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SCIENTIFIC AND TECHNICAL COOPERATION AND THE CLEARING-HOUSE MECHANISM

Report on the activities of the programme of work 2006-2010

Information note by the Executive Secretary

I. INTRODUCTION

1.   This report has been prepared by the Executive Secretary, in consultation with the informal advisory committee of the clearing-house mechanism, and with contributions of major partners, to report on the activities of the programme of work between 2006 and 2010. It should be seen as complementary information to the progress report included in document UNEP/CBD/COP/10/15.

2.   The document is structured as follows:

        (a)   Section I is the introduction;

        (b)   Section II contains the reporting details for each activity of the programme of work for the period 2006-2010;

        (c)   Annex I is a summary of the activities of the European Biodiversity Clearing-House Mechanism for the period 2006-2009, provided by the European CHM Focal Point;

        (d)   Annex II is a summary of development since 2005 and next steps of the Global Invasive Species Network (GISIN) provided by the GISIN Steering Committee.

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        *   UNEP/CBD/COP/10/1

II   REPORT ON THE ACTIVITIES OF THE PROGRAMME OF WORK OF THE CLEARING-HOUSE MECHANISM (2006 - 2010)

Goal 1	The clearing-house mechanism is promoting and facilitating technical and scientific cooperation
1.1	**The clearing-house mechanism contributes to the implementation of the Convention and particularly the achievement of the 2010 target**
	Actions by the CBD clearing-house mechanism
1.1.1.	Organize joint technical hands-on workshops with partners and international thematic focal points on new information and web-based technologies to assist in the implementation of the Convention, taking into account the special needs of indigenous and local communities. *Progress:* The following workshops were organized by partners with participation of the CBD Secretariat: - Subregional CHM training workshop (November 2006, Belgian Partnership, Antananarivo, Madagascar). - Joint CHM-Article 8(j) capacity-building workshop on networking and information exchange (December 2006, CBD Secretariat, Quito, Ecuador). - Subregional CHM training workshop (March 2007, Belgian Partnership, Rabat, Morocco). - CHM Brainstorming workshop on the identification of a strategy for the implementation of the Belgian CHM Partnership for the period 2008-2012 (May 2007, Belgian Partnership, Brussels, Belgium). - Subregional Workshop on Mechanisms for Biodiversity Data Sharing and Harmonization (March 2008, ACB, Hanoi, Viet Nam). - European CHM Meeting (September 2008, EEA, Copenhagen, Denmark). - Regional Technical Workshop on Clearing-House Mechanism Enhancement: Networking and Collaboration Tools (June 2009, ACB, Bogor, Indonesia). - Subregional Workshop on CHM Implementation in African Partner Countries (February 2010, Belgian Partnership, Grand Bassam, Côte d'Ivoire). - European CHM Meeting (June 2010, EEA, Copenhagen, Denmark).
1.1.2.	Invite programme officers and other experts to participate in clearing-house mechanism workshops to better integrate the work of clearing-house mechanisms with work related to implementation of the Convention. *Progress:* - Done through 1.1.1.
1.1.3.	Invite Parties to contribute technical expertise to technical workshops and training courses. *Progress:* - Done through 1.1.1.
1.1.4.	Develop collaborative tools and systems, including web-based systems and in particular the island biological diversity portal, to assist Parties in the implementation of cooperative activities and work. *Progress:* Many web-based systems and web portals were developed to support CBD programmes and initiatives: - Traditional Knowledge Information Portal - Biodiversity and Tourism Network - Climate Change Adaptation - Green Wave - LifeWeb - Biodiversity for development - International Year of Biodiversity - Meeting portals

