Refreshable Braille Technology Report for  
ICEB Mid-Term Assembly  
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By James Bowden

Chair, Refreshable Braille Technology Committee

The Refreshable Braille Technology Committee of ICEB has representatives from all ICEB countries and several observers.

Over the past two years, we have expanded the list of tasks (charges) for the committee to include:

* Keeping abreast of developments in braille technology
* Braille table development, (specifically UEB)
* Investigating and developing file formats

Within each of these are various tasks, such as braille support on Android devices, braille to text transcription and looking at automated transcription web servers. I wish to thank the ICEB executive and in particular Jen Goulden for all their help framing these tasks.

Working with Duxbury Systems, we have seen improvements to the Duxbury Braille Translator, including various additions and fixes, especially in the area of reverse translation (from braille to print). This has included support for arrows and fractional powers. We have also seen the addition of codes for the transcriber-defined typeform indicators. Our thanks to Duxbury Systems for their openness and willingness to engage, and for promptness in fixing issues when mentioned.

One of the major focuses of the Refreshable Braille Technology committee over the coming months will be improving the braille output from the LibLouis open source braille translation system, used in various screen readers, braille translators and even within braille displays.

We have already undertaken some work, including adding support for the Unicode fraction characters and making a list of wrongly brailled words. We will continue now with improving text to braille output.

Efforts have been made approaching some of the large technology companies for financial contributions towards development of LibLouis (which they use at no cost to themselves), but thus far all such efforts have not borne fruit.

We have also continued to monitor the development of, and in some cases, test new refreshable braille devices, in particular the new range of lower cost displays, such as the Orbit Reader, Canute 360 and BrailleMe. Such developments are very welcome and it is exciting to see the progress of a new range of more affordable devices on the verge of release.

I should like to express thanks to Christo de Klerk in particular for sharing his assessment of these new devices.

With the arrival of these devices and the consequent hope that many more people will start using refreshable braille technology, comes the question of the best way to prepare a braille file for use on these devices, particularly as most still only have a single line. We have started discussions on this topic, though at present no conclusions have been reached.

One matter that has concerned me greatly over the previous year is the apparent lack of response to questions on the ICEB Refreshable Braille Technology email list. This could be for a number of reasons, but one regrettable reason is that we have experienced problems with the list server. If you expect that you should have received emails, or have not received response when you have posted, please get in touch.

I wish to finish by again thanking everyone for all their help so far and look forward to increased activity in the coming years.

JB 15/02/18