















Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPBES/5/INF/23

Distr.: General 1 February 2017

English only

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

Bonn, Germany, 7–10 March 2017 Item 6 (h) of the provisional agenda*

Work programme of the Platform: communication, stakeholder engagement and strategic partnerships

National biodiversity platforms as partners for the implementation of the work programme of the Science-Policy Platform on Biodiversity and Ecosystem Services

Note by the secretariat

- 1. The annex to the present note sets out a report by members of various institutions, located in seven Western European countries, that aim to support the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and other biodiversity-related science-policy processes at the national and regional levels. The institutions are referred to as "national biodiversity platforms" in the report.
- 2. The report presents information on the current functioning of the national biodiversity platforms, noting that they have been operating under a variety of conditions and for varying lengths of time, and shares lessons learned that could inform considerations regarding the setting up of additional comparable structures. The report provides examples of how national biodiversity platforms can significantly improve the interaction between IPBES and various actors.
- 3. The report, which was initially published in 2016 on the website of the Europe and Central Asia Network of Organizations Engaging in IPBES, ¹ is presented without formal editing.

K1700716

^{*} IPBES/5/1/Rev.1.

¹ http://eca-ipbesnetwork.org.

Annex

European national biodiversity platforms as partners for the implementation of the IPBES work programme – opportunities and challenges

A report on experience gained with National Biodiversity Platforms in seven European countries, featuring the following institutions:

- Belgium Biodiversity Platform (Belgium IPBES National Focal Point)
- Finnish National IPBES panel (Nature Panel)
- French Committee for IPBES at the Foundation for Research on Biodiversity (FRB)
- German IPBES Coordination Office
- German Network-Forum for Biodiversity Research (NeFo)
- Portuguese IPBES panel
- Swiss Biodiversity Forum
- UK IPBES Stakeholder Engagement Hub of JNCC / Defra

Key messages

- The effective implementation of the work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) relies on the involvement of, and outreach to experts and institutions at the local, national and regional scale.
- National Biodiversity Platforms can significantly improve the linkage of IPBES to various actors and levels of action and have thereby the potential to contribute positively to the effectiveness of IPBES.
- Several design features or methods of functioning may impact the credibility, relevance or legitimacy of a National Biodiversity Platform this is worth considering during its set-up, operation or adaptation.

www.eca-ipbesnetwork.org

May 2016

Authors:

Elisabeth Marquard, German Network-Forum for Biodiversity Research (NeFo) & Helmholtz Centre for Environmental Research GmbH – UFZ, Permoserstraße 15, 04318 Leipzig / Germany. lisa.marquard@ufz.de

Estelle Balian, Belgium Biodiversity Platform -Royal Belgian Institute for Natural Sciences, Vautierstraat 29, 1000 Brussels / Belgium. e.balian@biodiversity.be

Hilde Eggermont, Belgium Biodiversity Platform -Royal Belgian Institute for Natural Sciences, Vautierstraat 29, 1000 Brussels / Belgium. h.eggermont@biodiversity.be

Pierre-Edouard Guillain, Fondation pour la Recherche sur la Biodiversité, 195, rue Saint Jacques, 75005 Paris / France. pe.guillain@fondationbiodiversite.fr

Agnès Hallosserie, Fondation pour la Recherche sur la Biodiversité, 195, rue Saint Jacques 75005, Paris / France. agnes.hallosserie@fondationbiodiversite.fr

Katja Heubach, German Network-Forum for Biodiversity Research (NeFo) & Helmholtz Centre for Environmental Research GmbH – UFZ, Permoserstraße 15, 04318 Leipzig / Germany. katja.heubach@ufz.de

Pierre Huybrechts, Belgium Biodiversity Platform - Royal Belgian Institute for Natural Sciences, Vautierstraat 29, 1000 Brussels / Belgium. p.huybrechts@biodiversity.be

Esko Hyvärinen, Finnish National IPBES panel (Nature Panel) & Ministry of the Environment, P.O. Box 35, FI - 00023 Government, Helsinki / Finland. esko.o.hyvarinen@ymparisto.fi

Hans Keune, Belgium Biodiversity Platform - Research Institute for Nature and Forest (INBO), Kliniekstraat 25, B-1070 Brussels / Belgium. h.keune@biodiversity.be

