

Recommendations for Sami PC-type keyboard layouts

Layout-rávvagat PC dihtora sámegielat boallobevdái

Anbefaling for layout i samiske PC tastaturer

Saamenkielisen näppäimistön layout-suositus PC-tietokoneisiin



SÁMEDIGGI SAMETINGET

Layout-rávvagat PC dihtora sámegielat boallobevdái

Sámi parlamentáralaš ráđđi almmuhii dokumeanta ”Gáibáduš sámegiela sáhttit geavahit dihtoris” (01/850-51) skábmanánuš 2002. Suoma, Norgga ja Ruoŧa sámeáššiid ovddasvástideaddji stáhtaráđiid ja dáid riikkaid Sámedikkiid presideanttat dohkkehedje maŋŋil dan vuodđodokumeantan dihtorindustriijai. Almmuhuvvon dokumeanta spesifisere dušše doarjaga unnimus gáibadusaid. Danin go sierranas dihtorortnegat rievddadit boallobevddi dáfus, leat dušše bustávat spesifisejuvvon dokumeanttas. Ožžodan dihte buot buoremus bohtosa sámegielaš boallobevdečovdosii boahhteáiggis, lea gávnnahuvvon ahte lea buoremus ráhkadit rávadokumeanta čuovusin dan Sámedikki dokumenttii 01/850-51.

Recommendations for Sami PC-type keyboard layouts

The document Sámediggi 01/850-51 "Requirements for support of Sami languages in IT" was issued in November 2002 by the Sami Parliamentary Council. It was subsequently endorsed by the Finnish, Norwegian and Swedish ministers responsible for Sami affairs and the presidents of the three Sami parliaments as a basic document for computer industry implementations.

That document specifies minimum support requirements only. In particular, character allocations to keyboard keys is specified solely for letters, since existing computer systems differ somewhat in keyboard functionality. To however achieve as much consistency as possible in future Sami-supporting keyboard layouts it was found suitable to develop the attached recommendation-type document, as a complement to Sámediggi 01/850-51.

Anbefaling for layout i samiske PC tastaturer

Dokumentet ”Krav om støtte for samiske språk innen databehandling” (ref. Sámediggi 01/850-51) ble utgitt av Samisk parlamentarisk råd i november 2002. Det ble senere bifalt, som et basisdokument for dataindustrien, av de ansvarlige ministere for samiske saker i Finland, Norge og Sverige og presidentene i de tre sameting.

Det utgitte dokumentet spesifiserer bare minimumskrav. Ettersom de ulike datasystemer varierer med hensyn til tastaturløsninger ble kun bokstavene spesifisert i dokumentet. I den hensikt å oppnå en best mulig konsistens (samsvar) for framtidige samiske tastaturløsninger har en funnet det hensiktsmessig å utvikle vedlagte anbefalingsdokument som et tillegg til dokumentet ref. Sámediggi 01/850-51.

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Saamenkielisen näppäimistön layout-suositus PC-tietokoneisiin

Saamelainen parlamentaarinen neuvosto julkaisi dokumentin ”Vaatus tietojenkäsittelyn saamenkielisestä tuesta” (01/850-51) marraskuussa 2002. Suomen, Norjan ja Ruotsin saamelaiskysymyksistä päättävät ministerit ja maiden saamelaiskäräjien puheenjohtajat hyväksyivät sen perusdokumentiksi tietokoneteollisuudelle. Julkaistussa dokumentissa on eritelty vain tuen vähimmäisvaatimukset. Koska erilaiset tietotekniikanjärjestelmät vaihtelevat näppäimistöjen osalta, niin vain kirjaimet on eritelty dokumentissa. Jotta saataisiin paras mahdollinen tulos tulevaisuudessa saamenkieliseen näppäimistöön, on nähty tarkoituksenmukaiseksi tehdä suositusdokumentti liitteeksi tähän Saamelaiskäräjien dokumenttiin Sámediggi 01/850-51.

Karášjohka 22.08.03

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Recommendations for Sami PC-type keyboard layouts

Foreword

This document complements Sámediggi 01/850-51 "Requirements for support of Sami languages in IT", by recommending character allocations to keys in addition to the allocations specified as requirements in that document.

Although a recommendation-type document only, it could be used together with the Requirements document as a reference in procurement.

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Important – please read!