1.1.5.	Make available the issue-based modules for coherent implementation of biodiversity-related conventions prepared by the United Nations Environment Programme through the clearing-house mechanism of the Convention on Biological Diversity.
	Progress:
	- The Issue-Based Modules (now Tematea) were made available in entry pages of each CBD programme for which a module exists.
1.1.6.	Work with partners to develop tools to analyze information concurrently from the national reports of the biodiversity-related and Rio conventions.
	Progress:
	- This activity was no longer applicable to the Fourth National Report.
1.1.7.	Participate in activities related to the World Summit on the Information Society.
	Progress:
	- The last summit took place in Tunis in 2005.
	- This activity was not longer relevant.
	Actions by national clearing-house mechanisms
1.1.8.	Identify and implement opportunities to facilitate scientific and technical cooperation that will enhance the capacity to implement priority actions in national biodiversity strategies and action plans.
	Progress:
	- A series of NBSAP workshops were convened to enhance the capacity to implement NBSAPs.
	-To some extent, this activity was handled at a high-level through the South-South Cooperation initiative.
1.2.	**The clearing-house mechanism facilitates the transfer of technology and technology cooperation**
	Actions by the CBD clearing-house mechanism
1.2.1	Assist Parties and other Governments in the use of new information technologies and traditional technologies to promote transfer of technologies.
	Progress:
	- Technical contacts established with Innovation Relay Centres (IRC), German Cleaner Production Database and UNFCCC.
	- Interoperability specifications were prepared to develop an on-line search on the three databases, but implementation did not proceed due to partner unavailability.
	- Further development should be planned in the context of the Biodiversity Technology Initiative.
1.2.2.	Promote technology transfer through participation in trade fairs, conferences, workshops, and other technology-related events.
	Progress:
	- This activity was cancelled due to other priorities and budget restrictions.
	Actions by national clearing-house mechanisms
1.2.3.	Identify and implement opportunities to facilitate the transfer of technology that is needed to implement priority actions in national biodiversity strategies and action plans.
	Progress:
	- The establishment of a Biodiversity Technology Initiative (BTI) was considered by Parties during several meetings including WGRI 3.

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1.3.	The clearing-house mechanism facilitates cooperation among the three Rio conventions and other environmental agreements, organizations and initiatives
	Actions by the CBD clearing-house mechanism
1.3..1	Establish a technical working group among the Rio and other environmental conventions and develop electronic tools to facilitate communication and work. *Progress:* - An Informal technical group from various MEAs met in May 2006, but did not materialized into an implementation project. - In 2009, UNEP started an initiative to improve information and knowledge management (IKM) among MEAs. This was followed by the establishment of a Technical Working Group and Steering Committee with participation of the Rio and other environmental conventions. Several meetings were held in 2010 and work is ongoing.
1.3.2.	Publish technical specifications through the CHM Toolkit to assist in making electronic information from the Rio and other environmental conventions interoperable. *Progress:* - Technical specifications need to be reviewed and finalized before considering integration into a toolkit. - This was discussed during the MEA IKM Steering Committee meeting in June 2010.

Goal 2	The clearing-house mechanism is promoting and facilitating the exchange of information among Parties, other Governments and stakeholders
2.1.	The clearing-house mechanism makes information related to the Convention and Convention processes available via electronic and traditional means
	Actions by CBD and national clearing-house mechanisms
2.1.1.	Invest in the development of, and use, new information exchange tools and technologies to make Convention-related information accessible. *Progress:* - Enhancement and maintenance of the website, with daily updates. - Information also disseminated through feeds, micro-blogging and social networking.
2.1.2.	Invest in the use of traditional information dissemination tools to ensure equitable access to Convention-related information. *Progress:* - Regular publications and newsletters. - Automated faxing system in place.
	Actions by national clearing-house mechanisms
2.1.3.	National clearing-house mechanisms make available information on activities undertaken to implement the Convention as appropriate *Progress:* - NBSAP and National Reports published on national CHM websites and on CBD website. - An online reporting mechanism was proposed at COP 9 but not endorsed.

