

Documentation and Information Network

The **Documentation and Information Network Coordinating Group** consisted of 11 members: Frank Begemann, Germany (Network Coordinator); Iva Faberová, Czech Republic; Theo van Hintum, The Netherlands; Helmut Knüpfner, Germany; Jonas Nordling, Sweden (NordGen); Idin Fazlic, Bosnia and Herzegovina (SEEDNet); Ahmet Semsettin Tan, Turkey; Ian Thomas, United Kingdom. The *ex officio* representatives were Sónia Dias and Lorenzo Maggioni, ECPGR Secretariat, Rome; Michael Mackay, Bioversity International, Rome; and José Iriondo, Spain (*In situ* and On-farm Network representative).

An **EPGRIS3 self-funded workshop** was held on 7 May 2009 at the Bundesanstalt für Landwirtschaft und Ernährung (BLE) in Bonn, Germany, including 12 participants collaborating in EPGRIS3 activities 2-05 (Characterization and Evaluation data) and 2-06 (Link to the ECPGR Central Crop Databases).

A proposal for inclusion of characterization and evaluation (C&E) data into EURISCO, presented by Theo van Hintum, CGN, The Netherlands, was discussed and reached general consensus around the following concepts:

- "It is not feasible to enforce any standardization in terms of experimental design, the use of standards or even the scale of measurement";
- "All (potential) data donors should be able to export their data, as they have it, in a common format, provided that this is a flexible format";
- "The value of C&E data is that high to a user that she/he is willing to invest time in analyzing the data".

The principle of creating a repository of non-standardized C&E data in the framework of EURISCO was also adopted, with the addition that the repository should only be used for non-confidential data. It was stressed that only C&E data on accessions already in EURISCO could be uploaded. However, it was decided that any registered "uploader" (the National Focal Point, or someone approved by the NFP) can upload data on any EURISCO accession, i.e. not only on accessions in the National Inventory of the "uploader". More details on this workshop are available at:

<http://www.epgris3.eu/EPGRIS3%2020090507workshop.htm>

A revised proposal for inclusion of C&E data into EURISCO, including a road map, was then drafted, circulated to the Network members and sent for information to the Steering Committee. The proposal was eventually approved by the Documentation and Information Network in June 2009 (see <http://www.epgris3.eu/docs/activities/2-05/Inclusion%20of%20C&E%20data.pdf>).

The road map to the inclusion of C&E data into EURISCO was revised in July 2009. This foresees a process of collaboration with Bioversity International, apart from the implementation of the procedures in EURISCO, also specifically in the context of the development of the GENESYS catalogue of the Global Information on Germplasm Accession (GIGA) project. A self-funded meeting to discuss the options for creating synergies between EURISCO and GENESYS was held at CGN in Wageningen, The Netherlands in December 2009. CGN, NordGen, BLE and IPK made themselves available to deliver the first data sets for developing and testing the EURISCO infrastructure in Rome.

The Network was heavily involved in the preparation of the EUROGENEBANK project proposal, that was submitted for funding in December 2009 under the EU 7th Framework Programme call for proposals on "Research Infrastructures - Support to existing research infrastructures - Integrating Activities". Two Work Packages focusing on documentation aspects were prepared (WP7 and WP8):

- WP7, coordinated by the Centre for Genetic Resources (CGN), The Netherlands, intending to "Upgrade PGR information management and interfaces". This Work Package was strongly based on the "wish list" as developed by EPGRIS3, and involved the following participants: Bioversity International, Italy; the Federal Agency for Agriculture and Food (BLE), Germany; the Crop Research Institute (CRI), Czech Republic; the Institute of Biological, Environmental and Rural Sciences, Aberystwyth University (IBERS), UK; the Leibniz-Institut für Pflanzengenetik und Kulturpflanzenforschung (IPK), Germany; the Julius-Kühn-Institut -

Bundesforschungsinstitut für Kulturpflanzen (JKI), Germany; The Nordic Genetic Resource Center (NordGen), Sweden; and the Royal Museum for Central Africa (RMCA) Belgium. Planned tasks included: the creation of crop portals for a number of model crops; data mobilization for more and better data in EURISCO; increased quality and quantity of EURISCO passport data; improved public Web-interface to EURISCO; application of Web-services technology for uploading National Inventory data to EURISCO; creating a repository and interface for C&E data; and creating trait ontology on the basis of the C&E data repository.

- A second Work Package (WP8), led by Bioversity International, intended to “Ensure free access to data through EURISCO”, with the aim to provide support (i.e. training, seminars and helpdesk function) to users, improve functionalities and add new tools to EURISCO.

H. Knüpffer (IPK, Gatersleben) represented the ECPGR Documentation and Information Network in the International Organizing Committee of the annual conference of Biodiversity Information Standards (TDWG; www.tdwg.org) on “E-Knowledge about Biodiversity and Agriculture”, held 9-13 November 2009 in Montpellier, France. For the first time, a TDWG conference focused on agriculture and plant genetic resources. Out of almost 300 participants, more than 50 represented agricultural research and plant genetic resources, half of these from France, and about ten represented ECPGR. A number of presentations, parallel working sessions and posters were devoted to aspects of plant genetic resources documentation and information.