The Board of the Sami Parliamentary Council has adopted this document, thereby approving its contents. However, neither the Sami Parliamentary Council nor any of the Nordic Sami Parliaments accept any liabilities, financial or otherwise, in any way connected with the use of the contents of the document.

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Recommendations for Sami PC-type keyboard layouts

1 Scope

This document complements Sámediggi 01/850-51 "Requirements for support of Sami languages in IT" as regards Sami-language keyboard layouts.

Note: In addition to the Sami-language keyboard layouts, Sámediggi 01/850-51 also specifies "Majority-language keyboards with Sami letters". Those layouts, identical to present national layouts with Sami letters added in previously unused positions, are not dealt with in this document.

Sámediggi 01/850-51 specifies a required minimum character repertoire, consisting of letters, digits, punctuation marks and some symbols. For its keyboard layout specifications, however, only the allocation of letters is given in that document.

In this document, recommended key allocations is given for the required but non-allocated characters, as well as allocations for some additional characters not part of the required character set but frequently implemented in today's systems. The allocations are specified in Annex A, and illustrated in Annex B.

It is recognised that several Sami-keyboard layout schemes exist at present, in various implementations designed for the writing of Sami. It is also recognised that software may exist which assigns special functions to particular keys. Given this situation, it is not practical to specify **required** keyboard allocations for other characters than letters. This document therefore defines **recommendations**, not **requirements**, on key allocations.

It shall also be noticed that the various types of computer systems on the market employ partly differing principles for the allocation of characters to keys. This document, although intended as a recommendation for all types of systems, takes special consideration of the de facto keyboard standards established for Personal Computers. Therefore, its recommendations may not be completely suitable for some other types of systems, and use of the document as a reference in procurement therefore requires careful consideration.

2 Implementation levels

In Sámediggi 01/850-51, two implementation levels are defined, a basic level and an extended-alphabet level.

That definition is relevant only for letters. It is therefore not applicable to this document.

3 Use of this document

In procurement, reference could be made to this document, in which case compliance with all or part of its specifications may be required.

In cases where such reference is not made, implementers may however decide to deviate from the recommendations of the document, e.g. for the reasons mentioned in clause 1 "Scope".

4 Diacritical marks

In Annex A, the same diacritical marks as found at present for Norwegian and Finnish/Swedish keyboards are included. Those characters are primarily intended for combination with base letters, but can also exist "free-standing". The following keyboard functional principles therefore apply:

- a) If depression of one of those keys is followed next by the depression of the key of a base letter which, in combination with the diacritical mark, is one of the combined characters specified in Sámediggi 01/850-51 Annex C, the code for that combined letter shall be generated.

Note: This applies, in principle, also to combinations with the diacritical mark CARON. Since however an allocation for that mark is not specified in this document, such combinations are outside its scope.

- b) If depression of one of those keys is followed next by the depression of the space bar ("blank"), the code for the corresponding "free-standing" character shall be generated:

CIRCUMFLEX ACCENT:	U+005E
GRAVE ACCENT:	U+0060
TILDE:	U+007E
DIAERESIS:	U+00A8
ACUTE ACCENT:	U+00B4

- c) If depression of one of those keys is followed next by the depression of the key of a base letter, singly or together with some shifting-function key, which would produce a combined letter not specified in Sámediggi 01/850-51 Annex C, the result is outside the scope of this document, and is to be decided by the implementer.

5 Pre-composition

Although Sámediggi 01/850-51 clause 3.4.2 permits all combined letters to be accessible as either pre-composed or as diacritic–baseletter combinations, it is recommended that all combined letters are made available pre-composed, except the letters é/É and ü/Ü, for which combination is recommended.

Note: Letters implemented pre-composed could be made available as diacritic–baseletter combinations also.

6 Key markings

This document specifies no marking of keys.

In procurements, requirements on marking may be specified. If not, it is assumed that implementers provide markings to the extent suitable, considering the needs of users.

Annex A

Character allocation for Sami-language keyboards

In the table below designations according to ISO/IEC 9995-1:1994 are used for key identification (ID). The corresponding character identities are given according to ISO/IEC 10646-1:2000.

"Group 1" applies to the normal function of the keyboard. "Alternative" applies to the layout that can be activated by a group select key (see ISO/IEC 9995-1).

