

REGIONAL ASSESSMENT REPORT ON BIODIVERSITY AND ECOSYSTEM SERVICES FOR EUROPE AND CENTRAL ASIA							
Comments external review first order draft - Chapter 1							
Reviewer Name	Chapter	From Page	From Line	To Page	To Line	Comment	Response
Frank Wugt Larsen (EEA input)	General	General	0			General: our 'light' review has focused on relevant information hosted by the European Environment Agency (EEA) for which we believe a consultation by authors could improve the ECA report. We have also provided some specific comments to issues we spotted (please note that this has not been done systematically given the length of the report). In general, we will also refer to the EEA/ETC BD document 'Information note to IPBES secretariat on EEA and EU information' (http://bd.eionet.europa.eu/Reports/ETCBTechnicalWorkingpapers/PDF/Information_IPBES_on_EEA_EU.pdf), which was shared with the ECA TSU in 2015. Several reports provide a good starting point to find relevant information, incl. EEA, 2015 European environment – state and outlook 2015 (SOER 2015 (http://www.eea.europa.eu/soer/)), in particular, thematic briefings (http://www.eea.europa.eu/soer-2015/europe) and SOER synthesis (http://www.eea.europa.eu/soer#tab=synthesis-report); EEA 2016. Mapping and assessing the condition of Europe's ecosystems. Progress and challenges (http://www.eea.europa.eu/publications/mapping-europes-ecosystems); EEA, 2015. State of Nature Report 2015 (http://www.eea.europa.eu/publications/state-of-nature-in-the-eu); EEA, 2015. State of Europe's Seas (http://www.eea.europa.eu/publications/state-of-europes-seas); EEA, 2016. European forest ecosystems – state and trends (http://www.eea.europa.eu/publications/european-forest-ecosystems). In general, the EEA website (http://www.eea.europa.eu) also provides access to a wealth of relevant indicators and assessments.	The ECA authors have been encouraged to use EEA reports as a resources, and we would like to thank the reviewer for providing the web links for these.
Frank Wugt Larsen (EEA input)	General	General	0			General: There seems to be quite some redundancy between the chapters. Additionally different data sources seem sometimes to be used in the redundant parts which may create more confusion than clarification leading to different partly biased messages. We assume the coherence and consistency of chapters will be dealt with in the next draft and haven't provided specific comments on this.	Agreed. We are aware of the overlap between chapters and this has been addressed in subsequent drafts
Frank Wugt Larsen (EEA input)	General	General	0			General: In general, there is a need to systematically check references in the chapters. References are cited in text but don't appear in reference lists, and references are missing in some graphs and in text etc. Specifically, EEA reports are not referenced consistently, e.g. sometime sit is EEA 2015, other times European Environment Agency 2015.	Agreed. The references were thoroughly checked in subsequent drafts and the author team has been encouraged to systematically use the Mendeley reference management software.
Thomas Brooks (IUCN)	General	0	0			Congratulations to the authors for all their hard work in producing this FOD.	Thank you
Thomas Brooks (IUCN)	General	0	0			If it would be useful to the authors for IUCN to disaggregate further the Red List data summarised for the ECA region and its component subregions by Brooks et al. (2016), please feel free to contact me accordingly. Examples of potentially useful disaggregation could include by marine/freshwater/terrestrial, by major systems (and sub-systems) aligned to the headings in Section 3.3.2, species groups aligned to the headings in Section 3.3.3, or drivers aligned to the headings in Section 4.3.	Thanks and these data have been made available to subsequent drafts of the ECA assessment
Thomas Brooks (IUCN)	General	0	0			IPBES follows the CBD definition of biodiversity, which encompasses diversity at genetic, species, and ecosystem levels. It is therefore redundant to say "biodiversity and ecosystems". Either replace with "genetic, species, and ecosystem diversity", or simply say "biodiversity". Same applies any other places this formulation is used throughout (eg Chapter 1 L146, L159, L164, L170, L788, L796; Chapter 2 L300, L1843-1844; Chapter 3 L461, L468, L472, L528, L635, L1018, L3305, L3307, L3317, L3323, L3340, L3738; Chapter 4 L265, L430, L4418; Chapter 5 L142-143, L144, L824, L846, L913, L1590, L1979, L1982, L1985).	The ECA assessment is based fundamentally on the IPBES conceptual framework. The conceptual framework refers to biodiversity and ecosystems in the 'Nature' box.
Douglas Nakashima	General	0	0			GENERAL: on incorporation of ILK as an actual source of knowledge: The way incorporation of ILK is recommended in the sections so far allows to address the question of indigenous and local people as a component of socio-ecological systems where humans and nature interact, where societies use nature, perceive it, invest it culturally etc... However, incorporation of ILK as an actual source of knowledge about biodiversity and ecosystems changes has not been fully developed in the FOD yet; although it is presented as a recommendation and announced in the 1st chapter. The involvement of indigenous and local people and ILK in scientific assessments and international organizations represents a political statement, and contributes to the recognition of indigenous people especially, as legitimate actors in decision making, in the context of natural resource management for example. However, incorporation of ILK is not only a political statement, but also represents a valuable source of knowledge. It is by taking seriously the value of this knowledge that incorporation of indigenous and local people can represent more than a superficial recognition. Published scientific literature represents a source of access to ILK. In this review, examples will be given of studies where ILK related to biodiversity and environmental change has been recorded. It can be factual qualitative observations made by local populations regarding components of the environment and the changes they observe, observations of the drivers of these changes, or narratives or stories embedded in personal history and local worldview illustrating the changes that occurred in the environment along one's lifetime or across generations. These observations can be added as a complementary source of information to scientific studies. They can corroborate scientific observations, but also complement them, contradict them, often operating at different time and space scales. It is to be noted that extraction of fragments of ILK to be incorporated to the different sections of such an assessment can be problematic, notably for the integrity of the knowledge which is outrooted from its context. (see comment line 8 of this table). SEE Nakashima & Roué 2002	Since the FOD, the author team has received the completed proceedings of the workshop with ILKP holders. Information within the proceedings has been included as much as possible within the SOD, although time constraints (the final workshop proceedings were only received 1 week before the SOD submission deadline) limited this task.
Douglas Nakashima	General	0	0			4.6.1.1. ECA in general Parrotta & Agnoletti 2007. (p1-2) "The holders and users of traditional knowledge in many parts of the world face significant challenges - continuing encroachment and/or expropriation of their lands, degradation of their forests, and the erosion of their cultures, values, and traditional lifestyles. In many developed societies, technological development, the abandonment of marginal lands, renaturalization, and inappropriate policies are rapidly erasing cultural values and contributing to the globalization of landscape, which are being simplified into areas either managed for commercial exploitation or left to natural succession." (p2) "This trend has been supported by the historical development of forestry, particularly in Europe. Since the early 19th century, the development of modern forestry promoted industrial plantations favoring species suited for timber production, as occurred in Europe with large-scale afforestation of conifers through artificial regeneration and producing even-aged forests. These ideas were spread throughout the world during the 19th century, largely through the colonial administrations of the European imperial powers. This process changed the features of many cultural forest landscapes created by traditional preindustrial societies, both in developed and developing countries. In the 1970s, forestry passed from a phase favoring almost exclusively economic aims, to one paying greater attention to the ecological roles of forests and the value of biodiversity. Unfortunately, the assessment of biodiversity has often neglected components arising from human influence, while monitoring and conservation have focused on "natural" species. The abandonment of traditional landscapes has reduced the diversity of forest management forms, creating simplified landscapes often with reduced biodiversity of habitats linked to land uses and related forest management practices."	Furthermore, the ECA assessment has established an ILP liaison group (Chaired by Zsolt Molnar) that is responsible for all aspects of ILKP within the assessment, including the SPM. We feel that this has improved the integration of ILKP within the SOD.