EURISCO in 2009

The European countries’ representation within EURISCO increased to 40 countries, with the inclusion of the National Inventories (NIs) of Belarus, Croatia and Montenegro.

Regarding the National Inventory Focal Points (NFPs), 12% were newly appointed and 14% were replaced, thereby requiring support and training from the Secretariat.

The EURISCO Web site content was updated with information, public awareness materials, documents and links to other important sources of information.

Three more downloadable EURISCO fact sheets were made available, now covering 15 different languages (see: http://eurisco.ecpgr.org/releases/fact_sheet.php). Translations were provided as in-kind contributions by the NFPs. In 2009, the Albanian, Armenian, Portuguese, and Russian versions were made available for the first time.

The EURISCO poster was updated several times and is available for download at:

<http://eurisco.ecpgr.org/releases/posters.php>

In an attempt to further increase the taxonomy data quality in EURISCO and the National Inventories, a total of 333 reports were sent to the NFPs in December 2009. In these reports, all the taxa of a given National Inventory that did not match or only partially matched the GRIN Taxonomy were indicated, inviting the NFPs to check whether it would be appropriate to make corrections in their country’s genebank documentation systems and in their National Inventories.

EURISCO data were regularly provided to GBIF (Global Biodiversity Information Facility). At the 10th Meeting of the GBIF Participant Nodes Manager Committee in Copenhagen, 2-5 October 2009, a poster was presented, entitled “EURISCO, European Plant Genetic Resources Portal: A Biodiversity Thematic Network in GBIF”.

At the TDWG annual conference on “E-Knowledge about Biodiversity and Agriculture” on 9-13 November 2009, Montpellier, France, EURISCO was presented with an oral presentation, a computer demonstration and a poster.

Four “EURISCO Seminars and Trainings” were organized with the objective of strengthening national capacity in data exchange and the sustainability of EURISCO, as well as to improve data completeness by enhancing the quality and quantity of data flow into the Catalogue. These seminars and trainings were held in Yerevan, Armenia (April 2009), St. Petersburg, Russian Federation (May 2009), Kharkov, Ukraine (October 2009) and Banja Luka, Bosnia and Herzegovina, where Serbian partners also attended (November-December 2009). In addition, a “Training workshop” was held in Prague, Czech Republic, 29-30 June 2009, partly funded by the Documentation and Information Network as an activity (5-01) of the EPGRIS3 self-funded project. Funding from ECPGR and the South East European Development Network on Plant Genetic Resources (SEEDNet) allowed the participation of 30 National Focal Points and documentation experts.

These seminars and trainings have involved a total of 113 people, have contributed to the updating of the National Inventories and resulted in agreed outputs and recommendations for the National Inventories. For more information see: http://eurisco.ecpgr.org/contact_menu/training.php.

During 2009, the number of visitors to EURISCO reached more than 7500, with a 50% increase in new visitors, and almost 50% of visitors returning. The information maintained in EURISCO has been searched from 102 countries (26 countries more than in 2008).

Two e-bulletins (July and December) were made available on the EURISCO Web site (<http://eurisco.ecpgr.org/releases/issues.php>), as well as disseminated via e-mail to more than 200 individuals. Three external contributions were provided, by Armenia and GRIN Global in July and by Bosnia and Herzegovina in December. Three articles giving updates on EURISCO were published in the 2009 issues of Bioversity's Newsletter for Europe.

The process for the renewal of the EURISCO data sharing agreement for the period of 2010-2020 was initiated. The data sharing agreement will be compliant and in harmony with the International Treaty on Plant Genetic Resources for Food and Agriculture and also with EURISCO's function as a network data provider to other major PGR information hubs of significant interest for the PGR community.

Some facts and numbers are worth highlighting regarding changes and improvements in EURISCO during 2009:

- The total number of accessions has decreased by 84 226, reaching a total of 1 049 469 accessions in December 2009;
- Three new NIs joined (Belarus, Croatia and Montenegro), raising the number of participating countries to 40;
- There was an increase of 46 data sources, reaching 297 institutes conserving PGR;
- The number of species names (including synonyms and spelling variants) represented in EURISCO increased by 25 817 species, reaching 34 556 species;
- More than 47% of the NIs were updated during 2009;
- As for the type of materials maintained in these NIs and searchable through EURISCO, these are "wild" 10%, "landraces" 25%, "breeding" 15% and "improved cultivars" 19% of the total material documented in EURISCO;
- Multilateral System (MLS) registration increased from 14% in 2008 to almost 20% in 2009 of the EURISCO total accessions, and from 11 to 13 countries. MLS accessions registered in EURISCO cover around 66% of the genera from Annex I of the ITPGRFA.

Outlook for 2010: activities planned by the Network include the organization of the Fourth Meeting of the Network Coordinating Group in Maccaresse, Italy on 17-18 February 2010, and the organization of a Second Capacity Building Inter-regional Workshop on International Treaty Implementation, jointly with the Inter-regional Cooperation Network.

