

From: Bernd Kappenberg [mailto:bernd.kappenberg@gmx.de]
Sent: Friday, April 04, 2008 2:27 AM
To: Håvard Hjulstad
Subject: WG: input from B. Kappenberg

Dear participants of the WS-MEEK,

I apologize for not being able to join you for the meeting in Tallinn.
However, I would like to give some input in written form.

I noticed that both the Swedish and the Finnish approach rely on adding pre-composed characters as well as additional dead-key diacritics.

This might be a bit confusing for the untrained users, especially if the physical engravings are missing.

In parallel, I propose a **“Compose key” solution**.

This solution would be based on the ASCII (lower half) characters that are already present on all current keyboard engravings, so no new allocations would have to be learned.

A solution without dead keys (obsolete since the replacement of typewriters by computers) is also more natural - for č, you say “c with caron” and not “caron on c”.

The Compose key (like under Linux) will be hit after all diacritics have been entered. It could be either a key close to the Return key in the respective national keyboard layout (e.g. #) or a universal two-key combination to be determined.

diacritic	ASCII surrogate
Tilde above Ɔ	Tilde ~
Umlaut, Trema ̈	Colon :
Stroke in ø ð ł ...	Slash /
Dot above ˙	Full stop .
Dot below ˘	Exclamation mark !
Macron ˉ	Hyphen/Minus -
Acute ´	Apostrophe ’
Gravis `	Backslash \
Double Acute ˝	Inch/Quotation “ or 2 Apostrophes ”
Double Gravis ˝	2 Backslashes \\
Circumflex ^	Bigger Sign >
Caron ˇ	Smaller Sign <
Comma below ,̣	Comma ,
Breve ˘	Left bracket (
Inverted Breve ˘	Right bracket)
Ring above ˚	Asterisk *
Cedilla ,̣	Semicolon ;

Ogonek ˛	Ampersand &
Horn ˆ	Nine 9
Hook above ˚	Question mark ?

Examples:

č	c<
ë	e:
ş	s,
û	u*
õ	o9
...	
ı	l.
Ł	L.
...	

By the way, the functions of existing acute, gravis and trema dead keys should be extended to affect all possible letters, i.e. ĥ, ħ, ÿ, ŵ etc.

The principle can be applied to the 11 additional characters / ligatures:

character	ASCII surrogate
æ	ae
ð	d
ə	a
ı	i
ij	ij
κ	k
ŋ	ng
œ	oe
ß	ss
þ	th
ʒ	dz

(Ancient letters like ρ, ϑ, ϰ, ϱ, Ϻ, ϻ etc. can be integrated, too, as well as vv for w, kw for q or ks for x.)

If we use one-letter surrogates (1), we will still have to assign ij to two letters, as i is already taken by ı. Two-letter combinations (2) would be more intuitive for the users, just then we will have to assign ə to a instead of e, as otherwise we would be left without e for æ and œ.

Letters with more than one diacritic or adding diacritics to ligatures and additional characters will also be possible:

ä	a:-
æ	ae ,
ž	dz <
...	

To illustrate the handiness of my proposal, I have turned it into a Windows plug-in that acts like future keyboard driver (here with # as Compose key).

Feel free to test it and to send me comments. You can download it here (please allow Java and pop-ups temporarily): <http://www.gmx.de/mc/KfKMwtcTUbm4T3OXdNfKKNziYrtzpM>

Click on "GMX MediaCenter starten", check the boxes and go to Datei/Download. After downloading, double-click the file icon. A small green box with a black Š will appear in the task bar and the "driver" will be operating.

For example, try to produce the words Sørensen, Müller, Erdoğan, Milošević, Guðmundsdóttir, Þor, Dvořák, Wałęsa, Onutè, Rīga, Horațiu, Håvard, Wæver, Szőke... or exotic characters like š ů ő ...

Regarding Cyrillic on Latin keyboards, I propose a **phonetic solution** based on the Russian Gosstandart transcription (Госстандарт России ST SEV 1362 (1978)). This is the only transcription that does not use diacritics (which might be missing in the respective keyboard layout) and gives unambiguous assignments (i.e. shh for щ instead of shch which could also be derived from шч).

а б в г д е з и й к л м н о п р с т у ф ц ы ё ж х ч ш щ ъ ь э ю я
a b v g d e z i j k l m n o p r s t u f c y jo zh kh ch sh shh ' ' eh ju ja

I have turned this solution into a Windows plug-in as well.

The transcription mode is activated by Windows+T. You can switch to submodes for Bulgarian, Ukrainian, Byelorussian, Serbian/Macedonian, Kyrgyz/Mongolian and Kazakh (but these are at the moment only fully operable with German or Scandinavian keyboards containing Ä Ö Ü).

Feel free to test it and to send me comments. You can download it via the link mentioned above.

Best regards

Bernd Kappenberg
University of Hannover
www.multialphabetism.eu