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# UNEP-GEF Biosafety Projects



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A horizontal silhouette strip containing various symbols related to biosafety and environmental science, including a DNA double helix, a person working in a field, a tree, a tractor, a windmill, and laboratory glassware.

## Building Capacity for Effective Participation in the Biosafety Clearing-House (BCH) of the Cartagena Protocol on Biosafety



## Foreword

On 11 September 2003, the Cartagena Protocol on Biosafety entered into force. Article 20 of the Cartagena Protocol on Biosafety established a Biosafety Clearing-House (BCH) to facilitate exchange of information and as a mechanism to assist Parties to implement the Protocol. A functional BCH is thus an essential part of the information exchange, which will be required as countries engage in the notification, assessment and decision-making on transboundary movements of Living Modified Organisms (LMOs) and will provide ready access to biosafety information in general.

UNEP, as one of the three Implementing Agencies of the Global Environment Facility (GEF) and in accordance with the Initial Strategy on Biosafety, adopted by the GEF Council, has committed itself to provide support for building capacity, at the national level, to enable countries to implement the Cartagena Protocol and to participate effectively in the BCH.

UNEP is implementing a global GEF project for Building Capacity for Effective Participation in the Biosafety Clearing-House (BCH), as an add-on to the UNEP-GEF Project for Development of National Biosafety Frameworks. UNEP-GEF will assist up to 50 countries to participate in the BCH by building human and institutional capacity and by providing countries with the minimum equipment required for the national participation in the BCH.

An effective BCH is an essential component of the successful implementation of the Cartagena Protocol, and an important step towards providing countries with the opportunities to participate in the safe use of biotechnology.



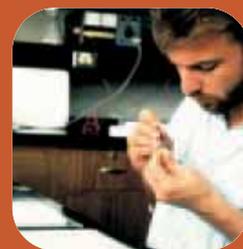
A handwritten signature in black ink, appearing to read 'Klaus Töpfer', written in a cursive style.

**Klaus Töpfer**  
**Executive Director**  
**UNEP**

# UNEP-GEF PROJECT FOR BUILDING CAPACITY FOR EFFECTIVE PARTICIPATION IN THE BIOSAFETY CLEARING-HOUSE OF THE CARTAGENA PROTOCOL

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## Abbreviations

<b>BCH</b>	Biosafety Clearing-House
<b>CBD</b>	Convention on Biological Diversity
<b>COP</b>	Conference of the Parties to the Convention on Biological Diversity
<b>COP-MOP</b>	Conference of the Parties to the Convention on Biological Diversity serving as the Meeting of the Parties of the Cartagena Protocol on Biosafety
<b>CPB</b>	Cartagena Protocol on Biosafety
<b>GEF</b>	Global Environment Facility
<b>GMO</b>	Genetically Modified Organism
<b>LMO</b>	Living Modified Organism
<b>MOP</b>	Meeting of the Parties
<b>nBCH</b>	National BCH
<b>NCA</b>	National Competent Authority
<b>NCC</b>	National Coordinating Committee
<b>NEA</b>	National Executing Agency
<b>NPC</b>	National Project Coordinator
<b>NPD</b>	National Project Document
<b>NBF</b>	National Biosafety Framework
<b>NBSAP</b>	National Biodiversity Strategy and Action Plan
<b>PNBCH</b>	Pacific Node for the BCH
<b>SCBD</b>	Secretariat of the Convention on Biological Diversity
<b>SIDS</b>	Small Island Developing States
<b>SPREP</b>	Secretariat for the Pacific Regional Environment Programme
<b>TOR</b>	Terms of Reference
<b>UNEP</b>	United Nations Environment Programme
<b>UNITAR</b>	United Nations Institute for Training and Research



## 1. Introduction

### 1.1 Agenda 21

In 1992 the United Nations Conference on Environment and Development, also known as the Earth Summit, was held in Rio de Janeiro in Brazil. At this conference, unprecedented in terms of both size and scope of its concerns, 172 Governments agreed on a number of key documents, among which were Agenda 21 and the Convention on Biological Diversity (CBD).

Chapter 16 of Agenda 21 deals with the environmentally sound management of biotechnology and recognizes two important facts: 1) although not a panacea, modern biotechnology promises significant contributions to sustainable food production, improved health care and environmental protection, and 2) the community at large can only benefit maximally from the potential of modern biotechnology, if it is developed judiciously and adequate safety mechanisms are in set place. With this context, Agenda 21 provides a blueprint for international collaboration for the further development and application of biotechnology and biosafety.

