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MEETING OF THE INFORMAL ADVISORY
COMMITTEE TO THE CLEARING-HOUSE
MECHANISM OF THE CONVENTION ON
BIOLOGICAL DIVERSITY
Montreal, 13-14 June 2014

REPORT OF THE MEETING

INTRODUCTION

A. General information

1. The meeting of the Informal Advisory Committee to the Clearing-House Mechanism of the Convention on Biological Diversity (CHM-IAC) was held on 13-14 June 2014 at the Secretariat of the Convention on Biological Diversity (CBD) in Montreal, Canada, prior to the fifth meeting of the Ad Hoc Working Group on Review of Implementation of the Convention (WGRI 5). The documentation of the meeting, including presentations, is available online at www.cbd.int/doc/?meeting=CHM-IAC-2014-01. The list of participants is available in annex IV below.

B. Background

2. The Conference of the Parties, in decision X/15, adopted the mission, goals and objectives of the clearing-house mechanism for the period 2011-2020, and in paragraph 11 of decision XI/2, welcomed the work programme for the clearing-house mechanism in support of implementation of the Strategic Plan for Biodiversity 2011-2020 (UNEP/CBD/COP/11/31). The Executive Secretary has prepared a progress report on the clearing-house mechanism (UNEP/CBD/WGRI/5/3/Add.2). The report summarizes the progress made since the eleventh meeting of the Conference of the Parties and the next steps to be undertaken.

C. Expected outcome

3. The purpose of the meeting was to review the progress made in the implementation of the work programme for the clearing-house mechanism and to make recommendations to the Executive Secretary for further implementation of this work programme. The meeting was also an opportunity to brainstorm and share relevant experiences on matters related to the clearing-house mechanism.

ITEM 1. OPENING OF THE MEETING

4. The meeting started at 9.30 a.m. on 13 June 2014. Mr. Ravi Sharma, Head of the Technical Support for Implementation (TSI) unit of the CBD Secretariat, opened the meeting on behalf of the Executive Secretary.

5. After welcoming all participants, including those attending remotely through videoconferencing, Mr. Sharma congratulated the members of the Committee for their nominations and thanked them for their willingness to contribute to the improvement of the clearing-house mechanism. He also thanked Canada for providing support to convene this meeting, Japan for its Japan Biodiversity Fund which enabled the organization of several capacity-building workshops, and Belgium for its ongoing partnership with many developing countries to strengthen their national clearing-house mechanisms. He stressed the importance of the Committee's role to advise the Executive Secretary on the further development of the clearing-house mechanism. He referred to the latest major decisions related to the clearing-house mechanism in the context of the Strategic Plan for Biodiversity 2011-2020, and highlighted the relationship between knowledge management and the clearing-house mechanism. Finally, he wished the participants a fruitful meeting while encouraging them to continue to interact with each other on an ongoing basis.

6. The participants then introduced themselves through a tour de table. The Executive Secretary briefly joined at the beginning of the afternoon session to welcome the Committee members and exchange views with them.

ITEM 2. ORGANIZATIONAL MATTERS

2.1. Election of the Chair

7. The members of the Committee were invited to elect a Chair or Co-Chairs on the basis of proposals from the floor. After brief deliberations the Committee decided to re-elect the former Chair, Mr. Han de Koeijer (Belgium).

2.2. Adoption of the agenda

8. The Committee adopted the provisional agenda prepared by the Executive Secretary (UNEP/CBD/CHM/IAC/2014/1/1) with the understanding that technical and scientific cooperation would be discussed under item 7.

2.3. Organization of work

9. The Committee adopted the proposed organization of work contained in annex I of UNEP/CBD/CHM/IAC/2014/1/1/Add.1.

ITEM 3. BACKGROUND AND OBJECTIVES

10. Agenda item 3 was introduced by Mr. Olivier de Munck (CBD Secretariat) who made a presentation that provided some general background to the Committee and present the objectives of this meeting.¹ The presentation briefly described the clearing-house mechanism and its current role as a support

¹ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item1-9-en.pdf>.

mechanism contributing to the implementation of the Strategic Plan for Biodiversity 2011-2020. A reference was made to decision X/15 which defined the mission, goals and objectives of the clearing-house mechanism for the period 2011-2020. The presentation also summarized the mandate of the CHM-IAC as defined by decision VII/23.

11. The presentation provided further details on the objectives of the meeting. It was clarified that the expected outcomes were recommendations to the Executive Secretary on how to improve the clearing-house mechanism and its impact. These recommendations should be prepared by reviewing the progress made so far and by sharing views and experiences in order to identify recommended actions for consideration by the Executive Secretary.

ITEM 4. GOAL 1: CENTRAL CLEARING-HOUSE MECHANISM

4.1. Information exchange services

12. The initial presentation on agenda item 4 was made by Mr. Olivier de Munck (CBD Secretariat) to describe the progress made in the development of the central clearing-house mechanism since the last Conference of the Parties,² as reported in document UNEP/CBD/WGRI/5/3/Add.2. Ms. Sandra Meehan (CBD Secretariat) explained the process followed for website translation and provided an update of the status of this translation.