3.8. *In situ* and On-farm Conservation Network

WGs: On-farm Conservation and Management; Wild species Conservation in Genetic Reserves.

The ***In situ* and On-farm Conservation Network Coordinating Group** consisted of seven members: Nigel Maxted, United Kingdom (Network Coordinator); Lothar Frese, Germany; Paul Freudenthaler, Austria; José Iriondo, Spain; Valeria Negri, Italy; Zdeněk Stehno, Czech Republic; and Jens Weibull, Sweden.

The Network has been involved in the preparation of the project proposal for "Novel characterization of crop wild relatives and landraces resources as a basis for improved crop breeding" (**PGR Secure**), submitted in January 2010 to the EU FP7 funding scheme for Collaborative Projects (KBBE.2010.1.1-03 – Characterization of biodiversity resources for crop wild relatives to improve crops by breeding). The project aimed to research novel characterization techniques and conservation strategies for European crop wild relative and landrace diversity, and to further enhance crop improvement by breeders, as a means of underpinning European food security in the face of climate change. Partners in the project included: University of Birmingham, UK (Coordinator); Plant Research

International, The Netherlands; ServiceXS BV, University of Nottingham, UK; Bioersity International; University of Perugia, Italy; Centre for Genetic Resources, The Netherlands; Julius Kühn-Institut, Germany; Nordiskt Genresurscenter, Sweden; MTT Agrifood Research, Finland; and Universidad Rey Juan Carlos, Spain. To achieve its aim, the project will include four research themes:

1. Novel characterization techniques, including: (1a) Genomics, phenotyping and metabolomics, (1b) Transcriptomics, (1c) Focused Identification of Germplasm Strategy.
2. Crop Wild Relatives (CWR) and Landraces (LR) conservation, including: (2a) Europe-wide CWR inventory; (2b) Exemplar national CWR inventories; (2c) European CWR strategy; (2d) Europe-wide LR inventory; (2e) Exemplar national LR inventories; (2f) European LR strategy.
3. Facilitating breeders' CWR and LR use, including: (3a) Identifying breeders' needs; (3b) Meeting breeders' needs; (3c) Integration of conservation and user communities.
4. Informatics development, including: (4a) CWR and LR inventory information Web availability; (4b) Novel characterization information Web availability; (4c) Inter-information system operability.

Through the use of the ECPGR listserver, the ECPGR Secretariat helped the project coordinator to obtain letters of support for the project proposal from the ECPGR National Coordinators. It is expected that the project will base its implementation on the Network of ECPGR *in situ*/on-farm National Inventory Focal Points, the respective National Inventories and EURISCO as European Inventory for Plant Genetic Resources (*ex situ* and *in situ*/on-farm). The project is expected to involve 42 European countries, as well as large and smaller European plant breeding companies.

The second coordination meeting of the project "An Integrated European *In Situ* Management Work plan: Implementing Genetic Reserves and On Farm Concepts (AEGRO)" took place in Almeria, Spain on 14-16 September 2009. The project is funded by the European Commission, DG AGRI within the framework of Council Regulation 870/2004. AEGRO is an initiative of the members of the Coordinating Group of the ECPGR *In situ* and On-farm Conservation Network in collaboration with the ECPGR Crop Networks. The project addresses issues relating to the development of national crop wild relatives and landrace conservation strategies, data sourcing, data acquisition and modelling, use of GIS technologies, and aspects of practical site management and monitoring. It further pursues the common goal of halting the loss of genetic diversity in European crop wild relatives and landraces, thus helping the PGR community meet its obligations under the European Strategy for Plant Conservation 2008-2014.

Methods for planning of landrace on-farm conservation activities were developed, an inventory of landrace occurrences in Italy created, criteria to be taken into account for giving priority among areas defined, a landrace management strategy formulated and the strategy tested. It allowed selecting those areas that include the maximum landrace and ecological diversity as well. In addition, this exemplary work formed the basis of workpackage 2 of the PGR Secure project.

A Web-based helpdesk has been developed and tested by project partners. The CWR *In Situ* Strategy Helpdesk is a guide and information facility for National Programmes, research institutes, NGOs, protected area managers or individuals involved in the development of a crop wild relative (CWR) *in situ* conservation strategy. It provides a list of CWR data types and sources. The helpdesk information was made publicly available in October 2009 (<http://aegro.bafz.de/index.php?id=188>).

The Crop Wild Relatives Information System - Population Level Information System (CWRIS-PLIS) is also online. This is a core functionality of the AEGRO project (<http://aegro.bafz.de/index.php?id=168>). Four independent modules are being developed for *Avena*, *Beta* (http://aegro.bafz.de/aegroprod_beta/home.seam), *Brassica* and *Prunus*, allowing the search for occurrence within a specific species. PLIS combines different data sources and uses harmonized data. It allows: (i) search for occurrences by taxon information; (ii) search for occurrences by geographic information; (iii) combined search for occurrences by geographic information (Eurostat administrative units, NUTS, LAU) and Natura 2000 protected areas. A survey data recording tool was developed to assist *in situ* management of *Beta* species using the software tool kit CyberTracker. This tool kit, as well as a crop-specific application, is freely available.