### 1.2 The Convention on Biological Diversity

One of the key agreements adopted at the Earth Summit in Rio de Janeiro was the Convention on Biological Diversity. The objectives of the Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The Convention addresses, in two different articles, the issue of biosafety, namely in article 8 on in-situ Conservation, and in article 19 on Handling of Biotechnology and Distribution of its Benefits.

Article 8(g) lays down the obligation for Parties to establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms (LMOs).

Article 19.3 calls upon Parties to consider the need for and modalities of a protocol setting out appropriate procedures, including, in particular, advance informed agreement, in the field of the safe transfer, handling and use of any LMOs.

On this basis, and after 5 years of negotiations, the Cartagena Protocol on Biosafety was adopted on 29 January 2000 and entered into force on 11th September 2003.

## Box 1

### *Text from the Cartagena Protocol on Biosafety* **Article 20 - Information Sharing and the Biosafety Clearing-House**

1. A Biosafety Clearing-House is hereby established as part of the clearing-house mechanism under Article 18, paragraph 3, of the Convention, in order to:
  - (a) Facilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms; and
  - (b) Assist Parties to implement the Protocol, taking into account the special needs of developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition as well as countries that are centres of origin and centres of genetic diversity.
2. The Biosafety Clearing-House shall serve as means through which information is made available for the purposes of paragraph 1 above. It shall provide access to information made available by the Parties relevant to the implementation of the Protocol. It shall also provide access, where possible, to other international Biosafety information exchange mechanisms.
3. Without prejudice to the protection of confidential information, each Party shall make available to the Biosafety Clearing-House any information required to be made available to the Biosafety Clearing-House under this Protocol, and:
  - (a) Any existing laws, regulations and guidelines for implementation of the Protocol, as well as information required by the Parties for the advance informed agreement procedure;
  - (b) Any bilateral, regional and multilateral agreements and arrangements;
  - (c) Summaries of its risk assessments or environmental reviews of living modified organisms generated by its regulatory process, and carried out in accordance with Article 15, including, where appropriate, relevant information regarding products thereof, namely, processed materials that are of living modified organism origin, containing detectable novel combinations of replicable generic material obtained through the use of modern biotechnology;
  - (d) Its final decisions regarding the importation or release of living modified organisms; and
  - (e) Reports submitted by it pursuant to Article 33, including those on implementation of the advance informed agreement procedure.
4. The modalities of the operation of the Biosafety Clearing-House, including reports on its activities, shall be considered and decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first meeting, and kept under review thereafter.

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### **1.3 The Cartagena Protocol on Biosafety and the Biosafety Clearing-House**

**T**o facilitate its implementation, the Protocol through Article 20, established a Biosafety Clearing-House (BCH) as indicated in Box 1.

Thus BCH, which is a part of the Clearing-House mechanism of the CBD, is critical to the implementation of the Protocol and is intended to be a repository of up-to-date information on LMOs and biosafety in order to assist decision-makers in countries around the world, as well as civil society and the biotechnology industry.

The Secretariat of the Convention on Biological Diversity (SCBD) launched a Pilot BCH in March 2001 and governments participated in its development until the modalities of operation were adopted at MOP-1 and the fully operational BCH was made available in April 2004. This can be found at: <http://bch.biodiv.org/>.

The BCH comprises a central portal and a distributed network of external components. It is critical that Parties provide information to the BCH; therefore there is a need to focus on how Parties can develop their capacity to use and access, as well as, how Parties can participate in the nationally in the BCH.

National participation in the BCH can vary from a country choosing the option of using the Management Centre as supported by the SCBD. This will only require a desktop computer and an intermittent Internet connection. Other options can include the inclusion of a firewall, database server, web server and connections to many National Competent Authorities (NCAs). Thus national participation in the BCH could involve many different NCAs and a complex system of decision-making and could, thereby increase, by necessity, the number of computer connections, both via the intranet and to the Internet, security set up and other requirements. The SCBD, through its notification, *SCBD/BS/RH/jh/3840*, has provided guidelines for national participation in the BCH, and these are summarised in Box 2, from the SCBD's brochure on the BCH.

Annex 3 provides a quick reference guide to equipment requirements for the options mentioned in Box 2.

The Protocol requires that countries enter and manage their own data in the BCH. The notification *SCBD/BS/RH/jh/38460* from the SCBD gives the requirements that need to be fulfilled as at the date of entry into force of Cartagena Protocol on Biosafety. It is imperative, therefore, that all Parties have the basic infrastructure and technical capacity, including equipment, tools and practical know-how, in order to fulfil their obligations and also to take advantage of the benefits of the BCH. Annex 2, which is an extract from Decision BS-1/3 from the COP-MOP1, provides a minimum list of information Parties are required to provide through the BCH.

