Overview

The POWER project is a Research and Innovation Action, supporting the EIP Water Action Group, NetwercH2O and City Blueprints. POWER addresses four of the eight priorities of the EIP WATER Action Group and is design to share best practice on urban water cycle services. It will also share the outcomes of the Blue Sustainable Cities project.

The project's Digital Social Platform (DSP) is its central tool to be made available to participating cities, aiming at an important contribution to the creation of digital communities around themes that are specifically related to water and impacting the quality of life of local populations.

The POWER Digital Social Platform of a given city is made available through a dedicated DSP website and an accompanying mobile app. It is set up by the city to be used by local community members, activists, volunteers, municipal officials and representatives, water professionals and experts, as well as regional, national or international-level policy-makers, politicians and other stakeholders.

As introduced in the *D2.1 General architecture, functionalities and analysis* report, the POWER DSP connects a top-down and bottom-up interaction, to enable interaction and flows of information and knowledge between the different types of actors and stakeholders. On the one hand, it provides information on water challenges and advice on known best-practice of relevance to the citizen's local communities that is otherwise unavailable or difficult to find, in an easily accessible, timely manner.

Figure 1 – The POWER mobile app

On the other hand, it provides channels of interaction and knowledge sharing of the citizens and local communities with the municipality and between each other. To support awareness and stimulate engagement, the information provision, user interaction and knowledge sharing channels and functionalities integrate information and knowledge visualisation and gamification techniques.

The information on local needs, the experiences and knowledge created and communicated in bottom-up and Peer to Peer (P2P) exchanges also enable the identification and sharing of community-driven best practices, stemming from local experience.

In the best practice repository, both the knowledge and lessons learned from top-down analysis and expert exchanges about them, and the community-driven exchange and identification of best local practices are connected with each other.

To achieve this, the POWER DSP is designed in an open and modular way, organized in three main tiers that address the specific needs of the different actors and target groups, and of the different channels of information provision, interaction and knowledge sharing. These are internally referred to as as the HUB (the information and content management backend), PUB (the public web portal) and the MOB (the mobile app).

This report describes the purpose, functionality and usage of the Beta release of the POWER Digital Social Platform's MOB software, made available to the project partners for project testing. The software was developed under Task 2.4 Development of DSP MOB tier, a part of the project's Work

Package 2 - DSP set-up and start-up. It is one of the components of the Digital Social Platform (DSP), the project's tool for driving sustainable behaviour and extending a raised collective awareness on the environment and the consequences of human actions.

The MOB is a mobile app for use in tablets and smartphones running the iOS or Android operating systems. It complements and mirrors in mobile devices the browser-based front end of the DSP, the PUB software, by publishing the same challenges and making available equivalent participatory mechanisms.

The mobile app further extends a specific user experience by taking advantage of location awareness, the immediacy of the personal device, and the ease of generation of user images and other media.

The MOB follows the architecture and functionalities detailed in deliverable *D2.1 General architecture, functionalities and analysis report*. This report describes the purpose, functionality and usage of the Beta release of the MOB. This report is complemented by the D2.2 and D2.3 reports, particularly the latter, which details all the contents and features of the PUB, mostly common to the one of the MOB.

The functionality implemented has been iteratively validated and extended, as testing and feedback was provided by the project partners before the final release on M22. During the Beta testing stage, the app was accessible using a secure testing service. After the public release, the app became available using the standard publishing channels (app stores) for iOS or Android.

The MOB software is entirely new and developed specifically for the POWER project. This software is open source and is being released under the GNU General Public License 3 (https://www.gnu.org/licenses/gpl-3.0.en.html). It is available at the following GitHub location: https://github.com/power-baseform/

All third-party libraries used are equally available under open source licenses.