



**Intergovernmental Science-Policy
Platform on Biodiversity and
Ecosystem Services**

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**Plenary of the Intergovernmental Science-Policy
Platform on Biodiversity and Ecosystem Services
Third session**

Bonn, Germany, 12–17 January 2015

Item 5 (a) of the provisional agenda*

**Initial work programme of the Platform:
task forces on capacity-building, knowledge and
data (including data and management plan/system)
and indigenous and local knowledge systems**

**Update on the work of the task force on knowledge and data
(deliverables 1 (d) and 4 (b))**

Note by the secretariat

In its decision IPBES-2/5, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services established a task force on knowledge and data for the period 2014–2018. The terms of reference for the task force are set out in annex III to the decision. The primary purpose of the task force is the implementation of deliverables 1 (d) and 4 (b) of the work programme for the period 2014–2018. The work of the task force is presented in document IPBES/3/4, which includes a draft data and management plan (deliverable 4 (b)). The annex to the present note provides further details on the task force and the activities carried out to address its mandate. It is presented without formal editing.

* IPBES/3/1.

Annex

Update on the work of the task force on knowledge and data

I. Membership of the task force

1. The terms of reference for the task force specify that it be led by the Bureau, and comprise two Bureau members and three members of the Multidisciplinary Expert Panel, between them covering the five United Nations regions, and up to 20 additional experts on data and knowledge selected according to the rules of procedure. Governments and other relevant stakeholders submitted 105 nominations (including 8 double nominations) corresponding to 97 people nominated for the task force on knowledge and data. The selection process involved members of the Bureau and of the Panel together reviewing all submitted nominations, based on examination of nomination templates and curricula vitae for each nominee. Selections were made on the basis of excellence and relevance of candidates' expertise with respect to relevant areas of the work programme. Once selected on merit, further selection was focused on balancing disciplinary, regional and gender diversity, as well as sectorial aspects (i.e. government and stakeholder nominations).

2. Membership of the task force was agreed by the Multidisciplinary Expert Panel together with the Bureau, as follows:

Bureau and MEP

Name	Affiliation	Bureau/MEP
Fundisile Mkteni (co-chair)	Department of Environmental Affairs, South Africa	Bureau
Spencer Thomas (co-chair)	Ministry of Foreign Affairs, Environment and Trade, Grenada	Bureau
András Báldi	MTA Centre for Ecological Research, Hungary	MEP
Mark Lonsdale	Monash University and Charles Darwin University, Australia	MEP
Yoshihisa Shirayama	Japan Agency for Marine Earth Science and Technology, Japan	MEP

Selected Experts

Name	Affiliation	Nominated by: Country/Organisation
Mialy Andriamahefazafy	Ministry of Environment and Forest	Madagascar
Juan Carlos Bello-Silva	Biological Resources Research Institute "Alexander von Humboldt"	Colombia
Jae Chun Choe	National Institute of Ecology	Republic of Korea
Eduardo Dalcin	Rio de Janeiro Botanic Gardens Research Institute	Brazil
Luthando Dziba	Council for Scientific and Industrial Research, CSIR	South Africa
Ferenc Horváth	Grassland and Landscape Division, Bioforsk	Hungary
Gregory Insarov	Institute of Geography, Russia	APN (Asia Pacific Network for global change research)
Walter Jetz	Yale University, USA	DIVERSITAS
Romain Julliard	Muséum national d'Histoire naturelle	France
Sandra Knapp	Natural History Museum	United Kingdom
Catherine Laurent	Institut National de la Recherche Agronomique Sciences pour l'Action et le Développement	France
Sheila Mbiru	Kenya Forestry Research Institute	Kenya
Nidhi Nagabhatla	Leibniz University Hannover, Germany	IHDP (International Human Dimensions Programme)
Antonio Mauro Saraiva	Universidade de São Paulo, Brazil	Brazilian Academy of Science

Sheila Vergara	ASEAN Centre for Biodiversity, Philippines	DIVERSITAS and Association of Southeast Asian Nations (ASEAN)
James Watson	Wildlife Conservation Society	Australia
Hiroya Yamano	National Institute for Environmental Studies	Japan

In accordance with the terms of reference for this task force, the following individual experts were invited to participate in the task force as resource persons:

Resource persons

Name	Affiliation
Salvatore Arico	United Nations Educational, Scientific and Cultural Organization (UNESCO)
Eugenie Reagan	United Nations Environment Programme World Conservation Monitoring Centre (UNEP WCMC)
Anne H�el�ene Prieur-Richard	International Council for Science (ICSU) and Future Earth
Henrique Pereira	Group on Earth Observations Biodiversity Observation Network (GEO BON)
Tim Hirsch	Global Biodiversity Information Facility (GBIF)

3. The IPBES Bureau, in consultation with the MEP, accepted the offer made by the Republic of Korea to host a technical support unit (TSU) for deliverable 1d and 4b at the National Institute of Ecology (NIE) in Seocheon, Republic of Korea. A memorandum of understanding was signed on 8 October 2014, between the Ministry of Environment of the Republic of Korea (MOE), the National Institute of Ecology (NIE) and UNEP.

