



## Project Overview

VUK is a European [Active and Assisted Living Programme](#) project made up of a consortium of 9 partners located in Hungary, Austria, Spain, Portugal and the United Kingdom. The project focuses on elderly blind and visually impaired individuals and their caregivers, with a basic (or above) ability to use technology, a population currently lacking a suitable navigational aid for everyday urban mobility. **Visionless sUpporting framework (VUK)** is a new urban mobility solution enabling visually impaired individuals to be more independent and active, while decreasing caregivers' workloads and increasing comfort on both sides. It also aims to assist people in establishing relationships with others facing a similar situation and offers users the opportunity to be support their surrounding community.

## Project Objective

The project goal is to support blind and visually impaired individuals in the challenging task of urban mobility through providing a simple, effective and affordable indoor navigation and mobility assistance solution. This system will guide the user on journeys through unfamiliar indoor environments such as subway systems and through complex buildings like shopping malls and business centers. The envisioned service would also be suitable for companies and public organizations in which blind and visually impaired individuals work or visit, assisting to integrate said individuals in an open community.

## Project Progress

The VUK project is now in its sixth month – below you can find an overview of the partners' progress.

### End User Organizations and Results of the User Requirement Analysis

The first task completed by **INFOALAP**, the **Hilfsgemeinschaft** and **TSB Transdanubia** was to assess real user requirements from end-users in two countries (Hungary and Austria), through quantitative and qualitative analyses, to define the main characteristics of the services, usability requirements, and main functionalities. Based on the qualitative and quantitative analyses, 5 types of indoor areas were identified where elderly and/or visually impaired people have difficulties and would use the VUK software.

These surveys acted as a basis for a number of use cases, defined by **INFOALAP**, to help with the technical specification, as well as for the validation process. Each use case contains a minimal and an optimal version, since it cannot yet be anticipated who the test subjects will be, and exactly how much time and patience they will have for the test. Furthermore, the test sites have not yet been selected and it is unforeseen what activities will be allowed there for the tests by the owners/management of the sites.

Each use case description contains the tasks (preparation, outdoor and indoor navigation), the start and end points of the journey, and – if and when they can be defined in advance – the most difficult situation/task for the end-user while completing the journey, preferences during the journey and additional information.

**INFOALAP** has also carried out a gap analysis to have a clear picture of the current developments and availability of existing solutions. The brief summary of the survey is that indoor navigation is still in its infancy, competing technologies and solutions come and go, availability of such services is still fragmented, sporadic and/or limited in some aspects. This dynamically changing landscape makes it hard to find the technology best suited to the special needs of VUK's target audience. In the light of the findings of this analysis, there is a gap in the indoor navigation market that VUK can successfully fill with its planned service and application.

**TSB Transdanubia** also focused its energy on the potential market for the VUK system in creating the first version of the market analysis. **TSB** has also created the first round of marketing materials for the system: the brochure, poster, Facebook group and continues updating the website.

## Technical Partners

The most important contribution from **INOVA+** for the second half of 2016 was the production of the project's Technical Specification document, Delivery 2.3. This important deliverable is a transversal documentation of the technical specificities that should be followed by all technical partners in order to cater to the end-user requirements gathered beforehand; although this document has an evolving nature which will accompany the activities brought forth by each of the technological tasks (some of the chapters require further details in their more relatable deliverables), the first version is a base of reference which should steer all development.

Although all partners contributed to the production of this document, there was an essential and particular help provided by **INFOALAP** (as the leaders of the user-requirement stage that precedes these specifications), **ESL** (who will undergo the most lower-level framework of the project) and **BZN** (always supervising the structure and methodology behind the construction of this rather long deliverable). This document is now the main input for the planning and execution of the technical activities that will become the main focus of the project in the coming months.

**INOVA+** has also participated with great passion and initiative in all project matters (steering many of the technical meetings in this period) and underwent one of the first dissemination activities of VUK in the scope of the European Researchers Night 2016.

