**Title: Status of Mapping between Characters of ISO 10574 and ISO/IEC 10646-1 (UCS)**
**Source: The Research Libraries Group, Inc.**
**Status: L2 Member Contribution**
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**Abbreviations and References:**

N 227   ISO/TC46/SC4/WG1 N227 (Revised) *Mapping of TC46/SC4/WG1 character sets to ISO/IEC 10646-1 characters* (1998-05-29). If L2 agreed with an N227 mapping, the L2 cell in that row is blank.

L2      L2 proposed mapping incorporating L2/98-292R *Comments on proposals to add characters to ISO/IEC 10646 from ISO standards developed by ISO/TC 46/SC 4*. Not linked directly from L2 document list, but available at http://www.unicode.org/L2/L2/98292.htm

## 1. SUMMARY

Mappings for 49 characters of ISO 10574 were approved by ISO/TC 46/SC 4/WG 1 in May 2000. The finalized mappings are shown in Section 3. Two characters from this character set were rejected by WG2 at Meeting 35 (London, U.K.: September 1998).

Mappings for 16 more characters were subsequently identified. The additional mappings are shown in Section 4. These will need to be approved by ISO/TC 46/SC 4/WG 1 when it next meets.

The 26 characters that still lack mappings are listed in Section 2. They may be categorized as:
a)  6 letters with strokes
b)  4 letters that may actually be typographical ligatures
c)  6 letters that may be variants of existing letters
d)  8 letters that may be considered clones of Latin letters
e)  2 other letters

## 2. CHARACTERS WITHOUT MAPPINGS

At Meeting 35 (London, U.K.: September 1998), WG2 directed further study of the characters in the following tables. The Komi letters that were also in the "further study" group were subsequently added to the UCS, and are shown in Section 4.

### a) Letters with Strokes

| ISO 10754 | | Mappings Proposed by L2 |
|---|---|---|
| Code | Name | |
| 40 | CYRILLIC SMALL LETTER YAKUT I WITH STROKE | 0456 + 0335 |
| 41 | CYRILLIC SMALL LETTER JE WITH STROKE | 0458 + 0335 |
| 45 | CYRILLIC SMALL LETTER CHECHEN KA | 043A + 030A |
| 50 | CYRILLIC CAPITAL LETTER YAKUT I WITH STROKE | 0406 + 0335 |
| 51 | CYRILLIC CAPITAL LETTER JE WITH STROKE | 0408 + 0335 |
| 55 | CYRILLIC CAPITAL LETTER CHECHEN KA | 041A + 030A |

### b) Typographical Ligatures?

| ISO 10754 | | Mappings Proposed by L2 |
|---|---|---|
| Code | Name | |
| 4A | CYRILLIC SMALL LETTER MORDVIN EL KA | 043B + 0445 |
| 5A | CYRILLIC CAPITAL LETTER MORDVIN EL KA | 041B + 0425 |
| 63 | CYRILLIC SMALL LETTER ER KA | 0440 + 0445 |
| 73 | CYRILLIC CAPITAL LETTER ER KA | 0420 + 0425 |

4A CYRILLIC SMALL LETTER MORDVIN EL KA & 5A CYRILLIC CAPITAL LETTER MORDVIN EL KA
Typographical ligatures of *el* and *ha* (not *ka*)

## 63 CYRILLIC SMALL LETTER ER KA & 73 CYRILLIC CAPITAL LETTER ER KA

Typographical ligatures of *er* and *ha* (not *ka*)

### c) Variants?

L2 considered these characters to be variants of already-encoded characters. Note that the Variant Selector mechanism had not been developed at the time. WG2 directed at Meeting 35 that all of these possible variants should be studied further.

| ISO 10754 | | Mappings Proposed by L2 |
|---|---|---|
| Code | Name | |
| 49 | CYRILLIC SMALL LETTER EL WITH MIDDLE HOOK | 0459 variant |
| 4C | CYRILLIC SMALL LETTER CHUVASH NG | 045A variant or 04A3 variant |
| 4E | CYRILLIC SMALL LETTER EN WITH MIDDLE HOOK | 045A variant |
| 59 | CYRILLIC CAPITAL LETTER EL WITH MIDDLE HOOK | 0409 variant |
| 5C | CYRILLIC CAPITAL LETTER CHUVASH NG | 040A variant or 04A2 variant |
| 5E | CYRILLIC CAPITAL LETTER EN WITH MIDDLE HOOK | 040A variant |

### d) Cyrillic Clones of Latin Letters

The issue with these letters is whether they should be deunified from Latin, and encoded in the Cyrillic block.

