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EXPERT MEETING ON THE MODALITIES
OF OPERATION OF THE ACCESS AND
BENEFIT-SHARING CLEARING-HOUSE
Montreal, 11-14 April 2011

**ISSUES FOR CONSIDERATION IN THE ESTABLISHMENT OF THE ACCESS AND
BENEFIT-SHARING CLEARING-HOUSE**

Note by the Executive Secretary

1. In accordance with decision X/1 of the Conference of the Parties, annex II, section A, paragraph 1, the Open-ended Ad Hoc Intergovernmental Committee for the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (the Intergovernmental Committee) will consider at its first meeting, from 5 to 10 June 2011, “the modalities of operation of the Access and Benefit-sharing Clearing-House, including reports on its activities (Article 14, paragraph 4).”
2. In preparation for this meeting and thanks to the financial support of the European Commission, an Expert Meeting will be held on the modalities of operation of the Access and Benefit-sharing Clearing-House (ABS Clearing-house). The expert meeting will focus on practical considerations related to the establishment of the ABS Clearing-house with a view to provide input to the first meeting of the Intergovernmental Committee and to assist countries with the early ratification and implementation of the Nagoya Protocol.
3. Against this background, a study on issues for consideration in the establishment of the ABS Clearing-House was commissioned by the Secretariat and carried out by Kirsty Galloway McLean and Geoff Burton on behalf of the United Nations University Institute of Advanced Studies (UNU-IAS) in order to assist the Expert Meeting in the consideration of this issue. The study is annexed to this document.
4. The views expressed in the study are those of the authors and do not necessarily reflect the views of the Secretariat of the Convention on Biological Diversity. The study is reproduced in the form and the language in which it was received by the Secretariat of the Convention.

ISSUES FOR CONSIDERATION IN THE ESTABLISHMENT OF THE ACCESS AND BENEFIT-SHARING CLEARING-HOUSE

I. INTRODUCTION

5. This information paper has been prepared to assist discussion on the establishment and operation of the Access and Benefit-sharing Clearing-House (ABS Clearing-House).

6. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Nagoya Protocol) was adopted by the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) on 29 October 2010. Article 14 of the Protocol establishes the ABS Clearing-House. Paragraph 4 provides that its modalities and operation will be determined by the first meeting of the Parties to the Protocol. In preparation for this, the Intergovernmental Committee for the Nagoya Protocol will consider those modalities at its first meeting in June 2011 as part of the Intergovernmental Committee Work Plan established at annex II of decision X/1. This paper has been prepared for consideration by the expert meeting that is to provide input to the Intergovernmental Committee.

7. This paper is structured into seven sections. Section II addresses the role of the ABS Clearing-House in implementing the Protocol. Section III offers an overview of existing activities, systems and areas of possible cooperation. Section IV summarizes lessons learned from previous related experience. Section V undertakes a preliminary assessment of needs. Section VI suggests some considerations on priorities for a pilot phase of the ABS Clearing-House. Section VII provides a list of questions that could be considered by the expert group at this meeting.

II. THE ROLE OF THE ABS CLEARING-HOUSE IN IMPLEMENTING THE NAGOYA PROTOCOL

8. This section provides an overview of the objective, role and information-exchange requirements of the ABS Clearing-House as determined by the Nagoya Protocol.

A. The clearing-house mechanism of the Convention

9. The ABS Clearing-House is established as part of the clearing-house mechanism (CHM) under Article 18, paragraph 3, of the Convention. The CHM was established to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through appropriate international and national institutions. It consists of the following components: (a) the CBD website, including its Information Centre; (b) the network of national clearing-house mechanisms; and (c) various partner institutions.

10. Guidance from the Conference of the Parties has emphasized that the key characteristics of the ABS CHM are that it should (a) be compatible with national capacities; (b) be needs-driven and decentralized in nature; (d) provide access to metadata; (e) provide support to the decision-making process; and (f) to the extent possible involve the private sector. As the ABS Clearing-House has been established under the CHM of the Convention, these characteristics should also be reflected in its design.

11. More recently, in decision X/15, the Conference of the Parties decided that the CHM mission for the next ten years should contribute significantly to implementing the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, through effective information services and other appropriate means in order to promote and facilitate scientific and technical cooperation, knowledge sharing, and information exchange, and to establish a fully operational network of Parties and partners.

B. *Requirements to provide and exchange information under Article 14 and other relevant articles of the Protocol*

12. According to Article 14, paragraph 1, of the Nagoya Protocol, the ABS Clearing-House is established to share information related to access and benefit-sharing. In particular, it provides access to information relevant to implementation of the Protocol. Parties will be expected to provide, update and process the information required under the Protocol through their national focal points, and/or their competent national authorities designated pursuant to Article 13, paragraph 1, and this will be the primary task of the information-exchange system.

13. In order to achieve the primary objective of the ABS Clearing-House under Article 14, namely to provide access to information made available by each Party relevant to the implementation of the Protocol, it will need to receive, process, and/or provide access to a number of types of information as elaborated below.

14. Article 14, paragraph 2, requires each Party to make available the following types of information to the ABS Clearing-House:

- (a) Legislative, administrative and policy measures on access and benefit-sharing;
 - (b) Information on the national focal point and competent national authority or authorities;
- and
- (c) Permits or their equivalent issued at the time of access as evidence of the decision to grant prior informed consent and of the establishment of mutually agreed terms.¹

15. In accordance with Article 13, paragraph 4, the contact information of a Party's national focal point and its competent national authority or authorities shall be provided to the Secretariat no later than the date of entry into force of the Protocol, and Parties shall subsequently notify the Secretariat of any changes. The Secretariat will make this information available through the ABS Clearing-House.

16. Where a Party designates more than one competent national authority, it must provide to the Secretariat relevant information on the respective responsibilities of those authorities along with its notification designating the authority. Where applicable, such information shall, at a minimum, specify which competent authority is responsible for the genetic resources sought.

17. The ABS Clearing-House will also need to provide access to other types of information that Parties may provide relevant to the implementation of the Protocol. Additional information specified in the Protocol (Article 14, paragraph 3) includes:

- (a) Relevant competent authorities of indigenous and local communities, and information as so decided;
- (b) Model contractual clauses;
- (c) Methods and tools developed to monitor genetic resources; and
- (d) Codes of conduct and best practices.²

18. In addition to Article 14, other references are made throughout the text of the Protocol to information that must be made available through the ABS Clearing-House, namely:

¹ See also the requirement to provide notification of the issuance at the time of access of a permit or its equivalent as evidence of the decision to grant prior informed consent and of the establishment of mutually agreed terms (Article 6, paragraph 3).

² See also Articles 19 (Model Contractual Clauses) and 20 (Codes of Conduct, Guidelines and Best Practices and/or Standards), use of sectoral and cross-sectoral model contractual clauses for mutually agreed terms, as well as voluntary codes of conduct, guidelines and best practices and/or standards in relation to access and benefit-sharing.