Germany	General		0			We believe that the regional ECA assessment generally has a comprehensive and scientifically sound structure: Status as well as trends are shown. It is however a first order draft and therefore, we hope that our comments will be useful for the further development and maturing of this regional assessment so that scientifically sound options for action can be derived. It needs to be critically highlighted in the first order draft that chapter 6 (Options for governance, institutional arrangements and private and public decision making across scales and sectors) refers to international organizations and treaties, thereby failing to discuss specific institutions and treaties, which are of relevance to Europe and Central Asia. As we are dealing with a regional assessment for Europe and Central Asia (ECA) we strongly encourage the authors of this assessment to assess regional organizations and treaties relevant to the ECA region so that useful options for actions can be derived for the potential user groups. Please also ensure that in the further development of this assessment key messages with their level of confidence/certainty are developed as outlined in the document IPBES/4/INF/9. Such key messages will be important to develop scientifically sound options for actions. We request the co-chairs of this assessment to ensure that the general comments listed here are made available to the CLAs and LAs of all 6 chapters. Reason: It is important that there is alignment in the use of terminology and structure of the document. In order to further strengthen the storyline throughout the 6 chapters we also encourage cross-referencing between the chapters so that information redundancies are avoided and the arguments are overall strengthened. We also strongly encourage the development of an appendix that lists all the acronyms and key terms (including their definitions) used in the ECA assessment and communicate these lists with the leaders of the other regional assessments to ensure that jointly, all 4 regional assessments can provide a solid basis for the global assessment (IPBES deliverable 2c) by using the same terms and definitions. We very much look forward to the second order draft of this important assessment.	Thanks you for your comments, which have been helpful for the ECA assessment. These comments have indeed been made available to all CLAs and LAs of each of the ECA assessment chapters. Ch6 deals with all relevant decisions makers including regional organisations and treaties. The standard use of terminology is being checked across chapters. The chapters will be cross-referenced and there will be a standard IPBES glossary and list of acronyms. Confidence language has been included for all key findings. However there are different traditions in using confidence language in the humanities and social sciences and this is why confidence language is not used in the key messages concerning for example options for governance. We will thereby avoid being prescriptive and instead provide a portfolio of governance option for decision-makers.
Germany	General		0			Please ensure that the general comments on the ECA assessment are provided to all CLAs and LAs! Reason: It is crucial that the chapters (a) use the same terminology; (b) don't provide redundant information and (c) don't contradict each other, and (d) provide a consistent chain of arguments and discussions.	This has been done.
Germany	General		0			New knowledge und publications should be used, if available. Some cited publications e.g. about the EU CAP (one from 2003) seem to be outdated	Citations have been fully checked and the latest available (up to April 2017) used in the assessment
Germany	General		0			Data and findings of the SoW-Report (The State of the World's Biodiversity for Food and Agriculture, http://www.fao.org/nr/cgrfa/biodiversity/sowbfa/en/) from FAO and report from the project "Preparatory Action on EU genetic resources" from COM (for more info: http://www.geneticresources.eu/) could provide some valuable information for this chapter. Both reports will be published soon. Please check both reports as soon as they become available.	This source of evidence has been checked
Germany	General		0			Often, statements are linked to "Europe" but actually only refer to "Western Europe" or the European Union. Please ensure to present a well-nuanced picture of the ECA-region and state very carefully which sub-regions are concerned (see definitions in Table 1.2, p. 19).	The use of terms to describe the sub-regions has been checked across the chapters
Zsolt Molnar	General		0			The Balkan is heavily underrepresented in all chapters.	We have attempted to achieve a geographic balance right across the assessment, within the constraints of availability of evidence in some locations.
Zsolt Molnar	General		0			Many-many important publications on ILK are not at all used and cited in the assessment (see the literature lists provided by the ILK Task Force, and the Proceedings volume of the ILK Dialogue workshop)	The ECA assessment ILKP liaison group has taken on responsibility for information chapter authors of relevant ILKP literature.
Ayman Batisha	General	1	1	105	4013	The entire report should be homogeneously arranged, logically build and fully integrated with no inconsistency, disharmony or overlapping within its chapters and sections. The titles of chapters and sections are generally too long to be professional, as a quick example "4.6 Status and recent trends in indirect drivers", the phrase "Status and recent trends in indirect drivers of" could be omitted in titles 4.6.1 to 4.6.5.	Consistency across chapters has been verified. Some chapters and sections have changed their names to be more precise.

Ayman Batisha	General		1	1	105	4013	There should be examples/chapter to clarify how the biogeochemical cycle (carbon, oxygen, nitrogen, phosphorus, sulfur, calcium, rock and water etc.) through both biotic (biosphere) and abiotic (atmosphere, hydrosphere, and lithosphere) compartments of Earth can cause land degradation and restoration. Special attention should be emphasized to the human-caused cycle of atrazine, which may affect certain species. Land degradation and restoration should be assessed in the light of Global Changes; Global Warming; Global Sea Level Rise, and Global Ocean. Land degradation and restoration should be assessed into two categories which operates at different time scales: the biological – physical, (Near-term) and the geological, (Long-term). Land restoration opportunities, planning, economics, implementation constraints, and limits should be defined.	The LDR assessment is dealing with land degradation issues and environmental pollution. ECA will take up this evidence where relevant with respect to biodiversity (in Ch3)
Ayman Batisha	General		1	1	105	4013	Research related to the Science of biodiversity and ecosystem services should be emphasized on. Assessment on biodiversity and ecosystem services generally deal with multiple meanings of fuzzy concepts, so it is strongly recommended to add chapter/section to provide General Guidance to the subject of how applying fuzzy concepts in the context of biodiversity and ecosystem services using soft computing techniques. The scope of soft computing covers the areas of Fuzzy Logic, Neural Networks, Chaos Theory, Evolutionary Computing, Rough Sets, Ant Colony, Immunological Computing, Particle Swarm, Wavelet, Probabilistic Computing, Hybrid Methods and other similar techniques to address real world complexities achieving tractability, robustness and low cost solution. The chapter may be devoted to effective approaches to Data Collection; dealing with Uncertainties; Methodological and efficient technique Choice; Time Series Consistency Identification of Key Categories, and Quality Assurance/Quality Control and Verification. The application areas of soft computing include but are not limited to Detection and Attribution of biodiversity and ecosystem services: from Global to Regional and local, biodiversity and ecosystem services Projections and Predictability (Near-term and Long-term), biodiversity and ecosystem services and its relevance for future Global and Climate Change. Detection and attribution of observed and multi-sector biodiversity and ecosystem services, emergent risks, key vulnerabilities, and opportunities should be addressed. Biodiversity and ecosystem services should be assessed in the light of statistical analysis and levels of confidence.	Literature on these topics has been assessed along with other sources of evidence in terms of how these methods contribute to understanding of biodiversity and ecosystems. Chapter 5 is concerned with the use of models supporting biodiversity and ecosystem knowledge.
Ayman Batisha	General		1	1	105	4013	Atlas of Continental, Regional and local biodiversity and ecosystem services Existing, Projections and Predictability should be annexed.	Sorry we do not understand this comment
Germany	chapter 1	general comment		0			To ensure appropriate coverage of the literature and knowledge across ECA we would suggest that a Russian author and an expert from Armenia, Georgia, Belarus, Ukraine, Moldova or Azerbaijan could provide so far missing information if co-authoring this chapter	The authorship has been updated to account for this, including new LAs and CAs
Germany	chapter 1	general comment		0			Please ensure readability of figures/legends, see for example Figure 1.8 - the resolution of these figures is poor; also the legends are not readable; and the units are different	Figures have been revised
Germany	chapter 1	general comment		0			Please ensure regional balance also in the representation of information through figures. As it stands now, way more figures contain information about Europe than for other regions	Figures have been revised
Germany	Chapter 1	general comment		0			Chapter 1 offers some general information in some places such as 1.2.1 "what is an assessment", 1.2.3 "The IPBES conceptual framework...". Please condense where possible and refer to the original documents and focus on how the framework is specifically applied to the ECA region (Table 1.1 is very useful). 1.2.4 "Regional and subregional aspects and relations to IPBES assessments" this is a very crucial objective of the subsection, however, it seems that the reference to the other IPBES assessments remains rather descriptive and the links to ECA are not visible. Please be more specific here and avoid too general information.	The text has been edited accordingly
