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3 **The network Biodiversity Knowledge in practice: insights from three trial**
4 **assessments**

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26 **Online Resource 2.** Overview on lessons learned from the three trial assessments during preparation, conduction and finalization phase. Issues relevant for more than one phase
 27 are only described at the first phase they occurred.

Phase	Issue	Background and lesson learned	Recommendations	Relevant trial assessment
Preparation phase				
	Expert engagement	<ul style="list-style-type: none"> • Communication with experts worked fine, but involvement and engagement wasn't always as strong as required to receive a diverse and reliable feedback; • Personal contact and face-to-face meetings (e.g. workshops) were an important tool to increase involvement and engagement 	<ul style="list-style-type: none"> • Make knowledge holders proactively aware of the opportunities offered by BiodiversityKnowledge (including coauthorship of assessments) • Conduct dissemination and training courses and provide knowledge holders with targeted information at the webpage and targeted alerts to fully exploit the advantages of BiodiversityKnowledge for them • Use experts with high reputation to contact knowledge hubs 	Marine Agricultural Conservation
	Scoping phase	<ul style="list-style-type: none"> • Broad, open framed, and potentially complex questions from decisions-makers are difficult to address with conventional scientific methods; • Expectations of requesters of broad and open questions can be difficult to meet. 	<ul style="list-style-type: none"> • Break down broad policy questions to a set of manageable ones • Dedicate enough effort to the scoping process with requesters • Identify as soon as possible a list of possible interventions or actions that are in the focus of the assessment • Involve requesters at several stages to avoid false expectations regarding outcomes and uncertainties. 	Marine Agricultural Conservation
	Engaging of policy-makers on emerging questions	<ul style="list-style-type: none"> • For emerging questions raised by researchers, lack of interest of policy-makers might be an obstacle for a sufficient uptake of results by policy-makers 	<ul style="list-style-type: none"> • Aim at dialogue and co-construction of requests with requesters also for emerging questions; • Produce particularly convincing and targeted outputs. 	Marine
	Dialogue with requester	<ul style="list-style-type: none"> • A regular dialogue with the requester is required during the assessment, particularly in the preparation phase 	<ul style="list-style-type: none"> • Agree with one person to act as formal requester or representative of requesters to favour effective dialogue. 	Conservation
	Engagement of experts with high reputation	<ul style="list-style-type: none"> • Experts and researchers with high reputation might not be interested in participating in conducting synthesis work 	<ul style="list-style-type: none"> • Build a mixed team for assessments with researchers of highest reputation being involved as peer-reviewers and for the most scientific aspects of it • The remaining work could be delegated to person with targeted skills to increase cost-effectiveness. 	Agricultural Conservation
	Search for completed or ongoing reviews on the same or similar questions	<ul style="list-style-type: none"> • The detection and consideration of completed or ongoing reviews is very important during the scoping • Such reviews might not exactly answer the posed question, but they may serve as an entry point to contact experts 	<ul style="list-style-type: none"> • Assess scope and quality of published and ongoing reviews at an early stage of the scoping. 	Agricultural
	Reputation of BiodiversityKnowledge	<ul style="list-style-type: none"> • The low reputation of BiodiversityKnowledge in its prototype stage was a barrier to credibility, relevance, legitimacy and expert/stakeholder involvement 	<ul style="list-style-type: none"> • Care must be taken to continuously increase credibility, relevance and legitimacy of BiodiversityKnowledge and its products • Raise awareness and disseminate activities to optimize the reputation of BiodiversityKnowledge 	Marine Agricultural Conservation

Phase	Issue	Background and lesson learned	Recommendations	Relevant trial assessment
	Outputs and communication means	<ul style="list-style-type: none"> Finalize preliminary outputs for communication A flyer was successful in raising interest about progress 	<ul style="list-style-type: none"> Start communicating broadly at the onset of the project to increase the chance to engage with stakeholders not yet identified 	Agricultural Conservation
Conduction phase				
	Different types of knowledge and combination of different methods	<ul style="list-style-type: none"> It was demanding to access and synthesize alternative forms of knowledge including practical experience or local knowledge Modular approaches, where some aspects of knowledge were assessed by means of reviewing evidence and others by expert consultations were applied in the conservation and the marine case 	<ul style="list-style-type: none"> For broader assessments where different kinds of knowledge are relevant, consider modular approaches where different aspects are tackled with different approaches 	Marine Agricultural Conservation
	Librarians as part of working groups	<ul style="list-style-type: none"> Professional librarians were highly valuable team members and enjoyed the exercise 	<ul style="list-style-type: none"> Consider librarians when composing working groups 	Agricultural
	Composition of working groups	<ul style="list-style-type: none"> The heterogeneity of the knowledge holders and users is a challenge and an opportunity in terms of achieving efficient knowledge exchange and synthesis 	<ul style="list-style-type: none"> Select working group members with targeted skills and a transdisciplinary mind-set 	Marine Conservation
	Broad policy questions and knowledge gaps	<ul style="list-style-type: none"> Broad policy questions entail large amounts of knowledge, to potentially hampering an effective review of evidence, and large knowledge gaps, owing to the multiplication of entities, interventions and combinations thereof 	<ul style="list-style-type: none"> Assess to which extent generalizations can be made out despite the encountered knowledge gaps 	Agricultural Conservation Marine
	Heterogeneity of data and evidence	<ul style="list-style-type: none"> Variability of study design and knowledge availability makes it challenging to quantitatively summarize knowledge and to reach solid conclusions 	<ul style="list-style-type: none"> Critically appraise the collected knowledge and choose appropriate methods for summarizing Consider presenting only a descriptive map of the 'knowledge landscape' in such cases 	Agricultural Conservation
Finalization phase				
	Emerging perspectives and research needs	<ul style="list-style-type: none"> The assessments may open up to new perspectives for research and synthesis 	<ul style="list-style-type: none"> Intend fundraise for subsequent requests that should be more targeted and supported by preliminary analyses of the first assessment 	Agricultural
	Policy brief	<ul style="list-style-type: none"> Commitment of experts and stakeholders beyond the assessment period is of key importance for uptake of policy documents by EU, national and regional policy-makers 	<ul style="list-style-type: none"> Adequately fund the finalization/outreach period as integral part of the assessment, in particularly for horizon-scanning requests 	Marine Agriculture Conservation

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