(a) Measures to inform potential users of traditional knowledge associated with genetic resources about their obligations for access to and fair and equitable sharing of benefits arising from the utilization of such knowledge (Article 12, paragraph 2);

(b) Information provided to designated checkpoints that collect or receive, as appropriate, relevant information related to prior informed consent, to the source of the genetic resource, to the establishment of mutually agreed terms, and/or to the utilization of genetic resources, including from internationally recognized certificates of compliance, where they are available (Article 17, paragraph 1 (a) (iii)); and

(c) Information on capacity-building and development initiatives at national, regional and international levels (undertaken in accordance with paragraphs 1 to 5 of Article 22 of the Protocol), that should be shared through the ABS Clearing-House with a view to promoting synergy and coordination on capacity-building and development for access and benefit-sharing (Article 22, paragraph 6).

C. Internationally recognized certificate of compliance

19. In accordance with Article 17, paragraph 2, a permit or its equivalent issued in accordance with Article 6, paragraph 3 (e) and made available to the ABS Clearing-House, shall constitute an internationally recognized certificate of compliance. Article 17, paragraph 3, then establishes that such certificates shall serve as evidence that prior informed consent (PIC) has been given and mutually agreed terms (MAT) have been established.

20. Article 17, paragraph 4, sets out the minimum information required for the internationally recognized certificate of compliance (where it is not confidential), which in turn dictates the minimum information that will be required to be reported to the ABS Clearing-House in this regard, namely:

- (a) Issuing authority;
- (b) Date of issuance;
- (c) The provider;
- (d) Unique identifier of the certificate;
- (e) The person or entity to whom prior informed consent was granted;
- (f) Subject-matter or genetic resources covered by the certificate;
- (g) Confirmation that mutually agreed terms were established;
- (h) Confirmation that prior informed consent was obtained; and
- (i) Commercial and/or non-commercial use.

D. Additional information that may be provided to the ABS Clearing-House

21. In fulfilling its role as a key mechanism for sharing information relating to access and benefit-sharing under the Nagoya Protocol, the ABS Clearing-House may also be required to handle additional categories of information, particularly in relation to future decisions of the Protocol's governing body.

22. For example, under Article 12 (Traditional Knowledge Associated with Genetic Resources), Parties shall endeavour to support the development by indigenous and local communities, including women within these communities, of community protocols, minimum requirements for mutually agreed terms, and model contractual clauses for benefit-sharing arising from the utilization of traditional knowledge associated with genetic resources (Article 12, paragraph 3). In light of the obligations in Article 12, paragraph 2, it may be advantageous to make such tools available through the ABS Clearing-House. Article 21 (Awareness-raising) also notes the need to raise awareness of community protocols and procedures of indigenous and local communities. Making such protocols and procedures available through the ABS Clearing-House may assist in raising such awareness.

23. Under Articles 19 (Model Contractual Clauses) and 20 (Codes of Conduct, Guidelines and Best Practices and/or Standards), Parties shall encourage, as appropriate, the development, update and use of sectoral and cross-sectoral model contractual clauses for mutually agreed terms, as well as voluntary codes of conduct, guidelines and best practices and/or standards in relation to access and benefit-sharing. The Conference of the Parties serving as the meeting of the Parties to the Protocol is also obliged to periodically take stock of their use.

24. Article 21 (Awareness-raising) notes that measures to raise awareness of the importance of genetic resources and traditional knowledge associated with genetic resources, and related access and benefit-sharing issues, may include information dissemination through a national clearing-house. Information on the location and accessibility of such national clearing-houses would be valuable information to include in the ABS Clearing-House. Although there is no requirement that national clearing-houses be part of the international ABS Clearing-House under the Protocol, it is likely that they would also wish to connect with the ABS Clearing-House.

E. Confidentiality considerations

25. The Nagoya Protocol does not require Parties to share confidential information with the ABS Clearing-House. In accordance with Article 14, paragraph 2, information would be made available to the ABS Clearing-House without prejudice to the protection of confidential information.

26. It is therefore anticipated that the ABS Clearing-House would not become or be used as a source of confidential information to meet the obligations of the Protocol, and each Party would be responsible for identifying and appropriately protecting confidential information prior to making information available to the ABS Clearing-House.

F. Traditional knowledge and indigenous and local communities

27. The Nagoya Protocol provides that benefits derived from the use of traditional knowledge (TK) associated with genetic resources should be shared with indigenous and local communities that are holders of such knowledge and subject to the prior informed consent, approval and involvement of these indigenous and local communities. In doing so Parties have to take account of the existing rights and interests of indigenous and local communities.

28. The ABS Clearing-House could play a role in informing potential users of traditional knowledge associated to genetic resources about their obligations. Parties, with the involvement of ILCs, could make available through the ABS Clearing-House measures related to access to and benefit-sharing from the utilization of such knowledge. Moreover, Article 14, paragraph 3, indicates that information of any relevant competent authorities of indigenous and local communities may be provided to the ABS Clearing-House, if available and as appropriate.

29. Indigenous and local communities may also need to consider, in light of obligations arising from participating communities, what information, and at what level of detail, is appropriate for sharing via the ABS Clearing-House. Such information could include the process of prior informed consent, including community protocols and procedures, as well as information for potential users of traditional knowledge associated with genetic resources about their obligations to indigenous and local communities who are knowledge holders.

G. Monitoring and tracking

30. Monitoring and tracking the use of genetic resources is an important feature of the Nagoya Protocol which can be supported by the internationally recognized certificate of compliance. Part of the utility of this certificate may be in providing an immediate and verifiable source of legal certainty over the acquisition and use of genetic resources. Such information may be useful to a person or organization undertaking due diligence' enquiries into the source or origin of genetic resources before entering into a research and development collaboration, or investing or purchasing an interest in research into such resources. Similarly, disclosure of the existence of a certificate in scientific abstracts may allow providers

of genetic resources to track that use of the genetic resources granted is in accordance with the conditions of mutually agreed terms.

31. In some cases, information about the source or origin may also be useful in meeting existing legal requirements. For example 18 countries require or encourage disclosure in patent applications of the origin or circumstances of acquisition of genetic resources and any associated traditional knowledge.³ This issue is also being examined by the World Intellectual Property Organization (WIPO) Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore (IGC).

32. When considering this matter it should be noted that nothing in Article 17 prevents the inclusion of additional information beyond the minimum information specified in the Article, nor prevents the correction of incorrect information or the subsequent inclusion of additional information by competent national authorities (CNAs). Therefore, after an initial developmental phase focused on requirements of the ABS Clearing-House, it may be beneficial to consider what further role could be played to assist in the smooth operations of the Protocol.