| ISO 10754 | | | Mappings Proposed by L2 | Notes |
|---|---|---|---|---|
| Code | Name | Appearance | | |
| 46 | CYRILLIC SMALL LETTER KURDISH QA | = q | 0071 | |
| 47 | CYRILLIC SMALL LETTER AISOR EL | = l | 006C | |
| 56 | CYRILLIC CAPITAL LETTER KURDISH QA | = Q | 0051 | Also has distinctive form |
| 57 | CYRILLIC CAPITAL LETTER AISOR EL | = L | 004C | |
| 61 | CYRILLIC SMALL LETTER SELKUP O E | = oe digraph | 0153 | |

| ISO 10754 | | | Mappings Proposed by L2 | Notes |
|---|---|---|---|---|
| **Code** | **Name** | **Appearance** | | |
| 68 | CYRILLIC SMALL LETTER KURDISH WE | = w | 0077 | |
| 71 | CYRILLIC CAPITAL LETTER SELKUP O E | = OE digraph | 0152 | |
| 78 | CYRILLIC CAPITAL LETTER KURDISH WE | = W | 0057 | |

### f) Other

L2 recommended further study of these letters.

| Code | Name |
|---|---|
| 6E | CYRILLIC SMALL LETTER YA IE |
| 7E | CYRILLIC CAPITAL LETTER YA IE |

### 3. FINALIZED MAPPINGS

| ISO 10754 | | Mappings | | | Notes |
|---|---|---|---|---|---|
| **Code** | **Character name** | **N 227** | **L2** | **Final** | |
| 21 | COMBINING ACUTE | 0301 | | 0301 | |
| 22 | COMBINING DIAERESIS | 0308 | | 0308 | |
| 23 | COMBINING OGONEK | 0328 | | 0328 | |
| 25 | COMBINING BREVE | 0306 | | 0306 | |
| 26 | COMBINING CEDILLA | 0327 | | 0327 | |
| 27 | COMBINING GRAVE | 0300 | | 0300 | |
| 28 | CYRILLIC SMALL LETTER A E | 04D5 | | 04D5 | |
| 29 | CYRILLIC SMALL LETTER GHE WITH STROKE | 0493 | | 0493 | |
| 2A | CYRILLIC SMALL LETTER GHE WITH MIDDLE HOOK | 0495 | | 0495 | |

| ISO 10754 | | Mappings | | | Notes |
|---|---|---|---|---|---|
| Code | Character name | N 227 | L2 | Final | |
| 2D | CYRILLIC SMALL LETTER ABKHASIAN DZE | 04E1 | | 04E1 | |
| 31 | COMBINING DOUBLE ACUTE | 030B | | 030B | |
| 32 | COMBINING MACRON | 0304 | | 0304 | |
| 33 | COMBINING LEFT OGONEK | 0321 | | 0321 | |
| 35 | COMBINING CARON | 030C | | 030C | |
| 36 | COMBINING RING ABOVE | 030A | | 030A | |
| 37 | COMBINING HIGH COMMA | 0313 | | 0313 | |
| 38 | CYRILLIC CAPITAL LETTER A E | 0404 | 04D4 | 04D4 | Correction made at 2000-05-09 WG1 meeting |
| 39 | CYRILLIC CAPITAL LETTER GHE WITH STROKE | 0492 | | 0492 | |
| 3A | CYRILLIC CAPITAL LETTER GHE WITH MIDDLE HOOK | 0494 | | 0494 | |
| 3D | CYRILLIC CAPITAL LETTER ABKHASIAN DZE | 04E0 | | 04E0 | |
| 42 | CYRILLIC SMALL LETTER KA WITH VERTICAL STROKE | 049D | | 049D | |
| 43 | CYRILLIC SMALL LETTER BASHKIR KA | 04A1 | | 04A1 | |
| 44 | CYRILLIC SMALL LETTER KA WITH STROKE | 049F | | 049F | |
| 4B | CYRILLIC SMALL LETTER ALTAIC NG | 04A5 | | 04A5 | |
| 4F | CYRILLIC SMALL LETTER O WITH STROKE | 04E9 | | 04E9 | |
| 52 | CYRILLIC CAPITAL LETTER KA WITH VERTICAL STROKE | 049C | | 049C | |
| 53 | CYRILLIC CAPITAL LETTER BASHKIR KA | 04A0 | | 04A0 | |
| 54 | CYRILLIC CAPITAL LETTER KA WITH STROKE | 049E | | 049E | |
| 5B | CYRILLIC CAPITAL LETTER ALTAIC NG | 04A4 | | 04A4 | |
| 5F | CYRILLIC CAPITAL LETTER O WITH STROKE | 04E8 | | 04E8 | |
| 60 | CYRILLIC SMALL LETTER ABKHASIAN HA | 04A9 | | 04A9 | |
| 62 | CYRILLIC SMALL LETTER ABKHASIAN PHE | 04A7 | | 04A7 | |