Note: How the alternative layout is activated will be system-dependent, and is not specified. It is however assumed that for Microsoft-type keyboards this is done by the **AltGr** key, and for Macintosh keyboards by the **Option** key. ("Macintosh" is a trademark of Apple Computer, Inc. and "Microsoft" is a trademark of Microsoft Corporation.)

Shading denotes character allocations specified in Sámediggi 01/850-51, and included here for information.

Table A.1 – Character allocations for Norway

ID	GROUP 1 - LOWER SHIFT	GROUP 1 - UPPER SHIFT	ALTERNATIVE - LOWER SHIFT	ALTERNATIVE - UPPER SHIFT
E00	VERTICAL LINE (U+007C)	SECTION SIGN (U+00A7)		
E01	DIGIT ONE (U+0031)	EXCLAMATION MARK (U+0021)		
E02	DIGIT TWO (U+0032)	QUOTATION MARK (U+0022)	COMMERCIAL AT (U+0040)	
E03	DIGIT THREE (U+0033)	NUMBER SIGN (U+0023)	POUND SIGN (U+00A3)	
E04	DIGIT FOUR (U+0034)	CURRENCY SIGN (U+00A4)	DOLLAR SIGN (U+0024)	
E05	DIGIT FIVE (U+0035)	PERCENT SIGN (U+0025)		
E06	DIGIT SIX (U+0036)	AMPERSAND (U+0026)		
E07	DIGIT SEVEN (U+0037)	SOLIDUS (U+002F)	LEFT CURLY BRACKET (U+007B)	
E08	DIGIT EIGHT (U+0038)	LEFT PARENTHESIS (U+0028)	LEFT SQUARE BRACKET (U+005B)	
E09	DIGIT NINE (U+0039)	RIGHT PARENTHESIS (U+0029)	RIGHT SQUARE BRACKET (U+005D)	
E10	DIGIT ZERO (U+0030)	EQUALS SIGN (U+003D)	RIGHT CURLY BRACKET (U+007D)	
E11	PLUS SIGN (U+002B)	QUESTION MARK (U+003F)		
E12	REVERSE SOLIDUS (U+005C)	<i>Diacritical mark GRAVE ACCENT – see clause 4 for coding</i>	<i>Diacritical mark ACUTE ACCENT – see clause 4 for coding</i>	
D01	LATIN SMALL LETTER A WITH ACUTE ACCENT (U+00E1)	LATIN CAPITAL LETTER A WITH ACUTE ACCENT (U+00C1)	LATIN SMALL LETTER Q (U+0071)	LATIN CAPITAL LETTER Q (U+0051)
D02	LATIN SMALL LETTER S WITH CARON (U+0161)	LATIN CAPITAL LETTER S WITH CARON (U+0160)	LATIN SMALL LETTER W (U+0077)	LATIN CAPITAL LETTER W (U+0057)
D03	LATIN SMALL LETTER E (U+0065)	LATIN CAPITAL LETTER E (U+0045)	EURO SIGN (U+20AC)	
D04	LATIN SMALL LETTER R (U+0072)	LATIN CAPITAL LETTER R (U+0052)		
D05	LATIN SMALL LETTER T (U+0074)	LATIN CAPITAL LETTER T (U+0054)		
D06	LATIN SMALL LETTER T WITH STROKE (U+0167)	LATIN CAPITAL LETTER T WITH STROKE (U+0166)	LATIN SMALL LETTER Y (U+0079)	LATIN CAPITAL LETTER Y (U+0059)
D07	LATIN SMALL LETTER U (U+0075)	LATIN CAPITAL LETTER U (U+0055)		