H. Ability to amend the internationally recognized certificate of compliance

33. A consideration in the design and operation of the system of internationally recognized certificates of compliance is the issue of the level of desirable detail in the information to be provided by relevant CNAs and the timing of its provision. This consideration may be influenced by whether a certificate of compliance should be seen as static or capable of progressive amendment. A fixed certificate has the advantage that it is conclusive evidence of facts established at the time the information is provided to the ABS Clearing-House. However, this may limit the utility of the certificate in demonstrating compliance with the terms and conditions flowing from the grant of prior informed consent (PIC) for access and in tracking and monitoring the utilization of those genetic resources and, where relevant, for tracking the use of traditional knowledge.

34. A variety of circumstances can be conceived where it would be in the interest of the issuer and holder of a permit to amend a certificate. For example, possession of a certificate is of little use if the genetic resources to be accessed are not specifically identified – as would necessarily be the case where the purpose of the collection of biological material is to discover new species or where new species are discovered serendipitously-. In such cases it might be in the mutual interest of the parties to the ABS agreement to be able to amend the certificate to identify the species involved.

35. Permits may also come with conditions and obligations as set out by mutually agreed terms (MAT). It may be useful therefore to be able to conclusively demonstrate that permit conditions have been met when demonstrating compliance. For example, a permit may require taxonomic duplicates of new or specified species to be deposited in a national taxonomic collection. Similarly, in the event that a CNA approves the transfer of the permit to a third party or an additional party is included as permittee, then it may be in their mutual interest to amend the relevant certificate to make this known. Public evidence of satisfactory compliance with such requirements through a certificate of compliance could be useful to the scientific research community when required to meet user country obligations established under Articles 15 and 16 of the Protocol.

36. The updating or amendment of a certificate may also need to be considered when demonstrating compliance with contracts establishing MAT and associated with the grant of a permit. These contracts include a range of obligations to be met during the process of research and development on genetic resources. For example, milestone payments may be required or intellectual property protection sought. This information may be useful to regulators in user countries, third parties entities undertaking due diligence inquiries, or to users relying on the evidence contained in an internationally recognized certificate to demonstrate good faith action to designated checkpoints.

³ Oldham and Burton *Defusing Disclosure in Patent Applications*, 20 October 2010 Social Science Research Network Paper: SSRNid-171735. < http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1694899 >.

I. Contributions of non-Parties

37. Although the Protocol's information exchange requirements refer to the obligations of its Parties, Article 24 requires Parties to encourage non-Parties to adhere to the Protocol and to contribute appropriate information to the ABS Clearing-House. It is therefore expected that non-Parties may provide and access the same types of information as Parties.

III. OVERVIEW OF EXISTING ACTIVITIES, SYSTEMS AND POSSIBILITIES FOR COOPERATION

38. This section provides an overview of national and regional initiatives for exchanging information relating to access and benefit-sharing. It also looks at international databases and examines future partnership opportunities.

A. Summary of existing systems

a) National access and benefit-sharing databases

39. Fifteen Parties to the Convention have developed governmental websites that provide ABS-related information.⁴ Although most of these do not operate as searchable databases, they are likely to initially fulfil the role of "national clearing-houses for the purposes of the Protocol. Of the Parties identified as having ABS information on their websites, all but one (Costa Rica) are developed countries. This suggests that the evolution of a comprehensive system of national ABS clearing-houses will be developed from a low base. Within the group of identified national clearing-houses, the ABS information ranges from a comprehensive description of existing ABS laws, administrative procedures and competent national authorities serving functioning ABS systems, for example as operates in Australia and Costa Rica, to general descriptions of ABS as an issue and with limited links the CBD website. European Union Member States also reflect the overarching policy role of the European Union, for example through the Biotechnology Directive. National interest also influences the level of detail and subject matter presented, for example a number of Nordic states focus on the importance of genetic resources for food and agriculture. This diversity of focus and detail among developed countries suggests the task for developing countries in establishing their participation in an evolving international ABS Clearing-House will be challenging.

b) Regional Access and Benefit-sharing Databases

40. Websites have been developed in relation to several regional instruments related to access and benefit-sharing, such as the African Regional Intellectual Property Organization (ARIPO)'s Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore⁵ and decisions of the Andean Community of Nations (Andean Pact).⁶ However, there are not many easily accessible information-exchange mechanisms at regional level.

41. The European Community maintains an Access and Benefits-Sharing Portal⁷ that provides access to information on regional policy and legislative measures related to ABS as well as links to web pages of international organizations active in the field. It also includes details of contact points and links to information on ABS in the European Union Member States. It is intended that in the future a number of European stakeholders will register on the portal and provide their policies, codes of conduct and other documents relevant to ABS issues.

⁴ <http://www.cbd.int/abs/government-chm/>

⁵ http://www.aripo.org/index.php?option=com_content&view=article&id=16&Itemid=68

⁶ Decision 391 (Common System on Access to Genetic Resources), Decision 486 (Common Intellectual Property Regime) and Decision 523 (Estrategia Regional de Biodiversidad para los Paises del Tropico Andino).

⁷ <http://abs.eea.europa.eu/>

c) *International mechanisms and Intergovernmental Organizations*

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

42. The objectives of the International Treaty on Plant Genetic Resources for Food and Agriculture are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits derived from their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.

43. The Treaty's most innovative solution to access and benefit-sharing is its Multilateral System for Access and Benefit-sharing, a global gene pool that covers 64 major crops and forages. It is one of the centrepieces of the Treaty and it guarantees facilitated access in return for benefit-sharing. On ratifying the Treaty, countries agree to make that genetic diversity and related information about the crops stored in their gene banks available to all, with multilateral negotiated conditions for access and benefit-sharing set out in a "Standard Material Transfer Agreement". The Treaty Secretariat makes available through its website a list of Parties that have notified the Secretary of the material included in the Multilateral System with links to their national databases. It also provides links to the websites of the International Centres for Agricultural Research of the Consultative Group on International Agricultural Research (CGIAR), and other International Centres that have signed agreements under Article 15 of the Treaty. The Secretariat of the International Treaty on Plant Genetic Resources (ITPGRFA) also makes available the notifications with the announcements of inclusions made by natural and legal persons within the jurisdiction of Contracting Parties. Hundreds of thousands of SMTAs have been concluded to date, although the International Rice Research Institute (IRRI) is currently the only organization to publish a summary of most of the shipments of germplasm sent under the SMTA publicly available on the Web.⁸

44. The Plant Treaty Secretariat has developed an information technology system in support of the Multilateral System.⁹ This contains a data store with details of many other shipments of germplasm sent under the SMTA, although the content of this database is not publicly accessible. The data store is part of a system developed by the Secretariat to facilitate the reporting obligations of the parties to the SMTA. The Governing Body at its third session held in Tunis in 2009 noted that it is possible to share some aggregated and non-confidential information from this system.¹⁰

45. The Plant Treaty Secretariat, in partnership with Bioversity International and the Global Crop Diversity Trust, is also working on the further development of Genesys, a web portal on plant genetic resources providing breeders and researchers a single access point to information on about a third of the world's genebank accessions.¹¹ The accessions include those in the international collections managed by CGIAR, the United States Department of Agriculture's National Plant Germplasm System and the European Plant Genetic Resources Search Catalogue (EURISCO), among others. Genesys adds value to these accessions by providing more than 11 million records about phenotypic characteristics, as well as 19 environmental parameters to the 625,000 of these accessions that are geo-referenced in the database.

