

General Description of the AEGIS Initiative

Introduction

The forty-five countries¹ of the European Region are working to establish a rational system of regional cooperation in the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) in Europe. The new system is called the European Genebank Integrated System, or AEGIS for short, and will establish for the first time a European Collection, which will operate as a virtual (European) genebank. The accessions in the European Collection (European Accessions) are to be maintained in accordance with agreed quality standards, and to be freely available in accordance with the terms and conditions set out in the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty)². In so doing, the countries hope to rationalize the present system of conservation and sustainable use in Europe, and to improve its efficiency at both the collective and individual levels. The new system will allow individual genebanks to rely on the work being undertaken by other genebanks, without having to duplicate it themselves. This paper describes the main lines of AEGIS.

Background

The AEGIS initiative is the brain child of the European Cooperative Programme for Plant Genetic Resources (ECPGR)³. At the present time, plant genetic resources for food and agriculture in Europe are conserved in some 500 institutions scattered over 45 European countries. While coordination of activities is carried out within the framework of the ECPGR and the ECPGR Crop Networks/Working Groups, each genebank basically operates on its own, providing for the conservation of a full range of crop germplasm important for agriculture in the area it serves. With this in mind, the countries of the European region believe that there is a need to improve coordination and share responsibilities with respect to the conservation of, management of and access to PGRFA in Europe by setting up AEGIS.

¹ Albania; Armenia*; Austria*; Azerbaijan; Belarus; Belgium*; Bosnia and Herzegovina; Bulgaria*; Croatia; Cyprus*; Czech Republic*; Denmark*; Estonia*; Finland*; France*; Georgia; Germany*; Greece*; Hungary*; Iceland*; Ireland*; Israel; Italy*; Latvia*; Lithuania*; Luxembourg*; Macedonia FYR; Malta; Moldova; Montenegro; Netherlands*; Norway*; Poland*; Portugal*; Romania*; Russian Federation; Serbia; Slovakia; Slovenia*; Spain*; Sweden*; Switzerland*; Turkey*; United Kingdom*; Ukraine.

* indicates the country is a Contracting Party to the International Treaty on Plant Genetic Resources for Food and Agriculture.

² 30 of the 45 countries in the region plus the European Community are Contracting Parties to the Treaty. See footnote 1 above.

³ ECPGR was founded in 1980 on the basis of the recommendations of the United Nations Development Programme (UNDP), the Food and Agriculture Organization of the United Nations (FAO) and the Genebank Committee of the European Association for Research on Plant Breeding (EUCARPIA). It is a collaborative Programme among most European countries, aimed at facilitating the long-term conservation on a cooperative basis and the increased utilization of plant genetic resources in Europe. The Programme, which is entirely financed by the participating countries and is coordinated by a Secretariat at Bioversity International, operates through broadly focused Networks dealing with groups of crops or general themes related to plant genetic resources.

The legal mechanism for establishing AEGIS will be a Memorandum of Understanding (MOU) entered into by eligible countries of the region⁴ and the EC, setting out their commitments as full Members of AEGIS and the main lines of AEGIS. To be eligible for membership, the countries listed must be members of ECPGR, and either Contracting Parties to the Treaty or otherwise willing to make PGRFA under their jurisdiction available under the conditions of the Treaty. The MOU will come into force on its signature by at least 10 eligible countries. The MOU will be supplemented by a series of Associate Member Agreements, concluded at the national level with individual genebanks that wish to become part of AEGIS. The Associate Member Agreements will be entered into by the genebanks with the ECPGR National Coordinator for the country concerned, who undertakes to work with the genebank in implementing AEGIS, and who is ultimately responsible for overseeing the genebank's compliance with its obligations under the agreement.

Objectives of AEGIS

The objectives of AEGIS are set out in the MOU. They are in essence to create an integrated system for plant genetic resources for food and agriculture in Europe, aimed at conserving genetically unique accessions that are important for Europe and making them readily available and easily accessible for breeding and research. *Ex situ* conservation of those accessions, called European Accessions together forming the European Collection, will be carried out in accordance with common agreed quality standards, independently of where the accessions are physically located, and will be made available in accordance with the terms and conditions of the Treaty.

AEGIS and the Treaty

AEGIS will be developed and operate within the framework of the Treaty in a manner consistent with the Treaty's objectives⁵. In its Article 5, the Treaty calls for the development of an efficient and sustainable system of *ex situ* conservation: AEGIS will be the response of the European region to that call. More generally, AEGIS will provide a mechanism for regional cooperation in the implementation of the Treaty in the European region. Wherever possible, AEGIS will use the Treaty's mechanisms, procedures and instruments, including the Standard Material Transfer Agreement (SMTA), and will thereby contribute to its effective implementation.

The Benefits of AEGIS

The main benefits of AEGIS will be:

- Improved collaboration among European countries and a stronger unified Europe;

⁴ See footnote 1 above.

⁵ The objectives of the Treaty, as set out in Article 1 of the Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.

- a. Cost-efficient conservation activities within and between European genebanks;
- b. Reduced redundancy in European collections;
- c. Improvement of quality standards for conservation, information management and the facilitation of use of conserved germplasm across Europe;
- d. More effective and better quality regeneration;
- e. Facilitated access to all the germplasm included in AEGIS;
- f. Improved security of germplasm through standardized commitments and safety-duplication;
- g. Improved linkages between *ex situ* and *in situ* conservation as well as linkages with users;
- h. Improved sharing of knowledge and information.

How AEGIS will work

➤ The European Collection

The concept of a European Collection is at the very heart of AEGIS. The European Collection will be, in essence, operated as a virtual European genebank, made up of the genetically unique accessions that are important for Europe (European Accessions⁶), selected according to agreed criteria, and organized on a crop gene pool specific basis.