The TSU has already been established and is providing support to the task force for deliverables 1d and 4b. The TSU is hosted by Prof. Jae Chun Choe, Director of NIE. It is composed of the following staff members:

- Sungnok Choi, PhD Environmental Economics, TSU Leader, NIE
- Haejin Bae, PhD Horticultural Sciences, TSU member, NIE

II. Meetings of the task force

4. The TSU hosted a very successful first task force meeting in Seoul, Republic of Korea, 3-6 June 2014, under the co-chairmanship of Bureau members Spencer Thomas, and Fundisile Mketeni. Participants reviewed their terms of reference and the requests directed to them by the Plenary. This task force is charged with:

“Priority knowledge and data needs for policy-making addressed through catalysing efforts to generate new knowledge and networking” (deliverable (1d)) and “Delivering an information and data management plan” (deliverable 4b).

5. The essential task for the first meeting of the task force was to develop a work plan to deliver the two outputs listed above. This was challenging in that the two deliverables are very different in character. Deliverable (1d) involves cultural and behavioural change, while deliverable (4b) is highly focused and relates particularly to ensuring long-term access to the data and knowledge used and developed by the platform.

In summary, the task force decided to structure its work as two streams:

- i. The data and information management plan specifically requested to be delivered at the third session of the plenary (deliverable (4b)), presented in IPBES/3/4. This plan was required by the Plenary to deal with the issue of long term access to the data and information generated by the platform.

- ii. A knowledge, information and data (KID) strategy that will guide the task force over the years of its existence, providing context to other deliverables involving knowledge and data, as well as serving as a source document for other outputs from the task force including deliverable (4b), as well as supporting the knowledge management activities of other IPBES deliverables such as the catalogue of assessments (deliverable (4a)) and the catalogue of policy support tools and methodologies (deliverable (4c)). This strategy will be developed by the task force out of session and then completed at its second meeting in the first half of 2015. An annex to this knowledge, information and data strategy will comprise an implementation plan to deliver the strategy by 2018, and will essentially form the work plan for the knowledge and data task force.

III. Progress in addressing the task force terms of reference

6. In addition to the information provided in IPBES/3/4, further information is provided in annexes to this information document on work in progress. The Plenary may wish to provide feedback to the task force on its progress.

Annex I Draft knowledge, information and data (KID) strategy

Annex II Schema to show relationship between all task force deliverables/outputs

Annex I: Outline of the Knowledge, Information and Data (KID)

Strategy (to be developed by the knowledge and data task force during 2015)