## Box 2

### *Extract from the SCBD Brochure:*

#### **The Biosafety Clearing-House of the Cartagena Protocol on Biosafety: A Guide to the BCH**

##### **Options for Participating in the BCH**

There are different options available to Parties and other governments making information available to the BCH electronically. They may:

- (1) Register data directly in the Central Portal using the Management Centre;
- (2) Register data locally using database templates (i.e. the simplified forms that match those in the BCH) and send data to the Central Portal;
- (3) Make data available through a local website and allow the Central Portal search engine to retrieve it; or
- (4) Store data on national BCH databases, and actively make those data available through the Central Portal using BCH interoperability protocols.

These options are not mutually exclusive. A combination of options may be employed. For example, a Party may choose to register some types of information directly in the central portal using the Management Centre (Option 1), while choosing another option for other types of information. Alternatively, the same type of information may be registered using different options.

Parties may choose to use one or a combination of these options depending on their needs, also taking into account the minimum requirements and responsibilities for each option with respect to the required resources and technical capacity, such as the level of Internet connectivity. Guidelines for National Participation in the BCH, designed to assist Parties and other Governments in selecting options that are appropriate to their needs and capacities, are available on the CBD website at: <http://bch.biodiv.org/national/guidelines> or can be requested from the Secretariat.

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All Parties have obligations under the Protocol to make information available through the BCH, but they can also derive important benefits from using the BCH, for example:

- Access information about the national laws, regulations and guidelines of other Parties; and information about the decisions and assessments of other countries relating to specific LMOs;
- Ensure, by posting up-to-date information on the BCH, that all potential exporters of LMOs to their country, or those who wish to transport LMOs across their territory, are aware of their national regulatory requirements;
- Access information about capacity-building and other assistance available to support implementation of the Protocol; and
- Ensure that the relevant authorities in other countries can quickly find out who to inform in the event of an accidental movement of LMOs into their territory.

In order to comply with these obligations and to take advantage of information sharing through the BCH, countries will need to have a minimum level of information technology infrastructure and technical capacity, including equipment, tools and practical know-how. Building this capacity in developing countries will be a major challenge to the success of the BCH.

#### **1.4 CBD Guidance to the Financial Mechanism (GEF) for Capacity Building for the BCH**

Throughout the negotiation phase and prior to the entry into force of the Cartagena Protocol, participating countries have stressed the need for financial and technical support in capacity building for effective implementation of the CPB, including with regard to the BCH.

This need was formally recognised by the GEF Council in November 2000 when it approved the GEF Initial Strategy on Biosafety, which aims to support countries to prepare for the entry into force of the Cartagena Protocol on Biosafety.

The Initial Strategy laid out the overall modalities for GEF support to eligible countries for capacity building prior to the entry into force of the Protocol and also recognised the need for capacity building for the establishment and implementation of the BCH.

The Conference of the Parties of the CBD at its sixth meeting specifically requested the GEF to provide national capacity-building in Biosafety, in particular for enabling effective participation in the BCH (Decision VI/17.10.b):

“For national capacity-building in biosafety, in particular for enabling effective participation in the Biosafety Clearing-House and in the implementation of the Action Plan for Building Capacities for the Effective Implementation of the Cartagena Protocol on Biosafety proposed by the Intergovernmental Committee on Cartagena Protocol at its second mee-

ting, and for other needs identified in the recommendations of the Intergovernmental Committee at its second meeting for assisting developing countries to prepare for the entry into force of the Protocol;”

In response to the Initial Strategy, UNEP-GEF, launched a questionnaire, in February 2003, in close collaboration with the SCBD, in order to determine the state of current use and access of the BCH in countries and to further understand the urgent capacity-building needs. In addition, the SCBD held regional workshops in collaboration with UNEP that were designed specifically for governments to determine what their capacity building needs were and the issues were widely considered at an intergovernmental level. The results of the survey and the SCBD workshops indicated a series of needs and identified some specific requests for training and were used to design a BCH capacity building project as an additional component of the ongoing UNEP-GEF Project for Development of National Biosafety Frameworks. This project was however, limited to the first 50 GEF eligible countries that had become Parties by the time of COP-MOP1.