Andrew Stott, UK IPBES National Focal Point	Chapter 1		0	0			In general, there is a very strong natural science (ecology/biodiversity conservation) 'feel' to this and rather superficial on social, economic and political aspects. The text should take a more neutral tone and not start from the perception of decline in biodiversity and ecosystem services, but rather or equally from the perspective of 'good quality of life'. This is necessary for it to reach out to the wider audience of policy makers and business.	The social science aspects have been developed further with new authors
Friedrich Wulf	Chapter 1	General remark		0			On a general note, while I am aware the first chapter is just a frame for the more interesting comment that will still come in the subsequent chapters, I think this chapter is below my expectations. There's too much process stuff which later won't interest anybody, and the geographical overview is quite commonplace and very Western Europe perspective. It would be good to have an outside author as well for assuring that the region is not only seen from those who live there	The description of the region has been substantially revised
Friedrich Wulf	Chapter 1	General remark		0			Important to stress the people-biodiversity connection; but connection should not only be made in monetary terms, but also in social terms - right to nature approach, health....	This is now discussed in the text in the section on values
Olivia Barrantes	Chapter 1	Whole		0			Abbreviations and Acronyms lists/Glossary should be provided	This has been created by the IPBES secretariat
Olivia Barrantes	Chapter 1	Whole		0			Biodiversity in Itself is an Ecosystem Service, this should be justified	Text has been revised
Esra Başak Dessane	Chapter 1		4	74	4	74	A comma needed after 'since then'	Text revised
Maximilian Weigend	Chapter 1		5	83	6	149	the executive summary is okay, but very general in its conclusions. Some of it sounds more like a mission statement than a summary	The exec summary has been revised considerably
Thomas Brooks (IUCN)	Chapter 1		5	83	6	133	These sections of the Executive Summary are very generic. Would be preferable to focus a bit more on ECA specific points?	The exec summary has been revised considerably
Marianne Penker	Chapter 1		5	84	6	149	The executive summary should not include unexplained abbreviations.	The exec summary has been revised considerably
Germany	chapter 1		5	84	6	149	Partly very general statements, which make the executive summary read more like a catalogue of objectives and procedures than results. It would be helpful to expand on these statements with information about the extent to which they were actually achieved. Also adding uncertainty statements here might not always make sense.	The exec summary has been revised considerably
Esra Başak Dessane	Chapter 1		5	84	5	86	Perhaps using a term such as 'good quality of life' instead of 'human well-being' could be more consistent with the IPBES CF, where human well-being is a component of a good quality of life	This change has been implemented
Tom West	Chapter 1		5	94	5	125	Although an exec summary, it would be helpful to have more examples at this point. In particular, what are (some of) these relationships and broad values? What are (some of) these different worldviews? What are (some of) these requests from governments? This would improve the summary as it is a little frustrating to have 'specific key questions' referred to, but then only vague areas referred to. Without this, the reference to 'key questions' in line 120 is somewhat mysterious. What are (some of) these options for policy-makers? Who are (some of) these other stakeholders?	The exec summary has been revised considerably
Shafqat Saeed	Chapter 1		5	94	1	97	statement comparison of ECA and previous assessment seems same, needs to be rephrased	Edits done
Esra Başak Dessane	Chapter 1		5	95	5	95	associated range of broad values?	Not clear what the point is here
Shafqat Saeed	Chapter 1		5	104	5	118	Rather than showing the responsibility of ECA, it will be more better to mention what you have done in the chapter	This has been done
Marianne Penker	Chapter 1		5	107	5	107	The executive summary should include the key questions.	This has been included in a reduced form
Tom West	Chapter 1		5	108	5	108	MEA not defined	Done
Esra Başak Dessane	Chapter 1		5	114	5	114	Again, I suggest to use good quality of life instead of human well-being for CF consistency	Corrected as suggested
Andrew Stott, UK IPBES National Focal Point	Chapter 1		5	121			Should also refer specifically to SDGs and Paris Agreement	Done
Esra Başak Dessane	Chapter 1		6	139	6	139	A comma needed after 'context'	Done
Esra Başak Dessane	Chapter 1		6	148	6	148	May want to include energy dependency also - i.e. Oil, natural gas etc	Not clear why this is needed here
Elena Bukvareva	Chapter 1		6	149	6	149	Proposed addition: "ECA region retains all the biological diversity of the subcontinent Northern Eurasia, so it is important for the conservation of global biodiversity. Ecosystem services of climate regulation provided by ecosystems of ECA have global importance".	The text has been revised accordingly
Maximilian Weigend	Chapter 1		7	150	19	520	context of the ECA-assessment: This part is very general in nature and is bound to be duplicated in all other regional assessment. I would expect these general informations to be found elsewhere in the IPBES-documents and there is nothing specific to the ECA here.	The text has been revised considerably
Andrew Stott, UK IPBES National Focal Point	Chapter 1		7	151		156		
Esra Başak Dessane	Chapter 1		7	155	7	155	This para doesn't really answer the question. Why is the assessment needed? What would happen if there wasn't an assessment.	The text has been revised considerably
Allian Watt	Chapter 1		7	158	9	218	A bit of a long sentence. Perhaps cut it into two here: 'It also identifies...' There is too much implicit criticism of earlier assessments in this section e.g. "broader and more inclusive..." (line 186). It should focus on their key findings and acknowledge that this assessment, and IPBES itself, would not exist without these previous assessments.	The text has been revised accordingly
Shafqat Saeed	Chapter 1		7	160	7	163	MA, 2005, I think it will be more better to write Mellanium Ecosystem Assesment 2005, please check reference also.	The text has been revised to account for this point
Mark Snehlage	Chapter 1		7	162	7	163	This should prompt some reflection as to why the responses do not appear to work. Are we focusing on a wrong approach?	Changed in the text and in Mendeley.
Esra Başak Dessane	Chapter 1		7	162	7	162	Increasing is used twice in this sentence; multiplying ?	We have included a brief discussion of the importance of mainstreaming within the limits of the length of this short section.
Andrew Stott, UK IPBES National Focal Point	Chapter 1		7	164		169	This para summarises only one EU level assessment. There are several other wider European assessments undertaken by EEA. There are also several national level assessments such as the UK NEA. This therefore gives an incomplete picture.	Changed to growing.
Frank Wugt Larsen (EEA input)	Chapter 1		7	165	7	167	Incorrect numbers. 77% and 60% respectively. See EEA, 2015, State of Nature Report 2015, http://www.eea.europa.eu/publications/state-of-nature-in-the-eu .	Further examples have been added
Thomas Brooks (IUCN)	Chapter 1		7	168	7	168	Key citation for Bison is Olech (2008) http://www.iucnredlist.org/details/full/2814/0	Numbers have been corrected
Thomas Brooks (IUCN)	Chapter 1		7	168	7	168	Too optimistic to list White-headed Duck here (see http://www.birdlife.org/datazone/species/factsheet/22679814)	Added
Thomas Brooks (IUCN)	Chapter 1		7	169	7	169	Key citation for Bison is Batbold et al. (2008) http://www.iucnredlist.org/details/full/4007/0	Removed
Andrew Stott, UK IPBES National Focal Point	Chapter 1		7	170		178	This para focuses on a few protected species, and protected areas, and doesn't refer to wider assessments of ecosystem services.	I believe this is for the Eurasia Beaver. Corrected.
								The reviewer is correct. This has been revised in the SOD.

Thomas Brooks (IUCN)	Chapter 1	7	172	7	174	Citation for Saiga being Critically Endangered is Mallon (2008) http://www.iucnredlist.org/details/full/19832/0	Introduced.
Andrew Stott, UK IPBES National Focal Point	Chapter 1	7	177		178	This sentence refers to the whole region and not just Central Asia, so it is wrongly placed. See comment above. Some further summary of national level studies should be included here. It is important to summarise not only the geographical coverage but also the qualitative aspects of the depth of analysis (ie ranging from selective assessments of elements of biodiversity to in-depth integrated analysis of ecosystem services. This analysis would feed into the conclusion on pg 9 in 201. A map showing coverage of national/sub-national assessments and their depth of analysis would be useful.	The structure of the SOD has changed to include a review of national assessments that are currently being done.
Thomas Brooks (IUCN)	Chapter 1	8	180	8	180	Why Figure 1 just for Central Asian countries, with no equivalent for the region's other countries?	We thought it would be interesting to include a figure that respects the central asia region. This figure was taken from a report on Biodiversity that is now correctly cited.
Andrew Stott, UK IPBES National Focal Point	Chapter 1	8	181		184	A useful graphic but it needs to have some statement concerning the quality of the data and uncertainty in the assessment. This seems to me very qualitative.	From a report on Biodiversity, which is now correctly cited
Jari Niemelä	Chapter 1	8	181	8		Why figure 1.1 is only for central Asia, not for Europe?	Taken from a report on Biodiversity in Central Asia, now with the correct citation.
Germany	Chapter 1	8	186	8	192	Please replace the repeatedly used expression "broad" with a term which is more concise.	The text has been edited accordingly
Esra Başak Dessane	Chapter 1	8	187	8	189	good quality of life instead of human well-being to be consistent with IPBES CF	The text has been edited accordingly
Mark Snethlage	Chapter 1	9	196	9	197	IL communities = indigenous local communities?	Yes, the text has been edited accordingly
Andrew Stott, UK IPBES National Focal Point	Chapter 1	9	201		210	But this should also explain some of the granularity. Some national studies, such as UK NEA, have used a more inclusive conceptual framework. There are also many EU research projects which have addressed parts of the conceptual framework. What can this assessment learn from them in a regional context?	we have detailed this with examples of local assessments and recent research projects.