Four model crops (oat, beet, brassicas and cherry) are used to test the genetic reserve conservation technique. Advanced drafts of genetic reserve guidelines were produced by all model crop project

teams describing concepts concerning the establishment of genetic reserves. These guidelines contain a list of candidate sites recommended for the establishment of genetic reserves for individual species and occurrences. The documents will be circulated within the ECPGR Working Groups with a request for discussion and feedback.

The CWR helpdesk, the Population Level Information System, the landrace management strategy, genetic reserves guidelines for a number of model crops as well as the identification of Most Appropriate Areas for genetic reserves establishment (a task to be performed in the last year of the project) is a contribution of AEGRO to the *in situ* and on-farm management activities of the ECPGR Programme.

As part of the EC project Diverseeds ("Networking on conservation and use of plant genetic resources in Europe and Asia"), and in collaboration with the ECPGR Secretariat, the University of Perugia, Italy progressed in the compilation of a Web database of on-farm research and coordination institutions and their contact points in Europe. This database is aimed at facilitating the exchange of information among on-farm and in-garden institutional stakeholders. At the end of 2009, a prototype database was available on the University of Perugia Web site (<http://www.sharinginformation.eu/>).

The following **Network publications** were printed and published on the Web:

- Vetelainen M, Negri V and Maxted N. 2009. European landraces: on-farm conservation, management and use. Bioversity Technical Bulletin no. 15.
http://www.bioversityinternational.org/publications/publications/publication/issue/european_landraces_on_farm_conservation_management_and_use-1.html
- Bailey A, Eyzaguirre P, Maggioni L. 2009. Crop genetic resources in European Home Gardens. Proceedings of a Workshop, 3-4 October 2007, Ljubljana, Slovenia.
http://www.bioversityinternational.org/publications/publications/publication/issue/crop_genetic_resources_in_european_home_gardens_proceedings_of_a_workshop_3_4_october_2007_ljublj.html

The following **report** was made available on the Web:

- Report of a Task Force on On-farm Conservation and Management. Third Meeting, 2-3 October 2007, Ljubljana, Slovenia.
http://www.ecpgr.cgiar.org/Networks/Insitu_onfarm/Rep_TF_OnfarmCons_final.pdf

Outlook for 2010 and 2011: activities planned by the Network include the organization of a Symposium for the establishment of European genetic reserves for CWR and landraces (Funchal, Madeira, Portugal, 13-16 September 2010), i.e. a joint meeting of the *In situ* and On-farm Conservation Network and the EU project AGRI GENRES 057 – AEGRO. As part of the symposium, the two Working Groups of the Network will meet for the first time in the new "Working Group" arrangement. In association with the IUCN CWR Specialist Group, many CWR Working Group members will attend an IUCN Red List Workshop in Cascais, Portugal in mid-April 2010, with the aim of completing the IUCN Species Red List documentation for a number of European CWR species.

The **PGR Secure** project is expected to start in February 2011. It will build on the knowledge and skills of the *In situ* Network and ECPGR *in situ*/on-farm National Inventory Focal Points, and on two workshops focusing respectively on CWR and LR conservation and use which are to be organized in the Summer of 2011.

3.9. Inter-regional Cooperation Network

The **new Terms of Reference** for the Inter-regional Network Coordinating Group/Task Force were drafted by the Secretariat and agreed by the Steering Committee in February/March 2009, including the composition of the NCG.

The agreed Terms of Reference were the following:

"During Phase VIII, the Inter-regional Cooperation Network Coordinating Group will coincide with the Inter-regional Cooperation Task Force, with the following task:

<<Organization of one or two Inter-regional Workshops, in collaboration with Bioversity and the Treaty Secretariat, with the objective to convey to other regions similar views to those prevailing in Europe as regards the sharing of tasks, material and information, at the same time facilitating and promoting the ratification and implementation of the International Treaty. The Task Force will also liaise with other ECPGR Networks/WGs expressing specific interest for inter-regional cooperation.>>

The composition of the Inter-regional Cooperation Network Coordinating Group (4-5 persons) will be defined by the Secretariat, on the basis of nominations received from the National Coordinators until 10 February 2009."

The **Inter-regional Cooperation Network Coordinating Group** consisted of five members: Frank Begemann, Germany (Network Coordinator); Merja Veteläinen, Finland; Petra Engel, Italy; Silvia Strajeru, Romania; and Ayfer Tan, Turkey.

A workshop for capacity building was organized in March 2009 in Entebbe, Uganda, jointly by ASARECA, EAPGREN, ECPGR, the FAO-Treaty Secretariat and Bioversity. F. Begemann and L. Maggioni, representing ECPGR, brought to the workshop the European experience regarding the regional implementation of the Treaty (National information systems, EURISCO and AEGIS). As a result, a road map for the national implementation of the Multilateral System (MLS) was drawn up, with priority assigned to the documentation of designated material, including the establishment and management of information systems. However, in practice, the ECPGR travellers received the impression that no firm commitment was taken and of apparent stagnation at the regional network level.