At the First Meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol (CoP-MoP1) in February 2004, Parties welcomed the proposed add-on BCH project and decided (Decision VII/20.21 b) upon extending the eligibility criteria for funding by the GEF:

“All developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition, including countries amongst these that are centres of origin and centres of genetic diversity, which are Parties to the Convention and provide a clear political commitment towards becoming Parties to the Protocol, shall also be eligible for fun-

ding by the Global Environment Facility for the development of national biosafety frameworks and the development of national biosafety clearing-houses and other necessary institutional capabilities to enable a non-Party to become a Party. Evidence of such political commitment shall take the form of a written assurance to the Executive Secretary that the country intends to become a Party to the Protocol on completion of the activities to be funded”

Further, the Conference of the Parties (COP) Decision VII/20.25 requested the GEF to provide financial resources, inter alia,

“... to support capacity-building for the establishment of national components of the Biosafety Clearing-House in a flexible manner...”

## 2. UNEP-GEF Capacity Building support for the BCH

**U**nder the global Project for Development of National Biosafety Frameworks (NBFs) and the demonstration projects on implementation of the NBFs, UNEP has been closely involved in the development of support for capacity building for biosafety.

In response to the urgent needs of Parties to use and participate in the BCH the GEF approved, in March 2004, a new UNEP-GEF project entitled “Building Capacity for Effective Participation in the Biosafety Clearing House (BCH) of the Cartagena Protocol” to assist 50 Parties of the CPB. The project is an add-on to the current UNEP-GEF Project for

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Development of National Biosafety Frameworks and was developed as a direct response to the needs of the countries for access and management of the Biosafety Clearing House and in close collaboration with the Secretariat of the Convention on Biological Diversity (SCBD).

## 2.1 Country Eligibility

This first project is intended to support 50 countries that are eligible for GEF funding and had ratified or acceded to the Cartagena Protocol by the time of the first meeting of the Conference of the Parties, serving as the meeting of the Parties to the Protocol (COP-MOP) in February 2004, and that were not beneficiaries of any GEF project to support implementation of their NBFs. At the time of COP-MOP/1, the number of eligible countries was 61, but only 50 countries can participate, due to the limitations in project funding. A list of the current 50 participating countries is attached as Annex 1. Based on recommendations from COP-MOP/1, COP 7 gave guidance to the Global Environment Facility to expand the eligibility of the original 50-country project to include all developing countries and countries with economies in transition which:

- Are Parties to the Convention on Biological Diversity; and
- Provide clear political commitment towards becoming Parties to the Protocol through a written assurance to the Executive Secretary that the country will become a Party on completion of activities to be funded.

UNEP subsequently submitted to the GEF Council, in November 2004, an add-on project to the current BCH pro-

ject, which will expand eligibility for 89 additional countries. The GEF Council has approved the add-on project to the current BCH project, in principle. However, the Council has requested UNEP-GEF to revise the project document to take into account the concerns raised by the Council members and to submit it to the GEF Secretariat for final endorsement. This process is currently under way.

## 2.2 Project Objectives

The BCH Capacity Building Project has the following three main objectives:

- a) To strengthen capacity in eligible countries through training of key stakeholders. The training will cover (i) data entry and management; (ii) identification and access to information required for decision-making under the Protocol and (iii) access to, and registration of, information in the BCH;
- b) To create an enabling environment for Parties to meet their obligations for implementation of the Protocol by providing participating countries with computer hardware and software for data storage and exchange (with the BCH) over the Internet and by other means; and
- c) To support further capacity building through the development and dissemination of an interactive computer-based training package.. The package will be developed at the global level, in close collaboration with the SCBD. The aim of the training package is to ensure that input from national participation in the BCH is consistent with the BCH central portal.

## 2.3 Relationships with other UNEP-GEF Biosafety Projects

Project activities in countries that are participating in the UNEP-GEF Project for Development of National Biosafety Frameworks will be carried out within the context of the national project systems that have already been established and within the developing national biosafety frameworks. The national BCH project team will normally report to the National Coordinating Committee for the Development Project, and the relevant UNEP-GEF Regional Coordinator for the national project will ensure that synergies and cooperation between NBF development and BCH project are fully taken advantage of. All project activities are also being carried out with the support of and in collaboration with the SCBD. Where relevant, the BCH project activities will also run in parallel with, and be complementary to any implementation projects, which a country might participate in. A comparable set of relationships would be established as for the Development project to ensure the best synergies and communications between all the activities going on in each country.

## 2.4 Project Activities

The major project activities, as described below, relate to the three project objectives described above.

### 2.4.1 Training Materials

In order to meet the first objective of training and developing core human resources, a training package has been

developed that will be used by countries for their own BCH national training workshops. The package includes:

- Background material,
- Interactive training modules,
- User-friendly computer based training manual,
- Database and website templates, and
- Workbook(s).