 $Diana\ Mortimer,\ Joint\ Nature\ Conservation\ Committee\ (JNCC),\ Monkstone\ House,\ City\ Road,\ Peterborough,\ PE1\ 1JY\ /\ UK.\ diana.mortimer@jncc.gov.uk$

Carsten Neßhöver, German Network-Forum for Biodiversity Research (NeFo) & Helmholtz Centre for Environmental Research GmbH – UFZ, Permoserstraße 15, 04318 Leipzig / Germany. carsten.nesshoever@ufz.de

Jari Niemelä, Finnish National IPBES panel (Nature Panel) & Faculty of Biological and Environmental Sciences, PO Box 65, 00014 University of Helsinki / Finland. jari.niemela@helsinki.fi

Isabel Sousa Pinto, Portuguese IPBES panel & Cimar – Centre for Marine and Environmental Research, University of Porto, R. dos Bragas, 289, 4050-123 Porto / Portugal. ispinto@ciimar.up.pt

Eva Spehn, Swiss Biodiversity Forum, Swiss Academy of Sciences (SCNAT), Laupenstr. 7, 3008 Bern / Switzerland. eva.spehn@scnat.ch

Malte Timpte, German Network-Forum for Biodiversity Research (NeFo) & Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Invalidenstraße 43, 10115 Berlin / Germany. malte.timpte@mfn-berlin.de

Please cite this report as:

Marquard E., Balian E., Eggermont H., Guillain, P. E., Hallosserie A., Heubach K., Huybrechts P., Hyvärinen E., Keune H., Mortimer D., Neßhöver C., Niemelä J., Sousa Pinto I., Spehn E. & Timpte M. (2016): European 'National Biodiversity Platforms' as Partners for the Implementation of the IPBES Work Programme – Opportunities and Challenges. Report edited by the German Network-Forum for Biodiversity Research (NeFo). Available at: http://www.eca-ipbesnetwork.org/1806

The implementation of the work programme of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) relies on the involvement of experts and institutions, and on the outreach to policy-makers and other addressees at various levels of decision-making. Effective sub-global structures are needed to link the intergovernmental process to actors at the local, national and regional scale.

With this document we inform about experience gained with National Biodiversity Platforms in Europe that act as science-policy interfaces and dedicate their work (partly or totally) to the IPBES process. We present case examples from seven European countries (Belgium, Finland, France, Germany, Portugal, Switzerland and UK), and share lessons learnt with regard to the design features of these platforms (including resources and governing structures) and their potential functions (e.g. concerning contributions to the implementation of the IPBES work programme). Furthermore, we list several aspects that are possibly worth considering when setting up or operating a National Biodiversity Platform and indicate how these issues may impact its credibility, relevance or legitimacy.

We conclude that successfully operating National Biodiversity Platforms have the potential to contribute positively to the effectiveness of IPBES, particularly at the national and local level, and thus encourage the initiation of similar structures in further countries.

Introduction

The majority of biodiversity-related problems need to be tackled at the local, national and regional level. Globally acting processes, such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) or the Convention on Biological Diversity (CBD), may give important stimuli to decision makers at the relevant scales, and these processes are, furthermore, an expression of a world-wide commitment for the protection and sustainable use of the living environment. However, these global processes require a coupling to actors and actions at sub-global scales. To comply with its mission and work programme, IPBES in particular relies on involving numerous experts and institutions relevant to its agenda and on reaching out to various stakeholders (Görg et al. 2006).

Given these requirements, IPBES calls for the appointment of National Focal Points (NFPs) by its member states, the set-up of Technical Support Units (TSUs) for particular work programme deliverables and, on a voluntary basis, the commitment to an open-ended network of IPBES stakeholders². However, these formally agreed elements need to be supplemented by further sub-global mechanisms that support science-policy dialogues on issues related to biodiversity and ecosystem services within their country or region, thereby transmitting the IPBES idea and reproducing IPBES' efforts to reach out to relevant actors.

In several European countries, specialized panels, platforms or other kinds of for a have been established that play a crucial role in actively connecting the resident expert communities on biodiversity and ecosystem services to IPBES, and that are subsumed under the term 'National Biodiversity Platform' for the purpose of this document³. Common features of such platforms are their rooting in biodiversity research or biodiversity research administration, their position at the science-policy interface and their (partial or total) dedication to IPBES.