Jari Niemelä	Chapter 1	9	202	9	203	It is stated 'they mostly did this implicitly rather than implicitly'. One 'implicitly' too much	The text has been edited accordingly
Olivia Barrantes	Chapter 1	9	202	9	203	This sentence is not clear to me. However, based on less inclusive conceptual frameworks than the ECA assessment, they mostly did 202 this implicitly rather than implicitly (e.g. MA).	The text has been edited accordingly
Shafiq Saeed	Chapter 1	9	202	9	210	Sentences are so slong, need to be rephrased with short sentences	The text has been edited accordingly
Mark Snethlage	Chapter 1	9	203	9	203	"implicitly rather than implicitly" -> explicitly?	The text has been edited accordingly
Thomas Brooks (IUCN)	Chapter 1	9	203	9	203	"implicitly rather than implicitly"?	The text has been edited accordingly
Germany	Chapter 1	9	203	9	203	It should be 'implicitly rather than explicitly'.	The text has been edited accordingly
João Garcia Rodrigues	Chapter 1	9	203	9	203	The word "implicitly" is repeated. Possibly the authors mean that other assessments covered aspects of nature implicitly, rather than explicitly.	The text has been edited accordingly
Friedrich Wulf	Chapter 1	9	203	9	204	implicitly rather than explicitly (Typo)	The text has been edited accordingly
Germany	Chapter 1	9	204	9	204	What is meant by traditional economic valuation approaches? The field of economic valuation has developed rapidly in the last years and includes more approaches and better ways of capturing non-market values. Also, participatory approaches to identifying values and analyses of people's preference's towards ecosystem services, biodiversity and nature are available. Please expand on this.	The text has been edited to expand on this point
Tom West	Chapter 1	9	210	9	212	Is it fair to say that Chapter 3 has a central focus on intrinsic value? It takes up only 1.5 pages of the whole chapter. There seems overall to be a limited engagement with intrinsic value despite it being a part of the IPBES conceptual framework. A useful way that intrinsic value could be engaged with is through exploring it as a scenario - eg 'what if nature's intrinsic value drove biodiversity policy?'	Actually intrinsic values sensu IPBES entails all 'strictly nature' valuations: biodiversity, ecological quality and value, diversity of processes and structures etc. In that sense, CH 3 is entirely intrinsic value targeted.
Esra Başak Dessane	Chapter 1	9	210	9	210	typo - assessing	The text has been revised accordingly
Friedrich Wulf	Chapter 1	9	210	9	210	and assessing Typo, "a" missing	The text has been revised accordingly
Germany	Chapter 1	9	211	9	211	Please if possible refer to the preliminary guide on the conceptualization of values IPBES/4/INF/13. Here definitions of different value categories can be found and more background information is available that helps readers to understand Figure 1.2.	we refer to this in the figure caption
Esra Başak Dessane	Chapter 1	9	211	9		Very useful table :) I just don't understand the last column called IPBES. Is the intention here to give an overview of the different value typologies that are the foci for the whole IPBES processes? Not quite clear; perhaps a footnote needed.	The text has been edited accordingly
Esra Başak Dessane	Chapter 1	9	211	9	213	This table is missing a title: Table 1.1 There is another title on line 213 but that seems for the next figure	The text has been edited accordingly
Shafiq Saeed	Chapter 1	9	211	9	213	This diagram is good representation of whole deliverable goals. Focus in different chapters were given. If I observe only this diagram the partial focus of chap.1 and Chapter 4 are similar where as central focus of chapter 4 and Chapter 6 are similar. Where as other key Target valuation needs to be focused as central focus in other chapters rather than partial focus.	Indeed. This is based on preliminary estimates by chapter coordinating lead authors. It has been adapted in the next version of the ECA assessment.
Marcus Zisenis	Chapter 1	9	213	9		Figure 1.2: I wonder why this evaluation scheme seems to have been chosen as leading structural approach for this regional assessment, instead of assessing the different values of biodiversity according to the Preamble of the CBD? This scheme is obviously inconsistent and overlapping in biodiversity values vertically and horizontally. It does not include criteria nor indicators for an evaluation of biodiversity. In particular, the 'key targets for valuation' are a mixture of all kinds of terms like sustainability, values like well-being, and parts of biodiversity like biophysical processes.	We are following the detailed guidelines on multiple conceptualisation of values of nature, its benefits for good quality of life, which have been approved by the plenary to serve as the IPBES valuation framework. We now refer more explicitly to this work for further reading.
Jari Niemelä	Chapter 1	9	213	9	220	no reference to figure 1.2 and figure 1.3 in the text	The text has been edited accordingly
Harald Paull	Chapter 1	10	215	10	215	in the figure is MEA, in the caption MA?	The text has been edited to clarify this point
Allan Watt	Chapter 1	10	215	10	220	I'm not sure that this figure is useful and it only serves to underline my previous point (with e.g. IPBES written in a larger font). One striking aspect is the size of the Nature bubble: having read the whole ZOD, I don't think this is justified by the attention given to "nature".	Adapted this to respect the notion of all-encapsulating Nature.
Germany	Chapter 1	10	215	10	220	This figure is quite useful and provides indications on the potential added value which the ECA Assessment will provide. In order to further enhance the quality of this figure please provide more information on how to interpret figure 1.3. Do the circles refer to a quantitative or rather a qualitative description of their relevance in the mentioned initiatives?	This is a purely illustrative figure. The aim is to provide a more quantitative representation based on the final screening of chapters.
Marcus Zisenis	Chapter 1	10	217	10		Figure 1.3: This main conceptual figure of the analysis is also inconsistent. What is the difference between nature and biodiversity? Ecosystem services are benefits of nature for human well-being (apart from intrinsic values), but they are separated in this figure.	We follow the IPBES guidelines and definitions. Biodiversity is a part of, or even a feature of nature as a whole. ES are indeed part of BoN
João Garcia Rodrigues	Chapter 1	10	217	10	217	Fig. 1.3. The circle "Nature" should be bigger and should encompass all other circles, since all other domains are part of nature.	The text has been edited accordingly
Roger Keller	Chapter 1	10	218	10	218	There are no "arrows" in Figure 1.3 but only lines.	The figure has been edited accordingly
Esra Başak Dessane	Chapter 1	10	218	10	218	MEA instead of MA as the abbreviation in the figure	The text has been edited accordingly
Allan Watt	Chapter 1	10	222	14	375	Presumably this text will be standardised across regions.	Yes, correct
Mark Snethlage	Chapter 1	10	228	10	228	is "skills" the right descriptor of why the experts have been selected and involved: would "knowledge and skills" be more appropriate?	Change has been made
Mark Snethlage	Chapter 1	10	230	10	231	The geographical domain (ECA) is given, the time domain is not (at least not that explicitly): is that 1950 - 2050? See line 1195, page 40.	Yes, this is now stated in the text
Marcus Zisenis	Chapter 1	10	231	10	235	The introduction should already make clear with reference to the following chapters, how this biodiversity assessment has generated which kind of new knowledge, as well as what was the practical contribution by the local and indigenous people concerned in this region. It should also give some hint to the extent to which this regional biodiversity assessment allows concluding practical political decisions with an impact on biodiversity in this region. Thereby, the statement could be justified that this regional report provides something new and substantial to improving the different values of biodiversity in this region.	These points have been developed further in the revised text
Mark Snethlage	Chapter 1	10	232	10	233	"understanding" not more appropriate here than "knowledge"?	The text has been edited accordingly
Roger Keller	Chapter 1	10	240	10	242	The report doesn't say anything about how these goals (consideration of ILK, disciplinary and gender balance) have been accomplished. Please provide details (i.e. in a table).	Thanks, important comment. This info is provided in section 1.7.2.