Six training modules have been developed as tools to help countries understand their BCH obligations as Parties and to assist them to enter and use information in the BCH;

- Module 1: "Introduction to the Cartagena Protocol on Biosafety"
- Module 2: "Introduction to the Biosafety Clearing-House"
- Module 3: "Introduction to the BCH Central Portal"
- Module 4: "Finding Information on the BCH Central Portal"
- Module 5: "Entering Information Using the Management Centre"
- Module 6: "Requirements for National Participation in the BCH-House"

These modules have been developed in collaboration with the United Nations Institute for Training and Research (UNITAR), and the content has been developed by international experts and reviewed by the Secretariat of the Convention on Biological Diversity and other experts.

All the training material can be downloaded from [www.unep.ch/biosafety](http://www.unep.ch/biosafety). In addition, the modules will also be integrated into the Central Portal, hosted and maintained by the SCBD.

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### 2.4.2 Equipment

To help Parties meet the obligations set down by the Protocol, computer hardware and software will be provided, along with means to access the BCH through the Internet or another medium.

Each country will be asked to set up a BCH Task Force to assess equipment and staffing requirements and decide on the structure and parameters of its national BCH.

National participation in the BCH will be designed to meet each country's specific needs, but each country will have to commit to standard operating procedures in relation to the central portal of the BCH, with corresponding levels of initial and on-going resource commitment. Strategies will have to be developed that ensure continuity and sustainability (viz. fulfillment of obligations) of the BCH when the project has ended.

The CBD Secretariat has prepared guidelines by which governments can evaluate various options for developing national participation in the BCH (See the Text Box 2). Countries will need to choose an option that meets their needs and capacity from the choices provided. Resource requirements for set up and maintenance will differ for each option in terms of Internet connectivity, personnel costs, maintenance, updating, security, hardware and software.

Accordingly, countries will be encouraged to choose an option that meets their needs and their ability to meet the

corresponding commitments. Resource requirements for set up and maintenance differ for each option in terms of Internet connectivity, personnel costs, security, hardware and software.

Annex 3 is a quick reference guide for equipment requirements for the options presented to countries for national participation in the BCH by the SCBD.

### 2.4.3 BCH Regional Advisors

A network of trained BCH Regional Advisors (RAs) will provide support and advise to countries. The BCH Regional Advisors are specialists in either Information Technology or the Cartagena Protocol on Biosafety and have been selected through a rigorous screening process by via a Panel that included representatives of the International Telecommunication Union (ITU), the Science and Technical Advisory Panel of the GEF (STAP) and members of the UNEP-GEF Biosafety Unit and the SCBD.

The Regional Advisors will provide assistance by helping in:

- Making the choice for type and style of national participation in the BCH;
- Delivering training activities with national counterparts to train participants in the use and access of the BCH;
- Setting-up and making the chosen method of national BCH access operational;
- Developing a sustainability strategy;
- Training National Focal Points; and
- Negotiating costs of setting up the BCH.

### 3. National level Implementation and sustainability

An “Operational Handbook” to help countries to participate in the BCH project has been developed and is accessible through <http://www.unep.ch/biosafety>. In addition, a sample Memorandum of Understanding (MoU) has been prepared by the UNEP-GEF Biosafety Unit.

The 50 countries currently participating in the project can now request assistance from the network of BCH Regional Advisors to help them in defining their national participation in the BCH. This collaboration between UNEP and the countries will lead to the definition of the details of the MOU. This process of definition of the terms of the MOU is a key stage that may take some time in countries, as it involves governmental decisions to be made.

At the time of the signature of the MOU, the country must:

- Have already set-up a BCH Task Force;
- Decided upon the option, as provided by the SCBD and summarized in Text Box 2 above, for national participation in the BCH;
- Have ensured that there is a sustainability strategy in place to take into account the continuity of the BCH use beyond end of this project; and
- Have developed their training plan for the BCH project.

Upon signature of the MOU, countries can start purchasing equipment for their national participation in the BCH and organizing and conducting training workshops.

At any time during the above-mentioned process, a BCH Regional Advisor can be accessed through UNEP for assistance on any of the above issues.

#### 3.1 National Level Participation

There will be three major types of activity for each participating country:

- (I) Support for purchase and set up of equipment required for national BCH participation;
- (II) If required, national-level training workshop(s) on the use, maintenance and access of their national BCH participation, and fulfilment of national obligations in relation to the Cartagena Protocol on Biosafety; and
- (III) Access to regional experts to assist in the design and development of the national participation in the BCH. The regional experts could assist in several different ways as mentioned above in section 2.3.3.