2.2	In collaboration with other relevant initiatives, organizations and partners, the clearing-house mechanism facilitates the access to and repatriation of information on biodiversity
	Actions by CBD and national clearing-house mechanisms
2.2.1.	In collaboration with other relevant initiatives, organizations and partners, publish information through the clearing-house mechanism on projects digitizing observational data and natural history collections of specimen data. *Progress: (information provided by GBIF)* - GBIF has constituted a Task Group on Content Needs Assessment to assess the needs for biodiversity data for multi-varied analysis, identify the gaps in biodiversity data presently accessible through GBIF, and make recommendations on data mobilization strategies to bridge the gap between data needs and data access. - As part of a broader global strategy for mobilizing primary biodiversity data, GBIF has convened a Task Group to catalyse the development of a Global Strategy and Action Plan for further mobilization of Natural History Collections data worldwide (GSAP-NHC). - GBIF has been engaged with its participants in the development of a Data discovery and publishing strategy. - Through GBIF, digital biodiversity data are being made freely and openly available on the Internet for scientists, researchers and the general public, as mandated by the Convention on Biological Diversity's decision VIII/11, with the ultimate objective of providing the means for improved decision-making. - In 2008, the Board of the International Association for Impact Assessment (IAIA) accepted a proposal from the Global Biodiversity Information Facility (GBIF), submitted through and endorsed by the Biodiversity & Ecology (BD&E) Sector of IAIA, to initiate a project to utilise the GBIF experience, data standards and architecture to develop protocols, processes, and tools for mobilizing all biodiversity data gathered during Impact Assessment exercises worldwide. - In June 2009, GBIF signed a Memorandum of Cooperation with IAIA to provide a technical, infrastructural, socio-cultural, policy and recognition framework that would make the publishing of impact assessment-associated biodiversity data a mainstream activity. This directly assists in implementing the recommendation in the 2006 CBD Impact Assessment guidelines, developed by IAIA's BD&E Section in collaboration with the CBD Secretariat, stating that: "Biodiversity data generated by EIA should be made accessible and useable by others and should be linked to biodiversity assessment processes being designed and carried out at the national and global levels." - In addition, the principles of *in-situ* and *ex-situ* conservation advocated in Articles 8 and 9 of CBD, and Article 14 of CBD, provide a strong case for promoting biodiversity-inclusive impact assessments, as biodiversity information is vital for both good assessments and sound decisions. GBIF has commissioned a Position Paper on investing in a Strategic Application to mobilize primary biodiversity data associated with EIA studies. - Efforts are underway to publish summary and detailed information reports on a country basis through the CBD clearing-house mechanism. Linkages to GBIF data portal and services will be provided as well as published standards, guidelines, reports and tools.
2.2.2.	Support the Global Biodiversity Information Facility and other initiatives that promote open access to digitized observational data and specimen data in natural history collections and the development of open distributed networks of data. *Progress: (information provided by GBIF)* - As part of a broader global strategy for mobilizing primary biodiversity data, GBIF has convened a Task Group to catalyse the development of a Global Strategy and Action Plan for further mobilization of Natural History Collections data worldwide (GSAP-NHC). The GBIF-commissioned Task Group on "Global Strategy and Action Plans for Mobilization of Natural History Collections Data" recommends that: 1) GBIF must facilitate access to information about non-digitized collection resources; 2) GBIF works with collections to continue to increase the efficiency of specimen data capture and to enhance data quality; and 3) GBIF must continue to improve and promote the global infrastructure used to mobilize digitized collection data. - GBIF-commissioned Task Group on "Content Needs Assessment" recommends that GBIF focuses on geographic, temporal, taxonomic, and ecosystem gaps in its currently mobilized data. GBIF must expedite digitization of natural history collections data, especially type specimens. GBIF must institutionalize and implement "data publishing framework" as being investigated by its "Data Publishing Framework" Task Group. GBIF will continue to enhance its global data portal and increase access towards "Global Names Architecture (GNA)". GBIF will strengthen, enhance, and enrich infrastructure, services, use of standards, and tools that facilitate rapid, easy and cost-efficient discovery and publishing for "fit-for-use" primary biodiversity data. GBIF will also develop a "data citation mechanism" to adequately credit and acknowledge the contributions of all players in the data life cycle from data creation to dissemination.