National Biodiversity Platforms in Europe differ in many other aspects though, e.g. in their history, scope or mandate. Reflecting differences in institutional settings, in available resources or in other national circumstances, there is a wide range of different platform formats. In some countries the 'platform' is a more or less formally established group of experts from different biodiversity-related fields that is chaired by a single person dedicated to connecting people, institutions and ideas, within the country and beyond, to support vivid science-policy interfaces. This chair volunteers his or her time to the platform and may be supported by a coordinator or secretary (e.g. in Finland, where such a group has been formally established by the Ministry of the Environment; and in Portugal, where the respective network has a less formal character and has been initiated by the Portuguese IPBES National Focal Point). In other countries, the 'platform core' is rather composed of a small team of paid officers that initiate or co-ordinate activities for or with the wider network of national biodiversity and ecosystem services experts (e.g. in Belgium, France, Germany, Switzerland, UK). These cores

² http://www.ipbes.net/stakeholders

³ Other important sub-global activities are e.g. regional consultation meetings as they were held in the past to provide an opportunity to discuss regional perspectives on the IPBES agenda and possibilities for stakeholder involvement. These meetings were usually initiated by regional stakeholders and not directly requested by the IPBES plenary. However, the custom of holding such meetings seems not to be retained on a regular basis in all UN regions.

might be located in administrative or scientific institutions, or compose self-standing entities. Table 1 provides an overview of more individual features of the platforms presented here.

Opportunities: National Biodiversity Platforms in support of IPBES

IPBES has acknowledged its need for geographically, disciplinary, and gender-balanced expertise when producing its assessments and other Platform deliverables (see e.g. its operating principles in UNEP/IPBES.MI/2/94). This requires knowledge of, access to and coordination of the broad expert community including scientists and experts from other knowledge systems. To ensure that its products will eventually have an impact on the ground, IPBES also aims at mobilizing nonscientific knowledge, especially indigenous, local, practical, traditional and technical knowledge. Moreover, the tackling of issues related to biodiversity and ecosystem services often requires an interdisciplinary and cross-sectoral approach, which may render the identification and mobilisation of relevant experts even more complex. A strong added value of National Biodiversity Platforms thus arises from their capacity to connect the IPBES process to the national and regional expert communities and institutions. National Biodiversity Platforms help to enlarge the pool of experts IPBES may draw from, and thereby considerably improve the possibilities for IPBES to constitute balanced expert groups in terms of expertise, gender and regional representation. Furthermore, by linking up with National Biodiversity Platforms, IPBES gains access to manifold and diverse channels to reach out and disseminate calls for nominations and its products. Thus, National Biodiversity Platforms in Europe and Central Asia may also contribute to put into effect what participants of the first Pan-European IPBES stakeholder conference (PESC-1) had suggested in their Statement⁵: "Besides the added-value of an operational IPBES for the global scale, the participants specifically see great potential in IPBES to support the dialogue between decision making and knowledge holders on biodiversity, ecosystem services and human well-being on the pan-European scale, its sub-regions, countries and even on the local scale, thus creating a cascade effect of better interfacing within society on IPBES activities."

⁴ Report of the second session of the plenary meeting to determine modalities and institutional arrangements for an intergovernmental science-policy platform on biodiversity and ecosystem services:

http://www.inhec.pot/pites/default/files/decombede/UNER_IDEES_MI_2_0_EN_0.pdf

 $http://www.ipbes.net/sites/default/files/downloads/UNEP_IPBES_MI_2_9_EN_0.pdf$

⁵ Preamble from PESC-Statement 2013, see http://www.ipbes.net/sites/default/files/downloads/IPBES_2_INF_8.pdf

Table 1
Selected features of National Biodiversity Platforms in seven European countries

