



## EUROCITIES – “Barrier-free City for All” Working Group

### Minutes of the 17<sup>th</sup> working group meeting

**Place:** Toulouse

**Time:** Tuesday, 17 October 2017

**Participants:** see Annex 1

**Programme / Agenda:** please see text

**Moderator:** Thomas Honeck (Berlin)

The BCA working group meeting took place as part of the EUROCITIES Mobility Forum in Toulouse from the 16<sup>th</sup> to the 18<sup>th</sup> October 2017. The subject of the Mobility Forum was “Innovative Mobility for Better Urban Spaces”. Its aim was thus to initiate discussions on the need to develop innovative solutions that facilitate mobility in public space. The range of topics addressed during the conference included among others the sharing of urban space, road congestion, and the operationalization of urban Bus Rapid Transit (BRT) systems. Innovative approaches were presented by the participating cities through “inspiration cases” and “Workshops on the move” led by the representatives of the Toulouse municipality. In their introductory speeches, the Mayor of Toulouse Jean-Luc Moudenc, and the President of Tisseo Collectivités (the local transportation company) Jean-Michel Lattes, advertised Toulouse as the most attractive urban area in France, as more than 15,000 people move to the city every year. The consequence for public transport is that the number of daily journeys will increase by 500,000 in 10 years. Currently, only 8% of Toulouse’s residents use public transportation services to commute from home to work. In response to these challenges, concrete actions will be carried out to double the capacity of metro line 1 and to open a third metro line by 2025, to strengthen the BRT system and the mobility service provided by urban cable cars, to install park-and-ride facilities and to extend the cycle network. As a metropolitan government body, Toulouse Métropole is responsible for guaranteeing the spatial coherence of its territory and offering a sustainable and attractive transportation system to all its citizens.

## 1. Opening and Welcome

**Gerd Grenner** and **Thomas Honeck** from Berlin welcomed the group and invited all participants to briefly introduce themselves.

**Thomas Honeck** announced that an update on “News from the cities” could be given at the end of the meeting.

**Laurent Saby** presented the two workshops on the prospect of a European GIS on accessibility in cities (Workshop I) and the challenge of data collection by local authorities for GIS on accessibility (Workshop II).

**Laurent Saby** drew attention to the table summarizing the initiatives from the cities. He indicated that this table was based on a questionnaire sent by Berlin previously.

The group unanimously approved the minutes of the last meeting.

## 2. Introduction

### 2.1 Presentation by Brigitte Grasset: Results of a Survey

**Brigitte Grasset** (Head of office – Road and Street Policies including accessibility of public spaces / Direction of Infrastructures, Works and Energy) gave the first presentation entitled “**Working Group BCA: Results of a Survey**”. The survey was initiated by the city of Toulouse to understand the travel habits of people with disabilities and to assess the need for developing a navigation application. 50 people with disabilities were interviewed for this survey. The most significant results are:

- 49% of people choose a digital tool to plan an unknown route
- 81% of people plan their journey alone
- Among digital tools, 59% use a mobile application to plan their journey
- Among applications, 56% choose Google maps to plan their journey

After the presentation, the group discussed the navigation application “Waze” which is increasingly used by young people. This GPS system is open-source, free and collaborative. It was initially developed for cars and includes real-time information. Unfortunately, a pedestrian mode does not exist yet, so that it is impossible to know if a particular street is practicable or not.

### **Discussion**

The presentation was followed by a discussion among participants who reflected their own experiences regarding the development of navigation apps for people with disabilities in their city.

**Karolina Klimova** indicated that similar projects (route planners) had been initiated in Prague without success. The reason was a lack of municipal capacities to update information at the level of detail needed. A major problem had been, for instance, temporary changes on routes. Consequently, people could not rely on the information provided by the app.

GIS-information had been obtained through field mapping and had also been contributed directly by users through the app.

**Matthias Pfeil** said that a routing system is more important for blind people.

**Jan Urbanek** confirmed this assumption and emphasised the importance of detailed and accurate information.

**Sergey Chistiy** said that good-quality accessibility standards are important.

**Amandine Varieras** explained that some new GPS apps, which have been primarily developed for cars, can analyse the movements of people and detect obstacles in the street.

**Matthias Pfeil** thinks that the idea is good but noted that only 10% of cars are connected to a routing system.

**Sašo Rink** explained that for him the most important data is to know if the final destination is accessible or not, as it will not be possible to predict all obstacles.

