



**PlanetData**  
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# **D20.2 Call 2: Linked Map Community Awareness plan**

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*Abstract*

This deliverable describes the plan for engaging some target groups into the participation on the crowdsourcing experiments of the Linked Map subproject. This plan targets the following groups: producers of Volunteer Geographic Information, geo Linked Data practitioners, and producers/consumers of Geographic Information.

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## Executive summary

This deliverable describes the plan to engage some target groups into the participation in crowdsourcing experiments of that will be organized as part of the Linked Map subproject of the PlanetData project. The plan of community awareness described in this deliverable will serve as a guide for activities of Work Package 19 *Call 2: Linked Map Quality & crowdsourcing experiment*. These activities will be carried out between the months M44 and M48. The dissemination plan outlined in this deliverable will be continually refined until the end of the project taking into account project progress and reaction of the potential users.

This deliverable identifies the main objectives of this plan: to make potential participants aware of the experiments, to increase the recognition of the Linked Map subproject, and to make stakeholders aware of the progress of the project. It also identifies the following target groups: producers of Volunteer Geographic Information, geo Linked Data practitioners, and producers/consumers of Geographic Information.

The authors are aware of the fact that potential participants must be sustained by a support infrastructure in order to reduce the risk of failure of the experiments due to lack of interest. Therefore, this deliverable describes a community infrastructure that includes a community manager, a portal in which the experiments will be carried out, a communication policy, participation acknowledgement, and technology access opportunities. With respect to the communication policy, the dissemination channels selected are the blog of the web site of the Linked Map subproject, third party blogs, forums and mailing lists, twitter and personal contacts.

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<b>Abstract (for dissemination)</b>	This deliverable describes the plan for engaging some target groups into the participation on the crowdsourcing experiments of the Linked Map subproject. This plan targets the following groups: producers of Volunteer Geographic Information, geo Linked Data practitioners, and producers/consumers of Geographic Information.
<b>Keywords</b>	Crowdsourcing, Planning, Management, Diffusion

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## Abbreviations

BCN 25	Base Cartográfica Numérica 1:25.000 (Numeric Cartographic Base 1:25.000)
BTN 25	Base Topográfica Nacional 1:25.000 (National Topographic Base 1:25.000)
CNIG	National Center for Geographic Information in Spain
GEOSLAB	GeoSpatiumLab S.L.
OGC	Open Geospatial Consortium
UNIZAR	Universidad Zaragoza
VGI	Volunteer Geographic Information
WMS	Web Map Service

# 1 Introduction

This deliverable describes the plan to engage some target groups into the participation in the crowdsourcing experiments that will be arranged as part of the Linked Map subproject of the PlanetData project. The community awareness plan outlined in this deliverable will serve as a guide for activities of Work Package 19 *Call 2: Linked Map Quality & crowdsourcing experiment*. These activities will be performed between the months M44 and M48. Next we describe the reasons why this plan is needed.

The Linked Map project envisions a read-write Linked Data enabled extension of the Web map service standard (WMS) [1] issued by the Open Geospatial Consortium (OGC)<sup>1</sup>. As application case, the Linked Data project will develop a platform based on such extension. This platform will be used to improve through crowdsourcing methods the quality of an automatic combination of official geographic information and volunteer geographic information. The evaluation of the improvement will be done through a series of experiments that require the participation of volunteers. The experiments will consist on:

- **Link quality assessment.** Participants should assess the quality of RDF links that have been generated in the production of a RDF dump of an official geographic dataset (BCN25/BTN 25 [2], [3]) between such dataset and crowdsourced data (OpenStreetMap<sup>2</sup> and Wikipedia/DBpedia). The production of such dataset has been described in D16.3 [4].
- **Data vandalism detection.** Participants should find wrong RDF links that have been introduced knowingly in the aforementioned dataset as part of the experiments.

The geographical scope of the experiments will depend on the success of the call to participate. Participants will be incentivized by means of an indicator of participation such as a digital badge.

We consider that communicate the what, how and why of the Linked Map project and experiments by the most appropriate dissemination channels is essential to ensure participation in the experiments.

The dissemination plan outlined in this deliverable will be continually refined until the end of the project taking into account the progress of the project and the reaction of the potential users.

This document is structured as follows. Section 2 describes the aims and objectives of the plan. Following, Section 3 identifies and describes target groups. Then, Section 4 describes the ecosystem or infrastructure required to sustain the participants. After that, Section 5 identifies the different dissemination channels that will be used. The deliverable concludes summarizing the key points of the plan in Section 6.