2.2.3.	Promote participation in projects aiming to enhance national capacities to digitize, access and use electronic observational data and specimen data from natural history collections, and the publication of their results.
	Progress: (information provided by GBIF)
	- GBIF held discussions with its Participants to develop demand-driven data discovery & publishing Strategies and Action Plans.
	- Best Practice Guide on Data Discovery and Publishing Strategy and Action Plans were developed by GBIF and promoted through its participants.
2.2.4.	Collaborate with relevant partners, academic and research institutions, non-governmental organizations and the private sector to facilitate access to relevant data and information, such as observational, environmental, geospatial and scientific literature.
	Progress:: (information provided by GBIF)
	- GBIF kick started a strategic application project on "EIA Biodiversity Data Publishing Framework, with pilot projects in South Africa and India.
2.3.	**The clearing-house mechanism assists Parties and other Governments and relevant organizations in making data and information available in support of activities related to the implementation of the Convention and the achievement of the 2010 target**
	Actions by the CBD clearing-house mechanism
2.3.1.	Encourage Parties and other Governments and relevant initiatives, organizations and partners to make data available that will assist in the implementation of the Convention and the achievement of the 2010 target.
	Progress:
	- UNEP-WCMC manages the 2010 Biodiversity Indicators Partnership and the World Database on Protected Areas.
	- Parties have been encouraged to do so, but it is difficult to report on such a broad scale.
2.3.2.	Establish a metadata registry of data and information held by national clearing-house mechanisms.
	Progress:
	- To be sustainable, such a registry should be established in a way that it avoids duplicate maintenance.
	- When fully implemented, the knowledge base and its submission system should provide this service.
2.3.3.	In collaboration with other relevant initiatives, organizations and partners, make information available through the clearing-house mechanism on data custodianship and issues of intellectual property rights.
	Progress:
	- This activity could not be carried out due to its low priority and the lack of appropriate expertise.
2.3.4.	Enhance mechanisms for Parties, other Governments and stakeholders to contribute case-studies and other information on best practices.
	Progress:
	- Various case-studies databases have been made available, and the knowledge base will gradually integrate them together.
2.3.5.	Link with other information systems containing resources on best practices.
	Progress:
	- This activity could not be carried out due to lack of capacity.
	- Available best practices will be included in the knowledge base.
2.3.6.	In collaboration with other relevant initiatives, organizations and partners, assist in the establishment of a global electronic library catalogue on biodiversity information.
	Progress::
	- This activity could not be carried out due to lack of capacity.
	- Available documents will be included in the knowledge base.

	Actions by national clearing-house mechanisms	
2.3.7.	National clearing-house mechanisms foster technical collaboration by making information available, including on their websites where appropriate, on technical expertise, new information technologies, geographical information systems and data modeling. *Progress:* - It is difficult to report on this broad activity. Implementation varies greatly among the network. - Some from national CHM have such services available on their website, particularly mapping services.	
2.3.8.	National clearing-house mechanisms contribute to the development of, and publish information on, resources required to assist Parties with achievement of the 2010 target. *Progress:* - See 2.3.1.	
2.3.9.	In collaboration with other relevant initiatives, organizations, partners and national clearing-house mechanisms, facilitate access to national databases on biodiversity information. *Progress:* - It is difficult to report on this broad activity. - Many national CHMs facilitate access to national databases on biodiversity information.	
2.4.	**The clearing-house mechanism contributes to the future technical development of the Biosafety Clearing-House established under paragraph 1 of Article 20 of the Cartagena Protocol on Biosafety.**	
	Actions by the CBD clearing-house mechanism	
2.4.1.	Assist with national participation in the Biosafety Clearing-House by contributing technical expertise in technical workshops and training sessions. *Progress:* - The Biosafety Clearing-House now has the technical expertise needed for its maintenance and further development. - To the extent possible, the BCH is now providing assistance to the clearing-house mechanism.	
2.4.2.	Continue to disseminate information through traditional methods to ensure full participation by Parties in activities related to the Cartagena Protocol. *Progress:* - Information on the Cartagena Protocol on Biosafety has been periodically disseminated through the clearing-house mechanism (newsletters, news headline mailing services). - The production of CD-ROM was also carried out whenever needed. - Such activities have become routine and are now managed directly under the Cartagena Protocol on Biosafety.	
2.5.	**Parties have established effective mechanisms for facilitating the exchange of information, including as appropriate clearing-house mechanism websites which use, when possible and appropriate, common formats, protocols and standards, including metadata standards, as recommended by the clearing-house mechanism**	
	Actions by the CBD clearing-house mechanism	
2.5.1.	Continue to update and use the CHM Toolkit to assist Parties in the use of common formats, protocols and standards. *Progress:* - Adequate expertise is not yet available to fully establish such mechanisms and publish the corresponding standards. - When available, such information will be part of the knowledge base (See 3.1.2.).	
2.5.2.	Publish metadata standards more widely for use by Parties. *Progress:* - Adequate expertise is not yet available to establish such standards. - When available, such information will be part of the knowledge base (See 3.1.2.).	
2.5.3.	Continue to update the controlled vocabulary for the Convention on Biological Diversity with new and evolving terminology for use by Parties to facilitate the interoperability of information, and use as descriptors in web page metadata records and library collections. *Progress:* - The initial controlled vocabulary has become obsolete and no adequate expertise is available to maintain it.	