Esra Başak Dessane	Chapter 1	11	247	11	247	Perhaps a new paragraph needed to break the text here?	The text has been edited accordingly
Mark Snethlage	Chapter 1	11	254	11	254	"Open Ocean Region" is not mentioned further down in the discussion. Perhaps indicate where in the IPBES process this region is dealt with.	Text has been revised
Esra Başak Dessane	Chapter 1	11	279	11	279	Space between renders and it	Done
Thomas Brooks (IUCN)	Chapter 1	12	289	12	289	Delete "western" - science is global	Done
Esra Başak Dessane	Chapter 1	13	307		317	I guess this will be Table 1.2 (see comment for line 211)	Yes
Andrew Stott, UK IPBES National Focal Point	Chapter 1	13	315			As for comments above. 'not typically found' is a general statement but it would be helpful to qualify this with a more thorough analysis of where this has been done.	Further analysis is underway
Allan Watt	Chapter 1	13	323	13	324	Suggest giving the titles of these (IPBES) assessments in full (as in the following text).	Done
Andrew Stott, UK IPBES National Focal Point	Chapter 1	14	340			The text is not very clear which of these assessments are in progress and which are still to be decided. It would be better to present this in a time series: completed, in progress, scoped but not yet started etc.	Text revised accordingly
Elena Bukvareva	Chapter 1	14	354	14	355	The dominant driver of change for biodiversity is habitat loss and transformation, so I propose to write: "Human use of wild species is one of the most important drivers of change for biodiversity"	Thanks for the suggestion and revision made
Andrew Stott, UK IPBES National Focal Point	Chapter 1	15	380			This question is only partly answered. As this text will be finalised at the end of the process it should be able to be more specific about both the procedural aspects of how they are linked and the analytical links that have been established between them.	Agreed, this needs to be done at the end of the process
Esra Başak Dessane	Chapter 1	15	383			space to be eliminated after 'see'	Text revised accordingly
Friedrich Wulf	Chapter 1	15	383			typo: line breaks in the middle, remove hard line break	Text revised accordingly

Esra Başak Dessane	Chapter 1	15	384	15	384	Space between above and mentioned	Text revised accordingly
Olivia Barrantes	Chapter 1	15	385	15	385	The concept "teleconnections" could be slightly explained here, not clear to people not familiar with the concept. transregional teleconnections in biodiversity	Text has been modified
Germany	Chapter 1	15	386	15	386	It is surprising that the reference to the global assessment is extremely short although the regional assessments are critical for conducting the global assessment. Please consider adding more information about how the regional assessments can fulfill this intended task.	There is an on-going dialogue with the global assessment that will be reflected here
Esra Başak Dessane	Chapter 1	15	389			space to be eliminated after 'see'	Text revised accordingly
Friedrich Wulf	Chapter 1	15	389			typo: line breaks in the middle, remove hard line break	Text revised accordingly
Sylvain Boucherand	Chapter 1	15	391	17	471	the private sector is mentioned as a potential stakeholder concerned by the assessment and having a role to play in the conservation, use and management of biodiversity and ecosystem services. How should data be presented and shared to stakeholders including private sector and SMEs so that they can mobilize and use them to implement their policies ? !!	made more general. Not specific for private sector anymore
Germany	Chapter 1	15	392	17	479	We welcome the valuable definitions of the different stakeholder categories, however, we feel that some of the information remains very general. It would helpful if the SOD gives a clear picture how the different stakeholder groups were able to contribute to the ECA assessment.	There is a general strategy to involve stakeholders in the process of IPBES on which this text is based. I would refer to the draft stakeholder involvement strategy and how these stakeholders can contribute.
Mark Snethlage	Chapter 1	15	395	15	395	Perhaps choose between the synonyms "relevance" and "relevancy" and use one throughout. With a preference for "relevance". See also page 5, line 102.	changed to "relevance"
Allan Watt	Chapter 1	15	397	13	398	Supporting evidence needed.	This has been provided in the next version
Allan Watt	Chapter 1	16	406			Is governance, rather than "institutional", meant?	in the respective papers institutional scale is used.
Esra Başak Dessane	Chapter 1	16	409	16	414	local communities - apostrophe not needed	Text revised accordingly
Germany	Chapter 1	16	416	16	417	We appreciate this statement, but wonder about the literature reference [because it yet seems to be incomplete/outdated?]. We look forward to more detailed information in the SOD as to how and to what extent ECA could fulfil this ambition.	added in the section.
Allan Watt	Chapter 1	16	421			What follows does not read like specific requests but ways in which the assessment might be relevant to specific stakeholders.	title changed
Germany	Chapter 1	16	421	17	479	The European Commission could be a multinational stakeholder to address; especially since many regulations are fixed by the EC and harmonisation is important (as also referred to on p. 21 lines 566 and 567). It might be appropriate to add a category with "regional organizations".	added in the section.
Germany	Chapter 1	16	421	17	479	In section 1.3.2 it is mentioned for some stakeholders, how they [will] benefit from the assessment and for others what they can contribute. It might be good to describe for every stakeholder group how they benefit and how they can contribute, respectively. It might be helpful to distinguish between direct and indirect benefits. For example, the private sector might not benefit directly in the short-term, but indirectly on the long-term because it depends on natural resources. Furthermore, it is not stated whether ILK holders benefit from contributing to IPBES, they are only mentioned as a source of knowledge here. It will be useful to provide these benefit to different stakeholders in a table.	We made now a separate contribution (1.3.2) and benefit (1.3.3) section. An ILK section has been added.
Thomas Brooks (IUCN)	Chapter 1	16	422	16	422	Specify "UNEP-WCMC".	specified
Esra Başak Dessane	Chapter 1	16	426			Plural - national governments	changed
Allan Watt	Chapter 1	16	428	16	431	Is this (and other assertions below) an assumption or was there a dialogue with these policy makers (and other groups)?	The text is based on presentations given by the stakeholders on IPBES plenary meetings and stakeholders days.
Esra Başak Dessane	Chapter 1	16	428			Plural - local governments	changed
Friedrich Wulf	Chapter 1	17	444	17	446	The paragraph on NGOs is too short in relation to their meaning for ipbes, also in relation to other stakeholder groups. Given the stakeholder engagement strategy (ipbes 3/4, annex II and the MoU between ipbes and the stakeholder platform, we suggest adding a sentence at the end of this para along the following lines: "NGOs can also substantially contribute to the quality of the assessment, both in terms of data/knowledge and in terms of political/social context."	This sentence has been added to the text
Thomas Brooks (IUCN)	Chapter 1	17	457	17	457	Delete "Future Earth and". Why specify Future Earth here? - this vision is shared by very many institutions working at the science-policy interface for biodiversity and ecosystem services. Not appropriate to emphasise one at the expense of others.	changed into many institutions
Esra Başak Dessane	Chapter 1	17	467	17	469	Perhaps add natural resources to biodiversity. Also business not only bring complementary perspectives but also have serious lobbying power upon governments.	Not any more specified specific for businesses. Contributions are made more generalised.
Germany	Chapter 1	17	473	17	475	Why is general public - in contrast to all other stakeholder groups - only introduced by a one-sentence citation?	Because the general public is very diverse and is partly represented by the stakeholder organisations.
Esra Başak Dessane	Chapter 1	17	473	17	475	Text should not be in italic	changed
Germany	Chapter 1	17	481	18	496	Though all this information is interesting, in how far is it "ECA-specific"? Can you add some examples to make this more understandable or refer to them in the further chapters of the assessment?	It might not be completely ECA specific. An attempt has been made to add some specificity in the next version
Andrew Stott, UK IPBES National Focal Point	Chapter 1	17	481			Not sure what this question means?	text changed accordingly
Esra Başak Dessane	Chapter 1	18	490	17	491	space to be eliminated after paranthesis	eliminated
Allan Watt	Chapter 1	18	498			Is this consistent with IPBES work on policy tools and instruments?	This has been cross-checked
Allan Watt	Chapter 1	18	501			I strongly recommend that acronyms such as this are not used	removed
Mark Snethlage	Chapter 1	18	510	18	513	Compare with criteria for EU policy evaluation: Efficiency, Effectiveness, Impact, Relevance and Coherence. Sustainability and Added value can also be part of it. See "Fitness Check of the Birds and Habitats Directives" http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm	The meaning of this point is not clear to us
Mark Snethlage	Chapter 1	19	517	19	518	Information and understanding at a personal level is not always (or almost never) enough to induce behavioural change. There are far stronger forces driving personal decision making affecting biodiversity.	Agree but it is a start. If you do not have the information and do not understand you will be far more influenced by popular quotes.
