

Press Release New Technological Breakthrough Aids Blind Accessibility

Date: 08 October 2009

Christchurch is set to be a world leader in accessibility for the blind with a cutting edge technology designed and built in Christchurch. The SoundPost Orientation System allows, for the first time, true independent accessibility for the blind to public arenas.

On Thursday October 15 (White Cane Day), Povidi NZ Ltd, a technology start-up, will launch an innovative piece of technology, the SoundPost Orientation System. The SoundPost system for the first time allows a blind person to simply, affordably and effectively cross 30 metres of open space.

A hand controller carried by the blind person, and strategically placed base stations put up at important places, such as at the entrance to a public building, make up this ground breaking technology. Talking GPS systems already aid the blind to navigate and get to a public space, the white cane or guide dog helps in avoiding obstacles, but finding the door, the information counter or the elevators has been a barrier that has to date severely restricted access to public buildings and spaces for the blind. As part of this world first, 60 SoundPost Base Stations will be placed throughout the Christchurch Cultural Precinct from the Museum at the end of Worcester Boulevard, around the Arts Centre, along the Boulevard itself up to and including the Christchurch Cathedral and Square.

"This product will make quite a difference to many blind people who today don't move around a lot as they find it very difficult to get back to their familiar environment" says Darryl Sherwood founder of Povidi. "This has been one of those hidden problems that no-one thought about until a simple solution was shown to make such a difference" he said.

Povidi began commercialisation of the product in late 2007 when Darryl Sherwood, then a project manager in the Research & Development group at Humanware, was laid off as part of the restructure of the Christchurch company. The R&D department then moved to the new head office in Canada. "Humanware is an icon in the field of technology products for the blind and visually impaired and I, like many of the R&D team, were passionate about what we did here in Christchurch" Darryl said. "So when I was laid off I decided to follow an idea I had been tinkering with for some time and knew within a couple of months that the SoundPost System had some real value."

Povidi joined the Canterbury Development Corporations' (CDC) Hi-Tech programme, forming relationships with many other Christchurch technology companies, gained a Foundation for Research, Science & Technology grant, and some angel investment that allowed the product to complete commercialisation. "We are patented, user trialed, have been approved as an accessibility aid by the Royal New Zealand Foundation of the Blind (RNZFB), and with the support of Mayor Bob Parker, now have an urban city installation that allows us to show to universities, airports, other councils and many other organisations with public access, how this product will change accessibility for the blind." Darryl said. "We are now starting to market this product to blind people globally, as well as to key institutional players within the blindness world. We are heavily export focussed and want to continue to keep the heart of the innovation, marketing and production of this fundamental piece of technology here in New Zealand."

For further information about this press release please read the accompanied Press kit, visit <u>www.povidi.com</u>or contact Darryl Sherwood <u>darryl@povidi.com</u>, +64 21 172-7073 CCC media contact:Nalish Arun <u>nalish.arun@ccc.govt.nz</u> Ph: +64 3 941 8250 Cultural Precinct media contact: Janet Luxton, Project Manager <u>iluxton@culturalprecinct.co.nz</u> Ph: +64 3 3790840 +64 027 5656 033

SoundPost Orientation System Further Details

About the SoundPost Orientation System

The SoundPost system is a two device infrared based direction finding system that aids blind and visually impaired users walk in a direct line to a given point, thus allowing for accurate orientation in semi open space. The system works up to 30 metres in direct sunlight conditions as well as indoors.

The system components are made up of a hand controller used by the blind person who moves the controller from side to side searching for any signals. These signals are provided by base stations placed in appropriate positions such as above doorways and at traffic crossings. When the hand controller detects a base station the hand controller emits either an audible beep or vibrates. The hand controller itself is approximately the size and weight of a cellphone with a button to turn the unit on and off. In addition it can provide recorded voice information that gives more detail about the current point of interest, for example "information", "escalator", "Entry". The hand controller is powered by 4 AAA batteries and is expected to work for over 100 hours before requiring a battery change.

The other side of the system is the base station which is a low power infrared transmitter that sends to the hand controller continuous signals allowing for direct movement towards it. It can be powered off the mains or via 4 AA batteries that allow for 12 months of use before requiring a battery change. The base station emits a low battery message for over 2 weeks prior to non-availability.

Each base station can be programmed with language independent location information. Information is then broadcast allowing a hand controller to tell the user specific details about the transmitter in question. Each base station also has a simple switch for full distance (25 metre range) or half distance (14 metre range). The half distance setting is predominantly for use indoors. The base station has been designed to allow a blind person to put it up themselves without the need of screws and the like. It can be placed horizontally or vertically on any flat surface and the head can be moved to point in the appropriate direction. The units are light and portable and can be placed and removed a few days later without leaving marks or holes in the surface on which it was placed.

Finally the design makes the product affordable by the blind community itself without the need for external funding agencies, as well as allowing those responsible for public and private open space environments to make them accessible at a very low cost.

About Povidi NZ Ltd

Povidi NZ is a technology start-up company based in Christchurch and founded by Darryl Sherwood. Darryl has over 20 years experience in the technology sector. He has been involved with many software and hardware projects specializing for the last 9 years in blindness and low vision products. His experience includes 7 years with Humanware, the blindness based technology company, that was based in Christchurch until 2007.

Povidi NZ Ltd. was set up to work on the fundamental patented technology called the SoundPost Orientation System. Further shareholders include Larry L Lewis Jr a leading marketer and evangalist of blindness products in the United States and Murray Jones Director of Dove Electronics.

Partners and Supporters

Povidi has worked closely with a number of Christchurch based development and production companies to date. Marcus Clyne, principal of Interlink Research, (<u>www.ilr.co.nz</u>) has played a key role in the hardware design and embedded software and the product was designed by Ian Crawley of Crawley Design (www.CrawleyDesign.com). The product has been manufactured and assembled in Christchurch by Action Plastics (Jeff Brook) and Novatronics (Dave Wyse).

The Canterbury Development Corporation (<u>www.cdc.org.nz</u>) have been very supportive in providing training and networking opportunities and a research grant from Foundation for Research Science and Technology helped significantly in completing some of the difficult technical challenges.

About the Christchurch Cultural Precinct Installation

The Cultural Precinct (<u>www.culturalprecinct.co.nz</u>) is at the heart of Christchurch City, containing many of the city's historical buildings and iconic institutions, as well as being a place where many city events and festivals are held. After initial discussions with Bob Parker, Mayor of Christchurch, and Karen Rickerby, Disability Officer for the Christchurch City Council, Janet Luxton, project manager for the Cultural Precinct, got involved. The members of the Precinct agreed to the first installation of Base Stations in an urban environment. "We are very committed to access for all in and around the Precinct", said Janet Luxton, "This part of the city is our heart and we saw the SoundPost as a tool that could really make a lot of our open spaces and make them more accessible to the blind citizens of our city".

Base Stations will be placed from the Museum & Botanical Garden entrance at the end of Worcester Boulevard, around the Arts Centre, The Christchurch Art Gallery, COCA, Our City Otautahi, Canterbury Provincial Council Building, the Central Library, the Isite Visitors Centre, and in and around the Cathedral and the Square. "We will work with the Council disability officer, Povidi and the Royal New Zealand Foundation of the Blind to ensure that the Base Stations are placed to really open up The Cultural Precinct and make it easy to access and move through" Luxton said. "We believe being the first in the world to achieve opening up our public spaces will be a real coup for us and we look forward to blind visitors from around the world coming to enjoy our city".