ID	GROUP 1 - LOWER SHIFT	GROUP 1 - UPPER SHIFT	ALTERNATIVE - LOWER SHIFT	ALTERNATIVE - UPPER SHIFT
D08	LATIN SMALL LETTER I (U+0069)	LATIN CAPITAL LETTER I (U+0049)	LATIN SMALL LETTER I WITH DIAERESIS (U+00EF)	LATIN CAPITAL LETTER I WITH DIAERESIS (U+00CF)
D09	LATIN SMALL LETTER O (U+006F)	LATIN CAPITAL LETTER O (U+004F)	LATIN SMALL LETTER O WITH TILDE (U+00F5)	LATIN CAPITAL LETTER O WITH TILDE (U+00D5)
D10	LATIN SMALL LETTER P (U+0070)	LATIN CAPITAL LETTER P (U+0050)		
D11	LATIN SMALL LETTER A WITH RING ABOVE (U+00E5)	LATIN CAPITAL LETTER A WITH RING ABOVE (U+00C5)	<i>Diacritical mark DIAERESIS – see clause 4 for coding</i>	<i>Diacritical mark CIRCUMFLEX ACCENT – see clause 4 for coding</i>
D12	LATIN SMALL LETTER ENG (U+014B)	LATIN CAPITAL LETTER ENG (U+014A)	<i>Diacritical mark TILDE – see clause 4 for coding</i>	
C01	LATIN SMALL LETTER A (U+0061)	LATIN CAPITAL LETTER A (U+0041)	LATIN SMALL LETTER A WITH CIRCUMFLEX (U+00E2)	LATIN CAPITAL LETTER A WITH CIRCUMFLEX (U+00C2)
C02	LATIN SMALL LETTER S (U+0073)	LATIN CAPITAL LETTER S (U+0053)		
C03	LATIN SMALL LETTER D (U+0064)	LATIN CAPITAL LETTER D (U+0044)		
C04	LATIN SMALL LETTER F (U+0066)	LATIN CAPITAL LETTER F (U+0046)		
C05	LATIN SMALL LETTER G (U+0067)	LATIN CAPITAL LETTER G (U+0047)	LATIN SMALL LETTER G WITH CARON (U+01E7)	LATIN CAPITAL LETTER G WITH CARON (U+01E6)
C06	LATIN SMALL LETTER H (U+0068)	LATIN CAPITAL LETTER H (U+0048)	LATIN SMALL LETTER G WITH STROKE (U+01E5)	LATIN CAPITAL LETTER G WITH STROKE (U+01E4)
C07	LATIN SMALL LETTER J (U+006A)	LATIN CAPITAL LETTER J (U+004A)		
C08	LATIN SMALL LETTER K (U+006B)	LATIN CAPITAL LETTER K (U+004B)	LATIN SMALL LETTER K WITH CARON (U+01E9)	LATIN CAPITAL LETTER K WITH CARON (U+01E8)
C09	LATIN SMALL LETTER L (U+006C)	LATIN CAPITAL LETTER L (U+004C)		
C10	LATIN SMALL LETTER O WITH STROKE (U+00F8)	LATIN CAPITAL LETTER O WITH STROKE (U+00D8)	LATIN SMALL LETTER O WITH DIAERESIS (U+00F6)	LATIN CAPITAL LETTER O WITH DIAERESIS (U+00D6)
C11	LATIN SMALL LETTER AE (U+00E6)	LATIN CAPITAL LETTER AE (U+00C6)	LATIN SMALL LETTER A WITH DIAERESIS (U+00E4)	LATIN CAPITAL LETTER A WITH DIAERESIS (U+00C4)
C12	LATIN SMALL LETTER D WITH STROKE (U+0111)	LATIN CAPITAL LETTER D WITH STROKE (U+0110)	APOSTROPHE (U+0027)	ASTERISK (U+002A)
B00	LATIN SMALL LETTER Z WITH CARON (U+017E)	LATIN CAPITAL LETTER Z WITH CARON (U+017D)	LATIN SMALL LETTER EZH WITH CARON (U+01EF)	LATIN CAPITAL LETTER EZH WITH CARON (U+01EE)
B01	LATIN SMALL LETTER Z (U+007A)	LATIN CAPITAL LETTER Z (U+005A)	LATIN SMALL LETTER EZH (U+0292)	LATIN CAPITAL LETTER EZH (U+01B7)
B02	LATIN SMALL LETTER C WITH CARON (U+010D)	LATIN CAPITAL LETTER C WITH CARON (U+010C)	LATIN SMALL LETTER X (U+0078)	LATIN CAPITAL LETTER X (U+0058)
B03	LATIN SMALL LETTER C (U+0063)	LATIN CAPITAL LETTER C (U+0043)		
B04	LATIN SMALL LETTER V (U+0076)	LATIN CAPITAL LETTER V (U+0056)		
B05	LATIN SMALL LETTER B (U+0062)	LATIN CAPITAL LETTER B (U+0042)		
B06	LATIN SMALL LETTER N (U+006E)	LATIN CAPITAL LETTER N (U+004E)		
B07	LATIN SMALL LETTER M (U+006D)	LATIN CAPITAL LETTER M (U+004D)	MICRO SIGN (U+00B5)	
B08	COMMA (U+002C)	SEMICOLON (U+003B)	LESS-THAN SIGN (U+003C)	
B09	FULL STOP (U+002E)	COLON (U+003A)	GREATER-THAN SIGN (U+003E)	
B10	HYPHEN-MINUS (U+002D)	LOW LINE (U+005F)		