		Belgium ⁶	Finland ⁷	France ⁸	Germany ⁹		Portugal ¹⁰ Switzer-land ¹¹		United Kingdom ¹²	
					NeFo	KS			Defra	JNC C
	The platform									
cess	functions as or hosts the IPBES	/					/		✓	
	National Focal Point collaborates closely with the		./	./	./	./		./		/
prc 5	IPBES National Focal Point		V	V		•		V		V
Activities related to IPBES process	generates IPBES information material	/	✓	/	/	/	✓	/	1	/
	supports the formulation of national viewpoints on IPBES issues	1	1	/	/	/	1	✓	1	1
	is responsible for national IPBES nomination processes	✓				√		✓	/	
	raises awareness for IPBES among scientific experts	1	1	/	1	1	1	1		1
	raises awareness for IPBES among other experts	/	/	1	/		1	/		1
tal	is run by a team of paid officers and equipped with a budget ¹³	1		1	1	/	_	1	/	1
n capi	is run by dedicated people not paid explicitly for platform work		/				1			
Financial & human capital	core team (= paid staff) includes scientific experts	✓		/	/	/		✓	/	1
	core team (= paid staff) includes policy expert			/	/				/	1
	core team (= paid staff) includes media expert	1		✓	/			✓	1	1
	runs its own website	1	√	✓	✓	/	1	/	/	/
vices	delivers a regular newsletter	✓		✓	✓	✓		✓		
Outreach and services	organises regularly events for target groups	✓	/	/	/	/		1	/	1
	releases publications, e.g. reports, policy briefs, factsheets	✓	✓	✓	/	/	1	1	/	✓
	hosts a database of BES ¹⁴ experts and expert institutions	1		✓	/	✓		1		
	is overseen by an advisory board that includes diverse stakeholders	✓		✓				/		
Further features and activities	has a scope wider than IPBES	/	evolving	/	✓			✓	/	/
	informs national and/or EU funding schemes	/	evolving	✓	√	/	evolving	/	1	1
	provides further support to BES research community (national/EU) ¹⁵	/		✓	√		1	✓	/	
	supports biodiversity policy and research initiatives (national/EU) ¹⁶	1	✓	✓	✓		1	✓	/	✓
	supports international initiatives on biodiversity (other than IPBES) ¹⁷	✓		✓	✓			/	/	/

⁶ Belgian Biodiversity Platform (http://www.biodiversity.be) and IPBES NFP (www.biodiversity.be/ipbes)

⁷ Finnish National IPBES Panel (Nature Panel): http://www.syke.fi/en-

US/Research__Development/Maintaining_ecosystem_services_and_biodiversity/Specialist_work/Nature_Panel

⁸ French Committee for IPBES at the Foundation for Research on Biodiversity (FRB): http://www.fondationbiodiversite.fr

 $^{^{9}}$ NeFo = Network-Forum for Biodiversity Research Germany: www.biodiversity.de; KS = German IPBES Coordination office: http://www.de-ipbes.de

¹⁰ Portuguese IPBES National Focal Point: http://ipbes.pt/

¹¹ Swiss Biodiversity Forum: http://www.biodiversity.ch

¹² UK IPBES Stakeholder Engagement Hub of JNCC / Defra: http://jncc.defra.gov.uk/page-5871

 $^{^{\}rm 13}$ Funded by ministries, scientific institutions or other donors

 $^{^{14}}$ BES = Biodiversity and ecosystem services

¹⁵ For details, see http://www.eca-ipbesnetwork.org/2125

¹⁶ Belgium: national platform and secretariat for EPBRS, vice-chair of BiodivERsA ERA-NET; France: coordinator of BiodivERsA ERA-Net, member of EPBRS, project partner of the national programme on biodiversity indicators and the French assessment of ecosystems and ecosystem services; Germany (NeFo): national platform for EPBRS; Switzerland: published two large assessments on biodiversity in Switzerland; Portugal: member of steering committee of EPBRS, member of BiodivERsA ERA-NET

¹⁷ Belgium: support to CBD SBSTTA NFP, and hosting of NFP for GBIF and IUCN; France: CBD SBSTTA NFP, vice-chair of the GBIF executive committee; Germany (NeFo): regularly member of national delegation at CBD and CBD SBSTTA; Switzerland: scientific input to federal administration regarding CBD, FAO International Treaty, etc., participation in CBD meetings, partly as delegation members

Grouped according to three major objectives of IPBES, possible contributions of National Biodiversity Platforms to the implementation of the IPBES work programme may be summarized as follows:

Assessments:

- Fostering the dialogue between science and policy and thereby seeking to stimulate the biodiversity research community to address policy- or user-relevant questions¹⁸
- Identifying, mobilizing and supporting experts that may act as chairs, authors, reviewers or
 editors, or as multipliers that spread the calls for nominations or the assessment outcomes
 further within their networks
- Reviewing IPBES draft documents (partly by participatory processes) and thereby feeding in the communities' perspectives

