

## Executive Summary

This deliverable provides evidence of advances towards the achievement of project objectives by presenting the Scent applications and their potential in terms of stakeholder engagement. These apps will allow the end-user to take pictures, annotate pictures and collect and send information in relation to land-cover/use changes. Various gamification techniques and engagement strategies will be deployed to involve citizens and other stakeholders and motivate them in participating in Scent. This deliverable particularly focuses on these aspects, by illustrating the game logic, dynamics, controls and interaction mode of each application.

The document starts by providing an introductory overview of the engagement strategy, also in relation to the broader dissemination and exploitation activities of the project. In this section, the 4 Scent applications (Scent Collaborate, Scent Explore, Scent Captcha Plugin and the Scent Sensor measurement collection app) are briefly presented. Each of these apps serves the overall goal of the project to build citizen observatories. Some of the apps can be used by citizens to collect some measurements through sensors and take pictures and tagging them while exploring some specific geographic areas (Scent Explore and Scent Sensor measurement collection app), some other apps can also be used remotely to tag pictures taken from other users and posted on social media platforms (Scent Collaborate, Scent Captcha Plugin).

For each app, the key elements in terms of gamification and interaction modes are presented. Target platforms, game scenarios, game goals, game modes, game mechanics (e.g. controls, unlockables, collectibles...), game depth, user experience design are all identified and described having in mind that the Scent apps should work on common devices such as smart phones, tablets and consumer desktop or laptop computers. Insights emerged from the previous deliverable “D2.3 Best practices in serious games” (e.g., ensuring a broad participation through browser-based and cross-platform games, going toward a bi-dimensional and minimalistic easy-to-use interface, supporting the interactions among users through rewarding systems and leader board) have also been considered while working on this game design document.



Figure 1: Scent Explore

More technical sections provide a further level of detail in relation to software design and code structure, game engines, setup/installation, the data structure and the interaction of the apps with the other Scent modules.

In its final section, the deliverable contains a thorough presentation of the visual aspects of the Scent apps by focusing on user experience design, character design and user interface design.