13. Ms. Beatriz Gomez-Castro (CBD Secretariat) made a presentation on the current status of the pilot phase of the Access and Benefit-sharing Clearing-House (ABS-CH).

14. A series of questions followed. Some questions were related to the timeline for finalizing the new online services and for making the application programming interface (API) publicly available. Mr. Frédéric Vogel (CBD Secretariat) replied that the IT team was currently fully engaged with the list of priority activities defined by senior management and that the timeline would depend on the prioritization of requests. Several participants stressed the importance of having the API in place to enable interested Parties to start working on the interconnection between the central and national clearing-house mechanisms.

15. Other questions were related to the submission of information and its validation either by Parties (for national records) or the Secretariat (for reference records). A point was raised about the fact that some reference records may also contain national information which should normally be validated by Parties. After some discussion, it was suggested to further investigate this issue in the context of the review of common formats.

4.2. Common formats and metadata

16. A presentation was made by Ms. Kata Koppel (CBD Secretariat) to introduce the common formats and metadata currently used in the new information services of the central clearing-house mechanism, as described in document UNEP/CBD/CHM/IAC/2014/1/INF/1.³ She indicated that these formats were still under development and that feedback for improving them was welcome.

17. Some suggestions were provided after the presentation. Among other things, it was recommended to streamline the number of fields for additional information, to include an attribute indicating the

² See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item4-en.pdf>.

³ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/information/chmiac-2014-01-inf-01-en.pdf>.

language(s) in which an online resource was available, to use the Dublin Core for describing documents, to consider national biodiversity strategies and action plans (NBSAPs) and national reports as a form of documents, to add location information, and to provide a visual representation of relationships between various formats.

18. Given the number of formats to review and the limited time available within this meeting, the Committee decided to establish a working group to further review and provide feedback on the current common formats and metadata elements. The existing proposal could be reviewed in the light of existing standards, vocabularies, terms, and even ontologies. Also, the use of “Persistent Unique Identifiers”, such as “DOI”, should be explored for documents and other resources expected to flow through the CHM network.

4.3. Strategic discussion and priorities

19. A general discussion followed to allow committee members to express their views on how to achieve goal 1 of the clearing-house mechanism. The main discussion points are summarized below.

20. The CBD Secretariat should engage Parties more frequently and closely to align the development of the information services of the central CHM with Parties’ needs and expectations. In particular, the CHM-IAC should be involved in the planning and testing of these information services.

21. Some thought should be given to the integration of the various online platforms managed by the CBD Secretariat (CBD website, clearing-houses, EBSA,⁴ LifeWeb, NBSAP Forum) in order to provide a unified environment to users. It was recommended that a web strategy for the development and maintenance of the central clearing-house mechanism be prepared along those lines, preferably in consultation with the CHM-IAC.

22. The central CHM should continue to build its online reporting system, but not just as a data entry system. The system should also try to collect information from external sources and aggregate everything to visualize progress towards Aichi Biodiversity Targets through indicators. This may lead to a definition of a global information system architecture that may have implications for how to build the central and national CHM websites. Collaboration with the Biodiversity Indicators Partnership (BIP) should also be explored with a view to pursuing the standardization of indicators.

23. More effort is needed to avoid or reduce duplication, especially before developing systems that require data entry. Users should not have to submit the same information in several places. Systems should be designed to share the same repository or to automatically exchange data updates through an interoperability mechanism.

24. Some members reiterated the urgent need to have access to the new application programming interface (API) being developed by the CBD Secretariat. Parties cannot start working on interoperability with the central CHM until this API is released. The public release of the first version of the API should be a priority to allow Parties to test it. Future enhancements to the API should be made in collaboration with interested Parties.

25. Whenever possible, the source code of software and tools developed under the responsibility of the CBD Secretariat should be free and open-source and kept on an open-source repository (e.g. GitHub,

⁴ On EBSAs, ecologically or biologically significant marine areas.

Google Code or SourceForge) so that others could potentially benefit from this work when developing their own applications. The CBD Secretariat has adopted this practice and should continue to do so.

26. To the extent possible, web developments should be based on available standards, tools and platforms. This practice increases productivity and compatibility while reducing development time and maintenance. For instance, some open-source content management systems (CMS) could be customized and made available to act as a “starting kit” to establish a national CHM. Another option is to offer an online environment to countries that have no infrastructure or limited capacity, so that they can start building up their national CHMs, similarly to the Scratchpads initiative.⁵

27. Some Parties are interested in the CBD news dissemination services. These services should be maintained and be compatible with relevant open standards such as RSS and Atom.

ITEM 5. GOAL 2: NATIONAL CLEARING-HOUSE MECHANISMS

5.1. *National experiences*

28. The second day of the meeting commenced with the consideration of agenda item 5.1. A presentation was given by Mr. Olivier de Munck (CBD Secretariat) on national clearing-house mechanisms.⁶ This presentation provided general background on CHM goal 2, which states that national clearing-house mechanisms should provide effective information services to facilitate the implementation of national biodiversity strategies and action plans (NBSAPs). The presentation also included details on how capacity-building was provided to countries through regional workshops.