Capacity and Knowledge Foundations:

- Informing national stakeholders on IPBES processes, deadlines and opportunities for engagement
- Supporting access to (scientific, indigenous, local, practical, traditional and technical)
 knowledge and data (e.g., by hosting and maintaining databases on experts and institutions that
 are either broadly accessible or restricted to particular registered user groups; and by engaging
 in European networks and initiatives that catalyse new knowledge, like AlterNet, EuroMarine,
 GEO BON and BiodivERsA)
- Providing for a for national experts to interact and to exchange views, experiences and best practices
- Identifying and helping to address knowledge and data gaps, and capacity-building needs
- Enriching the formation of opinions prior to IPBES negotiations, e.g. by facilitating preparatory meetings or by putting together participatory statements on IPBES documents
- Strengthening existing networks, initiatives and institutions, and supporting the establishment of new ones
- Supporting capacity-building activities at the science-policy interface, possibly also in developing countries or in countries with economies in transition
- Bridging IPBES work with other relevant initiatives (e.g. IPCC assessments)

Communication and Evaluation:

- Raising awareness on and promoting IPBES
- Supporting the dissemination of outputs at the national level, e.g. with products or processes tailored to the needs of the targeted audiences and the specific national circumstances
- Supporting the reflection on IPBES, its achievements and its effectiveness, potentially feeding back analytical views and recommendations into the IPBES process via the National Focal Points and other channels

In practice, these activities may partly overlap and their assignment to the three mentioned objectives of IPBES is not clear-cut. Moreover, National Biodiversity Platforms may have a much broader portfolio of activities, related to other processes than IPBES (as indicated in Table 1)¹⁹. Nevertheless, this list illustrates the many ways in which National Biodiversity Platforms may support the implementation of the IPBES work program. The actual set of activities and the degree of a platform's involvement in ministerial tasks or in critical analyses of processes depends much on its institutional setting, its resources and self-concept or mandate. Examples of activities that have been initiated, organised or performed by the National Platforms presented here include:

Convening of various meetings and workshops to inform stakeholders about IPBES and to
exchange views on current developments (e.g. national or regional workshops and IPBES
information days, dialogue workshops between IPBES and IPCC experts in France)

¹⁸ For example, in Belgium, this is done by three dedicated Communities of Practice (CoPs): on Belgian Ecosystem Services, on Biodiversity & Health, on Invasive Alien Species.

¹⁹ For more details on the National Biodiversity Platforms presented here, see: http://eca-ipbesnetwork.org/2125

- Analysing the experience gained by national experts involved in IPBES (e.g. their concerns, questions and expectations regarding IPBES processes or their appreciation of their involvement)²⁰
- Providing scientific-technical advice to the national IPBES delegations in preparing and analysing IPBES plenaries, also as members of national IPBES delegations
- Strengthening cross-regional networking (e.g., on the pan-European level, by providing information at a common website²¹ or by opportunities such as the Pan-European IPBES Stakeholder Consultation PESC²²) in Europe, such endeavours can build on existing initiatives like the European Platform for Biodiversity Research Strategy (EPBRS)²³, the network of national and regional funding organisations promoting pan-European research on biodiversity and ecosystem services BiodivERsA²⁴, the pan-European Biodiversity Platform²⁵, or the European Topic Centre on Biological Diversity working with the European Environment Agency²⁶, or link up with developing structures such as the pilot support mechanism on biodiversity and ecosystem services for decision-making in Europe (via the EKLIPSE project)²⁷
- Promoting the integration of IPBES assessments' findings into national action: e.g. by
 presenting IPBES assessments to decision-makers, identifying needs and expectations of
 stakeholders, planning research on biodiversity and ecosystem services.

Challenges: Constraints and diverse expectations

The set-up and maintenance of a National Biodiversity Platform requires human and financial resources, ideally secured for a medium- to long-term perspective. This is a continuing challenge for many of the National Biodiversity Platforms featured here and is likely to pose an obstacle for newly evolving initiatives – hampering a sustainable support to IPBES at the local, national or regional scale. Depending on the format chosen for the national biodiversity platform, its operation may also demand recruiting specialized staff or possibly relying on staff of participating organizations. The platform's mandate and work plan need to be specified under consideration of the national context, the platform's governance structure, its accountability as well as its approaches to community-building, inter- and transdisciplinary dialogue and stakeholder involvement. Incentives that motivate experts from the national community to get engaged in the platform's activities may also be required. Furthermore, mechanisms should be established that can durably secure the quality of products and processes. Generally, the building and maintenance of trust and good relations with representatives of science as well as with representatives of policy- and user communities is one of the major preconditions for the effective functioning of a National Biodiversity Platform (Swiss Academies of Arts and Sciences 2016). In this respect, the handling of diverse expectations and regular user feedback may prove critical.

