

# ITEA project results enhancing people's lives

## New generation of navigation assistance

According to the World Health Organization, the estimated number of visually impaired people in the world about 285 million [4.24%], with the majority of them being 50 years or older. All these people would greatly benefit from assisting navigation devices that support them in their daily live. However, visually impaired people are still a very heterogeneous user group, with a variety of needs and expectations on assistance devices. As an example, user-studies indicate that many visually impaired users appreciate navigation assistance devices that do not attract the attention of other people. A haptic belt or other wearables, giving haptic navigation signals to a user are highly promising solution to satisfy this user expectation.

To make the development of navigation assistant devices for visually impaired people sustainable and profitable, it is necessary to benefit from the developments on the mass-markets for smartphone navigation and location-based services. To achieve this, FIONA creates an eco-system for navigation assistance solutions, that allows to easily share and re-use software components. Within the FIONA eco-system, software components, e.g., for localisation, navigation, or obstacle detection, can be easily used in different products, such as smartphone navigation or haptic navigation for visually impaired. As such, FIONA greatly supports a new generation of navigation assistance products that are tailored to individual needs of various user-groups.

**ITEA 2 Project  
FIONA**