29. During this session, the following participants shared their experiences and recent progress on their national clearing-house mechanisms:

(a) Mr. Charles Shulman (Canada) made an online presentation on the national CHM of Canada (www.biodivcanada.ca);

(b) Mr. Hesiquio Benitez (Mexico) made an online presentation on the national CHM of Mexico (<http://biodiversidad.gob.mx>);

(c) Mr. Benoît Nzigidahera (Burundi) made an online presentation on the national CHM of Burundi (<http://bi.chm-cbd.net>);

(d) Mr. Jean-Patrick Leduc (France) made an online presentation on the national CHM of France (<http://biodiv.mnhn.fr>);⁷

(e) Mr. Han de Koeijer (Belgium) made an online presentation on the national CHM of Belgium (www.biodiv.be);

(f) Ms. Suzanne Davis (Jamaica) made an online presentation on the national CHM of Jamaica (www.jamaicachm.org.jm); she also provided an update of the status of development of national CHMs in several Caribbean countries, namely Belize, Grenada, Saint Lucia, and Trinidad and Tobago;⁸

(g) Mr. Naeem Ashraf Raja (Pakistan) presented the national strategy of Pakistan for its national CHM;⁹

⁵ See <http://scratchpads.eu>.

⁶ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item3-6-side-event-en.pdf>.

⁷ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item5-fr-fr.pdf>.

⁸ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item5-caribbean-en.pdf>.

30. After each presentation, the presenters answered questions to provide further details and clarifications.

5.2. Support to NBSAP implementation

31. In addition to the presentation by the CBD Secretariat, Mr. Han de Koeijer (Belgium) made a presentation on the Target Cross-linking Tool (TCT) available at <http://nbsap.biodiv.be>. This tool enables countries to enter their national targets online, and to link them to Aichi Biodiversity Targets and indicators as well as to European targets and SEBI (Streamlining European Biodiversity Indicators) indicators. This tool facilitates the planning and reporting at the national level and can be integrated in national clearing-house mechanisms. Mr. de Koeijer also explained that he had been in contact with the CBD Secretariat to discuss options for interconnecting the TCT with the system developed by the CBD Secretariat but that this issue was still pending.

32. A discussion followed the presentations. Comments and suggestions were made regarding support to the implementation of national biodiversity strategies and action plans. Strategic elements arising from the discussion are available in section 5.4 below.

5.3. Capacity-building for national clearing-house mechanisms

33. The CBD Secretariat's presentation on national CHMs summarized how capacity-building workshops were organized by the CBD Secretariat thanks to the financial support of Japan.

34. Mr. Han de Koeijer (Belgium) made a presentation on the partnership that Belgium has established with several developing countries to support the development of their national clearing-house mechanism. He explained that this partnership started in 2003 and evolved through 5-year phases, with the latest one covering the period 2014-2018. He said that the partnership was demand-driven and required a formal request from an eligible country. South-South cooperation between developing countries was also encouraged. National CHMs were established using the European CHM Portal Toolkit (PTK), provided and maintained by the European Environmental Agency (EEA).

35. During the discussion that followed the presentation, comments and suggestions were made on how to improve capacity-building to further develop national clearing-house mechanisms. Strategic elements arising from the discussion have been included in section 5.4 below.

5.4. Strategic discussion and priorities

36. During general discussion, committee members expressed their views and recommendations on how to achieve goal 2 of the clearing-house mechanism. The main discussion points are summarized below.

37. One of the functions of a national CHM is to share information on what the country is doing to implement the Convention at the national level.

38. A simple way to explain the purpose of a national CHM is to say that it should be one of the top results of a Google search, in a national language, for "biodiversity" followed by the country name. Search engine optimization (SEO) techniques can be used to increase the ranking. One suggestion is to use a name

⁹ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item5-pk-strategy-en.pdf>.

that is widely understood (e.g. “Biodiversity Canada”), especially in languages where the term “clearing-house” has no equivalent.¹⁰

39. The current percentage of countries having a national CHM is low (around 50% of Parties). Efforts should be made to increase this percentage in order to have as many CHMs as possible. Parties, partners and other donors should be invited to continue to provide resources to establish and maintain effective national CHMs. The CBD Secretariat should act as a “help desk” providing guidance on how to development a national CHM. The CHM email address (chm@cbd.int) is available for this purpose.

40. It would be useful to have a package available to Parties to help them establish and develop their national CHM. This package could recommend a process, tools and templates. The European CHM Portal Toolkit would be part of that package.¹¹

41. Awards could be created to reward the best (top 5) national CHMs based on an agreed process and a set of criteria. There could be an award ceremony at the margins of a meeting of the Conference of the Parties (COP), during which Executive Secretary would congratulate the winners. This would increase the visibility of national clearing-house mechanisms, promote champions, and give credit to those who work at the national level. Further details are available in annex III.