²⁰ See for example: http://www.eca-ipbesnetwork.org/1806

²¹ http://www.eca-ipbesnetwork.org/

 $^{^{22}\,}http://www.biodiversity.de/de/ipbes-co/ipbes/pan-european-stakeholder-consultation$

²³ http://www.epbrs.org

²⁴ http://www.biodiversa.org

²⁵ http://www.unep.org/roe/PromotingBiodiversityConservation/tabid/54597/Default.aspx

²⁶ http://bd.eionet.europa.eu

²⁷ http://www.eklipse-mechanism.eu

Table 2
Aspects possibly worth considering when setting up a National Biodiversity Platform (NBP), an indication whether an impact of these aspects on the credibility (C), relevance (R) and legitimacy (L) of the NBP may be expected, and exemplified challenges with possible approaches

	Aspects for consideration and its possible impact on features of NBP	Exemplified challenges with possible approaches			
During initiation	Who initiates the foundation of the NBP, what is its mandate (C, R, L)? What motivations are behind the initiative? (C, L) Who is /feels represented, who is marginalized, is it a bottom-up or top-down process? (C, R, L)	 Challenge: Creating a NBP that is well-recognized by broad communities of stakeholders within the relevant fields of science as well as of policy. Display transparently the process of initiation, initiators, motives, mandate, targeted groups aims and sources of funding. Map stakeholders in research and policy beforehand, consult main players. Consider embedding the NBP within an existing institution with established reputation at the science-policy interface or setting it up as a neutral ground between various stakeholders; this may increase the chance that it will develop into a well-recognised institution. 			
	What mandate does the have NBP? (R, L) What is its scope, which questions or problems should be tackled, which functions served? (R)	 Challenge: Identifying the scope of the NBP taking into account its mandate and the resources that may realistically be acquired. Identify and reflect on key challenges within the biodiversity science-policy context of the respective country and, if applicable, at regional and international scale (in consultation with initiators / funders of the NBP). Carefully design the NBP so that its functions do not overlap with the functions of the institutions that it should serve, complement or represent. 			
	To whom is the NBP accountable? (R, L) Who should be involved in the governance of the NBP? (C, R, L) What is a useful and feasible governing structure? (R, L)	 Challenge: The governance of the NBP may prove decisive for its acceptability, reputation and relevance. Display transparently the linkages to existing institutions, the mandate, the modes of operation and the work plan (see above), communicate regularly on the issues dealt with e.g. via mailings to stakeholders or webpages. Consider integrating policy experts and representatives of biodiversity-users into the governing bodies of the NBP; this may foster policy relevance at the national / local scale. Consider issues of accountability and reporting with regard to the relationships between the governing body and the executing body of the NBP (if applicable), ensure efficient ways of communication. 			
	How much funding is available, what are possibilities to mobilize more funding? (C, R, L) How many people may be employed / what activities may be supported? (R) What expertise is needed? (C, R)	 Challenge: Securing of adequate financial and human resources. Sources of finance could include ministries, research institutions and the private sector. If a solid scientific infrastructure with e.g. national academies or large biodiversity research centres exists, parts of this institutional landscape may also be part of the funding scheme. The amount of funding may impact the NBP's ability to foster engagement and to reach out to stakeholders (R); the sources of funding may impact additionally on its visibility for "clients" and its channels for outreach (R), but they may also determine the independence of the platform, as well as its acceptability for some stakeholders (C, L). The experts constituting the platform need to be highly skilled in 'interfacing' between science and policy and should have different disciplinary backgrounds. 			
During operation	What are the relevant communities to engage with, how can they be reached and motivated for an engagement (in activities initiated by the NBP / in IPBES work)? (C, R) What are their expectations and needs (regarding the NBP / regarding IPBES)? (R)	 Challenge: The added value of the NBP needs to be obvious to the relevant expert communities in order to motivate their members' engagement. To identify and reach out to relevant communities, draw on earlier mapping exercise (see above), stay informed and alert to ongoing developments, and identify appropriate channels of communication (including multipliers). Provide useful services to scientists and policy-makers, such as access to comprehensive information, networking or capacity building events, an effective media relation service or opportunities to popularize the own (research) profile. Provide decision-makers with experts' feedback on the work process they are involved in. 			
	How to ensure a high quality of outputs? (C) How to achieve and maintain a good reputation among diverse stakeholders?	 Challenge: The perceived credibility and legitimacy of the NBP depends on a continuously high standard of its outputs and a careful handling of sensitivities and divergent opinions among stakeholders. Employ a rigorous and transparent quality management to build trust among stakeholders, consider in this respect the installation of an advisory board or the collaboration with a network of experts that reviews the NBP's outputs. Reflect regularly on issues like transparency, inclusiveness, representativeness, uncertainty of knowledge, and plurality of opinions (see above). 			
	How to integrate the NBP's (or IPBES') outcomes with other relevant processes? (R)	Challenge: The relevance of the NBP depends on its ability to generate an impact on or new stimuli for other relevant processes. Build trust and close contacts with relevant stakeholders (see above). Arrange fora for discussions and find alleys for information/statements/outcomes into relevant (policy) bodies / processes. Foster uptake of biodiversity-related issue by the media (e.g. by PR-activities)			
	How to assess which activities or instruments of the NBP are / have been effective or ineffective? (R)	Challenge: Assess impact of the NBP's work. • Identify indicators of effectiveness for different functions of the NBP (e.g. for the function "coordination of IPBES nomination process": number of selected national experts). • Design a feasibility study of impact assessment.			

