

## **Agriculture Is Life (AIL) Database: Terms of Reference (ToR)**

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### **Article 1.**

Data that are considered in this database ToR are:

- Description of standard methods that are used for routine measurements in the long term experiments of AIL (soil, bioagressors monitoring (weed, diseases,insects), yield...).
- Data generated during the routine measurements in the long term experiments of AIL
- Historical data (data obtained in the long term experiments of AIL before the establishment of this data management plan)
- Data and protocols generated through specific projects using AIL material, infrastructure and/or data

These data divergent in nature will be stored in the dedicated AIL database, aiming to facilitate the sharing of information among project partners and ultimately the wider community of scientists and end-users through specifically designed interfaces. In the medium to long term, the AIL database will be a facility *per se* for *in silico* research that can be used in future projects. The storage in the AIL Database of all the data generated by project partners is mandatory.

The types of data that could be found in the AIL database are, among others:

- Table (timeseries, repetitions, measurement device output)
- Images, pictures, drawing
- Technical images (CAD)
- Satellite images
- GIS raster data
- GIS vector data: .shp file
- Text: PDF/ascii text file
- Fasta files
- ...

### **Article 2.**

The long term experiments of AIL considered in this database ToR are listed in Annex 1.

### **Article 3.**

Project partners are defined as all individuals (AIL members, ULiège members or externals) involved in a project using AIL tools, staff and/or infrastructures, and generating data. For each starting project, the list of partners or their representatives will be submitted to the AIL Management council (see AIL Internal Rules of Procedures).

### **Article 4.**

To have access to the data stored in AIL database (defined in Article 1) and/or to AIL tools, staff, long term experiments and infrastructures (fields, horticultural gardens, machines, material) a flat rate fee could be asked. This rate will depend on the source of funding available in the project asking for data and/or tools, and on the degree of involvement asked for AIL technicians (for more info, see AIL Internal Rules of Procedures). Access will be freely granted for students with no funding sources (masters 'students, 2-4-6 assistants, FRIA and FNRS PhD students).

This contribution of users is used to fund the technical staff of AIL, to maintain the long term experiments in place, and to ensure the generation of the baseline data in these long term experiments (yield, biomass, LAI, soil analyses, bioaggressors, drones' images).

### **Article 5**

All raw data and final results generated by the routine measurements made by AIL and by the projects using AIL facilities will be stored in the AIL database. This does not impede project partners from storing the data on their personal databases.

Access to the AIL database, containing the historical and up-to-date data, is granted to all AIL users having signed this database ToR and the AIL Internal Rules of Procedures and eventually having paid the rate corresponding to the project situation (cfr AIL Internal Rules of Procedures).

The sharing of data with non-members of AIL will be subject to a data-sharing agreement or equivalent. Each case of data sharing activity with non-members of AIL will be subject to its own data sharing agreement that will account for each individual case specificities. The agreement will have to indicate the conditions of use, criteria for access including the cost, and acknowledgements in case of publication.

In the case of data sharing restrictions, such as patentable, proprietary or confidential data for example, project partners who wish to withhold data can do so at the condition that an agreement has been signed beforehand. In the same way, specific secrecy agreements could be signed among partners involved in tasks with sensitive intellectual property and commercial issues, if required. The decision will be taken on this matter by the AIL Management Council under the advices of Intellectual Property experts from ULiège and partner organizations if applicable.

During the course of a project, regular discussions will be organized between data producers and the AIL Management Council or its delegate, in collaboration with ULiège legal department, to assess the licensing terms for the datasets. This will facilitate the decision on which of the datasets could be made openly available and outline the rationale for closed datasets.

In general, data generated in the framework of a specific project will be subject to an embargo (aka an exclusivity of use/publication during the course of the project). The decision to make the data of a project available at that point remains the decision of the project partners.

Unless a specific agreement has been signed as detailed above, the embargo will be cancelled one year after the end of the projects at the latest, and project partners will then be committed to give access to all raw data to AIL database registered users. Most datasets should be suitable for being used by third parties. When possible, the use of FAIR principles should be implemented. Data management and access provision will be ensured by AIL Management Council.

### **Article 6**

Concerning the dissemination of results (oral presentations, posters or publications of any kind), the following principles will be applied:

- At least 30 calendar days before the dissemination of a project's results, the relevant partners will have to submit an abstract to the other partners involved in the results produced and the AIL Management Council for approval. They will provide an opinion on whether it is, considering data use and producers, acceptable for dissemination as it is, if some modifications are required, or if the dissemination should be delayed to implement protection measures. When needed, Intellectual Property experts will be appointed by the partners' organizations to provide advice notably on protection measures.
- A party shall not include in any dissemination activity another party's results or background without obtaining the owning party's prior written approval, unless they are already published.
- Prior notice of any planned publication shall be given to the other parties (data producers) at least 30 calendar days before the submission.  
Any objection to the planned publication shall be made in writing to the Chairman or Chairwoman of AIL and to the party or parties proposing the dissemination within 20 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.
- An objection to publication is justified if:
  - o The protection of the objecting party's results or background would be adversely affected;
  - o the objecting party's legitimate academic or commercial interests in relation to the results or background would be significantly harmed.
- If there is an objection:
  - o The objection has to include a precise request for necessary modifications;
  - o The involved parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting party shall not unreasonably continue the opposition if appropriate measures are taken following the discussion;
- Concerning co-authorship in publications, at least the people involved in the projects can be listed as authors. However, the authors have to mention their affiliation to the CARE AIL, subordinate to TERRA, in all publication using its infrastructures and/or data.
- All publication of results generated using data and/or infrastructures of the CARE AIL should include a specific sentence in the acknowledgement section (see annex 2).

## **Article 7**

AIL will follow the rules for intellectual property set out by the European Commission, specifically:

- "Background": partners' pre-existing know-how, while remaining the sole property of their owners, will be made available to other partners when needed for projects' implementation (e.g. historical data). Specific restrictions regarding its use can be added;
- "Results": knowledge developed through projects, will be owned by the partners who have directly contributed to its creation. In case of joint ownership, a separate contract will be drawn up and signed by the co-owners to determine their rights and obligations and settle the intellectual property management and exploitation rules;

- Traceability of background and results information will be sought throughout the project. In AIL experiments, and particularly long term experiments, a constant flux of results between the partners will be generated. Each partner's contribution to the results will be recorded,
- Access rights to results for in-house research or for teaching activities will be granted on a royalty-free basis. Access rights to results and background brought to the project if needed for use of a beneficiary's own results including commercialization or for third-party research will be granted on fair and reasonable conditions.

## Annexes

**Annex 1:** The long term experiments of AIL considered in this DMP are :“Solcouvert”, “Solrésidus”, the agroforestry assay,” Ecofoodsystem”, the permanent pastures and “the centenary assay” in the frame of the experimental farm; and the long term experiments conducted in the market gardening plots of the Wasabi Platform (culture beds and agroforestry).

**Annex 2:** All publication of results generated using data and/or infrastructures of the CARE AIL should include the following sentence:” This work was made with the support of the CARE *AgricultureIsLife* of Gembloux Agro-Bio tech, ULiège, Belgium”

Pour Accord (nom, date, signature)