42. It is important to keep information on the status of national CHMs: How many countries have one? How many are regularly updated? How are they used? How are they developed? Such information is important not only for reporting purposes, but also to share national experiences and help tailor guidance for further development and improvements of these national CHMs.

43. Such information should be provided by Parties because it would be unrealistic for the Secretariat to monitor all national CHMs, and also because some relevant information cannot be obtained externally (e.g. information on infrastructure and content management).

44. In this context, web technology can facilitate the compilation of information needed to monitor national CHMs. An online system to track the implementation of national CHMs, such as the one proposed in annex III of WGRI/5/3/Add.2, is therefore recommended to address the points raised in the two preceding paragraphs. Indicators should also be identified to measure status and impacts.

45. To the extent possible, national CHMs should use common metadata. Information can then be tagged consistently across the CHM network in order to facilitate global searching.

ITEM 6. GOAL 3: CLEARING-HOUSE MECHANISM NETWORK

6.1. Partner contributions

46. This sub-item included two presentations to show how some partners had been contributing to the expansion of the clearing-house mechanism network and services.

47. The first presentation was made remotely by Mr. Jerry Harrison of the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). He summarized the contribution of UNEP-WCMC to the clearing-house mechanism through a series of processes and

¹⁰ For instance, a meaningful translation of “clearing-house” in French could be “Centre d’échange d’informations”.

¹¹ See <http://www.cbd.int/chm/guidance> for existing guidance to develop national CHMs.

initiatives, namely the Biodiversity Indicators Partnership, the NBSAP Forum, online reporting tools for multilateral environmental agreements (MEAs) and the national reporting toolkit for countries.¹²

48. Mr. Marcos Silva (CITES) made a presentation on the MEA Information and Knowledge Management (MEA-IKM) initiative, which brings together 18 MEA Secretariats to jointly develop harmonized and interoperable information systems for the benefit of Parties and the environmental community.¹³ As an example, InforMEA, the first project of this initiative, harvests key information from each participating MEA (e.g. COP decisions, news, events, national focal points, national reports and implementation plans) and makes it centrally searchable on a single website (www.inforMEA.org).

49. After each presentation, the presenters answered questions to provide further details and clarifications. Strategic elements arising from the discussion have been included in section 6.2 below.

6.2. Strategic discussion and priorities

50. During the general discussion, committee members expressed their views and recommendations on how to achieve goal 3 of the clearing-house mechanism. The main discussion points are summarized below.

51. Some Partners could further contribute to CHM implementation through existing initiatives, services and tools (e.g. NBSAP Forum, MEA-IKM initiative, interoperability, GEMET Thesaurus, European Portal Toolkit) if the CBD Secretariat were more responsive to their requests for collaboration.

52. Establishing and maintaining interoperability with the MEA-IKM initiative, as agreed in the Internal Cooperation Agreement (ICA)¹⁴ with the United Nations Environment Programme (UNEP), should be a priority because it would make key information from the CBD and its protocols globally searchable on the MEA-wide InforMEA web portal, including NBSAPs and fifth national reports. This would benefit both the CBD and the environmental community, and it would also send a positive signal that the CBD Secretariat supports and contributes to partnership initiatives.

53. The CBD Secretariat should continue to work closely with the MEA-IKM initiative on terminology issues, particularly on matters related to the evolution of the General Multilingual Environmental Thesaurus (GEMET) developed by the European Environment Agency (EEA). Such collaboration could lead to increased metadata compatibility not only between MEAs but also within the whole CHM network, starting with national CHMs using the European Portal Toolkit.

54. Collaboration with intergovernmental processes such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) should be enhanced. CHM-IAC members who are also members of IPBES task forces could facilitate such collaboration on issues of common interest with a view to identifying synergies, reducing potential duplication, promoting relevant existing services, and increasing information exchange including through interoperability and the use of common metadata and standards.

55. A general recommendation to the CBD Secretariat and its partners is to systematically make their data open, by providing an application programming interface (API). This API should have two main functions: (i) a query function to retrieve the data based on a series of criteria, and (ii) an update function to make contributions and keep them up-to-date. Each API should be provided with simple examples and

¹² See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item6-unesp-wcmc-en.pdf>.

¹³ See <http://www.cbd.int/doc/meetings/chm/chmiac-2014-01/other/chmiac-2014-01-item6-mea-ikm-en.pdf>.

¹⁴ See <http://www.cbd.int/doc/agreements/agmt-unesp-delc-informea-2014-03-13-ica-web-en.pdf>.

documentation to facilitate its use across the CHM network, and its source code should be shared on open-source repositories, as previously mentioned. In addition, the CBD Secretariat could consider signing the Bouchout Declaration for Open Biodiversity Knowledge Management and promote it through the Parties.¹⁵

56. The Inter-American Biodiversity Information Network (IABIN) was given as an example of a fruitful initiative in terms of regional networking and services. For instance, national databases on invasive alien species were developed with the support of Argentina and Brazil. However, this network could not be sustained when funding ran out. There may be opportunities for national clearing-house mechanisms involved in IABIN or similar initiatives to share in the benefits.

