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 third year. Below you can find an overview of the partners' progress.

INFOALAP

In the first six months of 2018, Infoalap has continued the end-user oriented agile evaluation of the VUK application and related software tools and hardware devices, focusing more on the accessible user interface and speech-based features. Infoalap's representatives have begun negotiations about adequate locations and necessary terms for the field trials with the managements of potential administrative and commercial sites in Hungary. A formal cooperation is imminent. In June, Infoalap attended the VUK consortium's Madrid meeting.

VIDEBIS

The last few months have been very exciting for VIDEBIS, as our visually impaired and blind colleagues have been able to test particular aspects of the VUK application and suggest improvements. Whilst drafting the second version of the Market Analysis and disseminating the VUK application, the need for the VUK system became even clearer, confirming the demand for the application. Dissemination has been a key word for VIDEBIS these last few months, in which approximately 10 VUK dissemination events have been held, the most impactful of which was the Zero Project Conference, an initiative of the Essl Foundation, visited by over 400 delegates of 50 countries at the United Nations in Vienna.

INOVA+

INOVA+ has been testing and updating the security system. New improvements are being prepared to be integrated in the VUK system in order to provide a strong and robust secured system. The authentication and authorization modules have been reviewed, analyzing and incorporating measures to improve efficiency of internal code and also to improve security in communication and avoid sharing of confidential actions from external connections in the VUK system.

ISCTE

In the former months ISCTE has been working on TTS and STT solutions. The core functionality of Interaction Manager module, which handles all TTS and STT requests for the VUK mobile app, has been implemented.

VUK mobile app now has full TTS support for German, English and Hungarian using Google's TTS engine and Profivox for Hungarian upon request. TTS is working in tandem with Talkback for screen reading. TTS is used to read directions or other notifications not read by Talkback.

VUK mobile app now has partial support for Speech recognition in German, English and Hungarian, using Google's speech engines for German and English and the Voxserver engine (BME) for Hungarian. Both engines work either offline or online. Currently working towards full ASR support and interaction.VUK Mobile app now has full support for the Trekz wireless headset.

ESL

On the 21 and 22 of June 2018, the VUK partners had a physical meeting in Madrid, where Erlang Solutions (ESL) presented updates on Deliverable 3.1 (VUK framework) and Deliverable 4.2 (Infostructure database).

We continued our work on deliverable 4.2, corresponding to the "Infostructure" database for storing and searching the "Places". Our daily continuous integration tests continued across the VUK framework and the Infostructure database, with minor refinements made to tests.

The VUK framework and Infostructure database are currently deployed and available in two environments: the "development" environment ("http://inf.dev.vuk-project.eu") for developers to experiments the API and it's correct behavior; the "stage" environment ("https://inf.stage.vuk-project.eu") for developers to use as a real testing scenario, similar to use cases that will be present in the final "production" environment.

As of June 2017 ESL is engaging with relevant technical partners in order to finish the integration of maps in the Infostructure database with other services like the VUK Website to plan routes and the VUK mobile application to use the navigation.