2.5.4.	Offer assistance to Parties and other Governments with the use of the controlled vocabulary for the Convention, subject and analytical cataloguing and authority control. *Progress:* - Cannot take place without completion of 2.5.3.

Goal 3	**The clearing-house mechanism is fully operational with participation of all Parties and an expanded network of partners**
3.1.	**All Parties have established and are further developing clearing-house mechanisms through sustainable funding**
	Actions by the CBD clearing-house mechanism
3.1.1.	Make available to Parties through the clearing-house mechanism information on GEF funding, including a list of GEF-funded projects and enabling activities related to the clearing-house mechanism. *Progress:* - A database on GEF funding was created but its maintenance could not been sustained due to the fact that the information had to be entered manually. - A better approach would be to establish an automated exchange mechanism with GEF. It should be possible to establish such a mechanism once ICT capacity is available on both sides.
3.1.2.	Further develop the CHM Toolkit to assist Parties and other Governments to develop and establish clearing-house mechanisms. *Progress:* - Recommendations on how to establish national clearing-house mechanisms have gradually been compiled, and high-level guidance to Parties was reflected in paragraph 2 of decision IX/30. Nevertheless, major CHM components, particularly the knowledge base, need to be delivered before considering the production and release of a toolkit with significant added value. - Also, with appropriate content, the CHM knowledge base could be as effective as a toolkit. - The recommendation is therefore to assign a low priority to this task.
3.1.3.	Use the results from checklists and surveys on the state of development of national clearing-house mechanisms to better target capacity building activities at the national level. *Progress:* - Replies to questionnaires on CHM implementation have been used to prepare this document. - This type of information, including any feedback and lessons learned, have been the basis of CBD contributions to capacity-building activities.
3.1.4.	Share innovative approaches of national clearing-house mechanisms across CHM focal points. *Progress:* - So far, this process has taken place informally during CHM workshops and meetings. - One of the goals of the knowledge base is to provide an online service able to capture innovative approaches and other good practices in order to make them available to the community of CHM national focal points. - The effectiveness of this service will depend on the quality of the online service and on the level of contributions from CHM national focal points.
	Actions by national clearing-house mechanisms
3.1.5.	Through their activities, national clearing-house mechanisms make a strong case for sustainable funding, support and investment. *Progress:* - Paragraph 2(f) of decision IX/30 reemphasized the importance of allocating and mobilizing resources to ensure long-term sustainability and effectiveness of national clearing-house mechanisms. - One third of the respondents to the CHM questionnaire on decision IX/30 indicated that sustainability has been achieved for basic operations.