Each participating country will be required to:

- Establish a BCH Task Force, which would be a sub-committee of the National Coordination Committee (in countries participating in the Development of National Biosafety Frameworks project), to assist in the implementation of the project at the national level;
- Provide an analysis of the country’s staffing and equipment requirements, including information on any support received through the Development of National Biosafety Frameworks project or other project;

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- Provide detailed cost information for the purchase of equipment and other project outlays, including the national-level workshop; and
- Provide a long-term strategy for sustaining national participation in the BCH and fulfilling its obligations under the Cartagena Protocol.

### **3.2 Available Resources**

The project will provide resources to participating countries for the following, as appropriate:

- Access to BCH Regional Advisors to assist in the design and development of the national participation in the BCH;
- Initial equipment set up, including, where required, intranet and Internet connectivity;
- Interactive guide to the central BCH portal;
- A BCH database template that could be used with existing computer programs to store data at a national level in the BCH common formats (the database will also provide functions to export data to the BCH central portal through various media, including Internet and CD-ROM);
- A training package and user-friendly computer-based training manual;
- Resources to hold national workshop(s); and
- Follow-up by the project team to ensure that training is useful (UNEP-GEF will operate a help-desk, for a limited period, to help countries comply with the Protocol).

### **3.3 Pacific Node for the Biosafety Clearing-House (PnBCH)**

In May 2004, the Development project as part of its last round of workshops, held a workshop for the Small Island Developing States in Trinidad and Tobago. At that meeting, the Pacific Island countries identified a strong need and support for a regional BCH node that would help the Pacific Island countries to quickly and effectively start using the BCH.

Since helping set up a regional node is beyond the scope of the current project, the UNEP-GEF Biosafety Unit contacted other partners to see if they would be interested in helping set up a regional node for the Pacific countries, while the BCH project would focus its activities on training and equipment requirements at a national level, to meet the objectives of the project.

In response to these specific requirements identified by the 14 Pacific Island countries, UNEP with Environment Canada is assisting the Pacific countries set-up a regional node.

### **4. Software Solutions offered by Countries**

Some countries that have already launched their national BCH national nodes have shown a strong desire to support the BCH project, based on their own experiences.

They have committed themselves to donating the time of experts, open source code, multiple language capability tools for websites and databases and additional man-hours to assist countries that take up the options.

Below is a list of the resources available through the BCH project that is being provided by the countries.

#### **4.1 Canada**

Canada is developing generic versions of the computer applications used to establish and operate the Canadian Node of the BCH ([www.bch.gc.ca](http://www.bch.gc.ca)). These applications will be made available to any county participating in the UNEP-GEF Project on Building Capacity for Effective Participation in the Biosafety Clearing-House of the Cartagena Protocol. The applications include a meta-data entry tool, a fully relational database, a Web site and Web site management tools, search engine, Web services to provide interoperability with the BCH, user guides, and full technical documentation. The system supports multiple languages and can also be used to create a regional node of the BCH to support multiple countries. A one-time licensing fee of CAS 1,000 (approx US\$ 800) would be required for the use of licensed software (expenses are eligible for UNEP-GEF funding).

Countries not requiring the full suite of applications described above may wish to establish a national Web site that is interoperable with the BCH using the Web site and Website management tools, search engine and Web services components only. Existing and new records created using the BCH Management Centre, or the Swiss or US systems would be duplicated on countries' Web sites.

Countries may use the Web sites to display additional information of interest to domestic or international users (e.g. discussion documents, draft laws or regulations, National Biosafety Framework documents). There are no licensing fees associated with the applications required for this option.

Further information on these applications and contact information can be found on the accompanying document provided by Canada and through [www.unep.ch/biosafety](http://www.unep.ch/biosafety).

#### **4.2 Switzerland**

The Swiss Government will provide access to their fully developed and operational BCH website and database to any country that requests to use them. The country will have their national website hosted at no cost on the GRID-Europe server located in Geneva, and will be provided with updates for the website and training, whenever necessary.