## **2.2 Presentation by Laurent Saby: The Diversity of Digital Apps used in the Field of Accessibility: Results of a Study in France**

**Laurent Saby** presented the results of a study led by Cerema for the French Ministry in charge of sustainable development. The study's objective was to help public authorities to develop an accessibility strategy and inform users about the degree of accessibility in their own city.

The study helped to identify fifteen existing systems (digital apps) developed by local authorities until 2016. It revealed the characteristics of different apps in terms of scale, objectives and features. Differences between the apps include, for instance, the type of disabilities taken into account, the cartography basis, data sources, types of services and the semantic approach.

At the end of the presentation, Laurent Saby summarised the key lessons of this study. The study revealed a multiplicity and heterogeneity of existing tools. Route calculators are

popular among app functionalities. With regard to crowd sourcing, there is a strong potential for data quantity but concerns remain about data quality.

### **Discussion**

**Laurent Saby** stressed that the database used by local authorities should be as extensive as possible and data should then be “digested” for the final user.

**Friederike Schlegel** noted that these apps tend to standardize the different situations of persons with a handicap.

**Laurent Saby** answered that a standard model is needed and real-time information can be added. A mix between institutional information and crowd-sourced information would be ideal.

Following these introductory presentations, the group was split into two sub-groups (parallel workshops).

## **3. Parallel Workshops**

### **3.1 Workshop I: Prospects of a European GIS on Accessibility**

(moderator: Laurent Saby, Cerema)

In Workshop I, participants discussed the challenge of organising convergence towards an accessibility data model that would cover the entire mobility chain.

#### **3.1.1 Presentation by Karolina Klimova from Prague: *Prague Accessibility Map***

The Prague accessibility map encompasses both buildings and public spaces; 300 different locations are presented on the map (culture, services, sports...). Detailed information helps users to assess their ability to reach their destination. A coloured lighting system is used to describe the accessibility of each location. Each profile presented on the map exhibits an extensive description of the buildings' characteristics, including the surface, narrow passages, toilets, etc.

The app has been developed by NGOs and supervised by the Prague institute for planning and development. In a first step, a nationwide expert group worked on developing a standardised methodology for field mapping and accessibility that had to be rated from the user's perspective. The methodology is only used for the built environment, so it is less strict than the current legislation which also applies to planned and new buildings. The app is financed by the Department of Transport.

Karolina Klimova told the group that people who proceed to the mapping of buildings on the app should be professionals who stick to the methodology as there is an extensive and detailed form to fill out.

## Discussion

**Sašo Rink** noted that the assessment is done according to such a framework and not the legislation; otherwise no building would be marked as accessible.

**Amandine Varieras** said that this methodology is meant for wheelchairs, and that only some guidelines are for blind people.

**Sašo Rink** said that blind people will rather choose a road that they know through their daily routine.

**Matthias Pfeil** reported that the city of Dresden has made a survey among 1,000 blind people. The results show that, for people with a handicap, the most important thing is to know if the service inside the building is accessible, otherwise they will not go there.

### **3.1.2 Presentation by Matthias Pfeil from Dresden: GIS-data on Accessibility / Case Study Presentation**

Matthias Pfeil of the city of Dresden also shared its experience with participants of the working group.

Dresden has a long tradition of providing information on accessibility. The first book on accessibility was published in 1996 and, from 2009 on, the city has used GIS-based data to provide information on accessibility.

The city of Dresden has issued an online guidebook along with a map for people with disabilities ([stadtplan.dresden.de](http://stadtplan.dresden.de)). Information available on the app includes the accessibility of buildings and other locations; parking lots for disabled people; bus and tram stops; free paths and sidewalks.

The challenge for the city is data collection and the maintenance of the database. At the moment, the app is being fed by user-generated data (people can contribute to the app and send a picture to the city with a comment) and by various public institutions (for instance the Department of Education is responsible for its own buildings).

To feed the database, the city of Dresden has switched from a paper-based survey to a website-based survey. In the beginning, data was collected by a special program employing long-term unemployed people. Since the quality of data was not satisfactory in the first place, data is now been collected by a professional company financed by the city.

Recently, the city of Dresden has applied for a grant together with a district in the Czech Republic (the Ustecky district). The grant will make it possible to add more functions, extend

the service to the entire region (as of now, it is only for the city in Dresden) and to offer new languages (English and Czech).

The lessons learned and presented by the city of Dresden concerned the preconditions required for developing such a city-wide application. First of all, it is necessary to define a common structure for the database and a common understanding of what accessibility involves through negotiations with all actors. The resulting outputs are common criteria used for defining what is fully accessible, partially accessible and not accessible in the city. Then, it is also necessary to have a common position on the categories needed to create the interface. Finally, Matthias Pfeil also recommended setting up clear responsibilities to manage and update data in the app.