ITEM 7. OTHER MATTERS

57. Under this item, the Committee discussed matters related to technical and scientific cooperation as agreed when approving the agenda of the meeting.

58. Mr. Charles Besançon (CBD Secretariat) introduced this topic by presenting document UNEP/CBD/WGRI/5/3/Add.1, to be considered by the fifth meeting of the Ad Hoc Working Group on Review of Implementation of the Convention (WGRI 5). He explained that one of the objectives of the document was to propose an approach to technical and scientific cooperation which would be country-driven, aligned to NBSAPs, facilitated through human intervention and supported by information technology. This approach would include the following components which, to be effective, would require active interaction of experts through various means such as workshops or roundtables even if web-based platforms were in place:

(a) Identification and effective communication of Parties' needs of a technical and scientific nature relevant to the implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020;

(b) A mechanism to capture and elicit relevant best practices and expertise from relevant organizations, initiatives, tools and other guidance materials in an effective manner; and

(c) A means of matching Parties' needs with the appropriate scientific and technical expertise, and of facilitating such matches.

59. A discussion followed the presentation and the main points are summarized below.

60. Facilitating technical and scientific cooperation through matchmaking is in line with the mandate of the clearing-house mechanism, as envisaged by Article 18.3 of the Convention. As a matchmaking facility is also envisaged under IPBES, collaboration with this initiative is recommended to explore the possibility of joining efforts.

61. The clearing-house mechanism is more than a network of websites. Human networking is essential in order to connect experts and help them work together to achieve outcomes. The clearing-house mechanism should therefore facilitate communication within expert groups or communities of practices.

62. Existing regional workshops provide opportunities to connect people sharing common interests. Specific activities could be undertaken during these meetings to facilitate cooperation.

¹⁵ See <http://www.bouchoutdeclaration.org>.

63. It would be helpful to establish and maintain an online database of resource persons/experts on certain topics. Collaboration with the NBSAP Forum on this matter is recommended in order to avoid duplications of services and data repositories.

64. A help desk function could be considered to further contribute to the implementation of the Convention. Its purpose would be to respond to incoming requests on how to implement the Convention. Incoming requests would be forwarded to the appropriate expertise when needed. Questions and answers would be recorded with a view to building a list of frequently asked questions that could evolve into a knowledge base on implementation.

ITEM 8. CONCLUSIONS AND RECOMMENDATIONS

65. Further to the discussions, the Committee drafted recommendations for improving the implementation and impact of the clearing-house mechanism. The draft was circulated for comments and further inputs by Committee members, particularly those who could not attend the meeting in person. The Committee also discussed various means by which it would follow up.

66. The following annexes provide further details on the outcomes of the meeting:

- (a) Annex I contains a review of the activities under goal 1 of the clearing-house mechanism;
- (b) Annex II contains the recommendations from the Committee;
- (c) Annex III contains preliminary criteria for the selection of the best national clearing-house mechanisms.

ITEM 9. CLOSURE OF THE MEETING

67. The meeting was closed at 6 p.m. on Saturday, 14 June 2014.

Annex I

REVIEW OF ACTIVITIES UNDER GOAL 1 OF THE WORK PROGRAMME FOR THE CLEARING-HOUSE MECHANISM

The table below summarizes the status of implementation of activities under goal 1 of the work programme for the clearing-house mechanism in support of the implementation of the Strategic Plan for Biodiversity 2011-2020 (UNEP/CBD/COP/11/31). The first three columns match the content of annex I of the progress report on the clearing-house mechanism (UNEP/CBD/WGRI/5/3/Add.2). The last column, entitled “CHM-IAC review”, summarizes the review of the corresponding activity by the CHM-IAC.

Note: References to annexes and tables refer to document UNEP/CBD/WGRI/5/3/Add.2.

Table 1. Status of implementation of activities under goal 1 of the CHM work programme.

<i>Ref.</i>	<i>Programme element</i>	<i>Status</i>	<i>CHM-IAC review</i>
Goal 1:	<i>The central clearing-house mechanism provides effective global information services to facilitate the implementation of the Strategic Plan for Biodiversity 2011-2020.</i>		
Obj. 1.1.	<i>The Secretariat of the Convention on Biological Diversity has the capacity to sustain an effective central clearing-house mechanism.</i>		
1.1.1.	Maintain a list of priority activities to be undertaken on the central clearing-house mechanism, taking into account progress made, available capacity, and evolving needs to enable, inter alia, the Conference of Parties, at each of its meetings, to review progress and, as necessary, adjust the activities.	The list of priority activities is available in annex II.	The list in annex II of WGRI/5/3/Add.2 is very short. Some high-priority CHM activities should be added to this list.
1.1.2.	Establish processes to monitor the development and effectiveness of the central clearing-house mechanism.	An online system to track progress is proposed in annex III.	This system should be implemented, but other mechanisms should be in place to gather quantitative statistics based on indicators.
1.1.3.	Ensure that the Secretariat has the capacity to further develop and maintain the CBD website and other modern information services of the central clearing-house mechanism.	All IT expertise of the Secretariat has been pooled into a single team.	Has this single IT team increased the delivery of CHM services? So far, major deliverables are still pending.
1.1.4.	Ensure that the Secretariat has capacity to manage knowledge and information, including terminology and documentation management.	A Documentation Officer has been hired and the recruitment process for an assistant has been completed.	Very good.
1.1.5.	Identify, assess, and adopt appropriate publicly-available tools or services that increase the capacity and sustainability of the central clearing-house mechanism in a cost-effective manner.	Web technologies have been evolving rapidly and a series of options are being considered.	Details on these options would be appreciated to allow the CHM-IAC to provide some advice.