As a technical partner of the consortium, the first task of **Erlang Solutions** (ESL) in the VUK project has been taking vision of the use cases, followed by reviewing and contributing to the technical specification. **ESL** also prepared for the phase of integration with the technical partners, by planning for the integration environment and prototyping software deployment.

**HI-Iberia**, as a technical partner with an important role in the business part of the project, has analyzed how the user requirements impact the social-based assistance/guidance service and has reviewed the technical specification related to such service. **HI-Iberia** has also started to identifying possibilities of further use for the project outputs and analyzing the best method to launch the VUK project to the market. These two activities will result in the exploitation plan and the first iteration of the business model plan in the next six months.

## London Meeting

We're just back from our meeting in London on the 20<sup>th</sup> and 21<sup>st</sup> of November, an important step in the VUK project. These meetings offer us the close proximity necessary for important technical decisions, updating the team on the individual progresses and setting the goals for the next six months.

At this meeting, the VUK partners have focused on the technical specifications and development of its own indoor navigation system. Amongst with lively group discussions regarding the online versus offline requirements, the technical partners made progress on the key components which are to be designed next.

End-user partners have begun discussions of the legal and practical requirements of system testing, and have swapped ideas for the testing locations. It has been decided that 40 end-users testers will assess the system: 20 in Budapest and 20 in Vienna.




## Next Steps

The next six months will be very influential in forming the end product which the VUK project creates. Of main importance will be the technical progress which is made in this period and the initial rounds of testing. In order to ensure the best possible product, the focus has been put on having a 100% accessible navigation solution. Each round of testing will be done by visually impaired and blind individuals to ensure that the solution is compatible with screen readers and speech out functions.

Dissemination events are also being planned for late spring/early summer 2017, in order to increase awareness of the VUK system. Amongst the appointments is the IKT Forum for Handicapped Individuals in Linz in July 2017. Check our website for more information!

## Partner Contacts

 <p>Bay Zoltán Nonprofit Ltd. for Applied Research</p>	<p><b>Bay Zoltán Nonprofit Ltd. for Applied Research</b></p> <p><i>Hungary</i></p>	<p>R&amp;D</p>	<p><a href="http://www.bayzoltan.hu">www.bayzoltan.hu</a></p>
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	<b>Budapest University of Technology and Economics</b>  <i>Hungary</i>	R&D	<a href="http://www.bme.hu">www.bme.hu</a>
	<b>IT Foundation for the Visually Impaired</b>  <i>Hungary</i>	End-user Partner	<a href="http://www.infoalap.hu">www.infoalap.hu</a>
	<b>Transdanubia Nikolai Ges.m.b.H.</b>  <i>Austria</i>	SME	<a href="http://www.tsb.co.at">www.tsb.co.at</a>
	<b>Instituto Universitário de Lisboa</b>  <i>Portugal</i>	R&D	<a href="http://www.iscte-iul.pt">www.iscte-iul.pt</a>
	<b>INOVAMAIS – Serviços de Consultoria em Inovação Tecnológica S.A</b>  <i>Portugal</i>	SME	<a href="http://www.inovamais.eu">www.inovamais.eu</a>
	<b>HI Iberia: HI-IBERIA Ingeniería y Proyectos SL</b>  <i>Portugal</i>	SME	<a href="http://www.hi-iberia.es">www.hi-iberia.es</a>
	<b>Erlang Solutions</b>  <i>United Kingdom</i>	SME	<a href="http://www.erlang-solutions.com">www.erlang-solutions.com</a>



**Hilfspgemeinschaft**  
der Blinden und Sehschwachen Österreichs

**Hilfspgemeinschaft  
der Blinden und  
Sehschwachen  
Österreich**

***Austria***

End-  
user  
Partner

[www.hilfspgemeinschaft.at](http://www.hilfspgemeinschaft.at)

## Contact

If you are interested in knowing more about our project or even participating in it as an end-user, or know anyone who would be interested, please contact the coordinator of the applicable country:

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## Further information

In order to be informed regarding the VUK community and its activities, please visit our site (<http://www.vuk-project.com>) or join us on Facebook ([VUK - Visionless Supporting Framework](#))?