#### **4.3 United States of America**

The US Geological Survey's National Biodiversity Information Infrastructure (NBII), has developed national database and website templates (NDT-BCH), based on the Simple National BCH Database developed by SCBD. These templates are now made freely available for download and are designed to make it simple to start work on the creating a national database and/or website. The NBII, in conjunction with the US State Department, will donate the time of technical staff for the UNEP-GEF BCH training workshops, and for the development of training manuals. The NDT-BCH application that is being developed by the

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NBII is completed and has been available for countries to access and use since the beginning of December 2004. This Microsoft Access based tool is easy to install and use, and had complete and exhaustive documentation. A multi-language version of the templates will be released by September 2005

## **5. Future Projects for Implementation of the National Biosafety Frameworks**

The current BCH project is a stop-gap measure to allow countries to start using and participating in the BCH as soon as possible in line with Cartagena Protocol obligations. Based on lessons learned from the demonstration projects for the implementation of the NBFs, it is clear that the BCH presents significantly larger needs than can be met by the current BCH project.

An indicative short list of activities not included in the current BCH project, which countries may wish to request for under their implementation projects may include, if appropriate:

- Input and update of data in their national BCH, and through this, to the central portal;
- Upgrades to national participation in the BCH in line with new COP-MOP decisions;
- More detailed national databases which serve national interests over and above the requirements of the BCH;
- Building national biosafety information systems, i.e. connecting various departments for input and access of data;

- Developing biosafety websites of which the BCH is a component and can be linked as such at a later date;
- National training workshops related to the BCH targeted at stakeholders other than decision makers and persons working specifically with the BCH;
- Activities relating to the provision of Article 23.3 that says "Each Party shall endeavor to inform its public about the means of public access to the BCH". This could include participatory workshops on the national BCH, awareness workshops for the BCH, training workshops for the BCH.

## 6. Information and Contacts

Further information on the project for Building Capacity for Effective Participation in the Biosafety Clearing-House (BCH) of the Cartagena Protocol can also be obtained from the UNEP-GEF Biosafety website at: <http://www.unep.ch/biosafety/>. Questions can be directed to:

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Further information on UNEP's programme of work as an Implementing Agency of the GEF may be obtained from:

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<http://bch.biodiv.org/>

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**Annex 1  
List of Participating Countries**

- |    |  |    |                              |
|----|--|----|------------------------------|
| 1  | Antigua and Barbuda                    | 26 | Madagascar                   |
| 2  | Bahamas                                | 27 | Maldives                     |
| 3  | Bangladesh                             | 28 | Mali                         |
| 4  | Barbados                               | 29 | Marshall Islands             |
| 5  | Belarus                                | 30 | Mauritius                    |
| 6  | Belize                                 | 31 | Mongolia                     |
| 7  | Bolivia                                | 32 | Mozambique                   |
| 8  | Brazil                                 | 33 | Nicaragua                    |
| 9  | Burkina Faso                           | 34 | Nigeria                      |
| 10 | Cambodia                               | 35 | Palau                        |
| 11 | Croatia                                | 36 | Panama                       |
| 12 | Czech Republic                         | 37 | Moldova, Republic of         |
| 13 | Korea, Democratic People's Republic of | 38 | Romania                      |
| 14 | Djibouti                               | 39 | Samoa                        |
| 15 | Ecuador                                | 40 | Slovenia                     |
| 16 | Egypt                                  | 41 | South Africa                 |
| 17 | El Salvador                            | 42 | Tajikistan                   |
| 18 | Ethiopia                               | 43 | Tonga                        |
| 19 | Ghana                                  | 44 | Trinidad and Tobago          |
| 20 | Grenada                                | 45 | Tunisia                      |
| 21 | Iran, Islamic Republic of              | 46 | Turkey                       |
| 22 | Jordan                                 | 47 | Ukraine                      |
| 23 | Latvia                                 | 48 | Tanzania, United Republic of |
| 24 | Lesotho                                | 49 | Venezuela                    |
| 25 | Liberia                                | 50 | Viet Nam                     |

## **Annex 2**

### **List of Minimum Information Requirements to the BCH by Parties**

#### **Extract from MODALITIES OF OPERATION OF THE BIOSAFETY CLEARING-HOUSE (Annex of Decision BS-1/3 from the COP7-MOP1)**

##### *A. Role of the Biosafety Clearing-House*

1. The role of the Biosafety Clearing-House in the provision and exchange of information in support of implementation of the Protocol, is clearly articulated in the Protocol. At a minimum, the Biosafety Clearing-House has a role in providing access to information relating to:
  - (a) Existing national legislation, regulations and guidelines for implementing the Protocol, as well as information required by Parties for the advance informed agreement procedure (Article 20 paragraph 3 (a));
  - (b) National laws, regulations and guidelines applicable to the import of LMOs intended for direct use as food or feed, or for processing (Article 11 paragraph 5);
  - (c) Bilateral, multilateral and regional agreements and arrangements (Articles 14 paragraph 2 and 20 paragraph 3 (b));
  - (d) Contact details for competent national authorities (Articles 19.2 and 19.3), national focal points (Articles 19 paragraph 1 and 19 paragraph 3), and emergency contacts (Article 17 paragraph 3 (e));
  - (e) Reports submitted by the Parties on the operation of the Protocol (Article 20 paragraph 3 (e));
  - (f) Decisions by a Party on regulating the transit of specific living modified organisms (LMOs) (Article 6 paragraph 1);
  - (g) Occurrence of unintentional transboundary movements that are likely to have significant adverse effects on biological diversity (Article 17 paragraph 1);
  - (h) Illegal transboundary movements of LMOs (Article 25 paragraph 3);