Table 2 suggests some further aspects that may be worth considering while setting up or operating a National Biodiversity Platform and exemplifies some challenges and how they may be overcome. It should be noted, however, that this table is no obligatory "check-list" and that even a rather simple set-up that is run with little human and financial resources can fulfil basic services in support of IPBES, such as promoting participation in IPBES activities and disseminating IPBES products.

National Biodiversity Platforms have the potential to promote IPBES' effectiveness

Despite many national specificities, experience gained over the past years in different countries and contexts suggests that successfully operated National Biodiversity Platforms can promote the implementation of the work programme of IPBES and its credibility and relevance, in particular at the national and local level.

Credibility and relevance are two of the three criteria commonly assumed to determine an institution's effectiveness in interfacing science and policy (the third one being 'legitimacy'; together, these three criteria are often referred to as 'CRELE', see Cash et al. 2003, Young et al. 2013, Sarkki et al. 2014). In the science-policy context, information or a process is regarded as credible if high scientific and technical standards are fulfilled (further determinants possibly being the reputation of involved actors and the transparency of processes), as relevant if it fits to the questions addressed and matches the needs of a 'client' (and therefore proves useful), and as legitimate if accepted rules have been followed throughout the acquisition of the information or the shaping of the process (see e.g. Cash et al. 2003, Heink et al. 2015). During the set-up or operation of a National Biodiversity Platform (and of IPBES and any other science-policy interface), the ambition to fulfil the three criteria of effectiveness should guide the choice of design features and activities (see e.g. Koetz et al. 2012). The three CRELE attributes may not be all maximised at the same time, because they partly compromise each other (Sarkki et al. 2014). Thus, the aim should be to consider these criteria and their trade-offs carefully and to find a most optimal balance under the given circumstances. This holds true for IPBES but also for the structures supporting IPBES at the sub-global levels.

A contribution of National Biodiversity Platforms to the effectiveness of IPBES may thus be achieved by contributing to its credibility via activities that identify relevant experts and facilitate their involvement, and by contributing to its relevance via activities that foster awareness of IPBES among stakeholders as well as their involvement.

Conclusions

Globally operating processes such as IPBES rely on sub-global structures for their effective functioning. In some European countries, National Biodiversity Platforms support the implementation of the IPBES work programme and fulfil the functions of national science-policy interfaces on issues related to biodiversity and ecosystem services, often also with regard to other processes than IPBES.