3.1.6.	Parties without clearing-house mechanisms use GEF funding to establish them
	Progress:
	- Decision IX/30 reiterated the need for GEF funding to assist Parties in the establishment of their national clearing-house mechanisms.
	- When liaising with the GEF on funding matters, the CBD Secretariat has mentioned the importance of establishing national clearing-house mechanisms capable of supporting the implementation of the Convention.
3.1.7.	Parties with well-developed clearing-house mechanisms participate in mentoring programmes to assist other Parties with less developed clearing-house mechanisms.
	Progress:
	- The Belgian CHM partnership has been assisting 25 African countries.
	- The Netherlands has been assisting 3 countries.
	- The ASEAN Centre for Biodiversity has been assisting 9 ASEAN Member States.
	- Colombia has been willing to assist other Latin American countries.
	- Overall, the willingness exists among the CHM network, but there is still a need for more cooperation partnerships and corresponding resources to further develop the CHM network.
3.2.	**Relevant partners participate in an expanded clearing-house mechanism network**
	Actions by the CBD clearing-house mechanism
3.2.1.	Make available to Parties and other Governments information on the development and use of electronic and traditional communication tools.
	Progress:
	- Given the ubiquity of Internet today, this activity becomes less relevant.
3.2.2.	Assist Parties and other Governments with the use of electronic and traditional communication tools
	Progress:
	- Same comment as above.
	- Assistance has been provided whenever requested through the Secretariat and CHM email addresses: (secretariat@cbd,.int or chm@cbd.int).
	Actions by CBD and national clearing-house mechanisms
3.2.3.	Establish partnerships with existing networks.
	Progress:
	- The CBD Secretariat has established many partnerships and their list is available on the CBD website.
3.2.4.	Publish information through the clearing-house mechanism on activities of partner networks
	Progress:
	- Maintaining an up-to-date list of activities of partner networks would not only be time-consuming, but its added value would also be arguable given that most networks publish their own activities.
	- One option to carry out this activity in a sustainable way is to establish an automated exchange mechanism. This may be possible with partners ready to go in this direction, but it is not a priority.
3.2.5.	Make available, and continuously update, a list of thematic contact points to facilitate networking, communication and collaboration among national and regional clearing-house mechanisms.
	Progress:
	- A global contact database was initially planned as a major component of the CHM knowledge base. Due to limited ICT capacity, the implementation of this component had to be postponed to Phase 2 of the knowledge base (after COP 10).
3.3.	**Parties have established and use effective mechanisms for facilitating scientific and technical cooperation, including thematic networks where appropriate in support of the implementation the Convention and the achievement of the 2010 target**
	Actions by the CBD clearing-house mechanism
3.3.1.	Publish information on clearing-house mechanism partnerships to develop thematic networks (Global Invasive Species Programme, Article 8(j), etc.).
	Progress:
	- The list of formal partnerships is available in an on-line database available on the CBD website.

3.3.2.	Publish information on existing thematic networks and their data resources.
	Progress:
	- Most thematic networks are in the list of related websites available on the CBD website. A description is usually associated to each entry, but it is difficult to maintain this information fully up-to-date.
3.3.3.	Add a component on issues related to networking in capacity-building technical workshops and training sessions organized by the Secretariat.
	Progress:
	- See 1.1.1.
	Actions by national clearing-house mechanisms
3.3.4.	Identify work areas where active networking between experts would facilitate implementation of priority actions in national biodiversity strategies and action plans, and seek to establish such networks.
	Progress:
	- The CBD has put a strong emphasis on national biodiversity strategies and action plans (NBSAP), with a key objective to mainstream biodiversity across various activity sectors.
	- Networks exist in several major thematic areas (protected areas, invasive species) and they are maintained through their own community of practice.

3.4.	The clearing-house mechanism contributes to the development of the global communication, education and public awareness network
	Actions by the CBD clearing-house mechanism
3.4.1.	Develop electronic interactive communication tools through the Convention website to promote and facilitate greater communication and interaction with stakeholders and civil society.
	Progress:
	- Over the years discussion forums have been used to promote communication and interaction with stakeholders and the scientific society. The range varies from small forums for working groups collaborating on a common project to wide-audience forums such as the Aichi-Nagoya International E-Conference on the Post-2010 Target (ANIEC 2010).
	- Modern collaboration tools have emerged in the field of micro-blogging and social networking. The International Year of Biodiversity was a good opportunity to establish a web presence on Facebook and Twitter.
3.4.2.	Develop electronic web-based spaces to assist with activities related to communication, education and public awareness, and to promote civil society participation and interaction in activities related to the implementation of the Convention.
	Progress:
	- See 3.4.1.
	- The GreenWave website was developed with a specific educational objective of raising awareness of biodiversity in schools.
3.4.3.	Support the objectives of the communication strategy of the Convention through the development of information dissemination tools and systems.
	Progress:
	- The communication strategy was supported particularly during major outreach initiatives, namely the celebrations of the International Day for Biodiversity (IDB) and the International Year of Biodiversity (IYB).
3.4.4.	Publish a regular column on activities related to the clearing-house mechanism in the CBD News.
	Progress:
	- The CBD News has been replaced by thematic newsletters. A section on CHM has been included in each annual Year-in-Review review published by the CBD Secretariat.