As a lesson learned from this workshop, before other ECPGR actions are undertaken, it will be essential to verify in advance the existence of a genuine interest of the partner network to implement the MLS as soon as possible. Provision of inter-regional support should also be linked to the possibility of obtaining factual outcomes (i.e. MLS accessions designated, national or regional inventory established, etc.).

Opportunities for future actions will need to be carefully explored together with the FAO-Treaty Secretariat and Bioversity Regional Directors.

Outlook for 2010: activities planned by the Network include the organization of a second Capacity building Inter-regional Workshop on International Treaty implementation, jointly with the Documentation and Information Network.

4. AEGIS INITIATIVE FOR "A EUROPEAN GENE BANK INTEGRATED SYSTEM"

During 2009 further steps were made with respect to the development of elements that are essential components of the AEGIS system. In addition, some other important developments took place during 2009 which are summarized below.

On 22 April 2009 the AEGIS Memorandum of Understanding (MoU) was sent to the ECPGR National Coordinators for signature by the respective country authorities. On 23 July 2009, upon signature of the tenth country eligible for membership, AEGIS entered into force. By the end of 2009 the following 17 countries had returned the signed MOU to Bioversity International, the depositary of the agreements: Albania, Azerbaijan, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Georgia, Germany, Ireland, The Netherlands, Norway, Portugal, Slovakia, Slovenia, Switzerland and the Ukraine. In addition, seven AEGIS Associate Membership Agreements between institutions holding *ex situ* accessions and the respective National Coordinators were concluded and copies sent to the Secretariat in Rome.

In September 2009, as a follow-up to the Steering Committee meeting in Sarajevo, the Secretariat, in close collaboration with Theo van Hintum (CGN, The Netherlands), finalized the discussion paper "Quality Management System for AEGIS", AQUAS in short. The paper includes a definition of a

quality management system, the principles of such a system, the operational framework including responsibilities, and the implementation steps of AQUAS.

During its Eleventh Meeting, the Steering Committee had approved the formation of a Competitive Grant Scheme, as part of the establishment phase of AEGIS. A small Task Force had assisted the Secretariat in developing the Scheme which is intended to support activities that will directly contribute to the establishment and/or operation of AEGIS. A total of € 103 000 had been set aside for this purpose during Phase VIII. The announcement on the launch of the Scheme was made on 26 June 2009, inviting ECPGR Networks, Network Coordinating Groups and Working Groups to submit proposals. A total of 17 proposals were received by the 18 October 2009 deadline, of which 14 were eligible (see the full list at: http://aegis.cgiar.org/about_aegis/latest_news/aegis_grant.html). The evaluation process was initiated under the leadership of the newly established AEGIS Advisory Committee.

In September 2009 the Steering Committee approved the Terms of Reference and the composition of the newly established AEGIS Advisory Committee. The Committee consists of Dave Astley (UK), Ladislav Dotlačil (Czech Republic), Gert Poulsen (Denmark), Anke van den Hurk (The Netherlands) and Vladimir Meglič (Slovenia) (<http://aegis.cgiar.org/structure/governance.html>).

The Secretariat staff participated in a number of ECPGR Network and Working Group meetings, as well as in some other European meetings that provided adequate fora for discussion and the creation of awareness on AEGIS. These included:

- ECPGR/FAO/Bioversity/EAPGREN Inter-regional Cooperation Workshop on International Treaty Implementation, 19-20 March 2009, Entebbe, Uganda
- SEEDNet Regional Steering Committee Meetings, 30 March-2 April 2009, St. Petersburg, Russian Federation, and 7-9 October 2009, Dubrovnik, Croatia
- EPGRIS3 meeting on the creation of protocols to facilitate the exchange of characterization and evaluation (C&E) data and to explore and improve the linkage between ECCDBs and EURISCO, 7 May 2009, Bundesanstalt für Landwirtschaft und Ernährung (BLE), Bonn, Germany
- EUCARPIA Genetic Resources Section, 26-30 May 2009, Ljubljana, Slovenia (keynote presentation on AEGIS)
- Preparatory meeting for the FP7 call for proposals on research "PGR Secure, i.e. KBBE.2010.1.1-03: "Characterization of biodiversity resources for crop wild relatives to improve crops by breeding", 2 July 2009, organized by the University of Birmingham
- The Integration of Cryopreservation in Genebank Strategies. COST Action 871, WG2 Workshop, 10-11 September 2009, IPK, Gatersleben, Germany
- Fourth Meeting of the ECPGR Working Group on Medicinal and Aromatic Plants, 29 September-1 October 2009, Kuşadası, Turkey
- Third Meeting of the ECPGR Vegetables Network Meeting, 10-12 November 2009, Catania, Italy.

In July 2009 the Framework Programme 7 of the European Union published the "Research Infrastructures - Support to existing research infrastructures - Integrating Activities" Call which included a topic "Integrated research infrastructure for a rational *ex situ* conservation and use of European plant genetic resources for food and agriculture". The Secretariat, Bioversity and some ECPGR member countries had worked closely with key officials to make this topic fully applicable to the establishment of AEGIS. The ECPGR Steering Committee endorsed the suggestion that the ECPGR Secretariat should coordinate the development of the proposal. On 3 December 2009 the proposal was submitted (EUROGENEBANK in short) after an intensive period of discussions and writing in which the selected Work Package leaders played a key role.