Sylvain Boucherand	Chapter 1	19	521	20	549	France is included in the Western Europe perimeter. How are taken into account overseas territories ?	According to IPBES instructions, overseas territories will be dealt within the region where they are physically located
Maximilian Weigend	Chapter 1	19	521	27	770	this entire chapter has no clear structure. One would expect first the overall region to be introduced, and then the subregions, in a standardized fashion with key facts on - size, geography, climate, biomes (steppe, natural forest, agricultural landscape etc.), overall biodiversity (species numbers, organisms of special importance), major drivers, political subdivision and systems. As it now stands, the different regions can not be compared.	The chapter has been completely restructured - the new structure is: key facts, basic geography, basic history, information on society/stakeholders, information specific to each sub-region
Maximilian Weigend	Chapter 1	19	521	26	721	overview of the region: The description of the region/subregions does not reveal its logic to me. The countries are listed, and map 1.7 is helpful, but table 1.3 is not as it now stands. Overall, a more explicit information structure - e.g., countries, size, population, structure, landscapes, biomes, land use would be more sensible. In that way, the gaps would be a lot more apparent. At present, quite different sets of information appear to be provided for the different subregions and some are not as much as mentioned by name (the map indicates that Greenland belongs here, but the name not as much as appears in this or the following two chapters, to name but one example).	information structure has been revisited, a major restructuring of the sub-region descriptions has been carried out, with the addition of more information in general and a set of the same indicators (area, population density etc.) for each region. Greenland does not belong to the region according to new instructions
Germany	Chapter 1	19	521	27	770	The chapter could benefit from a slight re-arrangement of its sections. Please ensure that the sub-regions are described in a similar, structured manner. So far, it is difficult to identify similarities and differences among the sub-regions. This could be easily improved by re-arranging the sections.	The text has been changed accordingly
Andrew Stott, UK IPBES National Focal Point	Chapter 1	19	523		529	It is very important that the text here is entirely consistent with the text in the scoping document. The scoping document states: 'For the purpose of the regional assessment, three subregions have been identified that include the following countries and territories, including marine and coastal areas'. And then provides a table. This should be reproduced as it is in the scoping document.	for the sake of readability we have decided not to directly reproduce the text of the scoping document
Harald Pauli	Chapter 1	19	530	20	536	The intention to use political distinctions is clear as some of the important stakeholders are tied to the national level and for some environmental policy reason, e.g. EU legislation. The main divisions in Table 1.2, however, are of limited meaning in a biogeographical and threatened biodiversity context. Biome types are repeated in the subregions, e.g. boreal is in W, C and E Europe, temperate-nemoral in W, C and part of E Europe, Mediterranean in W and C Europe, arctic in W and E Europe, temperate-continental in E- and W-Europe - which does not really make sense. In the political context, however, it is again a mix, e.g. EU countries are in both W and C-Europe. E-Europe is mainly northern Asia, the latter being in terms of km ² the main part and therefore northern Asia also must be in the name. Some countries are obviously mis-placed such as Greece and Israel. With the current non-biogeographic nor climate-zone approach, I'm just concerned that one of the main targets of the assessment: pointing out critically threatened biota and the reasons behind, is not properly addressed - or even it seems to be hampered making clear messages. In subchapters of chapter 3, the focus on the subregions is weaker already, thus, I question why you invent them here?	we have to follow the sub-region structure agreed at the scoping meeting, which was to use UN political regions and sub-regions
Asimina Skouteri	Chapter 1	19	531	19		Table 1.2. Northern Ireland is U.K. - So is solely U.K. or Great Britain and Northern Ireland	Text has been changed accordingly
Esra Başak Dessane	Chapter 1	19	531			Table number to be adjusted during formatting	Text has been changed accordingly
Tom West	Chapter 1	20	533	23	575	Better to use same map projection in figs 1.7 and 1.8. Ideally one that preserves area because of the area comparison in line 575.	maps have been re-drawn at the phase of graphic design
Thomas Brooks (IUCN)	Chapter 1	20	533	20	533	Include Greenland on map. Also, show marine area (EEZ) to be included here.	new maps of marine area have been added. Greenland is outside of the ECA assessment (and included in the Americas)
Andrew Stott, UK IPBES National Focal Point	Chapter 1	20	534		536	As above, important to stick t language in the scoping document. IPBES does not 'recognise' these regions, it identifies for the purpose of the regional assessment three sub-regions (one of which is subdivided).	we try to convey information beyond the scoping document. Here we use pre-defined regions - if we were to define regions for the purpose of the assessment they might follow geographic boundaries more closely
Friedrich Wulf	Chapter 1	20	535			We have issues with the definition / Term of Eastern Europe (see remark on chapter 1.4.4., line 661). Please also change the color in the subtitle from "blue" to "violet" as this is the color used in the document.	region structure was pre-defined. We acknowledge its disadvantages
Olivia Barrantes	Chapter 1	20	535	20	535	Eastern color is not blue, but purple. Furthermore, it should be justified that Russia Fedarion has one parte belonging to Europe and another parte belonging to Asia	Russian Federation was treated as one country. Also Turkey has one part in Europe and one in Asia, but its place in the sub-region structure is given

Harald Pauli	Chapter 1	20	538	20	549	This paragraph is quite a melange and needs revision: e.g. 'humid continental climate zones' is something which does not exist; or what has 'large-scale climate zonation' to do with 'edaphic factors' and the latter with 'cold and warm ocean currents'? - and finally it comes to slope and urban climate island - all in one sentence. Further, like parts of Central Asia, also the eastern part of Europe is not very fragmented, whereas some of the Central Asian countries are highly fragmented.	this has been extensively revised, but the view across several scales has been retained in the same sentence
Thomas Brooks (IUCN)	Chapter 1	20	538	26	742	In general, this section, apart from the first rows of Table 1.3, is weak on marine and coastal ecosystems to be included. Add text accordingly.	Done - new CA with marine expertise has been included in the writing team
Andrew Stott, UK IPBES National Focal Point	Chapter 1	20	538		539	I would not expect the ECA regional assessment to include within its scope overseas territories of European countries that lie outside the ECA ecoregion (such as those in tropical climates).	this has been adapted
Maximilian Weigend	Chapter 1	20	539	20	539	overseas territories outside the scope, either omit them, or make that clear	This has been done
Mark Snethlage	Chapter 1	20	542	20	542	The factors described in this sentence seem to be climatic not edaphic (i.e. soil related)	edaphic has been removed
Maximilian Weigend	Chapter 1	20	542	20	540	"edaphic" usually refers to soil features - geographical features?	edaphic has been removed
Germany	Chapter 1	20	542	20	540	"edaphic" usually refers to soil features - geographical features? [The term "edaphic" commonly refers to soil features (particular soil conditions). Therefore, please consider replacing the term with another term that will not cause misunderstandings.]	edaphic has been removed
Maximilian Weigend	Chapter 1	20	543	20	549	In this and in many other places, the authors fall into the trap of using Europe as in "common usage", not in the definition of Fig. 1.7. Eastern Europe includes all of Russia, Moldavia and Bielorus, all of which are anything but naturally fragmented. This statement has to be restricted to WE and CE, where it is indeed true. CA and EC are - by and large - little fragmented - apart from their very southern margin, including the highly diverse Caucasus region	this has been revised accordingly
Harald Pauli	Chapter 1	20	549	21	555	This is a bit of a mix of different terms and unclear definitions and distinctions between units. In the strict sense, a biome is a formation of plants (and animals) that have common characteristics because of similar climates, e.g. the Mediterranean biome around the Mediterranean Sea, the Biome with Mediterranean Climate in W-Northamerica, the Amazon Basin... Globally, all biomes with similar climate are combined to zoniomes. This Walter & Breckle classification would make much sense in this context, but is not widely used; others are: e.g., from Holdridge or Whittaker. I suggest to use such a classification or ecozones also in the IPBES assessment, as it would much contribute to clarity and would better focus on the regions with the highest risk of biodiversity losses. In Europe, the important distinctions are arctic, boreal, temperate and Mediterranean, where temperate should be further divided into an oceanic, nemoral and a more arid continental part (such as e.g. Central Asia). I think, it is kind of essential to consider the major climatically determined zones as a fundamental structure of the assessment.	we have used the pre-defined "units of analysis" that replace biomes in the SOD, but these are still under discussion
Maximilian Weigend	Chapter 1	20	550	20	550	at this moment in time I am not clear what Table 1-3 will show and how the breakdown into "biogeographical scale" units will be. This table will be of crucial importance for the entire document, since all list chapters should follow the classification here adopted. This might have been the first thing that should have been produced.	we have adopted the table from chapter 3, who are working on this topic
Germany	Chapter 1	20	550	20	550	Table 1-3 is still preliminary and the authors state that it will show the breakdown into "biogeographical scale" units. Hence, this table will be of crucial importance for the entire document, since all its chapters should follow the classification adopted here. We would therefore encourage the authors to interact with other chapter-authors to find a proper and useful classification.	we have adopted the table from chapter 3, who are working on this topic