		Actions by CBD and national clearing-house mechanisms
3.4.5.		Develop education modules to assist in the implementation of activities related to the implementation of the Convention.
		Progress:
		- Several training workshops on national biodiversity strategies and action plans (NBSAP) have taken place to build capacity on implementation of the Convention.
		- An e-learning course on the implementation of the programme of work on protected areas was developed.
		- An information kit on access and benefit-sharing was produced.
3.4.6.		Develop training modules on the use of new information and web-based technologies for use in training sessions and technical workshops.
		Progress:
		- Several technical workshops on new information and web-based technologies for Indigenous and local communities were convened. These workshops were prepared with partners/consultants who had their own training methodology.
3.4.7.		Support activities to create education networks devoted to biodiversity-related education and training.
		Progress:
		- A partnership was established with the IUCN Commission on Education and Communication, and a toolkit on communication, education and public awareness was produced.
3.4.8.		Increase the use of electronic communication tools and web-based technologies that facilitate the sharing and dissemination of information on the clearing-house mechanism and its activities, taking into account the importance of local languages.
		Progress:
		- The CBD website has been maintained and enhanced as the main information dissemination tool on the Convention.
		- Translation of the CBD website in all UN languages has gradually improved.
		- Emerging communication tools such as micro-blogging and social networking have also been used to share and disseminate information.

Annex I

**SUMMARY OF ACTIVITIES OF THE EUROPEAN BIODIVERSITY
CLEARING-HOUSE MECHANISM (2006-2009)**

Note: This information has kindly been provided by the European CHM National Focal Point.

1.   The European Environment Agency has continued the operations of the EU Biodiversity Clearing-House for the period from 2006-2009. Activities focused on (a) maintaining the EU portal (www.biodiversity-chm.eea.europa.eu) mainly as a demonstration portal of the CHM Portal Toolkit (PTK), now in use by 16 countries in Europe and 25 countries in other continents; (b) continually supporting users of the PTK in Europe and elsewhere with software updates and helpdesk operations and; (c) maintaining and further developing the European Biodiversity CHM network by organizing annual regional workshops for the CHM focal points of European countries. Throughout this period, collaboration with the CBD Secretariat and the CHM-IAC of CBD was actively continued.

2.   The November 2009 meeting of the European CHM network focused on the International Year of Biodiversity. During this meeting, the big challenge for further organizing biodiversity information at the EU level in a meaningful way was first discussed, and the concept of the Biodiversity Information System for Europe (BISE) was broadly agreed within European countries. During the first months of 2010, a big step was taken in this direction with the launch of the prototype of the Biodiversity Information System for Europe-BISE (www.biodiversity.europa.eu). BISE is built on the CHM Portal Toolkit (PTK) platform and showcases information from EU institutions, as well as countries and networks in Europe which are incorporating the European CHM network. Main features of BISE are the entries to policy, themes, research and data sections as well as countries and networks. As transparency in data quality control is particularly important for EU operations, the data section of BISE is linking directly into the European Environmental Data centres, and most importantly, to the Biodiversity Data centre (www.eea.europa.eu/biodiversity), where Europe-wide datasets on species, sites and habitat types can be found, searched and downloaded.

3.   During the last meeting of the European CHM network (June 2010), several countries agreed to start using a common multilingual short list of key terms when publishing their biodiversity indicator assessments, in order to strengthen information exchanges. The need to use information portals as knowledge base initiatives for supporting the new EU and global biodiversity policy was also discussed. In conclusion, the 2011-2013 objectives of the EU Biodiversity CHM operations are to be directly linked with the EU and global biodiversity policy targets and subtargets. Measuring progress towards these targets with indicators and assessments, especially for addressing the main threats to biodiversity, has a high priority in BISE, the Biodiversity Data centre and the European CHM network.

Annex II

**THE GLOBAL INVASIVE SPECIES NETWORK (GISIN)
SUMMARY OF DEVELOPMENT SINCE 2005 AND NEXT STEPS**

Note: This information has kindly been provided by the GISIN Steering Committee.

