



# Safety-Duplication of European Accessions (draft AEGIS policy)



**Jan Engels and Lorenzo Maggioni**

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# AQUAS (AEGIS Quality System) – technical elements

1. **Operational genebank manual** – all AEGIS Associate Members; based on **genebank template** (template finalized – AEGIS Web site; so far only one manual received)
2. **Generic operational standards** – Secretariat (cooperation with FAO; inputs into draft also by ECPGR members; discussed at Commission in July 2011; standards for non-orthodox species on field genebank and *in vitro*/cryopreservation requested)
3. **Agreed minimum crop-specific technical standards** – all WGs (complementing generic standards, when necessary)
4. **Quality management system procedures** – Secretariat; all WGs; Associate Members:
  - a. **record keeping**
  - b. **reporting**
  - c. **monitoring (not policing, but guiding and advisory approach)**



## Safety-duplication and AQUAS

- In “A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS) – A Policy Guide” (2009), it was foreseen that “*A safety-duplicate of each European Accession will be stored at one or more collaborating and agreed European genebank(s) or institution(s) and/or at the Svalbard Seed Vault*”
- This is also reflected in the MoU and AMA agreements and is the **responsibility of the Associate Members of AEGIS**
- AQUAS refers to the **international technical standards** to be met by genebanks, including on the safety-duplication of accessions



## Principles that underpin safety-duplication

1. • Adequate genetically representative sample
  - Sample stored/maintained for safety reasons only
  - Similar or better storage or maintenance conditions than those of the original sample
  - Stored at another AM genebank, preferably in another country, and under a black box arrangement
2. Agreed and deviating conditions are adequately reflected in a separate agreement between the two institutions



## Principles that underpin safety-duplication (cont.)

3. The revised FAO **international standards** as per the current draft for orthodox and non-orthodox seed germplasm and for field genebank accessions state that:
  - A safety-duplicate sample of every accession should be stored in a **geographically distant genebank** under **similar or better conditions** than those of the original sample.
  - The safety-duplicate sample should be **accompanied by relevant documentation**.
  - A **field genebank accession** should be safety-duplicated **at least in one more site and/or backed up by an alternative conservation method/strategy** such as *in vitro* or cryopreservation, where possible.



## Principles that underpin safety-duplication (cont.)

4. Relevant information about the location of the safety-duplicated accessions should be included in EURISCO by filling in the appropriate descriptor field
5. Cost related to the shipment of the safety-duplicated accessions rests with the duplicating genebank
6. Genebanks have the possibility of using the Svalbard Global Seed Vault (SGSV) facilities for safety-duplication of accessions of orthodox seed genetic resources. AEGIS would accept the duplication of European Accessions at SGSV as adequate safety-duplication.



# AEGIS

## Safety-Duplication Policy

The current draft presented here is under consideration by the AEGIS Advisory Committee and will thereafter be submitted to the ECPGR Steering Committee.

1. Upon approval by the ECPGR Steering Committee, this policy becomes the reference procedure for the appropriate implementation of the safety-duplication of European Accessions by AEGIS Associate Members.
2. Each European Accession will have an identified safety-duplicate stored under the same or better conditions than the original (as per Article 8 (a)(x) of the AEGIS MoU).





## AEGIS

### Safety-Duplication Policy (cont.)

3. The Associate Members of AEGIS will ensure that the European Accessions they maintain on behalf of AEGIS will be safety-duplicated under black box arrangement at another Associate Member genebank, possibly in a different country, or at the Svalbard Global Seed Vault. The safety-duplication will be formalized following the inclusion of the accessions in the European Collection:
  - In case such accessions have already been safety-duplicated at another Associate Member genebank, the corresponding information must be included in EURISCO in the appropriate field.
  - In cases where the accessions still need to be safety-duplicated, this will be done as soon as possible after their formal inclusion in the European Collection as per Articles 1 and 2 above, and the required information included accordingly in EURISCO.



# AEGIS

## Safety-Duplication Policy (cont.)

4. Unless otherwise agreed between the depositor and the genebank in which the material is to be deposited, the safety-duplication will be carried out under a so-called black box arrangement in accordance with the following terms and conditions:
  - a) The deposit of the material will not affect any property or other rights pertaining to the material.
  - b) The material deposited will remain in sealed containers, unless otherwise agreed with the depositor.
  - c) The material deposited will be maintained by the genebank in which the material is to be deposited, in accordance with internationally recognized standards.



## AEGIS

### Safety-Duplication Policy (cont.)

- d) All storage costs pertaining to the material deposited will, unless otherwise agreed between the parties, be borne by the genebank in which the material is to be deposited. Costs pertaining to the packaging and shipping of the deposited materials will be borne by the depositor.
- e) Any special terms and conditions governing the deposit of the material will be agreed between the depositor and the genebank in which the material is to be deposited.
- f) The genebank in which the material is to be deposited will take no action to further transfer the material except back to the original depositor or the depositor's successor in title, or in accordance with the depositor's instructions.



## AEGIS

### Safety-Duplication Policy (cont.)

- g) The safety-duplicated material will not be used, tested or regenerated by the genebank in which the material is to be deposited.
- h) The genebank storing/maintaining safety-duplicated accessions will return specified accessions as soon as possible to the duplicating genebank upon their request.
- i) Computerized passport data and, whenever possible, relevant management data should always accompany the safety-duplicated germplasm and/or be safety-duplicated in a central database, in order to allow identification of the black box content, in case of emergency.



## AEGIS

### Safety-Duplication Policy (cont.)

5. When deemed necessary or otherwise felt beneficial to any of the safety-duplicating partners, the depositing and the receiving genebanks of the safety-duplicated accessions may conclude a formal safety-duplication agreement. Model agreements (a more formal longer version and a more informal shorter version) are available on the AEGIS Web site (<http://aegis.cgiar.org/home.html>), both reflecting the conditions as set out in this policy.
6. The genebank maintaining the original sample of the European Accession will be responsible for any reporting on the safety-duplication, including keeping the respective records in EURISCO up-to-date.



## Next steps

1. Comments on draft policy expected from the AEGIS Advisory Committee
2. Submission for approval through the ECPGR Executive Committee to the Steering Committee
3. Upon approval, implementation by the Associate Members
4. Policy and template agreements available on the Web
5. Crop-specific conditions to be agreed at the WG level (i.e. what is the “genetically representative sample”).



Thank you  
for your attention!