João Garcia Rodrigues	Chapter 1	20	550	21	555	Table 1.3. Comparing with terrestrial systems, marine systems are quite poorly represented. Marine and coastal habitats that should be included are seagrass meadows, macroalgal beds, reefs, lagoons, kelp forests, saltmarshes, beaches, dunes, mudflats, coastal wetlands, estuaries, fjords, hydrothermal vents, cold seeps, etc.	we have adopted the table from chapter 3, who are working on this topic
Andrew Stott, UK IPBES National Focal Point	Chapter 1	20	550			What is the source of the classification used in the table? Is there a widely used classification that can be used without re-inventing another for this assessment. This should be a key element for linkage with the other 3 regions to facilitate comparison and aggregation at the global level.	we have adopted the table from chapter 3, who are working on this topic
Maximilian Weigend	Chapter 1	21	556	21	557	Again, this is mainly true for the western 1/5th as a blank statement and represent an undue simplification	Wording changed to reflect this
Friedrich Wulf	Chapter 1	21	556	21	557	High population densities and a long history of land management are not unique to Europe (eg Nile valley, Mesopotamia, India, China, East North America...) and also do not apply to large parts of the region. Also, the long continuous history of land management is the more specific element. We suggest the following new wording: "Parts of ECA, like other regions, are characterised by a long continuous history of land management and high population density."	Wording changed to reflect this
Douglas Nakashima	Chapter 1	21	558	21	558	About cultural landscapes: they are the result of coevolution between nature and humans, notably local / traditional practices. Possible to refer to the sites designated by Unesco as cultural landscapes, or mixed sites (natural and cultural): http://whc.unesco.org/en/culturallandscape/ http://whc.unesco.org/en/list/?search=&search_by_country=&type=Mixed&media=&region=&border=&criteria_restriction=&&order=year	wording has been adapted, reference added
Andrew Stott, UK IPBES National Focal Point	Chapter 1	21	560			Yes there is a broad trend but also high degrees of variation at a finer scale. Need to avoid being over-simplified. Important variation lies between large urban complexes and more peripheral and mountain areas.	yes but here we want to summarize the general properties
Andrew Stott, UK IPBES National Focal Point	Chapter 1	21	566		567	Need to avoid political statements about the perceived role of the EU!	sentence has been modified
Friedrich Wulf	Chapter 1	21	566			This sentence sounds like there is a general agreement that the EU has a mandate to harmonize governance across the region. We suggest changing the wording to "There are several institutions and arrangements in place aiming at harmonizing governance in the region, such as the European Union, EFTA, the European Council and various international treaties linking post-soviet countries." This would highlight the main assertion better, which is that there is a harmonisation of governance. Otherwise, the EU would be the main focus.	the exact sentence suggested by the reviewer has been added
Friedrich Wulf	Chapter 1	22	569			map: one might consider to lower the threshold fo cities shown to 500.000. This would make it possible to include cities such as Irkutsk and Waldwostok, and show that Eastern Russia is not entirely without people.	that would make the Western part of the map overly dense
Harald Pauli	Chapter 1	23	574	26	26	Given the subregion structure, their description is rather inconsistent and confusing. Further, e.g. at Central Asia, it would make sense to mention that considerable parts of this subregions has an extensive mountain area, in fact, by far the highest in the whole ECA. Besides, the term 'Central Asia', although often used for the former Soviet republics, means in the strict sense Xinjiang and surrounding areas which would include only small parts of the neighbouring former Soviet republics. Central Asia, therefore is ambiguous and the term 'Middle Asia' would be more suitable (see Cowan 2007, J of Arid Environments 69).	the term Central Asia was pre-defined by the UN regions. Description of CA has been extensively improved
Anna Augustyn	Chapter 1	23	574	24		Some information about High Nature Value (HNV) farming could be added	HNV farming is not necessarily specific to ECA
Douglas Nakashima	Chapter 1	23	574			Western Europe and its landscapes ADD more detail on landscapes of northern Europe, e.g. the Sami who live in Sápmi, which stretches across the northern parts of Norway, Sweden, Finland and the Kola Peninsula. e.g. see Samuel Roturier, J. Nygård, L.E. Nutti, M.P. Åstot and M. Roué (2016). Reindeer husbandry in the boreal forest: Sami ecological knowledge or the science of "working with nature". In Marie Roué and Zsolt Molnár (eds.), Indigenous and local knowledge of biodiversity and ecosystems services in Europe and Central Asia: Contributions to an IPBES regional assessment. UNESCO: Paris	some text on NW Europe has been added, but we believe the suggestion of the Reviewer would be too specific for the broad scope of this chapter
João Garcia Rodrigues	Chapter 1	23	574	26	742	In the description of the different subregions, the marine environment and its seascapes is never mentioned, although its importance, mainly for Europe, is fundamental. Please see, e.g., State of Europe's seas 2015 (EEA Report No 2/2015) to gather background information on this topic.	Information on marine environments has been added
Maximilian Weigend	Chapter 1	22	575	22	576	Again, the map is here ignored: including Greenland, Iceland and Spitzbergen (which are consistently omitted from the documents) it does include the arctic biome. The Alps are not a climatic zone, but a geographical feature - they include subarctic, arctic and boreal biomes.	Agreed and changed
Germany	Chapter 1	22	575	22	576	Please ensure that also Greenland, Iceland and Spitzbergen - as being part of ECA are well represented in the assessment. Please also consider that The Alps are not a climatic zone, but a geographical feature: they include subarctic, arctic and boreal biomes.	Agreed and changed
Andrew Stott, UK IPBES National Focal Point	Chapter 1	23	577			High latitudes and high altitudes?	Agreed and changed
Maximilian Weigend	Chapter 1	22	578	22	579	http://www.fao.org/forestry/ra/ra2010/en/gibes-precies-forest-cover-data - there is more forest forest cover in Spain than in Norway. Maybe a simple statistic to be added here (https://gabrielhemery.com/2011/02/28/european-countries-and-their-forest-cover/) would give more correct information.	this refers to purpose not to countries, but to the northern part of WE
Germany	Chapter 1	22	578	22	579	The authors may want to look at http://www.fao.org/forestry/ra/ra2010/en/ , which provides very precise forest cover data - and potentially useful statistics which can be found under the following link: (https://gabrielhemery.com/2011/02/28/european-countries-and-their-forest-cover/). These may enrich the statements given in this paragraph.	this refers to purpose not to countries, but to the northern part of WE
Andrew Stott, UK IPBES National Focal Point	Chapter 1	23	582		587	There are some 'value' statements appearing here - 'overused soils' 'low value to biodiversity'. These may well be valid conclusions from the assessment but they should not be set out as assumed facts in the introduction. Better to refer to heavily used soils and declines in farmland biodiversity.	Agreed and the text has been changed accordingly
Asimina Skouteri	Chapter 1	23	588	23		... after ref. that sometimes is in contrast with traditional landscapes (Lipski 1995), unsustainable and more vulnerable to external factors.	? Could not trace this back to the text section it was referring to
Andrew Stott, UK IPBES National Focal Point	Chapter 1	23	591		593	As above this may be a conclusion of the assessment but it should not be assumed at the outset.	The text has been edited accordingly

Tom West	Chapter 1	23	595	23	605	1) Worth mentioning the European Economic Area, through which Norway, Iceland and Liechtenstein have to comply with the majority of EU environmental laws. 2) Only EU Directives require transposition into national law (EU Regulations such as REACH do not as they are automatically law in MS). And directives must be transposed completely and correctly, so the implication that EU member states have great discretion in this area is not quite right; they have some discretion. The European Commission monitor transposition and can take cases to the Court. 3) Line 598 "and as non-member states define their own environmental policies" does not make sense. 4) References to the EU laws and policies mentioned are needed: eg the HD is Council Directive 92/43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206/7 22.7.1992); the WFD is Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327/1 22.12.2000). 5) The Biodiversity Strategy is generally referred to as the "Biodiversity Strategy to 2020". 6) The statement about CAP needs referencing - perhaps pointing to work in IPBES ch6? 7) Would suggest replacing 'biological' with 'ecological' in line 604.	The text has been edited accordingly
Germany	Chapter 1	23	598	23	602	There may be some issues regarding the degree of implementation of some EU biodiversity policies (e.g. Natura 2000). The results of the EU Fitness Check of Natura 2000 should be published this year. We therefore strongly encourage the authors to include the findings emerging from this Fitness Check in their further assessment.	this is an issue for later chapters
Asimina Skouteri	Chapter 1	23	600	23	600	Green Infrastructure Strategy (EU); Timber Regulation (EU); New Rural Development Programme 2014-2020 (EU); United Nation Framework Convention on climate change	examples are given here, but this is not a complete list
Mark Sneath	Chapter 1	23	600	23	601	"ecologically orientated" -> "environmentally orientated"? / "Habitats Directive" -> "Birds and Habitats Directives"	corrected
Germany	Chapter 1	23	602	23	603	There is an intense discussion of the common agricultural policy and its impacts and effectiveness in chapter 6. This should be mentioned here because otherwise the statements appear very bold. They should be further differentiated to capture the heterogeneity and the impacts of greening-measures.	The statement has been tuned down
Mark Sneath	Chapter 1	23	604	23	605	Suggested reference: European Union (2013) Flash Eurobarometer "Attitudes towards Biodiversity" http://ec.europa.eu/COMMFrontOffice/PublicOpinion/index.cfm/General/index	done, thank you for the reference