Table A.2 – Character allocations for Finland/Sweden

ID	GROUP 1 - LOWER SHIFT	GROUP 1 - UPPER SHIFT	ALTERNATIVE - LOWER SHIFT	ALTERNATIVE - UPPER SHIFT
E00	SECTION SIGN (U+00A7)	VULGAR FRACTION ONE HALF (U+00BD)	VERTICAL LINE (U+007C)	
E01	DIGIT ONE (U+0031)	EXCLAMATION MARK (U+0021)		
E02	DIGIT TWO (U+0032)	QUOTATION MARK (U+0022)	COMMERCIAL AT (U+0040)	
E03	DIGIT THREE (U+0033)	NUMBER SIGN (U+0023)	POUND SIGN (U+00A3)	
E04	DIGIT FOUR (U+0034)	CURRENCY SIGN (U+00A4)	DOLLAR SIGN (U+0024)	
E05	DIGIT FIVE (U+0035)	PERCENT SIGN (U+0025)		
E06	DIGIT SIX (U+0036)	AMPERSAND (U+0026)		
E07	DIGIT SEVEN (U+0037)	SOLIDUS (U+002F)	LEFT CURLY BRACKET (U+007B)	
E08	DIGIT EIGHT (U+0038)	LEFT PARENTHESIS (U+0028)	LEFT SQUARE BRACKET (U+005B)	
E09	DIGIT NINE (U+0039)	RIGHT PARENTHESIS (U+0029)	RIGHT SQUARE BRACKET (U+005D)	
E10	DIGIT ZERO (U+0030)	EQUALS SIGN (U+003D)	RIGHT CURLY BRACKET (U+007D)	
E11	PLUS SIGN (U+002B)	QUESTION MARK (U+003F)	REVERSE SOLIDUS (U+005C)	
E12	<i>Diacritical mark ACUTE ACCENT – see clause 4 for coding</i>	<i>Diacritical mark GRAVE ACCENT – see clause 4 for coding</i>		
D01	LATIN SMALL LETTER A WITH ACUTE ACCENT (U+00E1)	LATIN CAPITAL LETTER A WITH ACUTE ACCENT (U+00C1)	LATIN SMALL LETTER Q (U+0071)	LATIN CAPITAL LETTER Q (U+0051)
D02	LATIN SMALL LETTER S WITH CARON (U+0161)	LATIN CAPITAL LETTER S WITH CARON (U+0160)	LATIN SMALL LETTER W (U+0077)	LATIN CAPITAL LETTER W (U+0057)
D03	LATIN SMALL LETTER E (U+0065)	LATIN CAPITAL LETTER E (U+0045)	EURO SIGN (U+20AC)	
D04	LATIN SMALL LETTER R (U+0072)	LATIN CAPITAL LETTER R (U+0052)		
D05	LATIN SMALL LETTER T (U+0074)	LATIN CAPITAL LETTER T (U+0054)		
D06	LATIN SMALL LETTER T WITH STROKE (U+0167)	LATIN CAPITAL LETTER T WITH STROKE (U+0166)	LATIN SMALL LETTER Y (U+0079)	LATIN CAPITAL LETTER Y (U+0059)
D07	LATIN SMALL LETTER U (U+0075)	LATIN CAPITAL LETTER U (U+0055)		
D08	LATIN SMALL LETTER I (U+0069)	LATIN CAPITAL LETTER I (U+0049)	LATIN SMALL LETTER I WITH DIAERESIS (U+00EF)	LATIN CAPITAL LETTER I WITH DIAERESIS (U+00CF)
D09	LATIN SMALL LETTER O (U+006F)	LATIN CAPITAL LETTER O (U+004F)	LATIN SMALL LETTER O WITH TILDE (U+00F5)	LATIN CAPITAL LETTER O WITH TILDE (U+00D5)
D10	LATIN SMALL LETTER P (U+0070)	LATIN CAPITAL LETTER P (U+0050)		
D11	LATIN SMALL LETTER A WITH RING ABOVE (U+00E5)	LATIN CAPITAL LETTER A WITH RING ABOVE (U+00C5)	<i>Diacritical mark DIAERESIS – see clause 4 for coding</i>	<i>Diacritical mark CIRCUMFLEX ACCENT – see clause 4 for coding</i>
D12	LATIN SMALL LETTER ENG (U+014B)	LATIN CAPITAL LETTER ENG (U+014A)	<i>Diacritical mark TILDE – see clause 4 for coding</i>	
C01	LATIN SMALL LETTER A (U+0061)	LATIN CAPITAL LETTER A (U+0041)	LATIN SMALL LETTER A WITH CIRCUMFLEX (U+00E2)	LATIN CAPITAL LETTER A WITH CIRCUMFLEX (U+00C2)
C02	LATIN SMALL LETTER S (U+0073)	LATIN CAPITAL LETTER S (U+0053)		
C03	LATIN SMALL LETTER D (U+0064)	LATIN CAPITAL LETTER D (U+0044)		