<i>Ref.</i>	<i>Programme element</i>	<i>Status</i>	<i>CHM-IAC review</i>
1.1.6.	Optimize the process of maintaining the CBD website in all United Nations languages by making sound use of modern translation technology.	Automated tools are being used to optimize web content translation. Further optimization may be possible by upgrading some of the existing tools.	This technology does not seem to be in place for the home page and other data-driven pages.
Obj. 1.2.	A high-quality CBD website is available in all United Nations languages.		
1.2.1.	Prepare a web content strategy for the CBD website in support of the Strategic Plan for Biodiversity 2011-2020 and keep it in line with decisions adopted by the Conference of the Parties.	Internal discussions have taken place and a functional review is ongoing. The current strategy is to focus on the development of information services without making major structural changes to the existing website.	A web strategy would be welcome, preferably as a component of a broader communication strategy. The CHM-IAC is willing to assist/participate in the process of developing such a strategy.
1.2.2.	Maintain and improve the CBD website and its related portals in terms of content, services, appearance, user-friendliness, usability and accessibility taking into account user feedback.	Done on an ongoing basis with available resources.	While the content of the website has been updated, some of its key services such as its search engine require IT maintenance.
1.2.3.	Make the CBD website available in all United Nations languages.	Progress in translation is summarized in Table 1.	Still work in progress. More should be done.
1.2.4.	Ensures that the CBD website evolves in accordance with its web content strategy.	For the time being, no major structural changes are being planned. Future evolution will depend on the strategic direction taken.	To review when the web strategy is available.
Obj. 1.3.	Effective information exchange services are fully operational.		
1.3.1.	Expand the knowledge base in a way that allows easy access and cross-references by continuously incorporating Convention-related information such as decisions, work programmes, targets, indicators, implementation activities, online sources, reference documents, case studies, best practices, training materials, organizations, experts, contacts, events, maps, multimedia resources, and other relevant items.	New information services have been developed. Information types have been defined to collect information on implementation. Technical implementation is ongoing.	The new information services are not finalized and seem to be separated from the existing CBD website.

<i>Ref.</i>	<i>Programme element</i>	<i>Status</i>	<i>CHM-IAC review</i>
1.3.2.	Integrate collaboration tools in a user workspace encouraging Parties, experts, practitioners, and other stakeholders to maintain contact, share ideas, and work together, while providing quick access to information directly related to each user's role and activities.	The new information services include a user account management component. This component is essential for establishing user-based collaboration services.	Existing CBD users have to create a new account which cannot be used on the existing CBD website. A unified account management system is needed, and the adoption of an authentication standard, such as OAuth (http://OAuth.net) should be considered.
1.3.3.	Implement the online submission system as the update mechanism of the knowledge base and the collaboration tools in order to enable Parties and all stakeholders to make contributions related to the Convention and its implementation.	The new information services include an online submission system enabling Parties and other authorized users to submit information.	The online submission system is still in demonstration mode. The CHM-IAC is willing to assist/give advice through a working group.
1.3.4.	Implement specialized information services in accordance with decisions adopted by the Conference of the Parties.	Several information services have been implemented, including the ABS-CH and the EBSA repository and information sharing mechanism.	Appreciated.
1.3.5.	Expose data held by the central clearing-house mechanism through modern interfaces based on open standards as a way to facilitate access to information about the Convention on Biological Diversity.	An application programming interface (API) is under development to expose CHM records. This API is based on the REST protocol.	Urgently needed as already asked for in earlier reports or individual requests by CHM-IAC members.
1.3.6.	Provide tools enabling national clearing-house mechanisms to automatically access and display relevant information from the central clearing-house mechanism.	The development of such a tool is planned. The tool will be based on the above-mentioned API.	Urgently needed as already asked for in earlier reports or individual requests by CHM-IAC members.
1.3.7.	Continue to develop and use information exchange services to make Convention-related information easily and widely accessible, in line with technological and social trends.	There is an increasing use of mobile devices. This is taken into account when developing new CHM information services.	Looking forward to it.

