

Establishment of the European PGRFA Evaluation Network (EVA)

WHEREAS the world is facing increasing challenges to food security through the loss of diversity and the underutilization of the diversity that exists;

WHEREAS the natural range of growing conditions in Europe calls for and permits more comprehensive evaluation of PGRFA across different environments;

WHEREAS it is of strategic importance for Europe to better utilize Plant Genetic Resources for Food and Agriculture to facilitate adaptation of European agriculture to climate change and to contribute towards the achievement of Sustainable Development Goals;

WHEREAS it is important not only to increase the use of genetic diversity in plant breeding, but also to increase the diversity of stakeholders in plant breeding, including private and public sectors, small and medium enterprises and participatory plant breeding actions;

WHEREAS there is an opportunity to build on existing networks for conservation and use of PGRFA and to develop a European PGRFA Evaluation Network which is open for participation by both private and public sectors in order to facilitate the exchange of data on evaluation in a standardized format;

Now therefore, the Steering Committee of the ECPGR hereby establishes the European PGRFA Evaluation Network in the form of Private/ Public Partnerships within the framework of the European Cooperative Programme for Plant Genetic Resources (ECPGR), in accordance with the following provisions.

01 Definitions

For the purposes of this Proposal –

- i) “**AEGIS**” means the European Genebank Integrated System;¹
- ii) “**ECPGR**” means the European Cooperative Programme for Plant Genetic Resources;
- iii) “**EURISCO**” means the European Search Catalogue for Plant Genetic Resources;²

¹ **AEGIS** entered into force in 2009 within the framework of **ECPGR** in order to improve coordination with respect to the conservation of PGRFA in Europe and to facilitate the exchange of PGRFA and related information among the countries and genebanks of Europe, and is now functioning to conserve genetically unique and important accessions for Europe and to make them available for breeding and research

² **EURISCO** is a European cooperative mechanism, which provides information on nearly 2 million accessions of crop plants and their wild relatives, preserved *ex situ* by almost 400 **institutes**, based on a network of National Inventories of **43 member countries**: **EURISCO** forms part of the Global Information System on Plant Genetic Resources for Food and Agriculture provided for under the **International Treaty of Plant Genetic Resources for Food and Agriculture**, and is now being extended to characterization and evaluation data.

- iv) **“Evaluation”** means: –
- the generation of phenotypic and/or genotypic data and the linkage of such data;
 - the usage of such data to develop genetic markers;
 - the use of the information generated under the subparagraphs above to enhance the use of PGRFA in breeding and research;
- all the above must be at a pre-competitive level.
- v) **“EVA”** means the European PGRFA Evaluation Network;
- vi) **“Members of EVA”** means the persons or entities committed to active involvement in the evaluation of plant genetic resources in the European region that sign and deposit a **Letter of Commitment** as referred to in point 02 below;
- vii) **“PGRFA”** means plant genetic resources for food and agriculture;
- viii) **“SMTA”** means the Standard Material Transfer Agreement adopted by the Governing Body of the Treaty;
- ix) **“Treaty”** means the International Treaty on Plant Genetic Resources for Food and Agriculture, which entered into force on **29 June 2004**;

02 Establishment of the European Evaluation Network

Persons or entities eligible for membership that wish to become members of EVA should sign a Letter of Commitment in the form set out in Annex A below and deposit it with the Secretariat of ECPGR.

03 Goal, Objectives and expected benefits of EVA

- a) The goal of **EVA** will be to increase, facilitate and improve the use of genetic diversity present in PGRFA in Europe for crop improvement.
- b) **EVA** will seek to achieve its goal through pursuing the following objectives:
1. To promote and support the establishment of crop- or crop group-specific European Private Public Partnerships and other collaborative projects to carry out targeted evaluation of PGRFA;
 2. To promote and improve the digitization, harmonization, availability and exchange of existing and newly generated evaluation data of PGRFA using to the extent possible the existing EURISCO infrastructure;
 3. To improve the evaluation of PGRFA through coordinated and collaborative efforts, using harmonized methods and standard protocols and the development of best practices, guidelines and tools;
 4. To promote cooperation with other relevant EU infrastructures and collaborations related to the scope of the network.