ID	GROUP 1 - LOWER SHIFT	GROUP 1 - UPPER SHIFT	ALTERNATIVE - LOWER SHIFT	ALTERNATIVE - UPPER SHIFT
C04	LATIN SMALL LETTER F (U+0066)	LATIN CAPITAL LETTER F (U+0046)		
C05	LATIN SMALL LETTER G (U+0067)	LATIN CAPITAL LETTER G (U+0047)	LATIN SMALL LETTER G WITH CARON (U+01E7)	LATIN CAPITAL LETTER G WITH CARON (U+01E6)
C06	LATIN SMALL LETTER H (U+0068)	LATIN CAPITAL LETTER H (U+0048)	LATIN SMALL LETTER G WITH STROKE (U+01E5)	LATIN CAPITAL LETTER G WITH STROKE (U+01E4)
C07	LATIN SMALL LETTER J (U+006A)	LATIN CAPITAL LETTER J (U+004A)		
C08	LATIN SMALL LETTER K (U+006B)	LATIN CAPITAL LETTER K (U+004B)	LATIN SMALL LETTER K WITH CARON (U+01E9)	LATIN CAPITAL LETTER K WITH CARON (U+01E8)
C09	LATIN SMALL LETTER L (U+006C)	LATIN CAPITAL LETTER L (U+004C)		
C10	LATIN SMALL LETTER O WITH DIAERESIS (U+00F6)	LATIN CAPITAL LETTER O WITH DIAERESIS (U+00D6)	LATIN SMALL LETTER O WITH STROKE (U+00F8)	LATIN CAPITAL LETTER O WITH STROKE (U+00D8)
C11	LATIN SMALL LETTER A WITH DIAERESIS (U+00E4)	LATIN CAPITAL LETTER A WITH DIAERESIS (U+00C4)	LATIN SMALL LETTER AE (U+00E6)	LATIN CAPITAL LETTER AE (U+00C6)
C12	LATIN SMALL LETTER D WITH STROKE (U+0111)	LATIN CAPITAL LETTER D WITH STROKE (U+0110)	APOSTROPHE (U+0027)	ASTERISK (U+002A)
B00	LATIN SMALL LETTER Z WITH CARON (U+017E)	LATIN CAPITAL LETTER Z WITH CARON (U+017D)	LATIN SMALL LETTER EZH WITH CARON (U+01EF)	LATIN CAPITAL LETTER EZH WITH CARON (U+01EE)
B01	LATIN SMALL LETTER Z (U+007A)	LATIN CAPITAL LETTER Z (U+005A)	LATIN SMALL LETTER EZH (U+0292)	LATIN CAPITAL LETTER EZH (U+01B7)
B02	LATIN SMALL LETTER C WITH CARON (U+010D)	LATIN CAPITAL LETTER C WITH CARON (U+010C)	LATIN SMALL LETTER X (U+0078)	LATIN CAPITAL LETTER X (U+0058)
B03	LATIN SMALL LETTER C (U+0063)	LATIN CAPITAL LETTER C (U+0043)		
B04	LATIN SMALL LETTER V (U+0076)	LATIN CAPITAL LETTER V (U+0056)		
B05	LATIN SMALL LETTER B (U+0062)	LATIN CAPITAL LETTER B (U+0042)		
B06	LATIN SMALL LETTER N (U+006E)	LATIN CAPITAL LETTER N (U+004E)		
B07	LATIN SMALL LETTER M (U+006D)	LATIN CAPITAL LETTER M (U+004D)	MICRO SIGN (U+00B5)	
B08	COMMA (U+002C)	SEMICOLON (U+003B)	LESS-THAN SIGN (U+003C)	
B09	FULL STOP (U+002E)	COLON (U+003A)	GREATER-THAN SIGN (U+003E)	
B10	HYPHEN-MINUS (U+002D)	LOW LINE (U+005F)		