| ISO 10754 | | Mappings | | | Notes |
|---|---|---|---|---|---|
| Code | Character name | N 227 | L2 | Final | |
| 66 | CYRILLIC SMALL LETTER STRAIGHT U | 04AF | | 04AF | |
| 67 | CYRILLIC SMALL LETTER STRAIGHT U WITH STROKE | 04B1 | | 04B1 | |
| 69 | CYRILLIC SMALL LETTER ABKHASIAN THE | 04B5 | | 04B5 | |
| 6A | CYRILLIC SMALL LETTER CHE WITH VERTICAL STROKE | 04B9 | | 04B9 | |
| 6B | CYRILLIC SMALL LETTER HE | 04BB | | 04BB | |
| 6C | CYRILLIC SMALL LETTER ABKHASIAN CHE | 04BD | | 04BD | |
| 6D | CYRILLIC SMALL LETTER SHWA | 04D9 | | 04D9 | |
| 6F | CYRILLIC ASPIRATION OR GUTTERAL SIGN | 04C0 | | 04C0 | |
| 70 | CYRILLIC CAPITAL LETTER ABKHASIAN HA | 04A8 | | 04A8 | |
| 72 | CYRILLIC CAPITAL LETTER ABKHASIAN PHE | 04A6 | | 04A6 | |
| 76 | CYRILLIC CAPITAL LETTER STRAIGHT U | 04AE | | 04AE | |
| 77 | CYRILLIC CAPITAL LETTER STRAIGHT U WITH STROKE | 04B0 | | 04B0 | |
| 79 | CYRILLIC CAPITAL LETTER ABKHASIAN THE | 04B4 | | 04B4 | |
| 7A | CYRILLIC CAPITAL LETTER CHE WITH VERTICAL STROKE | 04B8 | | 04B8 | |
| 7B | CYRILLIC CAPITAL LETTER HE | 04BA | | 04BA | |
| 7C | CYRILLIC CAPITAL LETTER ABKHASIAN CHE | 04BC | | 04BC | |
| 7D | CYRILLIC CAPITAL LETTER SHWA | 04D8 | | 04D8 | |

Not to be added to UCS per WG2 decision

| Code | Name |
|---|---|
| 24 | COMBINING RIGHT DESCENDER |
| 34 | COMBINING LEFT DESCENDER |

All Cyrillic characters with descenders in the UCS are precomposed. Adding the descenders as combining characters would introduce decompositions.

## 4. ADDITIONAL MAPPINGS

The characters in this table were proposed to WG2 in N 2224 (2000-06-09) and accepted by WG2 at Meeting 39 (Athens, Greece: September 2000).

| Code | Name | Mapping |
|------|------|---------|
| 2B | CYRILLIC SMALL LETTER KOMI DE | 0501 |
| 2C | CYRILLIC SMALL LETTER KOMI DJE | 0503 |
| 2E | CYRILLIC SMALL LETTER KOMI DZE | 0507 |
| 2F | CYRILLIC SMALL LETTER KOMI ZJE | 0505 |
| 3B | CYRILLIC CAPITAL LETTER KOMI DE | 0500 |
| 3C | CYRILLIC CAPITAL LETTER KOMI DJE | 0502 |
| 3E | CYRILLIC CAPITAL LETTER KOMI DZE | 0506 |
| 3F | CYRILLIC CAPITAL LETTER KOMI ZJE | 0504 |
| 48 | CYRILLIC SMALL LETTER KOMI ELJ | 0509 |
| 4D | CYRILLIC SMALL LETTER KOMI NG | 050B |
| 58 | CYRILLIC CAPITAL LETTER KOMI ELJ | 0508 |
| 5D | CYRILLIC CAPITAL LETTER KOMI NG | 050A |
| 64 | CYRILLIC SMALL LETTER KOMI ESJ | 050D |
| 65 | CYRILLIC SMALL LETTER KOMI TJE | 050F |
| 74 | CYRILLIC CAPITAL LETTER KOMI ESJ | 050C |
| 75 | CYRILLIC CAPITAL LETTER KOMI THE | 050E |