- c) In pursuing its objectives, **EVA** expects to achieve the following benefits:
1. Increased access to well-evaluated genetic material and related information from all over Europe;
 2. The setting up of a structured network that will allow for the testing of PGRFA across a wide range of agro-environmental areas, using the same standards and methods, thus generating data that are scientifically more meaningful and useful for plant breeding;
 3. The centralization of data in a dynamic information system (EURISCO) providing privileged access (data embargo) for members as appropriate;
 4. Further strengthening and use of a well-developed and coordinated infrastructure for long-term maintenance of relevant material (AEGIS);
 5. The provision of a mechanism for pooling resources for the evaluation of PGRFA in order to better exploit the diversity of growing conditions across the region;
 6. The transfer of knowledge and ideas among genebanks, crop and breeding communities.

04 Principles to which Members of EVA should adhere

- a) EVA will operate in accordance with the principles of the **Treaty** and should be supportive of the **Treaty**;
- b) Members will use the SMTA currently in force for the transfer of PGRFA within the EVA to the maximum extent possible;
- c) EVA should make maximum use of AEGIS, including in the identification of relevant crops and accessions to be evaluated, as well as for the conservation of relevant material;
- d) EVA members should make maximum use of agreed standards for evaluation and maximum effort for the production of evaluation data in agreed standards;
- e) EVA should make maximum use of EURISCO, including in the use of EURISCO standard terminology and supportive collaborative data platform for documenting evaluation observations and acquired data;
- f) EVA should make maximum use of the supportive structure of ECPGR, including the ECPGR Crop Working Groups and the ECPGR Documentation and Information Network;
- g) EVA Members should abide by the agreed rules regarding the release of evaluation data as set out in any applicable crop-specific PPP project Cooperation Agreement;
- h) EVA will in principle be self-funded.

05 Structure of EVA

The structure of EVA will be as set out in Annex B. It will be composed of the following:

a) **Permanent Units**

- a. A Steering Unit of no more than 8 experts appointed by the Steering Committee of ECGPR in consultation with the private sector, which will provide overall policy guidance for EVA;
- b. A Coordination unit provided by the Secretariat of ECPGR;
- c. A data and information management support group appointed by the Steering Unit.

b) **Crop-specific PPP/projects established on an *ad hoc* basis**

Members of EVA may, as appropriate,

- a. enter into crop-specific cooperation agreements amongst themselves and with the participation of ECPGR, in the type of format set out in Annex C, providing for the detailed obligations and rights of such members, including the genetic resources to be investigated, the evaluation protocol, the way of reporting, the duration of any confidentiality period, and the moment when this period starts;
- b. establish crop-specific Expert Groups within the framework of crop-specific projects, elected by the Members participating in those crop-specific projects.

06 Entry into operation of EVA

- a. EVA will enter into operation on approval by the Steering Committee of **ECPGR**, and will remain in force until terminated by the Steering Committee.
- b. ECPGR will invite interested persons and entities committed to active involvement in evaluation of plant genetic resources in the European Region to become Members of EVA.
- c. ECPGR may invite, and will encourage regional organizations or associations representing seed companies or growers to support the objectives of EVA and/or its work.

ANNEX A

EVA – Letter of Commitment

_____, being a person or entity committed to active involvement in the evaluation of plant genetic resources in the European region, wishes to become a member of the European PGRFA Evaluation Network (EVA), and undertakes to adhere to the Principles set out in Point 04 of the Proposal for the Establishment of the European PGRFA Evaluation Network and to abide by the following commitments:

- Membership of EVA is free of charge: Participation in specific projects may have financial implications, which shall be set out in the applicable cooperation agreement.

Generators of data

- Full data on evaluations undertaken through any EVA crop-specific PPP project should be made available to other members of the EVA crop-specific PPP project. This could be through EURISCO directly or through links provided by EURISCO. The full data should be made available within such period as may be specified in the applicable crop-specific PPP project Cooperation Agreement;
- To abide by all restrictions on the release of evaluation data produced in the context of the crop-specific PPP in which they are involved in accordance with the rules adopted by the corresponding crop-specific PPP project Cooperation Agreement;
- To actively participate in the work of any crop-specific PPP activity charged with setting standards for the crop(s) covered by the crop-specific PPP in which they are involved and to abide by applicable agreed standards;
- To strive to enter into agreement with providers of genetic material for multiplication of given accessions under standard procedures and return of multiplied material to the providers.

Providers of material

- To provide partners in crop-specific PPP projects with the propagating material of genetic resources that are jointly selected for evaluation, in appropriate quantities and of suitable quality, within agreed deadlines and based on signature of an SMTA by recipients, if possible.