The World Intellectual Property Organization (WIPO)

46. As part of the work of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), WIPO is currently in the process of compiling an on-line, searchable database of biodiversity-related Access and Benefit-Sharing Agreements and related information, with a particular emphasis on the intellectual property aspects of such agreements.¹² As a capacity-building tool, it aims to provide information resources for those seeking assistance on current

⁸ http://www.planttreaty.org/smta/irri_en.htm

⁹ <http://mls.planttreaty.org/>

¹⁰ Resolution 5/2009 on the Third Party Beneficiary

¹¹ <http://www.genesys-pgr.org/>

¹² <http://www.wipo.int/tk/en/databases/contracts/index.html>

practices relating to intellectual property, access and benefit-sharing and genetic resources and, on an empirical basis, it aims to contribute to the development of the WIPO Intellectual Property Guidelines for Access and Equitable Benefit-sharing. Potential contributors were informed that it was not necessary to provide the actual text, or the detailed provisions of any contract, but rather a general description of each provision. The WIPO Secretariat was requested to update this database in May 2010¹³ and the database currently includes 39 records.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

47. The Convention on International Trade in Endangered Species of Wild Fauna and Flora aims to ensure that international trade in specimens of wild animals and plants does not put their survival at risk.¹⁴ The Convention establishes common procedural mechanisms for control of international commercial trade in species threatened with extinction, and for an effective regulation of international trade in others. CITES regulates the export, re-export, import and introduction of species through a system of permits and certificates.

48. Some Parties to the Convention have used CITES documentation to control access to genetic resources. Brazil, for example, at times adds a proviso to CITES export permits regarding access to genetic resources that excludes biological material if obtained in *in situ* conditions aiming at prospecting for identification of components of the genetic patrimony and/or information about associated traditional knowledge with potential commercial use.¹⁵

49. CITES recently completed several pilot programmes that allowed the electronic exchange of permits.¹⁶ The outcomes of these trials, as well as recommendations on the development and implementation of electronic documentation that can be found in the CITES e-permitting toolkit may also have relevance to the operation of the ABS Clearing-House. The CITES toolkit provides guidance to Parties which have developed or are developing electronic permitting systems. This guidance facilitates interoperability of information among national electronic permitting systems and ensures compliance with international standards.

United Nations University (UNU) 'Bioprospector' database

50. The Bioprospecting Information Resource ('Bioprospector') database is maintained by the United Nations University in collaboration with the United Nations Environment Programme and the Belgian Federal Ministry of Environment.¹⁷ This information resource provides access to four web-based databases to assist in assessing and documenting the extent of bioprospecting in Antarctic, Pacific, Marine and Arctic environments. It provides details of research and commercialized products arising from biological samples that were sourced from the regions covered and records include a short description of the research; the country sponsoring the original collection mission; the organization commercializing the product; taxonomy of the biological sample; and reference information. The database currently includes several hundred cases.

B. Networking opportunities with existing mechanisms

51. In addition to the partner opportunities explored above, other potential information partnerships for the ABS Clearing-House could include interlinkages with, for example:

¹³ WIPO/GRTKF/IC/17/INF/11.

¹⁴ <http://www.cites.org/>

¹⁵ CITES Secretariat (2010), "CITES Electronic Permits and Certificates: Lessons Learned for the Development of a Permit or Certificate to Regulate Access to Genetic Resources".

¹⁶ *Ibid*

¹⁷ <http://www.bioprospector.org/>

(a) Taxonomic databases (such as the Global Biodiversity Information Facility, GBIF¹⁸) and other biological information facilities;

(b) Legal information databases (such as ECOLEX, the environmental law database operated jointly by FAO, IUCN and UNEP¹⁹);

(c) Systems that are already making use of Material Transfer Agreements in the exchange of biological resources, such as microbial culture collections (e.g. the UK-based CABI Genetic Resource Collection;²⁰ the American Type Culture Collection;²¹ and the BIOTEC Culture Collection in Thailand²²);

(d) Gene banks (such as CGIAR's System-wide Information Network for Genetic Resources (SINGER)²³) and other networks for the exchange of biological material (such as the International Plant Exchange Network, IPEN²⁴); and

(e) Patent data portals, such as WIPO's Patentscope.²⁵

52. Several processes under the Convention on Biological Diversity may also benefit from integration with various aspects of the ABS Clearing-House, such as National Biodiversity Strategies and Action Plans (NBSAPs),²⁶ the Global Taxonomy Initiative;²⁷ and the Traditional Knowledge Information Portal.²⁸

53. Close collaboration with relevant mechanisms such as those outlined above will hopefully help to avoid duplication of effort and facilitate more timely exchange of relevant information. Mechanisms of collaboration with different partners will depend primarily on the type and purpose of information to be shared, which may range from incorporation of actual data (such as taxonomic nomenclature, or information in national websites) to simple links to relevant information (for example ABS information in the Bioprospector database), as well as contributing to complementary developments (as may be the case with information systems being developed in other international fora).

IV. CONSIDERATIONS FOR THE ESTABLISHMENT OF THE ACCESS AND BENEFIT-SHARING CLEARING-HOUSE

54. This section provides an overview of lessons learned from the establishment of other information-exchange mechanisms, in particular the Biosafety Clearing-House, and implications for the architecture and design of the ABS Clearing-House, as well as other considerations, namely a short discussion on the use of unique identifiers and the ABS Measures database.

A. *The Biosafety Clearing-House*

55. The process of gathering and organizing the information that feeds into the ABS Clearing-House will likely be decentralized, with focal points coordinating efforts at national level. However, if the necessary information is not available via the ABS Clearing-House, the purposes of the Protocol are

¹⁸ <http://www.gbif.org/>

¹⁹ <http://www.ecolex.org/>

²⁰ <http://www.cabi.org/>

²¹ <http://www.atcc.org/>

²² <http://www.biotec.or.th/bcc/>

²³ <http://www.icrisat.org/gene-bank-activities.htm>

²⁴ <http://www.bgci.org/resources/ipen/>

²⁵ <http://www.wipo.int/patentscope/search/en/search.jsf>

²⁶ <http://www.cbd.int/nbsap/>

²⁷ <http://www.cbd.int/gti/>

²⁸ <http://www.cbd.int/tk/>

likely to be defeated. This raises similar issues to those that have been addressed during the development of the Biosafety Clearing-House (BCH) of the Cartagena Protocol on Biosafety.

56. The Cartagena Protocol highlights information-sharing as one of the fundamental pillars to ensure transparency in the governance mechanism for the safe use and transboundary movement of living modified organisms (LMOs). The Cartagena Protocol established the BCH as part of the clearing-house mechanism of the CBD to facilitate the exchange of information on LMOs and to assist its Parties to better comply with their obligations under the Cartagena Protocol. Through the BCH, global access to a variety of scientific, technical, environmental, legal and capacity-building information is provided in all six of the United Nations languages.

