



The ESA Business Incubation Centre in Darmstadt, Germany, was founded in 2007 and is managed by Centrum für Satellitennavigation Hessen (cesah). The centre offers business start-up support as well as technical expertise in different space related areas, and in particular in satellite navigation, data systems, software systems and navigation test environments.

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## Sensovo

**Feel the way**



Website

**Founded in 2014 by**

- **Dr. Jan Walter Schroeder**

**Incubation period**

01-12-2014 to 01-12-2016



space solutions

## About Sensovo

Sensovo is an award winning supplier and service provider of wearable technologies. We have expertise in the development of devices using tactile and haptic feedback. The company mainly focuses on the engineering of wearables with integrated tactile actuators and associated mobile phone applications.

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## The challenge

Despite the popularity of navigation systems, the commercially available navigation devices are either visual or audio based, which might not be optimal for every user group or application because they require audio-visual attention and manipulation with the hands. For instance, cyclists and motorcyclists, need to concentrate on the road instead

of navigation to avoid accidents. Also runners might not like to waste time determining directions from the device screen. Another group of people, like visually impaired people or patients with Alzheimer's disease, may not be able to use the visual information and constant audio directions might be too distracting for them or unclear in noisy environments. Tourists do not like to make it obvious that they are using navigation by looking at a map or a screen, but instead they want to focus on the attractions and their environment.

## **The solution**

Sensovo aims to commercialise the first Tactile Satellite Navigation System (TNS). The product is a navigation system that consists of a mobile phone application to set target destinations and a wearable accessory with integrated vibration motors that can lead the user via vibration to those selected points. The advantage over other navigation systems is no audio-visual distraction for the user by using the navigation device. Several target groups can benefit from such a device such as blind people, Alzheimer patients, motorbikers, cyclists, geocachers, tourists, jogger and hikers. The device might be also useful for emergency services and rescue operations.

ESNC 2013 – ESA Special Price, 2nd of international evaluation and 2nd of Hessen Challenge