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- (i) Final decisions regarding the importation or release of LMOs (i.e. approval or prohibition, any conditions, requests for further information, extensions granted, reasons for decision) (Article 10 paragraph 3 and Article 20 paragraph 3(d));
- (j) Information on the application of domestic regulations to specific imports of LMOs (Article 14 paragraph 4);
- (k) Final decisions regarding the domestic use of LMOs that may be subject to transboundary movement for direct use as food or feed, or for processing (Article 11 paragraph 1);
- (l) Final decisions regarding the import of LMOs intended for direct use as food or feed, or for processing that are taken under domestic regulatory frameworks (Article 11 paragraph 4) or in accordance with annex III (Article 11 paragraph 6) (requirement of Article 20 paragraph 3(d));
- (m) Declarations regarding the framework to be used for LMOs intended for direct use as food or feed, or for processing (Article 11 paragraph 6);
- (n) Review and change of decisions regarding intentional transboundary movements of LMOs (Article 12 paragraph 1);
- (o) LMOs granted exemption status by each Party (Article 13 paragraph 1);
- (p) Cases where intentional transboundary movement may take place at the same time as the movement is notified to the Party of import (Article 13 paragraph 1); and
- (q) Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and relevant information regarding products thereof (Article 20 paragraph 3 (c)).

**Annex 3**  
**Quick Reference Guide of the Potential Minimum and Maximum Technical Requirements**  
**for the 4 Options Offered by SCBD**

Options	Basic Equipment	Server(s)	Network	Software
<b>Option 1:</b> Using the Management Centre hosted by the SCBD	Computer(s) with access to Internet		Modem 56Kbps or LAN (recommended)	Personal Firewall for client computer (s)
	Min specs: > 128MB RAM, 56 Kbps modem V.90 or 92 or network card, 1024*768 display, card, 1024*768 display, 17" screen		Contract with Internet Service Provider for a LAN or a Modem connection	Antivirus for client computer (s)
<b>Option 2:</b> Using the simple nBCH with no Internet connection	Computer CD writer or printer & fax		No	Microsoft Access
<b>Option 2:</b> Using the simple nBCH with an Internet connection	Computer with access to Internet Internet		Modem 56Kbps or LAN	Microsoft Access
	Min specs: > 128MB RAM, modem or network card, 1024*768 display, 17" screen		Contract with Internet Service Provider for a LAN or a Modem connection	Personal Firewall and antivirus for client computer
<b>Option 3 &amp; 4:</b> Crawling and Interoperable Options - minimum equipment solution	Computer(s) with access to the nBCH (Intranet, Internet)	1 Simple Web Server (with or without database).	LAN with a least 256Kbps bandwidth to the Internet for the webserver, 7/7, 24/24 (to be serviced by an ISP or the local institutional system administration)	Personal Firewall and antivirus for each client computer

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Options	Clients	Server(s)	Network	Software
	Requirements defined by nBCH application used and location on the network (Intranet, Internet)		Firewall (dedicated machine or installed on webserver)	
			Switch 100 Mbps for in-house connections	
			RJ45 Cabling to connect local computers	
<b>Option 3 &amp;4:</b> Crawling and Interoperable Options - maximum equipment - solution	Computer(s) with access to the nBCH (Intranet, Internet)  Rack to host servers	1 Web Server: >2Ghz CPU, >2GB RAM, 2X120GB HDD RAID1 recommended	LAN with a least 256Kbps bandwidth to the Internet for the webserver, 7/7, 24/24 (to be serviced by an ISP or the local institutional system administration)	Personal Firewall and antivirus for each client computer
	Requirements defined by nBCH application used and location on the network (Intranet, Internet)  UPS Uninterruptible Power Supply	1 Database Server (specs idem webserver)	Firewall (dedicated machine)	
		Backup System (Backup Server and/or Tape)	Switch min 100 Mbps 12 ports for in house connections	Backup Software
			RJ45 Cabling to connect local computers	