57. Since the release of the Pilot Phase of the BCH by the Secretariat in 2001 and its transition to the fully operational phase in 2004, the BCH has undergone several iterations in response to feedback from users and direction from the governing body of the Protocol. Lessons learned from this experience will be valuable during development of the ABS Clearing-House.

Centralized vs distributed information

58. The CBD Secretariat maintains a “Central Portal” for the BCH, which is essentially the web-based main point of entry to find information in the BCH. Among other things, the Central Portal aggregates information relevant to the implementation of the Biosafety Protocol that is provided by different sources, and provides users with the ability to search for information in six languages.

59. From the outset, national components were considered essential for enabling Parties to provide information to the BCH in accordance with their obligations under the Protocol, and for ensuring access to information available through the BCH for decision-making. Essentially, countries (and other partners) were provided with four options to share information through the BCH:

- (a) Entering and managing country data via the BCH Central Portal using an online information management tool that is integrated into the BCH website;
- (b) Sending information to the CBD Secretariat via mail, fax, e-mail, or CD-ROM;
- (c) Creating and managing a database of required information that interacts with the BCH Central Portal through the Internet and allows the Central Portal to “pull” information from it;
- (d) Creating and managing a database of required information that interacts with the BCH Central Portal through the Internet to “push” information from the database to the Central Portal.

60. Most of the BCH pages are in the public domain. However, to register, update, delete or correct information through the Central Portal, as well as to participate in some online activities (e.g. online forums), users must be registered and sign in with their ID (a previously registered email address) and password. Each Government participating in the BCH must designate a BCH National Focal Point who is responsible for validating information prior to its publication on the BCH. BCH National Focal Points may also designate a number of “Authorized Users” and give them permission to submit information to the BCH, for example representatives of various Competent National Authorities. However, to ensure the authenticity of the information, the BCH National Focal Point is required to verify the accuracy of any record before it is validated and made public.

61. Experience gained through the pilot phase of the Biosafety Clearing-House suggests that the development of a universal and symmetrical decentralized global network requires substantial investments of time, financial resources and capacity development. Despite significant early progress on the development of “interoperable” web-based databases (i.e. making use of options (c) and (d) in the list above), after ten years of operation virtually all Governments are now using the Central Portal to submit information to a database that is housed centrally within the CBD Secretariat. This is likely due to the ongoing development costs and technical resources needed to maintain an interoperable national database, which needs to be updated every time a change is introduced to the Central Portal (for example, to reflect

modifications to common formats for reporting information that arise from decisions of the meetings of the Parties to the Protocol).

Common formats

62. In order to allow for proper data browsing and querying of the database, it is essential that all data submitted should share a common format for reporting information. The BCH makes use of nine common formats for submitting national records, which range in length from a single page of mostly free text fields (to register national websites or databases) to an 18 page common format with a significant number of check boxes (to register an expert with the roster of experts).

63. A lack of common standards will stunt the growth of an effective information-exchange mechanism, and the ability of the ABS Clearing-House to further develop and exploit information-exchange opportunities. Therefore, agreement must be reached on common formats for sharing and exchanging information and data for inclusion in the ABS Clearing-House prior to the launch of the pilot phase.

Common language

64. An important issue in accepting submissions to the ABS Clearing-House will be the language of submission. The simplest solution for exchanging information would be the adoption of a compulsory unique language (or languages) to be used in all information submitted to the Clearing-House. However, this would have significant resource implications for many regions in providing information to the Clearing-House as much of their relevant information may be available only in a language of the submitting Government and not in an official language of the United Nations.

65. An alternative that would be more limited for search and retrieval functions would be to allow the submission of summary documents in a common language. These would synthesize and refer to original documents provided as annexes or links. More limited again, but with the lowest resource implications, would be to provide only short abstracts and metadata in a common language with exhaustive documents provided in the original language of the submitting country.

66. During the early pilot phase of the BCH, development took place in English, with consideration in the design that a fully operational system would need to function in six languages. The BCH currently requires all information to be submitted using the common formats that are available in the six United Nations languages. These common formats often require some level of synthesis of information into one of the United Nations languages (e.g. a brief description of the objective and scope of a legal document) as well as the use of comprehensive controlled vocabulary to describe the document (e.g. a list of subject areas a legal document covers) but provide links to the document in its original language (either by link to a website, or by uploaded document). Parties and other Governments are encouraged to provide courtesy translations of information provided into one or more languages that are commonly used internationally, in order to minimize the burden of translation on users of the system.

Metadata

67. Metadata (i.e. information about the data, such as the owner and description of content) will be required as part of the ABS Clearing-House to inventory what information is available in the system and where it is located. Automatic analysis of the information submitted through the database would typically allow some metadata to be created automatically (for example: dates of submission; identity of submitter, keyword indexing). However, the content provider would also be expected to supply additional metadata that describes the information (for example, by selecting certain fields in the submission to indicate its subject matter).

68. In order to facilitate entry into the BCH database, documents are requested to be submitted in electronic format as far as practicable, and metadata is provided through the use of controlled vocabularies. However, the enormous differences in computer technology as well as the different

organizations and regulatory frameworks that exist among countries suggest that a flexible system accessible to all users will need to be supported for the ABS Clearing-House, for example accepting documents via non-electronic means.

Controlled vocabularies

69. As mentioned above, the BCH also makes use of a controlled vocabulary for keyword indexing of information in a number of different languages. This is essentially a multi-lingual thesaurus of pre-defined words and synonyms used in the context of the Protocol, used to search and register information with the database. Although simple keyword searches are easy to implement and carry out, problems arise in retrieving the full range of results from the incorporation of information in various languages, the use of synonyms and inconsistent terminology. In the absence of a standard vocabulary it would be very difficult to compile meaningful datasets and information products, let alone exchange them in an efficient and harmonized manner.

70. The use of controlled vocabularies allow for more complete results than text searching as they are independent of the language of the text and changes in terminology. However, their use requires a complex structure of classifications. Such a vocabulary could be provided in the ABS Clearing-House in all six official United Nations languages, and also offer the opportunity for other Governments and agencies to undertake the translation of the thesaurus into additional languages. Establishing a controlled vocabulary for the ABS Clearing-House will require the careful selection of preferred terms, variants and hierarchies to ensure consistency and usability in multiple languages.

Constraints on reporting data

71. At least in the early stages, it is probable that only a limited number of Parties will have the necessary data already available (e.g. relevant laws and regulations in place), and also in a useable format (e.g. aligned with the common formats that will be required for reporting information). It is therefore likely that the resources and effort expended by Parties to collect and post data will be proportionally greater than was the case prior to meeting their obligations under the Protocol. Minimizing the impact and cost to furnish this information to the ABS Clearing-House will be an important consideration in determining its final design.