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<sup>1</sup> <http://www.opengeospatial.org/>

<sup>2</sup> <http://www.openstreetmap.org/>

## 2 Aims and objectives

The activities described in this document will run only between the months M44 and M48. The main objectives of the community awareness plan are:

- **Make experiment visible.** The success of the planned experiments of the Linked Map subproject that will take place in Summer 2014 requires publicizing the planned experiments among potential participants. The geographic scope of this objective is restricted to the areas that will be the topic of the empirical studies that are part of the Work Package 19 *Call 2: Linked Map Quality & crowdsourcing experiments*. The purpose of this objective is seeking participants with field knowledge of the respective geographic areas.
- **Easy recognition of Linked Map.** In support of the experiments, the Linked Map subproject must be easily recognizable by the geographic information and volunteer geographic information communities. This objective has no restriction in its geographic scope. The purpose of this objective is to communicate the what, how and why of the Linked Map subproject including the description of the aims and objectives, the means to attain them, the envisaged results and their expected benefits.
- **Awareness of stakeholders.** As part of the general tasks of dissemination, the community awareness plan has as goal increasing the awareness among stakeholders of the PlanetData project. Similar to the previous objective, this one has no restriction in its geographic scope. It is aimed to spread research results to PlanetData partners, academic communities, government and industry involved in the management of large datasets of geographic information.

These outreach activities are complemented by dissemination activities described in the deliverable D20.1 [5] that runs over the entire duration of the Linked Map subproject.

### 3 Target groups

The community awareness plan is focused on the following target groups:

- **Producers of volunteer geographic information**, that is, participants in volunteer geographic information initiatives, such as OpenStreetMap<sup>3</sup>. Mainly geo hackers, such as members of OpenStreetMap España<sup>4</sup>, compose this group. That is, citizens that without financial support create and publish online geographic information. We believe that they should be informed of the activities and outcomes of the Linked Map subproject, and the PlanetData project in general.
- **Geo Linked Data practitioners**, that is, Linked Data practitioners that are interested in the spatial dimension of the information. Nowadays, this group is mainly composed by researchers. They seek to make sense out of the huge amount of geo data continuously published online using Linked Data best practices. Members of the PlanetData consortium, such as the Universidad Politécnica de Madrid – Ontology Engineering Group (OEG-UPM), are recognized practitioners and obvious targets of the diffusion activities outlined in this deliverable.
- **Producers/Consumers of geographic information**, that is, people engaged in the production or consumption of large geographic information datasets. This group comprises people related to research entities, governmental entities, publicly owned corporations and private corporations that produce or consume large volumes of authoritative geographic information. They could adopt some of the technologies and ideas developed within the Linked Map subproject if they perceive that the use of Linked Data and/or Volunteer Geographic Information improves their data production or consumption workflows. The most obvious members of this target group are the members of the CNIG, which is the governmental organization legally responsible for planning and management of geographic information structure in Spain. CNIG is an associate partner of the Linked Map project.

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<sup>3</sup> <http://www.openstreetmap.org/>

<sup>4</sup> <http://www.openstreetmap.es/>

## 4 Preparing the experiments ecosystem

Potential participants in the planned experiments should be motivated to participate but after that their interest should be sustained by a community infrastructure. Providing a basic community infrastructure should maximize the participation and reduce the risks of failure of the experiments due to lack of interest. The community infrastructure includes:

- **Community manager.** Potential participants in the planned Linked Map experiments should be regarded as members of an online community that requires active management. The person responsible for this task should ensure that provisions contained herein are being made as planned. Initially, the person responsible for Work Package 19 will be the community manager.
- **Experiments infrastructure.** The Linked Map portal described in the deliverable D20.1 will evolve in terms of content and functionality between the months M44 and M48 mainly due to the rolling out the Linked Map platform where the planned experiments will be held and the feedback from the users community. The progress in the development of the infrastructure and the planned experiments will be described in the forthcoming deliverables D18.1 [6], D18.2 [7] and D19.2 [8] respectively .
- **Communication.** Planning, development and results of the experiments will be reported to the community through the channels described in Section 5.
- **Hard and soft skills acknowledgement.** Participants in the experiments will be awarded with an indicator of participation, such as a digital badge, that recognizes their ability to perform experiments tasks (hard skills) and their collaboration in the experiments (soft skills). Mozilla Open Badges<sup>5</sup> is, at the time of writing, the candidate infrastructure for such purpose. However, we are not yet confident that the indicator of participation will be implemented using this technology. The progress toward the acknowledgement of participation will be described in the forthcoming deliverable D18.2 [7].
- **Technology.** Participants in the experiments will have early access to some aspects of the Linked Map Service technology [9]. For example, overloading of WMS operations with Linked Data and integration of Linked Data into Web Map clients. We expect that some participants in the experiments will be interested in adopting the technology developed within Linked Map.

