Observation International Foundation

Policy plan

Observation International Foundation was established on 1 December 2015 in Roermond, the Netherlands. Over time it aims to be the international prolongation of the citizen science portals of Waarneming.nl, Waarnemingen.be, Observations.be en Observation.org. The objective is to integrate and modernise these existing websites and promote their use internationally.

This policy plan has a horizon of five years and encompasses the initial stage of Observation International Foundation. It was accepted at 26 January 2016.

1 Vision

Volunteers collect massive numbers of field observations on a world wide scale. If all this information would be collected and shared, these data would make a powerful instrument for the study of nature, conservations purposes, research, environmental policy, education as well as nature experience.

2 Mission

To share data of observations of the global biodiversity in present and past, as source of knowledge for the future.

To facilitate observers anywhere by means of a multilingual, global observation system with a species register for all known species and species groups present in the natural world, flora and fauna wide, and through that system, to share the dataset of validated field data with anyone in this world.

3 Ambition

Observation International has this ambition: to offer the best, most practical, sofisticated, yet elegant data entry portal, which is highly valued by its users and is used to a maximum level. For western Europe, it aims to be the most used, multi-thematic[1] data entry portal within five years and outside of Europe, to close at least three partnerships.

4 Commitment

In achieving its mission, Observation International is committed to following principles.

Observation International:

a. Aims for data which can be publicly searched;

b. Gathers knowledge for the benefit of research on (changes in) biodiversity;

c. Respects the observers, researchers, other users and the Community;

d. Declares that data are legally owned by the Foundation, while control of the observations is retained by the observers.

[1] Multi-thematic: all groups of plants and animals, from orchid to desmid algae, from birds to tardigrades.

5 Audience and market

All observers and their organisations, policy makers, owners of data sources, researchers, conservationists, environmentalists, museums, who submit field observations and / or use hereof derived information. This is meant in the widest sense of the word and on a global scale.

6 Objectives

From the mission, six primary objectives can be deduced: the **main objectives**. In addition, there are three **secondary objectives**, which are necessary for the realisation of the main objectives.

Main objectives directly following the mission are to:

A Biodiversity

a. Encourage collecting field observations, including any documentation of species worldwide, flora and fauna wide, preserve these and make them publicly available.
b. Secure the data on biodiversity for future generations.
c. Promote conservation, study and experience of biodiversity by means of securing the data.
d. Prevent disturbances and data abuse by not sharing sensitive data.

B Software

a. Establish and maintain a multilingual system for doing field observations, which can be used globally.
b. Make available tools which serve observers, researchers and other users for submitting and/or exporting their observations/data.
c. Accomodate the existing sites in a new, comprehensive site: the International Observation website. Here, existing sites (such as Waarneming.nl, Waarnemingen.be, Observations.be, etc.), or comparable future sites may be retained, serving as local portals for the communities.

C Community

a. Facilitate field observers who engage in doing and sharing field observations for all species groups, worldwide .
b. Encourage the emergence of 'learning communities'.
c. Forge partnerships and supporting local organisations, which are responsible for the data and the community in their region.

D Quality

a. Manage data, maintain the database and secure its integrity.
b. Realise as complete and up-to-date nomenclature registers as possible.
c. Develop and secure an appropriate validation system.

E Transparancy

a. Organise a maximum availability of data for users and third parties insofar as they fall within the objectives of Observation International Foundation.

b. To provide as much openness as possible about its activities, and to hold itself accountable to observers and other stakeholders.

In addition to the main mission-based objectives, the **secondary goals are to**:

F Infrastructure

Set up and make available a stable infrastructure.

G Stakeholders

a. Recruit people and acquire resources to achieve the stated goals.
b. Involve various stakeholders (also internationally).

H Communication

a. Generate and obtaining publicity around Observation International.
b. Produce promotional material, manuals, etc., for the recruitment of observers and community support.
c. Recognise and appeal to the various target audiences (communities).
d. Report to observers, stakeholders and communities.

7 Tasks

Based on the objectives which have been adopted, in the following tasks, are defined for short and medium terms. The tasks should be formulated 'smart' and be verifiable. For this, Observation International uses the PDCA cycle[2]. Tasks will be dealt with on a project basis. Each project will be assigned to a board member who will report to board meetings. Project management will take place on schedule, budget, quality, information and organisation (TOKIO principle[3]). Prior to the implementation of each project a final project plan will be adopted and a budget will be set.
Tasks which should be carried out will be prioritised. Development of new functionalties will thence be defined into three categories: must have, should have and nice to have.

2 PDCA-cycle: *plan, do*, *check*, *act*

3 TOKIO-principle: management focussing on time, money, product quality, information and organisation

A Tasks relating to Biodiversity

a. Facilitate people in doing, submitting, storing and sharing their observations: both point observations (loose observations), as well as other types of observations, such as grids, transects, rosters, quadrants and vegetation recordings.
b. Define a wide range of projects: research, citizen science, nature experience. The simple creation of research projects. It should be possible for projects to be private or public.
c. Adopt *gamification*[4] and in such a way encourage users to produce more data, both in quantity as in quality.
d. Set up easy customisation (personalisation). Allow self-defined free fields that can be linked to observations, such as water depth and chemistry, or information on one's collections.
e. Promote the development of (interactive) identification tools.
f. Set up guidelines for whether or not datais publicly available (public data, embargo, blurring).
g. Link data of third parties, making these available through the platform of Observation International.

