Research Project NAPA Takes Pedestrian Navigation to the Next Level

Nuremberg/Kamp-Lintfort, December 19, 2014 – The NAPA navigation receiver (navigation receiver chipset for high-precision pedestrian navigation) opens new possibilities with easy app-based pedestrian navigation and orientation. Funded by the Federal Ministry of Education and Research, NAPA is a joint project of Garmin Würzburg, HERE Europe B.V., IMST GmbH, NavCert GmbH, RWTH Aachen, University of Koblenz-Landau, and the Fraunhofer Institute for Integrated Circuits IIS.

For elderly and physically disabled people highly accurate and easy to handle route guidance makes all the difference. The combination of a high-precision receiver and exact map material, operated via easy-to-use app, opens up entirely new opportunities for pedestrians: With NAPA pedestrians are not only provided with real-time information like store hours or historical aspects, it is also possible to determine the exact sidewalk they are using at any given moment. This is a prerequisite to then guide him to a crosswalk or a traffic light and safely across the street.

The novel pedestrian navigation technology NAPA was developed utilizing the combined strength of various navigation systems like Galileo, GLONASS and GPS. Even in challenging areas like urban canyons the user knows his exact location, right down to which side of the street he is on. A navigation performance hard to match by solutions relying on only one satellite navigation system.

The new navigation chip has been field tested in the Würzburg area and has proven its reliability and performance capabilities.
The NAPA chipset will be used by e.g. visually impaired to navigate cities efficiently and safely. © Fraunhofer IIS / Steffen Werthmann and Katja Watzl | Picture in color and printing quality: www.iis.fraunhofer.de/pr