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<sup>5</sup> <http://www.openbadges.org/>

## 5 Dissemination channels

All the dissemination channels will be described in detail below. Dissemination channels will be used to connect to target groups by sending information about the Linked Map experiments and related information, such as events as the recent 2014 Space Apps Challenge<sup>6</sup>.

### 5.1 Blog and Project website

The Linked Map website<sup>7</sup> maintained by UNIZAR is the main tool for the promotion of the Linked Map project. This website contains a blog where we are posting twice a month posts related to the development of the project. The blog will be the main dissemination channel used for the interaction with participants.

### 5.2 Third party blogs

The setup of the interconnection of the project blog to the community formed by blogs and news aggregators where the main topic is geographic information and/or semantics web, such as GIS Lounge<sup>8</sup> and SemanticWeb.com<sup>9</sup>, is part of the diffusion tasks described in the deliverable D20.1. This enhanced communication channel formed by domain-focused blogs will be used to disseminate the experiments among the target groups.

### 5.3 Forums and mailing lists

Forums and mailing lists have declined in popularity as social media channels. Nevertheless, there are a handful of them useful for the Linked Map subproject, as was outlined in the deliverable D20.1, such as OGC mailing lists<sup>10</sup>, OSGEO mailing lists<sup>11</sup>, and W3C mailing lists<sup>12</sup>. These will be used to disseminate information on the experiments to the target groups.

### 5.4 Twitter

Relevant and urgent information about the experiments will be announced to the community using the Twitter hashtag described in the deliverable D20.1 (#LinkedMap).

### 5.5 Personal contacts

UNIZAR and GEOSLAB are very active in activities related to the geographic information sector. Both partners have a long list of direct contacts. Contacts belonging to the target groups will be invited to take part in the experiments. The first contacts will be focused on teaching staff and students of UNIZAR and staff of the associated partner CNIG. Several research groups of UNIZAR (e.g. IAAA<sup>13</sup> and GEOT<sup>14</sup>) have Geographic Information Systems as one of their research lines so they should be contacted. The evaluation of the usefulness of Linked Data for integrating Volunteer Geographic Information with official geographic datasets for their combined use by government agencies and entities is an issue of interest for the CNIG.

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<sup>6</sup> <https://2014.spaceappschallenge.org/>

<sup>7</sup> <http://linkedmap.unizar.es/>

<sup>8</sup> <http://www.gislounge.com/>

<sup>9</sup> <http://semanticweb.com/>

<sup>10</sup> <https://lists.opengeospatial.org/mailman/listinfo/>

<sup>11</sup> <http://lists.osgeo.org/mailman/listinfo>

<sup>12</sup> <http://lists.w3.org/>

<sup>13</sup> <http://iaaa.unizar.es/>

<sup>14</sup> <http://iuca.unizar.es/?q=en/research-groups/studies-on-spatial-planning-group-geot>

## 6 Conclusions

This deliverable has described the plan for engaging some target groups into the participation on the crowdsourcing experiments of the Linked Map subproject. These experiments will analyse how a crowdsourcing approach helps on:

- **Link quality assessment.**
- **Data vandalism detection.**

The main objectives of this community awareness plan are:

- **Make potential participants aware of the experiments.**
- **Increase the recognition of the Linked Map subproject.**
- **Make stakeholders aware of the progress of the project.**

The plan has the following target groups: producers of Volunteer Geographic Information, geo Linked Data practitioners, and producers/consumers of Geographic Information. We are aware of the fact that potential participants should be sustained by a supporting infrastructure in order to reduce the risk of failure of the experiments due to lack of interest. Therefore, the community infrastructure will include: a community manager, a portal where the experiments will be held, a communication policy, participation acknowledgement, and technology access opportunities. Regarding the communication policy, the dissemination channels selected are the blog of the web site of the Linked Map subproject, third party blogs, forums and mailing lists, twitter and personal contacts.

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