<i>Ref.</i>	<i>Programme element</i>	<i>Status</i>	<i>CHM-IAC review</i>
Obj. 1.4.	The Secretariat of the Convention on Biological Diversity facilitates the development of a network of experts and practitioners among Parties and partners.		
1.4.1.	Establish a user-friendly online networking platform for national focal points, experts, practitioners, and other relevant contacts to encourage participation.	The United Nations Development Programme (UNDP) has collaborated with the Secretariat to establish the NBSAP Forum website whose purpose is to connect experts and practitioners involved in the preparation and implementation of NBSAPs.	Users would benefit from an integration of the NBSAP Forum platform within the CBD infrastructure to avoid data duplication.
1.4.2.	Promote networking of Parties and partners by linking the central and national clearing-house mechanisms.	This activity will be carried out when the API is available.	Should start as soon as possible because Parties need time to work on this interconnection.
1.4.3.	Explore opportunities to facilitate scientific and technical cooperation for the implementation of the Convention.	Opportunities are being explored with interested Parties. One possibility under consideration is the use of LifeWeb as a platform to facilitate technical and scientific cooperation.	Looking forward to a concrete proposal that takes into account existing initiatives, including LifeWeb and IPBES.
Obj. 1.5.	Guidance is available for Parties and partners to exchange information through the clearing-house mechanism network.		
1.5.1.	Establish and publish specifications to exchange information through the clearing-house mechanism network, including interoperability protocols, common formats, controlled vocabularies, application programming interfaces, and other technical guidelines.	The new Application Programming Interface has not yet been officially released. Technical documentation will be provided in due course.	These API specifications are urgently needed to allow Parties to get familiar with them.
1.5.2.	Provide guidance to Parties and partners on how to exchange information through the clearing-house mechanism network, including on the data submission and validation processes.	The new CHM information services have not yet been finalized and launched. Guidance will be provided in due course.	Looking forward to it.

*Annex II***RECOMMENDATIONS**

This annex contains the recommendations arising from the meeting of the Informal Advisory Committee to the Clearing-House Mechanism (CHM-IAC) which took place on 13-14 June in Montreal, Canada. These recommendations are addressed to the Executive Secretary. **Recommendations in bold** should be considered **with a higher priority**, and recommendations which would require a decision by the Conference of the Parties are grouped in section D (“Possible elements for drafting future decisions”).

A. CENTRAL CLEARING-HOUSE MECHANISM*Strategic advice*

- A.1. **Involve the CHM-IAC in planning the development of CHM information services with a view to ensuring that they meet Parties’ needs and expectations.**
- A.2. Provide timelines for the deployment in production of the new CHM information services.
- A.3. Prepare a web strategy for the development and maintenance of the central CHM in consultation with the CHM-IAC with a view to increasing consistency between the three clearing-houses as well as with other platforms developed under the Convention.

Interoperability

- A.4. **Make publicly available a first version of the application programming interface (API) of the central CHM** in order to allow interested national CHMs and partners to start working on the interconnection with the central CHM (decision XI/2, paragraph 14 (a)).
- A.5. **Finalize the implementation of the interoperability with InforMEA to allow national reports and NBSAPs** to be globally searchable on the InforMEA website (decision XI/2, paragraph 14 (b)).

Online information services

- A.6. **Finalize the development of the new CHM services**, preferably in consultation with the CHM-IAC.

Technical advice

- A.7. Continue to make the source code of newly-developed tools available on open-source repositories (e.g. GitHub) and provide the necessary documentation to allow Parties and partners to reuse this code as needed.
- A.8. Adapt the common formats and metadata based on the advice to be provided by the CHM-IAC working group that will review them.
- A.9. Adopt and use open standards for exchanging information on biodiversity whenever possible.

B. NATIONAL CLEARING-HOUSE MECHANISMS*Information services*

- B.1. **Establish an online system to keep track of the implementation of national CHM**, as described in annex III of document UNEP/CBD/WGRI/5/3/Add.2 (Progress report on the CHM) and in section IV of document UNEP/CBD/CHM/IAC/2014/1/INF/1 (Common formats and metadata).

- B.2. **Collaborate with the European Environment Agency on the further development of the European CHM Portal Toolkit (PTK)** used by many national CHMs, particularly to make it interoperable with the central CHM.

Promotion of national CHMs

- B.3. **Establish an award for the best national CHMs at COP 12 based on the proposal in annex III** and, if Parties agree, announce a competition for COP 13.
- B.4. Prepare a promotional package to help Parties raise awareness on their national CHMs.
- B.5. Develop a sensitization workshop on the CHM and its role in NBSAP implementation for target groups of CHM users, using standardized templates and tools that can be customized for different national CHMs.
- B.6. Recommend the selection of a simple meaningful name for a national CHM, and discourage the prominent use of the CHM acronym. In French, “Centre d’échange d’informations sur la biodiversité” is recommended.

Support to NBSAP implementation

- B.7. Encourage the creation of national help desks to respond to requests on biodiversity and implementation of the CBD at the country level.
- B.8. Carry out an assessment of the contribution of the national CHM to the NBSAP revision or national report preparation processes in order to identify gaps and barriers.

Capacity-building

- B.9. Take steps to increase the number of national CHMs, including through the establishment of a help desk facility at the CBD Secretariat to support the development of national CHMs.
- B.10. Prepare a training module to assist Parties in building their national CHMs.

