SA Braille Atlas launched

by Peter Bowerman, CDSM

The Chief Directorate: Surveys and Mapping (CDSM), a component of the Department of Land Affairs, has achieved a milestone in producing the first Braille atlas of maps covering South Africa.

decision to produce the SA Braille Atlas (see Fig. 1) was taken in terms of the departmental disability strategy and the constitutional right of access to information by disabled persons. The Pioneer School for the Blind and the Pioneer Printing Works in Worcester played a key role in assisting the cartographers of CDSM during the preliminary stages of the atlas production.

Many issues arose concerning the size and format of tactile maps and how the blind user is able to assimilate information. During the initial stages, interviews and workshops were held with pupils and teachers at the Pioneer School for the Blind and based on recommendations from them, it was decided to produce an atlas rather than a single map.

The blind user relies on variances in the texture of the tactile image (see Fig. 2) to distinguish between for example boundaries and roads or water and land. The themes portrayed on the map must be kept simple, and line, point and area symbols must be easily distinguishable in terms of shape and texture. The legend or reference (see Fig. 3) on the map is placed on the opposite page to the map image. This is done to enable the user to navigate the map separately from the legend and is usually referenced to numerals or letters of the alphabet.

The Pioneer Printing Works in Worcester has specialised equipment to produce Braille text and embossed tactile images. Computerised systems used by Pioneer Printing Works are powered by proprietary embosser technology. This allows embossers to interact with Windows software, just like ink printers, creating a perfect tactile copy of the same information i.e. text, graphics, charts etc. The embossers use different dot heights to create the tactile impression – as colour densities get darker or lighter, so the dot heights vary, just as an ink printer would use more or less ink to reproduce an image.

The tactile atlas comprises an introductory section describing maps and how they are used to inform the



Fig. 2: Tactile map image.

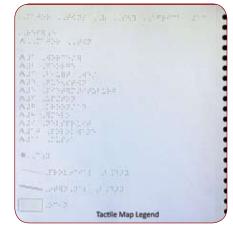


Fig. 3: Tactile map legend.

user about spatial relationships and scale. A teachers guide booklet has been included with the atlas as well as a CD to enable blind persons to follow the audio and use the atlas even if they cannot read Braille.

The atlas is a first in South Africa and is primarily intended as an educational tool for blind persons who can read Braille. In terms of the Constitution and the right of access to information by people with disabilities, this publication will enable the blind in South Africa to be "In touch with your world".

Contact Peter Bowerman, CDSM, Tel 021 658-4426, pbowerman@sli.wcape.gov.za @

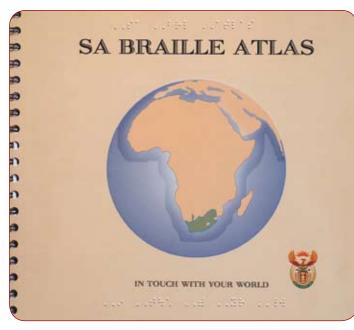


Fig. 1: The front cover of the SA Braille Atlas.

PositionIT - Jan/Feb 2009 5