

PRESS RELEASE FROM THE INDIAN INSTITUTE OF TECHNOLOGY DELHI
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SmartCane™ developed jointly by IIT Delhi, Phoenix Medical Systems and Saksham Trust with Wellcome Trust support is ready for product launch

A novel mobility aid for the visually impaired has been developed by the Indian Institute of Technology Delhi, along with Phoenix Medical Systems (P) Ltd., Chennai and Saksham Trust, New Delhi. The device, known as SmartCane™, was funded by the Wellcome Trust under their *Affordable Healthcare* funding scheme in India.

A white cane is currently the most commonly used visual mobility aid. However, it can only detect limited types of obstacles and has a short distance range. Likewise, it cannot detect obstacles that are above knee height, for example a metal barrier on the road, or those that protrude into the natural environment, such as a tree branch.

The SmartCane™ is an innovative device that can be mounted onto a traditional white cane and uses ultrasonic sensors to detect obstacles up to 3 metres away outdoors and 1.8 metres indoors. The range of the detected obstacles is conveyed to users through vibrations which will differ according to the distance of the object at hand. The device is designed for use as a user-detachable unit and is powered by a rechargeable lithium-ion battery, such as those found in mobile phones and digital cameras. It also comes with a range of support material including manuals in various languages including Braille, training programme and accessories for carrying.

The key objective of the project is to provide a safe, effective, and an affordable device for the visually impaired. Field trials conducted with over 150 users in multiple locations across India have helped inform and optimise the design of the SmartCane™ courtesy of funding from the Wellcome Trust. Each user was provided a SmartCane™ for over a month in order to gain detailed feedback. Many trial participants have now become regular SmartCane™ users, having been provided with complimentary devices after the end of their trial period.

SmartCane™ is expected to be launched in India in late March/early April at the price point of Rs 3000. Phoenix Medical Systems will be manufacturing the devices as well as providing after sales support. Saksham Trust will be distributing the SmartCane™ along with their partner welfare organizations located across the country and providing orientation training to users.

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