CAP4Access e-Newsletter No. 2, March 2015

First tools released + + + "Mapping parties" raise awareness for disability issues + + + Finding accessible toilets made easy

Dear Readers,

The CAP4Access project has kick-started its second year by publishing first versions of a range of tools. They are intended to raise awareness about accessibility of the built environment and for providing concrete support to people with limited mobility in overcoming barriers to access in the city.

December 3 is the International Day of Persons with Disabilities. In 2014 the UN chose "Sustainable Development: the Promise of Technology" as the day's theme. The partners of the CAP4Access project are exploring some of the possibilities that technology offers to people with mobility impairments. Hence, three of the project's four pilot sites marked this day by organising so-called "mapping parties" to engage with locals. A fourth mapping event took place in pilot city Elche in March 2015.

Finding a toilet when needed is a problem for anyone out there. People in wheelchairs carry the additional burden of finding a toilet that is accessible for them. To address this requirement, CAP4Access partner Sozialhelden is currently developing a feature, to be integrated in Wheelmap shortly, which will make it much more straightforward to identify an accessible toilet both on-the-spot (when out and about) and in advance (when planning trips).

Read about these items in this second newsletter of the European CAP4Access project.

The CAP4Access Team

First versions of CAP4Access tools available

A range of tools newly developed within the project have been published at the beginning of 2015. These include above all a mobile tagging app, called the **CAP4Access Tagging App**, developed by Heidelberg University. It offers volunteer contributors great functionality in terms of entering new tags and attributes to the OpenStreetMap (OSM) database. It also provides search facilities and visual representation of tags.

For the support of routing and navigation for people with limited mobility, Heidelberg University's OpenRouteService (ORS) platform was enhanced by a **wheelchair option**. A **mobile client** has been newly developed for enabling wheelchair users to retrieve **navigation** information en-route (the beta version for Android smartphones is available **here**). The mobile client links with OSM and Wheelmap for selecting destinations and allows user to select personal preferences for the routes generated.

Visualisation of accessibility related information can be a powerful means for raising awareness about the issue and for motivating local stakeholders to become active in addressing barriers to access. CAP4Access partner Fraunhofer-IAIS is developing **Viz-Dashboard**. This is an application that allows an integrated view and management of different visualisations. It includes for example comparisons of cities according to availability of information on accessibility and the share of tagged buildings found to be inaccessible for people with limited mobility.

Read more about these and other CAP4Access tools in our Deliverable 3.3 which you can download from **http://cap4access.eu/results0**.

Reports from mapping parties

On December 3, 2014, CAP4Access pilot sites, London, Vienna and Heidelberg threw so-called "mapping parties" in order to raise awareness for disability issues and to collect valuable accessibility information in these cities. The fourth pilot site, Elche in Spain's Valencia province, followed in March 2015. People with and without disabilities were invited to take part in a variety of activities, to learn about the (in)accessibility of their cities and to add information to wheelmap.org, the worldwide map for wheelchair accessible places – and to have fun and get to know new people, of course! Turnout was good, everyone had fun, and the OpenStreetMap and Wheelmap.org definitely profited from the important data that was added to them during the events.

London

Across London the International Day of Persons with Disabilities was celebrated with a series of mapping parties, wheelchair access walks, and events for the empowerment of disabled people – all organised by CAP4Access partner, Mapping For Change. The day provided a great opportunity to engage with a variety of different groups, including students, third sector organisations, and local authorities. In Croydon, students from a local special school took to the streets to map accessible locations around the town centre, and discuss the provision of access facilities with shop keepers and restaurant staff. Students divided into groups of three or four and took on individual roles such as photographer, journalist and mapper. Chilly temperatures didn't stop the group of eager volunteers from making their views about the importance of accessibility known!

Read more at **http://myaccessible.eu/raising-awareness-london/** or check out our video from the day's activities at **https://www.youtube.com/watch?v=N8Lo0bQQDI4**.

Heidelberg

During the mapping party in Heidelberg about 20 participants got acquainted with the hows and whys of mapping and tagging wheelchair accessible places on the OpenStreetMap and on Wheelmap.org. After an introduction to the topic by a researcher of Heidelberg University's GIScience research group, the participants split up into two groups. One group braved the weather and used their smartphones to tag the accessibility of places around the University campus on Wheelmap.org. The other group stayed indoors and edited the OpenStreetMap with sidewalk information using the GIScience Institute's PCs.

Read more at **http://myaccessible.eu/successful-mapping-party-heidelberg/**.

Vienna

The Vienna event was hosted by Austrian CAP4Access partner ZSI (Centre for Social Innovation). A wheelchair user introduced participants to the different aspects that must be considered when rating the accessibility of locations, pointing out that certain, easily overlooked, details can make all the difference in practise. This applies for example to swinging doors to otherwise accessible places or small steps inside of a place which deny access to the toilet. The mapping tour was done in groups of three to five people. Wheelchairs were available for borrowing by those who have never sat in one before so they could make their own experiences of getting about in this unfamiliar manner. The groups braved the cold and rainy weather and toured the area for up to two hours, before gathering together for hot tea and some intensive discussions.

Read more at **http://myaccessible.eu/vienna-active-mapforaccess/**.