72. Although the Biosafety Clearing-House is fully operational, one of its identified weaknesses is that in certain areas there is still only very limited information available. In some cases this information is not available even at national level (and the credibility of an international clearing-house mechanism is inextricably intertwined with the credibility of the national systems that provide it with information). A 2007 survey of BCH users²⁹ identified obstacles that hinder submission of information to the central portal that should be taken into consideration when designing the ABS Clearing-House.

73. One of the difficulties mentioned in submitting information to the BCH was the need to submit information in one of the six United Nations languages, since often documents were not available in one of these languages. This issue was recently addressed at a technical level by providing the possibility to enter country data in two languages – in one of the six United Nations official languages and another of country's choice. However, countries are still encouraged to provide courtesy translations where possible.

74. A lack of a common understanding on the definition and scope of some fields of information required was also identified as a possible constraint regarding submission of information, as well as a need for greater structure regarding the submission of information to the BCH, (e.g. by reducing where possible free text entries and substituting them with metadata or common vocabularies).

75. Another difficulty that has been identified with the BCH is that information can become out-dated if it is not regularly reviewed and updated by the responsible government authority.

²⁹ <http://www.cbd.int/doc/meetings/bs/mop-04/information/mop-04-inf-20-en.pdf>

76. To address these constraints, the CBD Secretariat has been requested to actively identify information that is missing and advise Parties accordingly, and where possible to differentiate between information that is missing because it is not available and information that is missing because it has not been reported.

B. Unique identifier

77. As noted above, internationally recognized certificates of compliance must contain a “unique identifier”. However, the format of such an identifier is not prescribed by the Nagoya Protocol. Despite being an element of the internationally agreed certificates of compliance, it will not be possible to report this information through the ABS Clearing-House until the structure and format of the unique identifier has been defined by the Parties to the Protocol. Without prejudice to the process that will develop such an identifier, it may therefore be useful to review how unique identifiers are used in other sectors.

ISBNs

78. A commonly used worldwide unique identifier is the International Standard Book Number (ISBN), a 13-digit number that uniquely identifies books and book-like products published internationally. Its purpose is to establish and identify one title or edition of a title from one specific publisher and is unique to that edition.

79. An ISBN has four parts:

- (a) A group or country identifier which identifies a national or geographic grouping of publishers;
- (b) A publisher identifier which identifies a particular publisher within a group;
- (c) A title identifier which identifies a particular title or edition of a title; and
- (d) A check digit – the single digit at the end of the ISBN which validates the ISBN.

80. There are over 160 ISBN Agencies worldwide. Each ISBN Agency is appointed as the exclusive agent responsible for assigning ISBNs to publishers residing in their country or geographic territory. There is a service fee to process all ISBN applications.

UIDs for genetically modified organisms

81. The Working Group on Harmonisation of Regulatory Oversight in Biotechnology of the Organisation for Economic Co-operation and Development (OECD) has developed a unique identifier for genetically modified crops.³⁰ Its purpose is to access information in OECD’s database and interoperable systems (including the Biosafety Clearing-House) for products of modern biotechnology that have been approved for commercial application. It is a simple alphanumeric code that is based on the “transformation event”.³¹

82. This unique identifier is composed of three elements separated by dashes (-). The total length is 9 digits, the last of which is a verification digit:

- (a) 2 or 3 alphanumerical digits to designate the applicant;
- (b) 5 or 6 alphanumerical digits to designate the transformation event; and
- (c) One numerical digit as a verification tool.

83. Because each applicant has their own internal mechanism to avoid applying the same designation of the transformation event to different products, applicant information is incorporated into the unique

³⁰ Series on Harmonization of Regulatory Oversight in Biotechnology, No. 23: OECD Guidance for the designation of a unique identifier for transgenic plants (ENV/JM/MONO(2002)7).

³¹ A transformation event refers to the successful integration of a transgene into a cell.

identifier. This allows each applicant to generate the unique identifier for its own product, while at the same time ensuring its uniqueness from those generated by other applicants. Furthermore, this provides applicants with the flexibility to generate the unique identifier themselves, at the time they believe appropriate or necessary (at the latest, at the time for the first commercial approval). It is then sent to the OECD for inclusion in its database.

Barcode of Life

84. “DNA barcoding” is another way to identify species. Barcoding uses a very short genetic sequence from a standard part of the genome the way a supermarket scanner distinguishes products using the black stripes of the Universal Product Code (UPC).³²

85. As a research initiative, DNA barcoding has some of the characteristics of large, coordinated, “top-down” projects like the Human Genome Project, and some characteristics of taxonomic research, which traditionally consists of individualistic “bottom-up” projects. The largest consortia involved in the DNA barcoding initiative are iBOL, the International Barcode of Life Project;³³ CBOL, the Consortium for the Barcode of Life;³⁴ and ECBOL, the European Consortium for the Barcode of Life.³⁵

86. One of the most important components of the Barcode of Life³⁶ Initiative is the construction of a public reference library of species identifiers that could be used to assign unknown specimens to known species. There are currently two main barcode databases that fill this role, the International Nucleotide Sequence Database Collaborative³⁷ and the Barcode of Life Database³⁸ (BOLD).

Catalogue of Life

87. The correct identification of the species involved in any collection of genetic resources will be an important element of the unique identifier. An initial standard reference to the accepted names of species linked to their synonyms will form an important basis for the utility of an internationally recognized certificate of compliance. A primary reference tool in this regard could be the Catalogue of Life.³⁹ This is used by the Global Biodiversity Information Facility and the Encyclopedia of Life as their principal taxonomic database. The 3 January 2011 edition of the Catalogue of Life contains 1,333,403 species and is made up of 95 taxonomic databases.

C. ABS Measures Database

88. The Secretariat of the Convention already maintains a database on access and benefit-sharing measures, which includes measures taken by Parties in order to implement the access and benefit-sharing provisions of the Convention.⁴⁰ The database covers a broad range of ABS measures including national, sub-national and regional strategies, policies, legislation or regulations. Moreover, for each measure the database provides an overview of its main ABS elements.

³² The UPC encodes 12 decimal digits, each represented by a seven-bit sequence. It has only numerals, with no letters or other characters.

³³ Organized by the Biodiversity Institute of Ontario at the University of Guelph with support from Genome Canada, <http://ibolproject.org/>

³⁴ Based at the Smithsonian Institution's National Museum of Natural History in Washington, DC, <http://www.barcodeoflife.org/content/about/what-cbol/>

³⁵ Part of the research infrastructure efforts of EDIT, the European Distributed Institute of Taxonomy, <http://www.ecbol.org/>

³⁶ <http://www.barcodeoflife.org/>

³⁷ A partnership among [GenBank](http://www.ncbi.nlm.nih.gov/genbank/) in the U.S., the Nucleotide Sequence Database of the [European Molecular Biology Lab](http://www.ebi.ac.uk/EMBL/) in Europe, and the DNA Data Bank of Japan, <http://www.insdc.org/>

³⁸ <http://www.barcodeoflife.org/>

³⁹ <http://www.catalogueoflife.org/info/about>

⁴⁰ <http://www.cbd.int/abs/measures/>

89. The main ABS elements presented in this database include the ABS national focal point, competent national authority, scope, PIC procedures, MATs including benefit-sharing, compliance mechanisms, traditional knowledge associated to genetic resources and other information. As of March 2011, this database incorporates records from six regions and 54 countries.