B Tasks relating to Software

a. Modernise the current system. The basis is formed by the current system of Waarneming.nl, and the wishes of the users will form the starting point for the modernisation of the system. Upgrade, go ahead with time.
b. Universal design of the web applications, hence same functionality (look and feel) on all types of devices (PC, tablet, smartphone) and operating systems (Android, iOS, Windows). Moreover, the data must be unambiguously integrated into one central data collection.
c. Multilingualism of applications and documentation. To start with English, French, Dutch, Spanish and German. Thence, according to wishes originating from partnerships.
d. Create multilingual manuals, tutorials, etc. to support users of the system.
e. Enable bidirectional traffic in apps: Users can enter their records, but also see their data returned.
   - reports of observed special species in their search area
   - observations from previous years from their search area
f. Develop features for users
   - Personalise one's login page, by means of submitting one's photo, one's interest profile, tagging of fellow observers
   - Possibility of automated feedback when you spot a new species
   - Opportunity to share to facebook, twitter: so more useful to users
g. Realise various derivative tools on mobile (Android, iOS and maybe Windows). To make observers more enthousiastic and introduce them to less known features of the system. E.g. Exotic species app, mystery bird app, app for route lists.
h. Organise interactive communication between observers (Facebook-like aspects). Possibility to share to Facebook, Twitter: and be more easy to be found by fellow platform users.

[4] Gamification: Wikipedia: is the application of game-design elements and game principles in non-game contexts.

i. Develop interfaces that enable third parties to implement applications that support and use the systems of Observation International: APIs. [5]

C Tasks relating to Community

a. Maintain contact with observers and communities (in part automated, in part personally).
b. Establish and strengthen partnerships in Western Europe, starting with the Benelux countries, Germany (NRW) and France; once desirable, outside of Europe as well.
c. Create communities, where still lacking.
d. Listen to and investigate what observers like; their interests. That may differ over species group, field of knowlegde and region.
e. Develop a system which brings observers together, for joint research, excursions, identification guides and the like.
f. Explore the possibility of a ranking system of observers based on their expertise (approved observations per species group/family), as a tool for validation or as part of the gamification. Badges, autostimulance.

D Tasks relating to Quality

a. Organise and manage data (database maintenance). Secure integrity.
b. Nomenclature. Making available a species register for all species groups, using current scientific insights, including synonyms and local names in various languages. Current authoritative sources will be recognised, linked and used where possible. There should be accountability for nomenclatural changes using log files. Promote good documentation, e.g. by indicating relevant literature for identification of species.
c. Validation system. Update of the current validation system: modern and dynamic. Partially automated on the basis of computer algorithms and partly manually, using knowledge and manpower originating from the various communities. Transparent and with respect for the user, specialist or beginner.
d. Investigate utilisation of the quality of individual observers within the validation system, possibly using badges.
e. Incorporate various (interactive) identification tools to support observers.

E Tasks relating to Transparancy

a. Enable and encourage of the public disclosure of data.
b. Generate information and knowledge based on the collected data, for example, phenology, distribution maps or trends.
c. Make data available.
d. Provide information about the platform's own functioning (including statistics).
e. Provide transparency on finance (income and expenses).

F Tasks relating to Infrastructure

a. Keep information (data) available on various platforms (software)
b. Secure integrity back-up (content, commodity).
c. Secure global access to the platform using the word wide web and apps.

[5] API: *Application interfaces*.

G Tasks relating to Resources

a. Draft a fundraising plan on the possibilities to obtain structural funding outside of governments.
    - Crowd funding
    - Sponsoring of site/species/projects/areas
    - Appropriate advertising
    - Legacies and inheritances
b. Acquire subsidies from governments on project basis (define projects which could be subsidised).
    - Regionally/nationally/at a European level
c. Gain means from cooperation with partner organisations.
    - Mak data available
    - Joint projects
d. Recruitment of human resources, recruitment of volunteers, who can fulfill specific tasks within the platform.
    - Set up teams for validation (organised by region/community)
    - Finding volunteers with specific knowledge (communication, finance)
e. Resources in kind, by acquiring and adding knowledge / modules / third party / partner applications, for example, nomenclature register.

H Tasks relating to Communication

a. Draft a communication plan that elaborates on all steps and actions in the field of promotion and publicity:
    - Recruite users, call for participation in fieldwork / platform
    - Approach different audiences (serving each community in its native language / jargon)
    - Produce promotional material, such as clips, folders, youtube, tutorials, T-shirts, etcetera.
    - Use communication tools to communities, observers, data users, such as newsletters.
b. Support local communities.
c. Install an automated communication module, which responds to actions of observers and users of data.
d. Make communication with the community professional. In service of the users (setting up a helpdesk).

I Tasks relating to Partnerships

a. Forge partnerships at an (inter-)national level with similar organisations.
b. Link with data systems where this would add value and significance, such as map layers.
c. Pursue a good relationship with other biodiversity databases.

8 Organisation

Stichting Observation International is an independent, non-governmental, international foundation under Dutch law, with international aspirations. The foundation is managed by a board, which is supported by working groups, volunteers and employees. In order to achieve its goals, the foundation aims to have a board which is diverse concerning nationalities and expertise, with board members from different communities, attentive to different fields of interest.

In order to have an optimal board compostion, the board should have members having specific knowledge of biodiversity, communication, finance, IT, grants, acquisition, targeted audiences, etcetera. Furthermore, it is important that the international character be reflected by having board members of different nationalities. This also helps understanding and bridging cultural differences.

Individual board members will be responsible for the realisation of tasks. Each task is linked to one board member, serving as project manager, and informing the board on the progress of the task / project (time, money, finished goods).