During the first (out of two) face-to-face meetings, it was decided to stick to a number of principles, i.e.:

- To place the EUROGENEBANK Project squarely within the AEGIS framework
- To include key aspects agreed upon by the ECPGR SC (i.e. "A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS) - A Policy Guide")

- To build on the strength and existing capacity/infrastructure
- To create the Project as an “independent” entity, but to actively manage the interface with the wider community
- To make the Project outputs available to all European genebanks (owing to the importance of capacity building).

The submitted EUROGENEBANK Project entailed the following interesting facts and figures:

- If funded, the ECPGR Secretariat would coordinate the Project implementation.
- The project involves 32 formal participating organizations (i.e. partners) in 19 countries.
- The total requested budget is € 8 683 685 with more than 1060 person/months and a duration of 4 years. The proposal includes 79 deliverables and 85 milestones.
- The Project consists of 11 Work Packages (see box below), lead by 8 different organizations.

Work Packages of EUROGENEBANK Project
WP1: Project Management (Bioversity)
WP2: Policy dissemination and communication (KIS)
WP3: European <i>ex situ</i> conservation and use knowledge base (CRI)
WP4: Creating the European Collection (Graminor)
WP5: Designing C&E procedures and infrastructure (BLE)
WP6: Capacity building (Bioversity)
WP7: Upgrading PGR information management and interfaces (CGN)
WP8: Access to European PGR Catalogue (Bioversity)
WP9: Developing operational and technical standards (MTT)
WP10: Designing the quality management system (MTT)
WP11: Supportive research to facilitate rationalization of germplasm management (INRA)

According to the instructions of the SC at its meeting in Sarajevo (2008), the following **publication**, previously printed as a “Discussion paper”, was made available on the Web in a revised form and as a “Policy guide”:

- ECPGR. 2009. A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS). A Policy Guide. European Cooperative Programme for Plant Genetic Resources (ECPGR). Bioversity International, Rome, Italy.

A new dedicated **Web site for AEGIS** was developed and launched in December 2009:

<http://www.aegis.cgiar.org/>

Outlook for 2010: major activities foreseen for 2010 include the development of a template for an operational genebank manual, the development of generic operational genebank standards and support to the WGs in the drafting of minimum crop standards. Draft system(s) should be developed for recording and reporting on the implementation of AQUAS. Procedures for identifying MAAs should also be streamlined. The selected Grant Scheme 2009 projects will be implemented and a second Grant Scheme 2010 is expected to be launched at the end of 2010. The number of AEGIS members and of established Associate Membership Agreements is expected to increase and possibly the first accessions belonging to the European Collection will be designated.

5. LINKS WITH OTHER NETWORKS AND INITIATIVES

The following interactions between ECPGR and other Networks and initiatives took place during 2009:

➤ **Global Crop Diversity Trust**

2009 was the first year of activity of a two-year project funded by the Global Crop Diversity Trust for the regeneration and safety-duplication of regionally prioritized crop collections. The project, jointly prepared by the ECPGR Cereals Network and the Oil and Protein Crops Network, and submitted for funding through the ECPGR Secretariat, is aiming at carrying out regeneration and safety-duplication of over 5000 threatened accessions identified in ten European countries (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Greece, Hungary, Israel and Portugal). The total grant is nearly US\$ 130 000 and the ECPGR Secretariat is acting as the backstopping agent for the project. As a result of the first year of activities, the 12 partner institutions involved have successfully regenerated 414 grain legume accessions (chickpea, common bean, cowpea, faba bean, grasspea and lentil) and 1522 cereal accessions (*Aegilops*, barley, maize, sorghum and wheat). All the regenerated samples are planned to be safety-duplicated both at the Svalbard Seed Vault and at a CGIAR centre or at another genebank meeting the international management standards. All germplasm regenerated under the project will be made available and otherwise dealt with in accordance with the terms and conditions of the Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture.

➤ **SEEDNet**

Collaboration with the Sida-funded South East Europe Development Network on Plant Genetic Resources (SEEDNet) continued in 2009, with the participation of the ECPGR Coordinator in the Tenth and Eleventh Regional Steering Committee meetings in St. Petersburg, Russian Federation, 30 March-2 April 2009 and in Dubrovnik, Croatia, 7-9 October 2009. There was an exchange of information regarding ECPGR, AEGIS and EURISCO.

➤ **European Commission**

The ECPGR Networks continued their involvement in the development of a few ongoing projects: AEGRO (*in situ* management), AVEQ (*Avena* for quality in human consumption), EURALLIVEG (vegetative *Allium* core collection), LEAFY VEG (use of leafy vegetables germplasm) and GrapeGen06 (management of *Vitis* genetic resources).

Following the recommendations made by the Steering Committee at their meeting in October 2008, a Task Force was established to support further development of the ECPGR strategy for collaboration with the EU. The European Commission (Directorate-General for Health and Consumer Protection) was informally approached by the Task Force members with a proposal for collaboration in the implementation of the Treaty. As a result, the European Commission organized an inter-service consultation, involving representatives of the relevant Directorates-General.