1. **Vision:** The strategy will develop a vision for IPBES KID that espouses an open and accessible information system to catalyse the generation of new knowledge that is integrated across scales, disciplines, knowledge systems and institutions, with minimal duplication.
2. **Purpose of this Strategy:** This section will outline the purpose of the strategy which broadly is to guide the task force in delivering its mandate to identify and prioritise key scientific knowledge needed for policymakers, facilitate access to KID, provide guidance on how to manage and present KID, to advise on custodianship of the platform's KID and catalyse efforts to generate new knowledge. This section will highlight the context for the strategy, including the necessary partnerships with other IPBES task forces, especially capacity-building, and indigenous and local knowledge systems, and IPBES expert groups.
3. **Principles:** This section will lay out the principles that will guide the implementation of the strategy. These principles will fall into the following groupings: *quality and security* (principles to ensure the longevity and integrity of IPBES KID); *accessibility* (principles to ensure free and open access to IPBES deliverables); *knowledge through partnerships* (principles to foster necessary relationships and collaboration on the basis of the work programme); and *diverse disciplines and knowledge systems* (IPBES will need to draw not only on diverse scientific disciplines, but also on knowledge systems not founded on science, such as indigenous knowledge.)
4. **Overview of types and needs of IPBES KID:** This section will develop a typology for IPBES KID in the context of the IPBES conceptual framework.
5. **Critical analysis of current sources for IPBES KID needs and impediments:** This section will provide an overview of the existing landscape of relevant data knowledge and metrics for IPBES.
6. **Identifying and addressing KID gaps, biases, and limits:** This section will identify KID gaps, biases and limits to the representativeness of data and then undertake a prioritisation exercise for the desirability and feasibility of addressing these gaps, again using the conceptual framework, as well as the work programme and the key functions of IPBES to set priorities relevant to policy-making. This section will also summarise the ways and means that will be needed to address prioritised gaps.
7. **Data standards and interoperability:** This section will outline the data and metadata standards and protocols that will be essential to increase access to and usability of the platform's KID. The approach taken will be to adopt wherever possible internationally accepted standards. However, standards for many biodiversity and ecosystem data types are still lacking, and this section will lay out measures to encourage the development of such standards by international bodies.
8. **Guidelines on handling uncertainty and ensuring data quality:** This section will propose mechanisms for characterising limitations to the quality of data, derived metrics, and models in biodiversity and ecosystem services, and for delineating and documenting uncertainty, in order to reduce the risk for decision makers of drawing false conclusions or taking unwarranted action.
9. **Rights and attribution:** The focus of this section is to develop guidelines for handling the rights of knowledge holders, including issues of transparency, acknowledgement, recognition, intellectual property, access, and respect for indigenous knowledge.
10. **Long term access to knowledge, information and data:** This section will summarise the actions developed under the Data and Information Management Plan (Deliverable (4b)) to ensure access, far into the future, to outputs produced by IPBES, coupled with access to the KID used in compiling these outputs.
11. **Driving cultural change:** This section will outline mechanisms for driving the adoption of the principles and approaches of open science, which promotes the building of knowledge through collaboration based on free and open access to knowledge information and data. This cultural change is already happening in various scientific disciplines such as astronomy, neurobiology, and others. From this experience, it is clear that adopting a culture of open science in IPBES will drive significant advances in data integration, analysis and interpretation.
12. **Enabling partners and resources:** This section will outline the internal (e.g. task forces) and external (e.g. content partners and infrastructure partners) partners for delivering the KID strategy.
13. **Key Performance Indicators:** This section will outline the key performance indicators for the delivery of the KID strategy. Indicators will be developed under the following groupings: KID quality and security; accessibility to KID for IPBES stakeholders; health of IPBES KID partnerships; diversity of disciplines and knowledge systems available under IPBES.

Annex II: Proposed IPBES Knowledge, Information and Data strategic priorities, showing the context of the deliverables (in bold) from the data and information management plan (IPBES/3/4). These priorities will be developed further in the draft IPBES Knowledge, Information and Data Strategy (refer Annex I of this paper).

Strategic priority	Focus area	2015	2016	2017	Deliverables	Stakeholders
Planning	Design				<ul style="list-style-type: none"> IPBES Strategy and Action Plan for Knowledge, Information and Data (KID) Data and Information Management Plan 	IPBES Plenary Bureau
	Management structure				<ul style="list-style-type: none"> Roles and responsibilities of TSU and task force mapped out 	
Foundations	Repository				<ul style="list-style-type: none"> Long-term partnerships in place to house IPBES outputs stably and securely 	Repository partners TSU
	Standards				<ul style="list-style-type: none"> Data and metadata guidelines developed and applied Principles for handling gaps and uncertainty 	MEP TSU Working Groups
	Portal				<ul style="list-style-type: none"> Platform giving access to all IPBES outputs 	Policy-makers MEP Working Groups
	Capacity-building				<ul style="list-style-type: none"> Workshops/documents on IPBES knowledge policies and principles 	Working Groups Capacity-building Task force
Services	Research journal access				<ul style="list-style-type: none"> Ready access to primary research literature for all IPBES experts 	Working Groups
	Analysis tools				<ul style="list-style-type: none"> Visualization tools that make data “alive” and reinterpretable Updated catalogue of assessments 	Working Groups Policy-makers
	Standardized assessment workflows				<ul style="list-style-type: none"> Standardized workflows to ensure interoperability and streamlining of IPBES assessments 	
Cultural change	Open Science				<ul style="list-style-type: none"> Policies for open access to IPBES knowledge resources 	IPBES Plenary Working Groups Policy-makers ILK Task Force
	Interdisciplinarity				<ul style="list-style-type: none"> Approaches for handling diverse knowledge outputs e.g. ILK 	

	Low activity		Medium activity		Intense activity
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