90. It must be noted that the information in the ABS Measures Database has not been submitted in accordance with the requirements of the Nagoya Protocol and therefore may or may not meet the standards required therein (e.g. it may not be in an appropriate format or language, and may need to be validated by the National Focal Point to ensure it is still up-to-date). However, it is nonetheless a valuable resource that could be used to populate the ABS Clearing-House in its early stages. It may therefore be possible to design the ABS Clearing-House to include this information by clearly differentiating it from information that has been officially submitted in accordance with Protocol requirements, particularly with regard to information on national focal points, competent national authorities, and legislative, administrative and policy measure on ABS.

V. PRELIMINARY ASSESSMENT OF PARTIES' AND INDIGENOUS AND LOCAL COMMUNITIES' NEEDS

91. This section undertakes a preliminary assessment of the primary audience of the ABS Clearing-House, and key capacity-building needs for developing country Parties and countries with economies in transition as well as holders of traditional knowledge.

A. Primary audience

92. All levels of government, indigenous and local communities, the private sector, non-governmental organizations, and the scientific and academic research community will be important users of the ABS Clearing-House, and it is expected that they will use the system to retrieve information for inquiry, analysis and decision-making purposes.

93. For applicants seeking access to genetic resources, the ABS Clearing-House will need to provide access to information on procedures for obtaining prior informed consent and establishing mutually agreed terms.

94. For applicants seeking access to traditional knowledge associated with genetic resources, the ABS Clearing-House will need to provide, where possible, access to information on procedures for obtaining prior informed consent or approval and involvement, as appropriate, of indigenous and local communities and establishing mutually agreed terms.

95. Thus, a priority for including information in the ABS Clearing-House should be to make available information on how to contact decision-makers including competent national authorities, relevant indigenous and local communities, and relevant stakeholders; as well as access to relevant legislative, administrative and policy measures

96. In addition, a potentially wide range of users and possible checkpoints may consider the application of the internationally recognized certificates of compliance as a resource for monitoring and tracking of compliance. These may include:

- (a) Countries managing the movement of genetic resources across their borders;
- (b) Intellectual property institutions;
- (c) Public authorities funding research;
- (d) Taxonomic collections;
- (e) International depository authorities holding deposit of specimens or samples of organisms as required by the Budapest Treaty 1977;
- (f) Peer reviewed journals;

- (g) Universities, including when setting research approval standards;
- (h) International research collaborations;
- (i) United Nations entities supporting research or publication;
- (j) Countries considering product registration;
- (k) Government assessment of new product safety and utility;
- (l) Professional bodies setting standards of professional conduct; and
- (m) Companies and lawyers undertaking private, commercial due diligence.

B. Special needs of developing country Parties and countries with economies in transition

97. Capacity-building and financial requirements of developing countries will need to be analyzed and monitored on a continuing basis, in particular the least developed and small island developing States among them, and countries with economies in transition, to enable their active participation in the pilot phase of the ABS Clearing-House.

98. By way of comparison, significant efforts aimed at capacity-building for the BCH have been implemented since its establishment, particularly through two multi-million dollar projects run by the Global Environment Facility and the United Nations Environment Programme. These projects have produced peer-reviewed training packages, and a roster of regional advisors that have trained over 1500 people in 120 countries. The CBD Secretariat has also developed and maintained a variety of capacity-building tools specifically for the BCH that range from online help functions and a training site, to out-of-the-box software solutions for establishing national biosafety websites.

99. However, experience with other international policy data exchange networks including the Biosafety Clearing-House and the clearing-house mechanism of the Convention has also shown that despite several years of operation and ongoing capacity-building efforts, they cannot yet be considered universal and symmetrical networks of partners. There are a number of key issues to be resolved before this ideal state is reached.

100. Assuming a model similar to that used by the Biosafety Clearing-House will be adopted for the pilot phase of the ABS Clearing-House, capacity-building programmes will need to particularly take into account the need to:

- (a) Improve capacity to collect and manage data at the national level (including the need for Parties to be able to provide summary information in the common formats for reporting information in an official language of the United Nations to enable registration of such information with the ABS Clearing-House);
- (b) Strengthen core human resources at the national level; and
- (c) Establish appropriate infrastructure to share information at national, regional and international levels.

C. Traditional knowledge holders

101. Particular attention will need to be given to the capacity-building needs of indigenous and local knowledge holders.

102. On a practical level, before being able to interact with the ABS Clearing-House, indigenous and local communities are likely to need to identify the rightful holders of their traditional knowledge associated with genetic resources within their communities, as well as identify indigenous competent authorities for access to traditional knowledge, and processes for free prior informed consent, as well as determine the relationship between their competent authorities and the National Competent Authorities.

VI. PRIORITIES FOR THE PILOT PHASE OF THE ABS CLEARING-HOUSE

103. This section reviews the priorities that could be taken into consideration in the development of the pilot phase of the ABS Clearing-House.

104. The ABS Clearing-House will be essential in ensuring that the Nagoya Protocol is fully functional. It will provide the basis to exchange key information that will facilitate access to genetic resources and ensure the sharing of benefits arising out of their utilization.

105. Its main characteristics can be envisioned to:

- (a) Allow validated data to be submitted to the system;
- (b) Store and/or provide access to this data;
- (c) Present the data so that it can be easily found; and
- (d) Protect the data submitted to the system.

106. As noted above, guidance from the Conference of the Parties has emphasized that key characteristics of the Convention's clearing-house mechanism under which the ABS Clearing-House has been established include that it should be needs-driven and decentralized in nature, and provide access to metadata.

A. *Phased development*

107. To ensure that the development of the ABS Clearing-House is needs-driven, it could be implemented in a phased manner, building up its functions and activities in response to clear and identified demand, incorporating ongoing feedback from users, and in line with available resources.

108. The objectives of a pilot phase could include building experience and providing feedback on the development of a functional and accessible internet-based ABS Clearing-House; responding to the needs and demands of its users and preparing for later incorporation of valuable functions and activities; and identifying and addressing the capacity needs of Parties with respect to its use.

109. The development audience for the pilot phase should be clearly elaborated, for example that it be open to all governments (both Parties and non-Parties), accessible to all stakeholders (particularly holders of traditional knowledge), and incorporate mechanisms for both electronic and non-electronic information sharing.