In return, the Member has the right to expect the following benefits from its membership in EVA:

- The right to participate in crop-specific PPP evaluation Projects under the EVA structure;

- Access to data standards and regeneration protocols generated under EVA and appropriate support in using them;
- Privileged access to data generated for such time as set in the applicable crop-specific PPP project Cooperation Agreement;
- Multiplication/regeneration carried out by breeders of accessions provided by genebanks / collection holders and the multiplied/regenerated material **subsequently** returned to the genebank/collection holder at no cost to the genebank/collection holder.

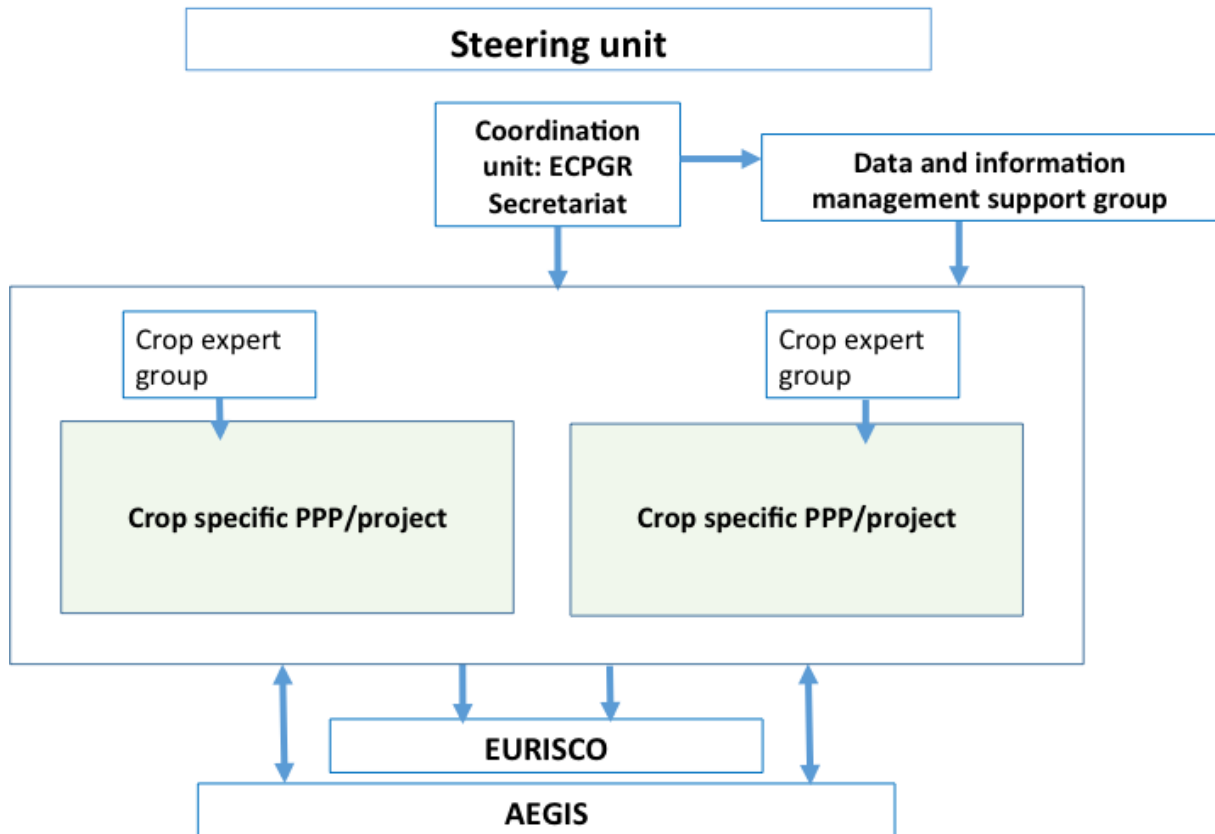
Withdrawal or termination of EVA Membership

- An EVA Member may withdraw its membership at any time by giving 3 months' notice of withdrawal in writing to the Secretariat of ECPGR. Any such withdrawal shall not affect any rights or obligations entered into under a Cooperation Agreement currently in force.
- The Steering Unit of EVA may terminate the membership of any EVA Member in the event that a Member fails to abide by the conditions set out in this Letter of Commitment. Termination of membership shall not affect any obligations entered into under a Cooperation Agreement currently in force.

