i>The authors: glyph design by Roman Doroshenko, font file by Karl Pentzlin</i>		
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	<i>The authors</i>		
6. References:			
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?	<i>Yes</i>		
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?	<i>Yes</i>		
7. Special encoding issues:			
Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?	<i>No</i>		

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see <http://www.unicode.org/Public/UNIDATA/UCD.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

¹ Form number: N3702-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?	Yes
If YES, with whom?	Some of the authors are members of the user community themselves
If YES, available relevant documents:	See text
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	See text
4. The context of use for the proposed characters (type of use; common or rare)	Specialized
Reference:	See text
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference:	See text
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference:	To keep them in line with related characters
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	Yes
If YES, is a rationale for such use provided?	Yes
If YES, reference:	See text
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	n/a
If YES, reference:	See text
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility character(s)?	No
If YES, is the equivalent corresponding unified ideographic character(s) identified?	
If YES, reference:	