B. Information to be incorporated on a priority basis

110. During the initial pilot phase, certain types of information will need to be identified as critical for the operation of the ABS Clearing-House. Information to be incorporated on a priority basis could include:

- (a) Legislative, administrative and policy measures on access and benefit-sharing;
- (b) Contact information and, where applicable, responsibilities of National Focal Points and Competent National Authorities, as well as relevant competent authorities of indigenous and local communities;
- (c) Permits or their equivalent; and
- (d) Links to existing national, regional and international databases.

111. Information contained in the CBD's existing ABS Measures Database could also be reviewed to determine what could be included as an initial dataset in a pilot phase of the ABS Clearing-House.

C. Submission of information

112. In order to allow easy submission of information to the ABS Clearing-House, Parties and governments could be invited to nominate ABS Clearing-House National Focal Points responsible for validating information submitted and communicating with the Secretariat on related technical issues.

113. These Focal Points could in turn be given the authority to designate a number of "Authorized Users" with the ability to provide information at national level, where needed.

D. Information management

114. Initially, a central database will need to be designed to store information, and a front-end user interface (web portal) for the ABS Clearing-House will be needed to assist the use and navigation of the website.

115. The design of the database and web portal will be dependent on the structure of the information to be contained within the databases. This will require agreement on the following information-management issues:

- (a) Common formats for reporting information (for at least those categories of information being included on a priority basis outlined above);
- (b) Information search mechanisms, including a controlled vocabulary for indexing information being reported; and
- (c) A mechanism for non-electronic information-sharing.

116. Bearing in mind that a pilot phase system should be amenable to rapid development, it is likely that development will initially occur in a single language, with consideration that the design of the pilot phase should enable the use of all six official United Nations languages at a later stage.

117. In developing the common formats for reporting information, the design of the ABS Clearing-House should allow for the possibility to enter country data in multiple languages – in one or more of the six United Nations official languages, and another of country's choice-. Where possible, definitions and the scope of the fields of information required to be reported should be clearly elaborated.

E. Networking with existing mechanisms

118. Facilitating complementarity with other information-exchange networks will be a valuable consideration during development of the ABS Clearing-House, not least to eliminate duplication of work, and to facilitate compliance with regulatory procedures. Development of the pilot phase of the ABS

Clearing-House would therefore benefit from close cooperation with relevant international organizations to maximize use of existing experience and expertise.

119. The development of the ABS Clearing-House should also support networking between national, regional, subregional and international centres with relevant expertise, as well as indigenous and local communities' organizations, non-governmental organizations and the private sector, to maximize use of existing experience and to minimize any duplication of work.

120. Relevant organizations willing to offer their cooperation as active partners in the operation of the ABS Clearing-House should be advised of the minimum standards for sharing information, and any information-sharing guidelines needed to assist them in their collaboration. Draft criteria and priorities to identify and establish cooperative arrangements with appropriate organizations may therefore be required.

121. During the pilot phase, facilitating networking with existing mechanisms is likely to involve:

- (a) Identifying opportunities to partner with existing national, regional and international information-exchange systems;
- (b) Preparing criteria to establish cooperative arrangements with partner organizations; and
- (c) Determining mechanisms to assist existing systems to conform to ABS Clearing-House reporting requirements.

F. Capacity-building

122. As discussed above, capacity-building and financial requirements of key stakeholders will need to be analyzed and monitored on a continuing basis. To ensure the widest possible access to the ABS Clearing-House, its development should be guided by the principles of inclusiveness, transparency and equity.

123. As an initial contribution to determine Parties' capacity-building needs, a survey of user needs could be carried out, or regional information-gathering meetings convened, depending on the availability of resources.

124. In addition, with the view to support the implementation of the Protocol, information related to, for example, access to model contractual clauses; methods and tools developed to monitor genetic resources; and codes of conduct and best practices could also contribute to building capacity. Depending on the volume of such information, these could initially be incorporated in the ABS Clearing-House on an ad hoc basis to aid in faster access to existing resources, and later converted to full searchability through the use of common formats and controlled vocabularies.

125. Capacity-building activities during the pilot phase could therefore include:

- (a) An analysis of user needs, collated either through survey or regional capacity-building meetings; and
- (b) Relevant information supporting the implementation of the Protocol such as, model contractual clauses, methods and tools developed to monitor genetic resources, and codes of conduct and best practice could be included in the ABS Clearing-House on an *ad hoc* basis.

G. Reporting requirements

126. According to Article 14, paragraph 4, the decision on the modalities of operation of the ABS Clearing-House that will be taken by the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol will need to include a mechanism to allow reporting on the activities of the Clearing-House.

127. Essentially, the role of the ABS Clearing-House will be to make its information accessible to all users; facilitate the process of both integrating and summarizing the information to the extent desired by decision makers and the public; sift through this information to find information specifically requested by

decision-makers and facilitate getting the information to them; and ensure its presentation is clear and understandable.

128. The reporting mechanism should therefore consider ways to characterize the operation of the ABS Clearing-House with respect to elements such as transparency, accessibility, objectivity and reliability, as well as quality, comprehensiveness and rapid reporting of results.

129. Reporting requirements during the pilot phase may include information on:

- (a) The number and regional distribution of records made available through the ABS Clearing-House;
- (b) The number of internationally recognized certificates of compliance issued;
- (c) The number of visitors accessing the ABS Clearing-House to retrieve information;
- (d) Availability of information in six United Nations languages;
- (e) Reports of partnership arrangements; and
- (f) User surveys or other feedback on the operation of the ABS Clearing-House.

VII. POSSIBLE ISSUES FOR CONSIDERATION BY THE EXPERT MEETING

130. This section identifies key questions that may be considered by the expert meeting in order to assist the Intergovernmental Committee in its consideration of modalities of operation of the ABS Clearing-House:

- (a) Confirmation that the ABS Clearing-House should be implemented in a phased manner.
- (b) What would be the objectives of the pilot phase?
- (c) Who is the development audience of the pilot phase?
- (d) What information types should be incorporated on a priority basis during the pilot phase?
- (e) How should information in the ABS Measures Database be reviewed and, if appropriate, incorporated into the pilot phase of the ABS Clearing-House?
- (f) How should Parties and stakeholders submit information to the ABS Clearing-House (for example, through nomination of ABS Clearing-House National Focal Points)?
- (g) How could information that is available but has not been identified as priority information be incorporated in the pilot phase?
- (h) What are the design considerations for the common formats for reporting information to the ABS Clearing-House, including definitions and the scope of information to be reported?
- (i) How should the controlled vocabulary for indexing information in the ABS Clearing-House be elaborated?
- (j) What elements could be included in a front-end web portal to access the ABS Clearing-House?
- (k) Is a mechanism for non-electronic information-sharing required?
- (l) What language(s) should be used in development of the pilot phase?
- (m) Which information-exchange partnerships should be investigated as a priority?
- (n) What mechanisms should be used to identify, analyse and support capacity-building needs of key stakeholders?

(o) What metrics could be considered for determining reporting requirements for the ABS Clearing-House?

(p) What is an appropriate timeline and sequence for activities?