### **3.1.3 Presentation by Sašo Rink from Ljubljana: *The Road to GIS Accessibility Systems***

In the introductory words of his presentation, Sašo Rink warned the group that he would be presenting an example of “bad practice” that he considers as a useful counter-example for the other participants.

The city of Ljubljana commissioned a private company from England (DisabledGo) to make a survey and develop an app for the city that wished to have a catalogue of accessible places. Sašo Rink explained to the group that the surveyors did not speak Slovenian, which caused a major communication problem.

Consequently, the survey was finally carried by the Urban platform Institute of the Republic of Slovenia as part of a European project, but this process ended without any result.

A lesson learned by the city of Ljubljana in this project was that GIS data should be open-source or managed by a municipality. If data comes from an external partner, the city has to pay and the sustainability of the project cannot be guaranteed.

#### **Discussion**

The question was raised if collected data could be used by the municipality to help modernise buildings.

**Francesc Aragall** stressed that it is important to differentiate between public information and information necessary to upgrade buildings.

**Matthias Pfeil** mentioned the existence of a state program for private owners who can benefit from up to €25,000 to renovate their residential unit. The city of Prague had launched a similar program but didn't receive many applications (only nine). He stressed the importance of publicising the program.

**Amandine Varieras** said that, as an architect, she cannot access the required information about accessibility.

**Laura Trujillo** explained that Barcelona's administration has worked with the union of shopkeepers to identify cases in which owners should improve their facilities.

### **3.2 Workshop II: Gathering Data**

(moderator: Thomas Honeck, Senate Department for the Environment, Transport and Climate Protection, Berlin)

Participants of the second workshop discussed ways of collecting data for Geo Information Systems (GIS) on accessibility and the challenges this brings. **Thomas Honeck** (Berlin) moderated the workshop, which included two presentations and a final discussion about conclusions.

#### **3.2.3 Presentation by Bart Vermandere and Robin Julien from Ghent: *Making Accessibility more Accessible***

**Bart Vermandere** and **Robin Julien** from the city of Ghent gave the first presentation, entitled "Making Accessibility more Accessible". The presentation reported on Ghent's efforts on integrating different data on accessibility in two ways. On the one hand, various existing data sets from other contexts are connected and used as the input for Geo Information Systems. Such data might, for example, cover the accessibility of buildings, parking lots or streets. On the other hand, the city also applies an integrated approach regarding the output of data. In the sense of a one-stop agency, data on accessibility will be included on the website of "Visit Brussels" and not presented separately. Generally, Ghent's activities draw attention to user-friendliness. Users can, for instance, create individual profiles specific to their key needs, abilities and preferences. Moreover, the municipality frequently organises meetings on open data with interdisciplinary experts. Students are invited to these events, which was especially applauded by the BCA-workshop participants. They emphasised the importance of including future generations in the work on urban accessibility, as the topic is still not fully embraced at an institutional level.

#### **3.2.3 Presentation by Ingeborg Stude from Berlin: M4Guide and the IGA 2017**

The second presentation was offered by **Ingeborg Stude**, who illustrated Berlin's efforts to make the city more accessible based on the pilot project M4Guide. M4Guide is a guidance system designed for people who are visually impaired. The software was first put into practice at the International Garden Exhibition (IGA), which took place in Berlin in 2017. It aims to guide blind people from their home to and through the exhibition and back. The IGA itself placed importance on a "design for all" approach. To this end, Mrs. Stude emphasised

the general paradigm of adjusting “as little as possible and as much as needed”, for example to prevent dangerous situations. Berlin’s activities highlight the interconnectivity of design aspects and their attractiveness for people without handicaps. Flowers, sounds smells and particular types of stone can create a special experience for everybody. All in all, the presentation emphasised the complexity of collecting data, in particular when different types of handicaps are addressed.

#### **4. Parallel workshops: drawing conclusions**

The afternoon session started with a summary of the morning discussions in Workshops I and II. Subsequently, participants of each workshop discussed their conclusions. For the presentation of conclusions, please see section 5.

### **5. Presentation of conclusions of workshops and debates**

#### **5.1 Workshop I: Prospects of a European GIS on accessibility**

(Laurent Saby)

Presentations in the subgroup I focused on access to buildings.