To evaluate whether comparable structures could be set up elsewhere, it may be helpful reflecting the opportunities that emerged from National Biodiversity Platforms in Europe and the challenges that these had or continuously have to face. This document aims at sharing experience from seven different European countries and provides information on some characteristics of the respective platforms (Table 1), as well as an indicative list with questions that may be worth considering during the initiation, operation or evaluation of a National Biodiversity Platform (Table 2). As the operation of a National Biodiversity Platform should be shaped by adaptive learning, the information compiled in Table 2 is also relevant for scrutinizing and optimizing the effectiveness of the platforms presented here. The weighing of the listed aspects and the relevance of further conditions depend on the national context. However, acquiring financial and human resources, creating a useful governance structure, ensuring a high quality of products and processes, and initiating and maintaining meaningful community engagement are among those challenges that are likely to arise and for which we exemplify possible approaches (Table 2).

From our experience, National Biodiversity Platforms have proven to be useful structures to foster and coordinate national contributions to the global IPBES process, and to render IPBES relevant also for sub-global levels. A possible further step could be a network of platforms within a region to foster the exchange of experience and to support newly emerging initiatives as well as regional activities of IPBES. In Europe, the 'pan-European network of national platforms engaging in IPBES' (www.eca-ipbesnetwork.org) has been set up for this purpose.

Acknowledgements

The authors thank Dr. Axel Paulsch at the Institute for Biodiversity – Network e.V. (ibn) for valuable comments and discussions.

The Belgian Biodiversity Platform is an initiative funded by the Belgian Science Policy Office.

The Finnish Nature Panel is supported by the Finish Ministry of the Environment and the Finnish Environment Institute.

The Secretariat of the French Committee for IPBES is hosted by the Foundation for Research on Biodiversity and is funded by the French Ministry of National Education, Higher Education and Research (MENESR) and the French Ministry of Environment, Energy and the Sea (MEEM).

The German Network-Forum for Biodiversity Research (NeFo) is a project funded by the German Federal Ministry of Education and Research (BMBF) - FKZ: 01LC0831 A2/C2.

The Swiss Biodiversity Forum is funded by the Swiss Academy of Sciences (State Secretariat for Education, Research and Innovation) and the Federal Office for the Environment.

JNCC is a UK statutory adviser to Government and devolved administrations on UK and international nature conservation.

References

- Cash, D. W., W. C. Clark, F. Alcock, N. M. Dickson, N. Eckley, D. H. Guston, J. Jager & R. B. Mitchell (2003): Knowledge systems for sustainable development. *Proceedings of the National Academy of Sciences of the United States of America* **100**:8086-8091.
- Görg, C., S. Beck, A. Berghöfer, S. Van den Hove, T. Koetz, H. Korn, S. Leiner, C. Neßhöver, F. Rauschmayer & M. Sharman (2006): International science-policy interfaces for biodiversity governance needs, challenges, experiences. A contribution to the IMoSEB consultative process (Workshop Report). Helmholtz Centre for Environmental Research UFZ. http://www.ufz.de/export/data/2/80122_leipzig_workshop_report_final25406.pdf.
- Heink, U., E. Marquard, K. Heubach, K. Jax, C. Kugel, C. Nesshover, R. K. Neumann, A. Paulsch, S. Tilch, J. Timaeus & M. Vandewalle (2015): Conceptualizing credibility, relevance and legitimacy for evaluating the effectiveness of science-policy interfaces: Challenges and opportunities. *Science and Public Policy* 42:676-689.
- Koetz, T., K. N. Farrell & P. Bridgewater (2012): Building better science-policy interfaces for international environmental governance: Assessing potential within the Intergovernmental Platform for Biodiversity and Ecosystem Services. *International Environmental Agreements-Politics Law and Economics* 12:1-21.
- Sarkki, S., J. Niemelä, R. Tinch, S. Van den Hove, A. Watt & J. Young (2014): Balancing credibility, relevance and legitimacy: A critical assessment of trade-offs in science-policy interfaces. *Science and Public Policy* **41**:194-206.
- Swiss Academies of Arts and Sciences (2016): Engaging politics with science. Experience and recommendations based on more than 20 years of practice of three dialogue platforms of the Swiss Academy of Sciences. Swiss Academies Reports 10 (5), http://www.akademienschweiz.ch/en/dms/pub/10/report1005e.pdf.
- Young, J. C., A. D. Watt, S. Van den Hove & and the SPIRAL project team (2013): Effective interfaces between science, policy and society: The SPIRAL project handbook. http://www.spiralproject.