

8.0 Digital Content

We are proposing a parallel project for the setup of a digital wayfinding and visitor information system to present locations and routes in combination with the wayfinding information and walking navigation. There are number of solutions using either GPS systems that can coordinate with Google maps, or beacon systems. Beacon systems work well inside, but GPS works better externally, so a combination of the two systems may required.

Key elements

- Access will be via mobile and smartphones or tablets, with seamless integration in the existing local WiFi system
- incl. touch-less interaction options at visitor locations
- incl. information push channels to guide users actively
- acts as a useful aid for those with sensory impairment
- one database and hosting of information to be accessed in different ways

The set up would be in phases. The first phases are via a Geodirector GPS based system which enables access from both Apple and Android systems.



Location specific information can be accessed via mobile web on the user's smartphone.

Phase1:

- installation of the basic system with approx. 20-30 locations
- incl. a NFC or geofencing based technology to deliver the information touchless to the user at a specific location (“..you are now standing in front of..”) and allow information push
- additionally there is the option to enter a number to get to a specific location page, This location code function is useful in case GPS is not activated or user declines localisation function
- GeoDirector+ server and database module to edit and administrate unlimited locations and routes in up to 8 languages (text, images, audio, video – audio, video server not included)
- GPS based location tracking
- alternative Google Maps integration
- responsive website design to work on smart phones in portrait and landscape mode
- notification push functionality (within the website)
- standard JSON API to provide data for other platforms (customisation not included)

Phase 2: Extensions (optional):

- integration of further visitor and landmark locations
- push-messaging
- extend to indoor navigation
- integration of video and audio content
- multi-client capable for the integration of further services (public and private services)

Phase 3 : Sensory impaired users

In addition as an aid to pedestrians with sensory or cognitive impairments including dementia, we are also trialling a system called Way-Fairer. This system is based on low energy Bluetooth or iBeacons placed in appropriate locations in the environment, and is independent of GPS and works both inside buildings and in the open. Where the pedestrian moves around the City they will receive useful information about their surroundings or route via a smart mobile phone.

The message will be in both speech and text. The information may be the name of the next street, retail outlets in the area or an interesting building.

Exact location of beacons will be decided after consultation with organizations including YCC, Visit York, YBPSS, Roundtree and other local groups. It is proposed to set up a demonstration route during January 2015 after further discussion and agreement. It would be supported by a regular service agreement.

After trialling we will review whether the Geodirector system will host all the information and create an interface between this and the Way-Fairer to allow the overlay of the additional information for sensory impairment, or whether it becomes and stand alone system.