There is a need for a shared model to aggregate data from different sources and to go into greater detail than just “accessible or not accessible”. Every map presented in the morning session provided the user with written descriptions of the buildings. These models are more user-centred than the existing legislation requires. What is interesting first and foremost is the service for disabled people available in the building.

Then, the participants held a discussion on standards and on the attempt to define a common structure to handle data. “Standards” represent the minimum of information to be put in a database to say if a building is accessible or not. Accessibility should not only apply to buildings but also to the services offered in this building. We need a definition of accessibility, a common structure for a database and a definition of the categories that should be included.

Standards at the EU level exist or are under development and should be considered by the Working Group:

- Directive INSPIRE from 2007 on the exchange of GIS data between authorities in Europe;
- European Standard “Public Transport Reference Data Model” (“Transmodel”);
- M420 guidance.

**Francesc Aragall** said that the criteria available within the framework of the “M420 guidance” mandate could be disseminated in cities, which could then ask the end-users to provide feedback.

**Sašo Rink:** The working group should work on a definition of “accessible” that would be acceptable to all.

**Pedro Homem de Gouveia** noted that a common shared level will tend to water down the meaning of “accessible”. Cities cannot say that something below national standards can be seen as accessible. When we try to establish a data model in order to share information, data models have to be compatible. The question is about the input that we encourage users to provide. In this context, **Pedro Homem de Gouveia** considers that it isn’t necessary to come up with common standards.

**Matthias Pfeil** explained that the city of Dresden managed five different sources of data and focussed on just a few aspects of accessibility as a compromise (common low level of standards). He considers that it is not possible to put the databases together.

In the end, the group decided that the minimum level of information on accessibility necessary should be discussed during the next meeting. In a common database, this minimum level of information would be accompanied by pictures and a written description of the buildings.

## **5.2 Workshop II: Gathering Data**

(Thomas Honeck)

The concluding discussion of the second workshop focused on the aspects of “gathering data” and “qualifying data”. Regarding the first aspect, the group stressed that a lot of data about various relevant aspects already exists. Often data is redundant and it is difficult to estimate its quality as well as to answer questions of ownership and responsibilities. Therefore, the main task of municipal actors was seen in “qualifying data”. This includes mediation and translation between different stakeholders such as users, planners and technicians. Analogously, it is important to consider not only the “hard”, technical facts, but also soft-facts such as, for instance, the staff of a shop. After all, data on dynamic urban processes is quickly out of date and hence not useful anymore. It is critical to develop institutions that guarantee that data remains up to date. Such institutions could be organised centrally, as for instance in the field of transport management, or they could be established via an open source approach, in the sense that data is validated and updated through its usage.

## Discussion

The presentation of the workshop results was followed by a discussion among participants.

**Matthias Pfeil** emphasised that the information available on the databases addresses planners rather than users.

**Pedro Homem de Gouveia:** Accessibility specialists can bring added value to crowd-sourced resources since they have the required expertise. For instance, Lisbon is currently mapping the pedestrian network and shares this information with the start-up community, which also benefits from this investment. The disabled community will be involved in contributing and critically reviewing sections of the database. **Pedro Homem de Gouveia** insisted that cities have to adopt new approaches and must help the public to come up with better systems.

**Christian Minaudier** to update data in real time, apps should be based on collaborative information.

**Robin Julien** said that in an open-data model, data is managed and updated by the city. Other websites are connected to this database, so it is impossible to have outdated data.

**Bart Vermandere** suggests that the BCA Working Group should connect with other Eurocities Working Groups working on data.

**Matthias Pfeil** explained that the city of Dresden tried to have a single database but it is difficult to convince all organizations to use this particular database. The city extracted 12 indicators (basic data) – free indicators on accessibility – that form the basis of a common database in their region.

**Francesc Aragall** suggest to take contact with Google and asked them to cooperate. He insisted on the importance of working in an integrated manner in cities.

**Bart Vermandere** said that the city of Ghent had already contacted Google but a city-wide platform is too small for them; only a European platform would be interesting for them.

**Matthias Pfeil:** expressed concerns about privacy when working with Google.

**Pedro Homem de Gouveia:** noticed that Open Data is quite a new topic. Cities have to focus on the database, as they have the technical infrastructure to host the database. Maintenance is expensive. Cities are tasked with the collection of information while paying special attention to the quality of data.

**Bart Vermandere** said that accessibility is more than a pure mobility issue; it also encompasses housing, tourism, etc.

## 6. Concluding words

Thomas Honeck announced that the ***News from the cities*** will be collected and distributed via email.

Thomas Honeck and Laurent Saby thanked the group for their fruitful discussions.