

ZEB1 Mobile Mapper Wins Australian Science and Technology Awards



The ZEB1 mobile mapping system, available from 3D Laser Mapping, has won two prestigious Australian research awards. CSIRO, the developer of ZEB1, which is a truly mobile, handheld, rapid laser mapping system, has been awarded the Eureka Prize for the Innovative use of Technology as well as the iAwards Prize for Research and Development.

The Eureka Prize, which is given to the top scientists in Australia each year, is often referred to as the “Oscars of science in Australia”. The Australian Museum Eureka Prizes, including the ANSTO (Australian Nuclear Science and Technology Organisation)-sponsored award, celebrate the best in Australian science, innovation, leadership, research and journalism. The iAwards is Australia’s premier technology awards

programme, focused on recognising the contributions made by the ICT industry to both the national and global economies. Winners of 2013 iAwards now have the chance to compete with businesses from across the region at the 2013 Asia Pacific ICT Alliance (APICTA) Awards.

Mobile mapping is a technology in great demand, but difficult to perform indoors, said Frank Howarth the director of the Australian Museum. The team behind the ZEB1 solution has taken those challenges and turned them into opportunities. Their quick and easy scanning solution is regarded as a revolution for bio-physical measurement of cultural heritage sites and tracking of environmental changes.

iAwards Chair Russell Yardley noted that it is rewarding to see the far-reaching impact which the use of innovative technology has on the economy. ICT can lead to improvements in productivity and can also have a tangible impact on society in areas such as education, mining and the environment.

CSIRO

Developed by CSIRO, ZEB1 uses robotic technology called Simultaneous Localisation and Mapping (SLAM). The ZEB1 system includes a lightweight laser scanner mounted on a simple spring mechanism, which continuously scans as the operator walks through the environment. As the scanner loosely oscillates about a spring, it produces a rotation that converts 2D laser measurements into 3D fields of view. Its ability to self-localise makes ZEB1 ideally suited for use indoors, underground and in other covered environments where traditional solutions that utilise GPS do not function well.

This is a huge achievement for ZEB1 and the development team, commented Dr Graham Hunter, founder and executive chairman of 3D Laser Mapping, the company that has commercialised the technology and launched it to market. It clearly demonstrates just how advanced the system is and recognises the impact it is already having on the mapping and surveying industries.

Dr Jay Guo from CSIRO’s Digital Productivity and Services Flagship said he was pleased to be working with 3D Laser Mapping to commercialise the world-leading Zebedee research into the ZEB1 product which is now available on the market. From mapping crime scenes to enabling mining companies to better understand and manage their operations, this technology is already having significant impact in helping businesses all over the world to make substantial productivity differences.