Elche

In the fourth pilot city, Elche, a mapping party took place on 14 March 2015, hosted by Spanish project partners Polibienestar Research Institute from the University of Valencia in cooperation with Elche City Council. Preparatory fieldwork was already conducted in February, during which the project team added more than 800 so-called POIs (points of interest) across Elche's historical town centre such as shops, restaurants, pubs and touristic places to OSM. During the day, participants tagged places either directly using the Wheelmap app on their smartphone or alternatively on map print-outs, which made sure that citizens of all ages and ICT-skills could join in. The event attracted a lot of interest in local media.

Read more at **http://myaccessible.eu/elche-spain-colors-in-the-wheelmap/**.

Finding accessible toilets made easy

People in wheelchairs and other people with mobility impairments must be able to find an accessible toilet when needed. What is more, unavailability of such information can deter from taking a trip to places which are otherwise known to be

wheelchair-accessible. For example, the decision to visit a restaurant or pub can easily turn into a gamble if there is no knowledge in advance about toilet availability. To address this requirement, Sozialhelden are currently developing a feature, which will be integrated in Wheelmap in the coming months. When adding a tag to a building, the contributor will be asked explicitly to specify whether toilets are accessible, partly accessible or not accessible. The search interface will be enhanced to allow people to look for accessible toilets in the vicinity of the current location.

News

CAP4Access website updates

The CAP4Access website is being updated continuously to provide insightful information about accessibility related issues. The following updates may be of particular interest:

- Project flyers in English, Spanish and Austrian-German are available at **http://cap4access.eu/what_we_do/**.
- The list of related events, projects and literature has been updated at **http://cap4access.eu/resources/**.

Europe-wide survey on accessibility needs

We are conducting an only survey targeting people with limited mobility and their helpers or carers. We would like to learn about your experiences with accessibility in daily life. The anonymous survey covers mobility needs; information channels and tools used when planning a journey; features in the built environment such as steps, stairs, and kerbs that make it difficult to get around; experiences with using public transportation; and information that would help get out and make travelling to work, school or college or for recreation easier. The online questionnaire is available in **English**, **German** and **Spanish**. Every response will increase our ability to better meet the needs of people with limited mobility across Europe. Please forward to friends and colleagues!

Calling the crowd! Volunteers sought for retrieving sidewalk information for wheelchair routing

Sidewalk data is of essential importance for the development of routing and navigation services tailored to the needs of wheelchair users. Where there is no sidewalk, chances are that a street is close to inaccessible for wheelchairs. Sidewalk information on OSM is still very patchy, however, which means new, innovative methods to collect such data are required. Heidelberg University's GIScience Group developed an extension for an **OSM quality analysis tool** that shows streets that do not have a sidewalk tag yet. In order to be able to utilise the support from volunteers, tasks have been designed and placed on the platform **crowdcrafting.org** to detect sidewalks from Mapillary imagery. The actual task is straightforward and can be

carried out by anybody with a few minutes of spare time and a computer plugged into the Internet.

Participate here: **http://crowdcrafting.org/app/detectsidewalkinformationfromstreetlevelimages/newtask**

Or read more at **http://myaccessible.eu/looking-for-sidewalks-on-open-data-day/**.

Meet us at European Commission sponsored events in Brussels

Net Futures 2015 is a new addition to the range of European Commission organised conferences in the ICT domain. The conference will bring together a large number of interest groups working on the following topics: internet of things, open source developments, the cloud, smart cities, and novel types of ICT-driven entrepreneurship. It will also include consultation meetings that cover cross-cutting topics such as network technologies, software & services, cloud, net innovation, and experimental platforms. The event will be structured around three pillars that represent stages in the life-cycle of an idea: research and innovation, technological validation, and final delivery to market. Net Futures 2015 will be on 25 – 26 March in Brussels. See **http://netfutures2015.eu**.

On 18 – 19 June 2015, the City of Lisbon will be hosting a major EUROCITIES event on **Cities for Accessibility, Jobs and Inclusion**. Under the heading "Together towards barrier-free Europe", the conference will discuss how cities can ensure that everyone, including people with disabilities, the elderly and parents with children can fully participate in society. From the built environment and transport to public websites, accessibility is crucial for the quality of life as well as social and labour market inclusion of many residents. The conference will bring together stakeholders from the EU as well as national, regional and local levels to discuss how to steer the accessibility agenda together. Attendees will be policy makers from the EU, national, regional and local authorities, representatives of civil society and human rights organisations, trade unions, business associations, and research and academia. See **http://www.eurocities.eu/eurocities/events/Conference-Cities-for-Accessibility-together-towards-barrier-free-Europe-** .

7 – 8 July 2015 marks the **2nd International Conference on Collective Awareness Platforms for Sustainability and Social Innovation** (CAPS). An entire ecosystem of initiatives innovates the European and worldwide societies through a plurality of voices and approaches, including social entrepreneurship, crowdfunding, sharing economy, P2P, sustainable consumption, just to mention a few. What they all have in common is the use of the internet and the internet of things as a lever to scale, engage, ideate, debate, impact and overall tackle societal challenges. CAP4Access belongs to the first batch of CAPS projects that have started in late 2013 and early 2014. This international annual event provides existing projects and initiatives with an opportunity to discuss their impact, increase their visibility, develop synergies and roadmaps, and liaise with any interested stakeholders: civil society organisations, NGOs, local communities, students and hackers, academic and industrial institutions,

policy makers, national agencies, new Members of the European Parliament. See **http://caps-conference.eu/**.