

Future Prospects Regarding Modern ICT Accessibility Technologies

eAccessibility Meets Technology

ETH Zürich, February 3 2016

Anton Bolfing

«Access for all» foundation

Navigation & Orientation

Indoor and Outdoor Navigation Aids

BLE Beacons

Accessibility Geodata Platform

«Beacons» & WiFi Assisted Indoor Navigation



<http://blindsquare.com/indoor/>

<https://www.youtube.com/watch?v=Ts6PFGgOYGE>

Intelligent Visitor Guidance



Today (proximity levels):

- Hellos & Goodbyes
- Special offers

Vision (localization, visitor tracking):

- Audio direction signage
- Search option (gates, check-in, stores, toilets)
- Route guidance
- Layers / Routing for special needs (moving stairs, elevators)

Outdoor Navigation

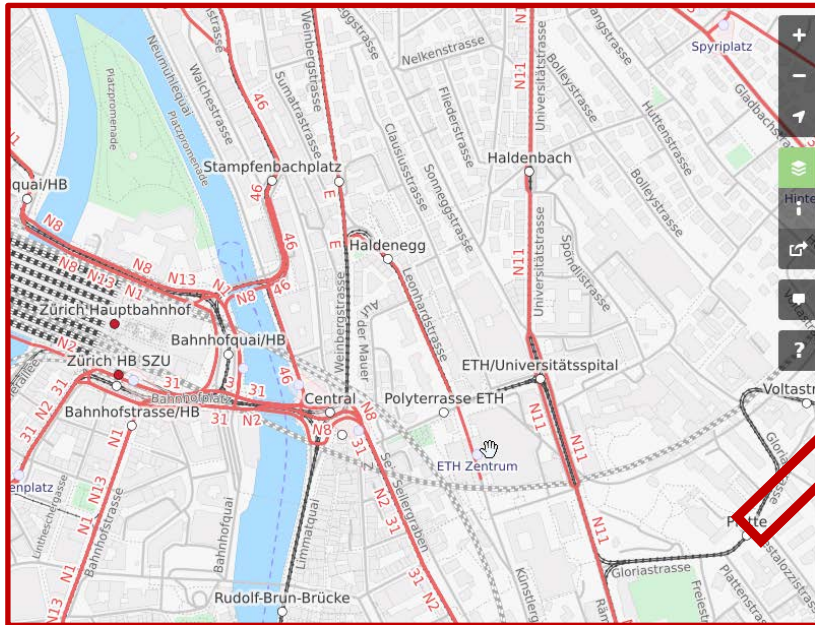


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roland_zh(a) ...
via Wikimed

- Vision:
 - White lines
 - Vibra traffic lights
 - Soil conditions
 - Obstacles (construction sites)
 - Traffic volume
- Orientation aids:
 - Fountains
 - Trees
 - Bakery
- Account for side of street

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Aggregated Accessibility Geo Data Platform

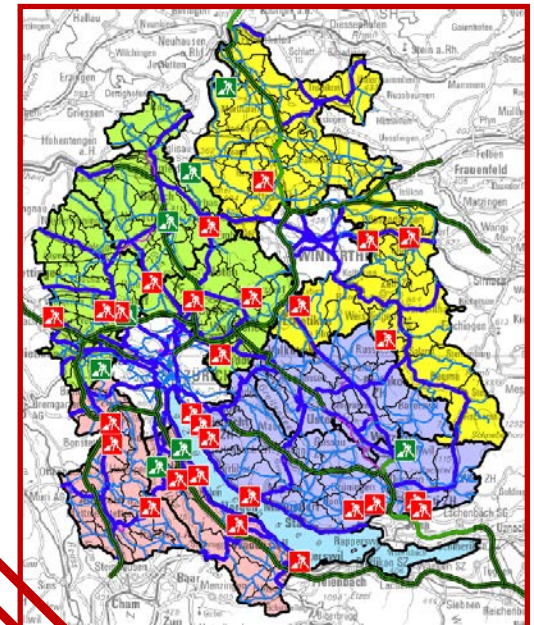


<http://www.openstreetmap.org>

Open Data Communities



Accessibility ?



<http://maps.zh.ch/>

Open Government Data (OGD)

Peer Communities

- Blind
- Visually Impaired
- Motor Disabilities
- ...

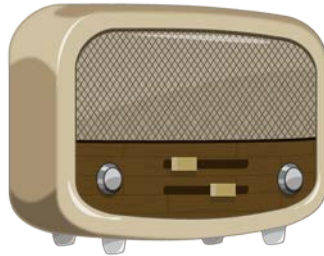
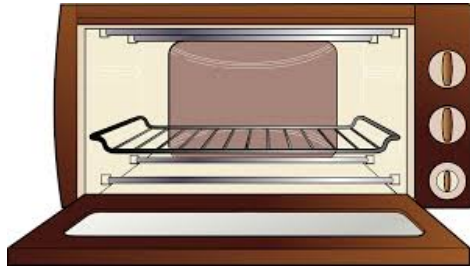
The role of smartphones in the accessibility world

Internet of Things (IoT)

or

Standardised Programming Interfaces in
«Things»

How to make all kinds of things accessible?



Mobile Access to all these «things»

- Prerequisites:
 - Built-in Signal Transceiver
 - Well documented application programming interface (API)
 - Fully accessible Mobile App
 - Fully accessible Mobile Operating System

TAKE HOME

THANK YOU

Anton Bolfing
«Zugang für alle»

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