A. Background

1.   In April 2004, an Experts Meeting on Implementation of a Global Invasive Species Information Network (GISIN) was held in Baltimore, Maryland, USA. The meeting was attended by 76 experts from 26 countries and included representatives from government, non-government, non-profit, educational, and other organizations who agreed to work together to provide increased access to data and information on invasive alien species (IAS) around the world. An interim Steering Committee was chosen and continues to work with the global invasive species information management community on developing the GISIN. A list of Web-accessible invasive species databases was developed, has grown to more than 270 entries, and is maintained by the NBII at http://www.GISIN.org/GISINlist.html

2.   The mission of GISIN is formulated as follows:

        (a)   To provide a platform for sharing invasive species information at a global level, via the Internet and other digital means;

        (b)   To offer a central place for the reporting and tracking of new alien species sightings;

        (c)   To develop and share electronic information management tools to better identify, map, and predict the spread of invasive species at regional and global levels;

        (d)   To build the capacity of network members in the development and use of information tools to integrate IAS databases.[1]

B. Development since 2005

3.   A draft data exchange standard was prepared in 2005 and reviewed at an Experts Meeting to Discuss Implementation of an Invasive Species Profile Schema on 19-24 February 2006, in Agadir, Morocco, and was described in UNEP/CBD/COP/8/INF/35.[2] The draft GISIN standard was presented at the annual Taxonomic Databases Working Group (TDWG) meeting in St. Louis, Missouri and a TDWG Invasive Species Information Systems (ISIS) Interest Group was formed.

4.   A Needs Assessment Survey was conducted from December 2006 to February 2007. More than 135 people responded, representing 41 countries. The survey indicated low levels of technical capacity amongst most potential data providers, so a simplified GISIN Protocol was developed in 2007. Data provider toolkits for programmers are available, but information managers can also post their data for upload to the cache as flattened, tab-delimited text files for easier implementation. GISIN has deployed six data models that build on existing biodiversity standards, but which define additional concepts that are important to invasive species science.[3]

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[1] The Baltimore Declaration, available online at www.gisinetwork.org/Documents/BaltimoreDeclaration.htm

[2] GISIN progress report UNEP/CBD/COP/8/INF/35 is available online at www.cbd.int/doc/meetings/cop-08/information/cop-08-inf-35-en.pdf

[3] Information on how to become a GISIN data provider can be found at www.gisin.org under the "provide Data" submenu.

5.   Three International Data Provider Workshops to establish the parameters of the GISIN data models were held in June and August 2008 and July 2009 in the United States, and meeting reports are available on-line at www.GISIN.org. The implementation of the GISIN search prototype now connects 7 distributed online invasive species information systems through Web services, compiling their data holdings for simultaneous search.[4]

6.   The newest improvements to the GISIN portal are species maps that combine data provider records and display consolidated country level species distributions (and include data sources). The GISIN List is now searchable and sortable, and continues to be updated on an ongoing basis.

7.   GISIN has been represented at a number of key meetings called to address IAS issues including:

        (a)   The 2010 Helping Islands Adapt workshop in Auckland, New Zealand;

        (b)   The 2009 International Congress on Biological Invasions (ICBI) in Fuzhou, China;

        (c)   The 2008 IUCN World Conservation Congress in Barcelona, Spain;

        (d)   The 2006 Beijing International Symposium on Biological Invasions (BISOBI) in Beijing, China.

C.   *Next Steps*

8.   Data from a number of offline data sources will become available once an application for bulk upload of flattened, tab-delimited text files is completed.

9.   GISIN is promoting the development of IAS inventories to address global information gaps. GISIN will continue providing training and distributing data capture tools including standardized spreadsheets and the Inter-American Biodiversity Information Network's (IABIN) Invasives Information Network (I3N) database and Web template, to assist countries with their IAS inventories that are part of the reporting requirement of the Convention. Inventory development has important local benefits for awareness raising, monitoring and prioritization of management activities and typically involves close cooperation amongst key stakeholders, which leads to the development of enduring information exchange networks. When shared internationally inventory data increases global knowledge of potential threats.

10.   GISIN is also supporting further development of the prototype Global Register of Invasive Species (GRIS), which provides information support for pre-screening of proposed imports, species risk assessments, and prioritization of management activities. GRIS harvests and integrates data that would otherwise not be available on the Internet, to produce regularly updated and easily accessed lists of known invasive species.

11.   Interoperability between data mediated by the Global Biodiversity Information Facility (GBIF) and GISIN is also being explored. Ecological niche modelling and invasion history data will be combined to provide policy and decision-makers with a package of decision support tools including distribution maps and models of potential distributions (under present conditions and under different climate change scenarios.

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[4] The Current List of GISIN data providers is available at www.gisin.org/cwis438/websites/GISINDirectory/DirectoryWebService_Table.php