The communication efforts undertaken by the Secretariat and supported by Bioversity in 2009 also led to the adoption of three significant research topics on agricultural biodiversity in the Seventh Framework Programme, i.e.: "Genetic and genomic tools to increase the breeding efficiency in fruit Trees", "Characterisation of biodiversity resources for wild crop relatives to improve crops by breeding" and the call for proposals on the "Strengthening of the European research infrastructure for the conservation and use of PGRFA", for which the AEGIS proposal (EUROGENEBANK) was submitted in December 2009. The European Commission sought and received technical advice from the Secretariat in preparation of these calls.

➤ **The International Treaty on PGRFA**

The capacity building inter-regional workshop organized in March 2009 in Entebbe, Uganda (see above, Section 4.9) was the result of collaboration with the Treaty Secretariat.

Following approval by the Steering Committee in September 2008 of a mechanism of registration of accessions in the Multilateral system (MLS) and the introduction of a descriptor field in EURISCO regarding MLS status of each accession, over 212 000 accessions had been registered as part of the MLS by 13 countries at the end of 2009.

The opportunity was sought to establish a Memorandum of Understanding between ECPGR and the Treaty Secretariat, so that the support of ECPGR to the implementation of the ITPGRFA could be acknowledged and formalized. The financial support that ECPGR was prepared to invest for the organization of inter-regional workshops amounted to about € 56 000 (including the funds allocated by the Documentation and Information Network, the Inter-regional Cooperation

Network and targeted funds offered by Germany). However, at the end of 2009, a formal agreement of this type had not yet been concluded.

➤ **EUCARPIA**

The ECPGR Secretariat participated in the 19th EUCARPIA Genetic Resources Section Meeting, Ljubljana, Slovenia, 26–30 May 2009, offering an invited presentation on AEGIS and presenting a poster on EURISCO. Participation of ECPGR in the EUCARPIA meeting has allowed the breeders to be informed on the ECPGR activities, although it has not so far led to any concrete joint initiatives or strengthened collaborations in a visible way.

6. ECPGR EXTERNAL REVIEW

Preparations for the ECPGR Independent External Review continued in 2009 with the definition of the Terms of Reference (agreed by the Steering Committee in May 2009). A Bioversity Internal Review Team (Jan Engels, Lidwina Koop, Lorenzo Maggioni, Patti Sands and Jozef Turok) was established to closely coordinate the preparations for the external review of the Steering Committee-established Review Task Force (Jens Weibull, Sweden – Chair; Gordana Popsimonova, Macedonia FYR; Bert Visser, The Netherlands; Zofia Bulinska, Poland; Silvia Strajeru, Romania; Geert Kleijer, Switzerland; and Mike Ambrose, United Kingdom). Three candidates were also selected and approved by the Steering Committee as panel members. The three following candidates accepted to carry out the review in 2010:

- **Marianne Lefort**, France – currently Director of Research AgroParisTech, she has been former Director of the Bureau des Ressources Génétiques and French ECPGR National Coordinator.
- **Orlando De Ponti**, The Netherlands – current President of the International Seed Federation, he has been former Director of Research at Nunhems Seeds, vegetables breeding company, and former Chair of the Biodiversity Commission of the Dutch breeding sector organization.
- **Thomas Gass**, Switzerland (proposed Chair of the panel) – currently Swiss Ambassador in Nepal, he has been former ECPGR Coordinator and Director of the Regional Office for Europe at IPGRI, after which he worked as programme officer for employment and income generation in rural areas for the Swiss Agency for Development Cooperation (SDC) and for UNDP as Deputy Resident Representative.

In order to cover the costs of the review, over € 33 000 were raised as voluntary contributions paid by Switzerland (€ 10 000), UK (€ 1000), Finland (€ 750) and pledged by the Nordic Countries (DKK 160 000).

7. PUBLICATIONS

7.1. Publications produced in 2009

The following publications were produced in 2009 and can be obtained free of charge from the Secretariat. The ECPGR publications are also available in electronic format through the ECPGR Web site (<http://www.ecpgr.cgiar.org/Publications/Publications.htm>).

- **ECPGR printed publications (also available online)**
 - Report of a Working Group on *Beta* and the World *Beta* Network. Third Joint Meeting, 8-11 March 2006, Puerto de la Cruz, Tenerife, Spain.
 - Report of a Working Group on Medicinal and Aromatic Plants. Second Meeting, 16-18 December 2004, Strumica, Macedonia FYR / Third Meeting, 26–28 June 2007, Olomouc, Czech Republic.
 - European landraces: on-farm conservation, management and use. Bioversity Technical Bulletin no. 15.
 - Crop genetic resources in European home gardens. Proceedings of a Workshop, 3-4 October 2007, Ljubljana, Slovenia.