C. CLEARING-HOUSE MECHANISM NETWORK

Technical and scientific cooperation

- C.1. Support the establishment of a matchmaking facility in order to facilitate technical and scientific cooperation.
- C.2. Given that the CHM is more than a technical platform, explore opportunities to facilitate technical and scientific cooperation through human networking, such as matchmaking and identification of capacity-building needs during CBD workshops.

Promotion of partners’ tools and services

- C.3. Inform Parties of the existence of relevant tools and services (e.g. NBSAP Forum, Target Cross-Linking Tool, etc.) and promote their use.

Collaboration

- C.4. Further collaborate with the MEA-IKM initiative in order to increase access to and sharing of biodiversity-related information and knowledge held by MEAs, including through further work on interoperability, common vocabularies, and thesaurus.
- C.5. Further collaborate with relevant initiatives, including the Biodiversity Indicators Partnership (BIP) and the NBSAP Forum, in order to make relevant data hosted by them accessible through the central and national CHMs.

- C.6. Collaborate with IPBES through the task force on knowledge and data and the task force on capacity-building, including on the IPBES discussions on the establishment of a matchmaking facility.
- C.7. Explore ways to collaborate with existing projects and networks (e.g. UNDP's Biodiversity Finance Initiative, BIOFIN; the Valuing Nature Network (VNN); Invasive Species Early Detection & Distribution Mapping System (EDDMapS)) in order to generate specific data and information on thematic areas relevant to the Strategic Plan for Biodiversity 2011-2020 (e.g. ecosystem service mapping, valuation).

D. POSSIBLE ELEMENTS FOR DRAFTING FUTURE DECISIONS

- D.1. Invite Parties to assist other Parties in the development of national CHMs by building upon successful experiences and good practices.
- D.2. Encourage global partners to play a more active role in engaging with the CHM network.
- D.3. Encourage Parties and other donors to further support capacity-building activities such as workshops.
- D.4. Invite Parties, partners and other donors to provide resources to establish and maintain effective national CHMs.
- D.5. Encourage parties to develop funding proposals aiming at mobilizing resources for further developing their national CHMs.
- D.6. Encourage pilot projects, including pilot projects between global partners and national CHMs.

*Annex III***DRAFT PROPOSAL FOR THE SELECTION OF THE BEST NATIONAL CLEARING-HOUSE MECHANISMS**

1. This annex proposes a process and some criteria for selecting the top five national clearing-house mechanisms to receive an award.

A. Process

2. The following process is suggested:

- (a) A notification will be issued to Parties to inform them of this initiative, and to provide guidance on how to maximize their chance to be one of the winners;
- (b) All existing national CHMs will be assessed; there is no need to enroll;
- (c) A jury will be established, and may include CHM-IAC members, CBD Secretariat staff and others;
- (d) Each jury member will allot points to his/her selected national CHM (5 points for the first, and 1 point for the fifth);
- (e) A jury member cannot assign points to his/her own country. The results of jury votes will be adjusted to ensure that the process remains fair for countries represented in the jury;
- (f) In case of a tie, the jury will have a specific round of votes to resolve it;
- (g) The announcement of the winners will be made during a meeting of the Conference of the Parties or at another major CBD event.

B. Criteria

3. The criteria in table 2 below are proposed to assess each national clearing-house mechanism.

Table 2. Proposed criteria to assess national clearing-house mechanisms.

Category	Criteria
Visibility and usage	<ul style="list-style-type: none"> - Ranking after a Google search of "Biodiversity [Country]" in the language of the site - Web statistics (page views) - Availability in several languages (if non-English website) - Activities undertaken to promote awareness of the national CHM (meetings, brochures, ...) - Use of the national CHM by thematic groups and other stakeholders.
Layout	<ul style="list-style-type: none"> - Home page - Design and attractiveness of the site - Menu and navigation - Overall user-friendliness - Appearance on mobile devices - Appearance of printed pages

<i>Category</i>	<i>Criteria</i>
Content	<ul style="list-style-type: none"> - Biodiversity in the country - National strategy and action plan (NBSAP) - Implementation activities and progress towards Aichi Targets - Scientific and technical information - National legislation - National information on biosafety and access and benefit-sharing (ABS) - Information on national initiatives related to cooperation, collaboration, and networking - Case studies, assessments, reports, ... - News and events - Links to other national websites - Other resources
Online services	<ul style="list-style-type: none"> - Search engine - Online databases (species, protected areas, document, experts, ...) or links to these databases - Submission services - Collaboration tools (forums, blogs) - Other modern services (e.g. maps)
Content management	<ul style="list-style-type: none"> - Use of a content management system - Number of updates in the current year and the previous year - Frequency of updates - Number of active contributors - Use of terminology / metadata - System(s) in place to gather and analyze statistics (based on reports provided) - Content translation (if site available in several languages)
Governance	<ul style="list-style-type: none"> - Strategy and roadmap for further development - Coordination committee - National collaboration - History and evolution (document, presentation, or case-study) - Level of adherence to guidance for developing national CHMs (http://www.cbd.int/chm/guidance)

Annex IV

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