HI-Iberia

As a technical partner, HI-Iberia is currently developing the second iteration of the VUK Web User Interface, this time paying special attention to the integration with the Indoor Navigation Service and the Infostructure Database, and has continued the development of the Social-based Assistance/Guidance Service by carrying out the implementation of the following features: "Social maintenance of the Infostructures" and "Private messages between VUK users as an online communication channel". As it is already known, HI-Iberia also has a relevant role in the business part and so, it has chosen the best business model to commercialize VUK and defined the first version of the business case including a detailed analysis of the potential revenues and the CAPEX and OPEX costs, which will be reported in the deliverable D5.6. Finally, it is very important to remark that it was a real pleasure for HI-Iberia to host the VUK consortium meeting in Madrid.
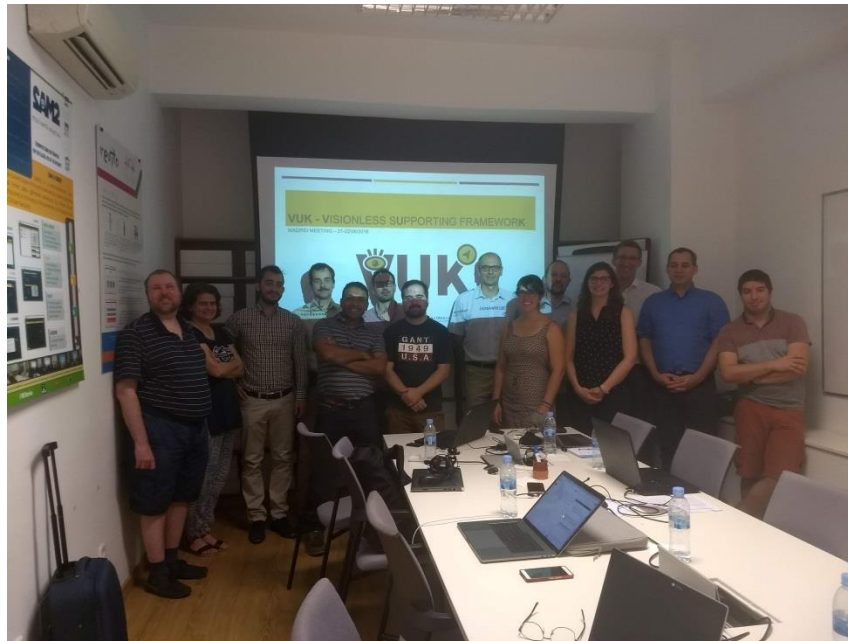
BME

BME-TMIT has been further developing the mock-up of the VUK Mobile User Interface, and did several rounds of agile evaluation with the end-user partners. Besides, BME-TMIT fixed the issues found by the end-users regarding speech technologies for Hungarian, namely the automatic speech recognition solutions for Android. We coordinated the testing of each of the core technologies (e.g. VUK framework, localization, web and mobile user interfaces, STT and TTS solutions), and started writing deliverable D3.8 from the results.

BZN

Madrid Meeting

On the 21st and 22nd of June the VUK consortium has met in Madrid on the HIB premises to discuss all the project management, development, end-user and dissemination & exploitation related questions. This was a very important meeting since while the first version of the application is getting ready, end-user partners need to plan the field trial evaluation. The meeting was very fruitful and positive with lots of discussions among technical partners about the status and the next steps (including the important integration) of the modules' development life. Meanwhile end-users have presented their agile evaluation results and talked through the process of having the agreements with different premises where tests can be carried out. The meeting allowed us to go through all the important questions and to find solutions for them in order to be able to start the field trials in September.

VUK consortium meeting in Madrid, 22nd June, 2018

Project extension

As it was recommended by the AAL CMU in our first Mid-term review feedback and report the lifetime of the AAL VUK project has been extended by 6 months. Partners have signed an amendment which states that the final project ending date is February the 28th, 2019. This extension will allow the consortium to provide a reliable AAL VUK product and be able to test it thoroughly thanks to the end-users involved in the evaluation. The amendment also contains the name change of TSB for VIDEBIS.

Dissemination activities:

Carpathian Control Conference (28th to 31st of May, 2018)

The 19th International Carpathian Control Conference was held in Szilvásvárad, Hungary from 28th to 31st May, 2018, where Mr. László Árvai - Head of Department of Info-communication Technologies, Bay Zoltán Nonprofit Ltd. for Applied Research (BZN) - presented the realization of the VUK project, the results achieved and the experiences gained during project implementation. Moreover an article on the VUK project was issued in the printed ICCC brochure as well.

Medtec (17th-19th of April, 2018)

The dissemination activity performed was the INOVA+'s presence on the Medtec. Medtec Europe 2018 is the preeminent medical technology platform showcasing the key trends and insights across the entire supply chain of the medical technology in Stuttgart (17-19 April 2018).

Besides reading this Newsletter we encourage everyone to visit our website or follow us our VUK Facebook to see the latest news about VUK.

Partner Contacts

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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).