Annex B

Illustrations of Sami keyboard layouts

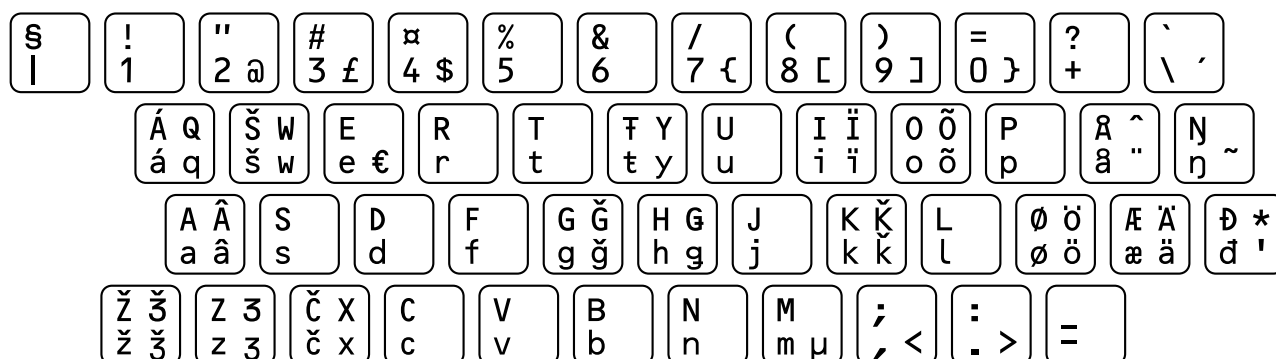


Figure B.1 – Sami keyboard for Norway (extended-alphabet level layout)

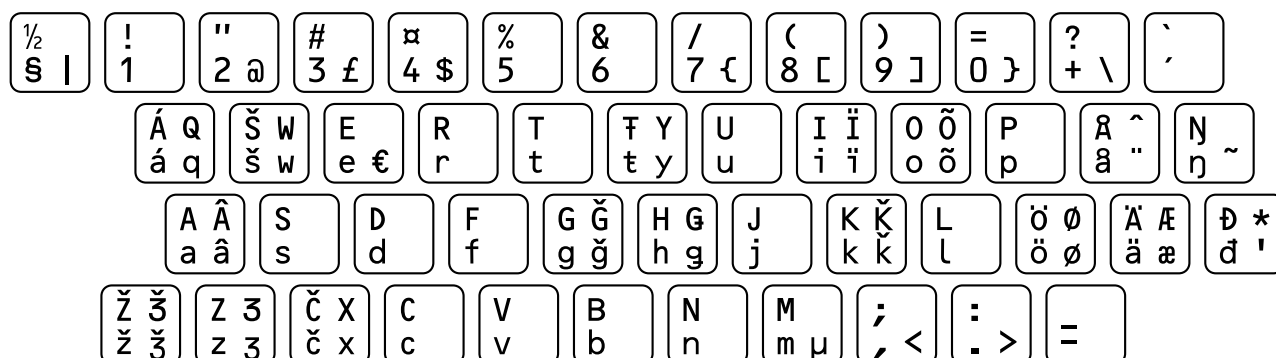


Figure B.2 – Sami keyboard for Finland/Sweden (extended-alphabet level layout)

Bibliography

- [1] ISO/IEC 9995-1:1994, *Information technology — Keyboard layouts for text and office systems — Part 1: General principles governing keyboard layouts.*
- [2] ISO/IEC 10646-1:2000, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*