Each AEGIS Member can, at its own discretion, propose accessions as European Accessions. The only precondition is that the accessions must be free from any third party obligations or restrictions, i.e. they must be freely available. The AEGIS Member will submit its proposals to the appropriate ECPGR Crop Network/Working Group, through the ECPGR Secretariat, for consideration within a European context. The Crop Network or Working Group will make technical recommendations on each of the proposals and recommend to each country which proposed accessions qualify as European Accessions. It is then up to the individual Member concerned whether or not to register the accession as a European Accession. Once it has done so, then the Member concerned must notify the registered European Accession to the **European Plant Genetic Resources Search Catalogue (EURISCO)** through its National Inventory System⁷. Each AEGIS Member is responsible for keeping the list of European Accessions within its jurisdiction under review, in light of the need to maintain a rational system of “*ex situ*” conservation.

The task of identifying, managing and distributing the European Accessions lies with the genebanks and other institutions participating in AEGIS (i.e. the AEGIS Associate Members) where those accessions are located. European Accessions are to be managed in accordance with management standards proposed for each crop gene pool by the respective ECPGR Crop Working Group and approved by the

⁶ The provisions concerning the registration, management and availability of European Accessions are set out in a series of General Principles in the MOU.

⁷ It is of course also responsible for requesting the removal of the European Accessions within its jurisdiction from EURISCO if it withdraws from AEGIS.

ECPGR Steering Committee. All European Accessions must be safety duplicated as soon as possible.

All European Accessions must be made freely available for research, breeding and training for food and agriculture. Accessions of crops listed in Annex 1 to the Treaty must be made available under the Standard Material Transfer Agreement (SMTA). Accessions of non-Annex 1 crops are to be made available under the SMTA with an explanatory note, in the same way as authorized by the Governing Body of the Treaty for the CG Centres.

European Accessions accessed for non-food and agricultural purposes, i.e. purposes not covered by Article 12.3.a of the Treaty, are to be made available on terms and conditions to be agreed on a case by case basis between the Recipient and the Associate Member concerned. In all cases public domain accession-level information will be made available, as well as non-confidential characterization and evaluation data.

➤ **The Relationship of AEGIS with the ECPGR**

In order to eliminate unnecessary bureaucracy, AEGIS will operate within the framework of the ECPGR using the institutional machinery developed by ECPGR:

- a. The **ECPGR Steering Committee** will have overall responsibility and oversight over the operation of AEGIS;
- b. The **ECPGR Secretariat** will provide support and coordination;
- c. The **ECPGR Crop Networks/Working Groups** will provide technical support, including through the preparation and coordination of Crop Conservation Work Plans and recommendations regarding proposed European Accessions;
- d. The **ECPGR Documentation and Information Network** will provide information infrastructure, including reporting services through EURISCO and the National Inventory System; and
- e. **National ECPGR Coordinators** will also act as coordinators for AEGIS within their own countries, and will serve as focal points for interactions with the ECPGR Crop Networks and Working Groups, as well as serving as the link with Associate Members in their own countries and promoting and coordinating the designation of European Accessions and the development and management of the European Collection as a whole.

➤ **The Role of Associate Members in AEGIS**

Associate Members are at the cutting edge of AEGIS: they are the ones that actually carry the brunt of managing the European Accessions that collectively form the European Collection. Associate Members will include genebanks and other institutions holding collections or providing PGRFA conservation related services such as information, evaluation and characterization services, regeneration and plant health services.

Associate Membership of AEGIS will be voluntary. Only institutions located in an AEGIS Member Country are eligible for Associate Membership. Potential Associate Members will be identified by the ECPGR National Coordinators. They can become Associate AEGIS Members by signing an Associate Membership Agreement with the National Coordinator accepting the responsibilities of an Associate Member. These responsibilities are set out in both the Associate Membership Agreement and in the MOU itself. They are in general terms:

- a. Identifying suitable accessions in their institutions to be proposed for registration as European Accessions, and managing those accessions in accordance with agreed quality standards;
- b. Facilitating supporting activities such as regeneration, viability testing and others organized by the respective ECPGR Crop Network/Working Group for the crop/species in question; and
- c. Facilitating access to the European Accessions in their institutions and related information in accordance with internationally agreed conditions in line with the Treaty.

➤ **How AEGIS will work legally**

Countries will become Members of AEGIS by subscribing to a common MOU establishing AEGIS. Individual participating genebanks and other institutions will be entitled to become Associate Members by signing an Associate Membership Agreement.

The main AEGIS MOU will be deposited with the Director General of Bioversity International, as the organization responsible for providing secretariat services for the ECPGR. Eligible countries and regional organizations can become Members of AEGIS by signing the original MOU or an authenticated copy provided by the Depositary. The MOU can be amended by consensus of the Parties, and will terminate if the number of Parties falls below 10, the minimum number required for its entry into force.

Any Party may withdraw from the MOU and hence from AEGIS, on 12 months written notice. If it withdraws, all AEGIS Associate Membership Agreements automatically terminate at the same time.

Associate Members may withdraw from Associate Membership Agreements on 12 months written notice. In addition, the National Coordinator will be tasked with overseeing the compliance of Associate Members in their jurisdiction with their obligations under those agreements. If a National Coordinator is not satisfied that an Associate Member has complied fully with its obligations, it may serve written notice on the Associate Member specifying the areas in which compliance has been deficient. If the Associate Member fails to remedy the situation within 12 months, the Agreement, and hence the Associate Membership, may be terminated. Associate Membership Agreements are to be deposited with the National Coordinators concerned.