- **ECPGR electronic documents**
 - A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS) – A Policy Guide.
 - Report of a Vegetables Network. Second Meeting. 26-28 June 2007, Olomouc, Czech Republic.
 - Report of a Task Force on On-farm Conservation and Management. Third Meeting, 2-3 October 2007, Ljubljana, Slovenia.
 - Report of a Network Coordinating Group on Forages. *Ad hoc* Meeting, 11 May 2009, La Rochelle, France.
 - Report of a Cereals Network. Second Meeting, 21-24 April 2008, Foça, Turkey (draft published February 2009).
 - Report of a Working Group on Grain Legumes. Fourth Meeting, 16-17 November 2007, Lisbon, Portugal (draft published March 2009).
 - Report of a Working Group on Medicinal and Aromatic Plants. Fourth Meeting, 29 September - October 2009, Kuşadası, Turkey (draft published December 2009).
 - ECPGR Annual report 2008.
 - ECPGR Financial report 2008.
- **Biodiversity publications**
 - Issues 38 and 39 of Biodiversity's **Regional Newsletter for Europe** were also published in 2009 with contributions and partial financial support from ECPGR.

7.2. Publications in preparation in 2009

- **ECPGR electronic documents**
 - Report of a Working Group on Forages. Ninth Meeting, 23-25 October 2007 Piest'any, Slovakia.
 - Report of a Working Group on Grain Legumes. Fourth Meeting, 16-17 November 2007, Lisbon, Portugal.
 - Report of the Network Coordinating Group on Sugar, Starch and Fibre Crops. Third Meeting, 8-9 October 2009, Quedlinburg, Germany.
 - Report of a Working Group on Fibre Crops (Flax and Hemp). First Meeting, 14-16 June 2006, Wageningen, The Netherlands.
 - Report of a Working Group on *Malus/Pyrus*. Third Meeting, 25-27 October 2006, Tbilisi, Georgia.
 - Report of a Vegetables Network. Third Meeting, 10-12 November 2009, Catania, Italy.
 - Report of a Working Group on Medicinal and Aromatic Plants. Fourth Meeting, 29 September-1 October 2009, Kuşadası, Turkey.
 - Report of a Working Group on Cucurbits. *Ad hoc* Meeting, 23-24 October 2008, Warsaw, Poland.
 - Report of a Cereals Network. Second Meeting, 21-24 April 2008, Foça, Turkey.

8. ECPGR MEETINGS HELD IN 2009

- ASARECA, EAPGREN, ECPGR, FAO-Treaty Secretariat and Biodiversity International Inter-regional Cooperation Workshop for Capacity building on the Implementation of the International Treaty, 18-21 March 2009, Entebbe, Uganda.
- EPGRIS3 Workshop on characterization and evaluation data and the link between EURISCO and the ECPGR Central Crop Databases, 7 May 2009, Bonn, Germany.
- *Ad hoc* Meeting of the Forages Network Coordinating Group, 11 May 2009, La Rochelle, France.
- Training workshop of the EURISCO National Inventory Focal Points, 29-30 June 2009, Prague, Czech Republic.
- Fourth Meeting of the Medicinal and Aromatic Plants (MAPs) Working Group, 29 September-1 October 2009, Kuşadası, Turkey.
- Third Meeting of the Sugar, Starch and Fibre Crops Network Coordinating Group, 8-9 October 2009, Quedlinburg, Germany.
- Third Meeting of the Vegetables Network, 10-12 November 2009, Catania, Italy.
- Pre-breeding workshop on cereals, 24-25 November 2009, Alnarp, Sweden.

9. COORDINATING SECRETARIAT AND BIOVERSITY INTERNATIONAL

The following staff members have worked as part of the ECPGR Secretariat at Bioversity (ECPGR personnel budget): Aixa Del Greco (until April 2009, as half-time Scientific Assistant involved (*inter alia*) in support to the Networks, revision of descriptors, Web development/implementation, public awareness); Jan Engels (as half-time AEGIS Coordinator); Lidwina Koop (as 75% ECPGR Programme Assistant); Elinor Lipman (as half-time Scientific Assistant, based in Montpellier, France, involved in the compilation and layout of ECPGR publications and general support to the Secretariat activities); Lorenzo Maggioni (ECPGR Coordinator).

The scientific and technical contributions, as well as management and administrative support provided by Bioversity International and its staff to the work of ECPGR is also acknowledged. In particular, Bioversity provided funding for the half-time EURISCO Coordinator (Sónia Dias) and documentation-related activities in Europe, as well as technical inputs to the maintenance and development of EURISCO. Several colleagues participated and actively contributed as members of the Local AEGIS Task Force (Ehsan Dulloo, Jan Engels, Lorenzo Maggioni, Gerald Moore and Jozef Turok), as well as members of the Local ECPGR Support Team dealing with the external review of ECPGR (see above, Chapter 6). Bioversity Policy Unit was supportive regarding the policy and legal aspects of AEGIS.

★★★

Lorenzo Maggioni
ECPGR Coordinator

(with inputs from Sónia Dias, Jan Engels, Elinor Lipman, Olga Spellman, Jozef Turok and from the ECPGR Network Coordinating Groups)

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Bioversity International, Via dei Tre Denari 472/a 00057 Maccarese (Fiumicino), Rome, Italy
Tel: (39) 06 6118 231; Fax: (39) 06 61979661; Email: l.maggioni@cgiar.org