Signed _____

Date

ANNEX B
EVA Structure



ANNEX C

Format of a Cooperation Agreement

(Example that can be adapted to specific cases)

This Cooperation Agreement is entered into by the Steering Unit of the European Evaluation Network (EVA) acting through the ECPGR Secretariat and the following Members of EVA _____ (the Evaluation Partners).

1. The Evaluation Partners agree to collectively evaluate ____ accessions of _____ for _____ (e.g. resistance) to _____ with the option to extend the evaluations to ____ additional isolates at a later stage. The total selection of ____ accessions is attached as Appendix 1 to this Agreement.
2. The Evaluation Protocol to be used is attached as Appendix 2 to this Agreement.
3. Accessions to be evaluated will be distributed by _____.
4. Each Evaluation Partner shall test ____ accessions ____ for _____ (e.g. resistance) before the following date _____.
5. Each Evaluation Partner shall send the data generated by the evaluation undertaken by it to _____ by _____20**.
6. _____ shall then compile the data provided for a joint analysis by the Evaluation Partners. An overview of all evaluation data (the Results) will be prepared and sent by _____ to all Evaluation Partners.
7. All Evaluation partners may use the Results freely for research and development provided that the provisions set out in this Agreement are complied with.
8. The embargo period for the Results obtained under the contract shall be ____ years starting from the date on which the Results are distributed by _____ among the evaluation Partners, after which the Results shall be made publicly available.
9. Both during the project and the embargo period, each Evaluation Partner shall treat the Results as confidential. Each Evaluation Partner shall hold the Results in strictest confidence and shall not disclose or allow the disclosure of the Results to any third party, or make the Results, or any part thereof, available to a third party, unless publication of the results is accepted by all partners.
10. The confidentiality obligation shall not be applicable to the Results, or any part thereof:
 - a. Which were already in the public domain prior to the entry into force of this Agreement, or
 - b. Which have become part of the public domain otherwise than through any unlawful act or omission of the party wishing to disclose the results, or
 - c. Which were disclosed by a third party that was entitled to disclose the results, or

- d. Which are required to be disclosed by law or by order of a competent court of law, provided that the Evaluation Partner first provides the other Evaluation Partners with notice of such requirements and of its intent to disclose the Results, or
 - e. Which an Evaluation Partner needs to disclose as part of a patent application.
11. Each Evaluation Partner is entitled to give its employees and the employees of its affiliated companies access to the Results, in so far as necessary for them to fulfill their tasks. Each Evaluation Partner shall ensure that its employees and the employees of Affiliated Companies shall use the Results, and hold the Results, in strict confidence, in accordance with the provisions of this Agreement.
 12. A company shall be considered an Affiliated Company if that company controls, is under control of, or is under the same control as an Evaluation Partner under this Agreement. In this context, control means –
 - a. the direct or indirect ownership of more than 50% of the capital stock of a company;
 - b. the power to exercise more than 50% of the voting rights in a company, and/or
 - c. the power to determine the policy of a company in a decisive way.
 13. _____ will distribute the accessions to be evaluated under the terms of the SMTA of the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture.
 14. This copy of this Agreement, together with the copies of this Agreement signed by other Evaluation Partners, shall constitute a single Agreement.

Signed by

 Steering Unit of EVA
 Acting through ECPGR Secretariat, Bioversity International

 Evaluation Partner

Date

Date

Appendix 1

Selection of ____ accessions

(List Accession number, taxon name, holding institution)

Appendix 2

Evaluation Protocol

(Example that can be adapted to specific cases)

Test Protocol

1. Maintenance:
2. Host differentials:
3. Sample size:
4. Temperature:
5. Inoculum concentration:
6. Illumination:
7. Recording:

Scoring Protocol

1. Abiotic stress susceptibility

Scored under artificial and/or natural conditions, this should be clearly specified. These are coded on a susceptibility scale from 1 to 9, viz.:

- 1 – Very low or no visible sign of stress susceptibility
- 3 – Low
- 5 – Intermediate
- 7 – High
- 9 – Very high

2. Biotic stress susceptibility

In each case, it is important to state the life cycle tested, i.e. seedling, excised leaf, mature plant, seed-bearing plant, storage organ. These are coded on a susceptibility scale from 1 to 9, viz.:

- 1 – Very low or no visible sign of susceptibility
- 3 – Low
- 5 – Intermediate
- 7 – High
- 9 – Very high