Asimina Skouteri	Chapter 1	23	605	23	605	The real issue with the coordination and implementation of previous CAP and supporting AEPs [their results are criticized as unsatisfactory and inefficient (Shomers and Matzdorf, 2013)] - which the main aim was the reduction of rural poverty - was the way that were implemented in countries (lack of targeting important areas, variety of measures, lack of effective monitoring, political and professional lobbys, revolving doors phenomena and etc).	this will be extensively discussed in later chapters
Maximilian Weigend	Chapter 1	23	607	23	608	It is probably incorrect to deny the high degree of political cooperation and economical interdependence in pre-EU-times. I personally feel the sentence is superfluous	sentence has been modified
Andrew Stott, UK IPBES National Focal Point	Chapter 1	23	607		608	Rather simplistic historical analysis - not sure what it adds?	sentence has been modified to be more specific and avoid overly general statements
Andrew Stott, UK IPBES National Focal Point	Chapter 1	23	607	24	623	As above. The section seems more like conclusions than setting the scene	corrected
Harald Pauli	Chapter 1	23	614	23	614	suggest add: "...resource exploitation, global and climate change."	changed to "intensive use of natural resources"
Marianne Penker	Chapter 1	23	614	23	614	Land abandonment is another major pressure affecting agro-biodiversity and social-ecological systems that have co-evolved over centuries of past land use. In most parts of Europe, land abandonment generates landscape and biodiversity-related concerns in the scientific community and among the public (Navarro and Perera, 2012). Reviews of land abandonment literature identified the following negative consequences in order of decreasing importance: biodiversity loss, increase of fire frequency, soil erosion and desertification, loss of cultural and/or aesthetic values, reduction of landscape diversity and reduction of water provision (Benayas et al., 2007) and an overall undesirable effect on the environment (MacDonald et al., 2000). Estel et al. (2015) generated European-wide maps showing the annual extent of abandoned farmland from 2001 to 2012 (cropland and grassland) and detected an average of 128.7 million hectares of fallow land (24.4% of all farmland). Up to 7.6 million hectares of farmland was abandoned from 2001 to 2012, mainly in Eastern Europe, Southern Scandinavia, and Europe's mountain regions. Land abandonment is related to loss of farmers and income opportunities in mountain areas, loss of bio-cultural diversity (UNESCO, 2012) and cultural ecosystems services (Daniel et al. 2012), but also in yield gaps which have to be substituted by potentially more harmful extension of agricultural land somewhere else (Foley et al. 2011)	land abandonment is now mentioned, but the structure of this sub-section has been changed. It is not the role of the intro to discuss these effects in detail
Frank Wugt Larsen (EEA input)	Chapter 1	23	615	23	617	SEBI 023 can be used as source http://www.eea.europa.eu/data-and-maps/indicators/ecological-footprint-of-european-countries	this will be dealt with in later chapters
Thomas Brooks (IUCN)	Chapter 1	23	616	23	616	Add citation for the parenthetical text "with the exception of Sweden, Norway and Finland".	citation added
Esra Başak Dessane	Chapter 1	23	618		618	EU's apostrophe needed	text has been edited accordingly
Maximilian Weigend	Chapter 1	24	621	24	623	Fisheries are another dramatic example of the exported global footprint, should at least be mentioned	text has been edited accordingly
Germany	Chapter 1	24	621	24	623	Here you may also refer to fisheries as an example of a global export footprint.	text has been edited accordingly
Germany	Chapter 1	24	624	26	721	Many statements provided in section 1.4.3, and even more statements provided in the sections 1.4.4 and 1.4.5 are not supported by references or case studies. Please include references and case studies to validate your statements. Please also ensure that the information is not overemphasizing some historic events, thereby paying less attention to other events.	these sections have been extensively revised, but still serve the purpose of a general overview
Anna Augustyn	Chapter 1	24	625	24	629	Worth noting that a large proportion of the population in this part of Europe still lives in rural areas	This has been noted in the text
Maximilian Weigend	Chapter 1	24	625	24	629	a parallel statement (relative importance of agriculture) is missing elsewhere, e.g., for WE. If it's relevant, put it there, or omit everywhere	this is specific for this region
Germany	Chapter 1	24	625	24	629	A parallel statement (relative importance of agriculture) is missing elsewhere, e.g., for WE. If it's relevant, put it there, or omit everywhere	this is an issue specific for this region, therefore it was mentioned here but not in other regions
Marianne Penker	Chapter 1	24	628		629	High relevance of subsistence farming, in many parts of Central Europe, e.g. Romania. (e.g.: http://www.europarl.europa.eu/RegData/etudes/etudes/Join/2013/495861/IPOL-AGRI_ET(2013)495861_EN.pdf)	now it is mentioned
Maximilian Weigend	Chapter 1	24	630	24	633	Here and again below, there seems to be an entirely unnecessary political side-story. I would delete everything up to "1980s."	political side-story removed as requested
Germany	Chapter 1	24	630	26	733	Please critically cross-check and ensure that that this section of the chapter is not overemphasizing some historic events, thereby paying less attention to other events. It must be ensured that a balanced view is provided and that the information is really relevant for the ECA assessment.	The chapter was restructured
João Garcia Rodrigues	Chapter 1	24	633	24	633	Change "Communism" to "Union of Soviet Socialist Republics (USSR)" because actually it was the latter that collapsed.	text has been edited accordingly
João Garcia Rodrigues	Chapter 1	24	634	24	634	Erase "becoming the region of young democracies" as this is rather debatable and controversial.	done - the reviewer is right, the region had a certain level of democracy even before the 20th century
Maximilian Weigend	Chapter 1	24	640	24	641	true - but relevant?	statement removed
João Garcia Rodrigues	Chapter 1	24	640	24	640	It implies that totalitarian regimes were a specificity of Central Europe. Why this link between totalitarian regimes and environment degradation is not made for Western Europe? There were several totalitarian regimes in WE in the 20th century as well, e.g., Germany, Italy, Spain, etc. Were they "better" for the environment than the ones in CE?	statement removed
Maximilian Weigend	Chapter 1	24	641	24	646	diversity, ranges, endemism for selected taxa are urgently required here, for coming to grips with actual spatial patterns. A qualified discussion on which parts of the diversity and ecosystem services resides in PNV and which part in cultural landscapes needs to be addressed.	this is beyond the scope of the intro
Germany	Chapter 1	24	641	24	646	Here are many quite general statements. Is it possible to provide a more nuanced picture reflecting actual spatial patterns, and the role of cultural landscapes? After all, diversity, ranges and endemism for selected taxa are urgently required here in order to come to grips with actual spatial patterns. A qualified discussion on which parts of the diversity and ecosystem services resides in PNV and which parts are in cultural landscapes needs to be addressed.	this is beyond the scope of the intro
Frank Wugt Larsen (EEA input)	Chapter 1	24	647	24	650	References should be reversed, right? In general, there is a need to check references in the chapters. References are cited in text but don't appear in reference lists, and references are missing in some graphs etc.	references have been reworked in the SOD
Maximilian Weigend	Chapter 1	24	653	24	653	please spell out what they are important for	text has been edited accordingly
Germany	Chapter 1	24	653	24	653	Please provide more information on the role of "green corridors"	text has been edited accordingly
Maximilian Weigend	Chapter 1	24	655	24	656	I seem to see a paradigm creeping in here. Traditionally, it seems to be the only vision that every country - under ideal conditions - ends up looking like Germany or Switzerland. But is this a given, or will not western European consumption patterns also have to adjust? I would downscale that statement and make it more open.	statement tuned down
Germany	Chapter 1	24	655	24	656	This statements might supports the paradigm that every country - under ideal conditions - would end up like western states such as Germany or Switzerland. But western European consumption patterns may also have to adjust? We therefore suggest to open up this statement for more discussions/perspectives.	statement tuned down
Tom West	Chapter 1	24	658	24	659	Why the shorter reference to EU law here given that the EU is just as relevant to CE as WE? Perhaps a box on the EU between 1.4.2 and 1.4.3, or in 1.4.6?	because EU law is more recent in this region, for most of the EU history this region has been outside the EU
Germany	Chapter 1	24	658	24	659	This is not true for all Central European countries, as some countries are less closely associated to the EU; adifferentiation has to be made	this statement has been changed
Friedrich Wulf	Chapter 1	24	661	25	695	The region named "Eastern Europe" in fact covers all of former Russia. As such, it is for the most part located in Asia. While we do understand that the term "Eastern Europe" comes from a UN definition, everyone at school learns that Europe ends at the Ural mountains. Europe, and Eastern Europe as part of it, doesn't extend to the Pacific Ocean by common conventional definition. Asia would suddenly be south of Europe instead of East. In order to avoid confusion, we suggest to rename the subregion consistently as "Eastern Europe and Northern Asia". Besides the title in lien 661, there are a number of other rplaces where this should be changed, see below for some examples	this is discussed now in the beginning of the chapter
Maximilian Weigend	Chapter 1	24	663	24	664	this is a weird combination of geographical and political terminology and needs some tidying up	This has been tidied up
Friedrich Wulf	Chapter 1	24	663		663	Please change "Eastern Europe" to "Eastern Europe and North Asia"	Not possible to do, since we are mandated to use UN terminology

Elena Bukvareva	Chapter 1	25	667	25	668	1. Significant ecological problems because of oil and gas extraction are in Western Siberia and problems with the forest protection are in the south part of Siberia and the Russian Far East. 2. The Russian Far East (from Chukotka in the north to Primorye in the south) is not a part of Siberia in a geographical sense. 3. Tundra occupies extensive territory in Siberia and Russian Far East. So it is more correctly to write as follows: "... while the sparsely populated regions in the central and northern regions of the Asian part of Russia are mostly covered by unmanaged forests and tundra".	this section was extensively revised, far more details now
Maximilian Weigend	Chapter 1	25	668	25	668	this is a very unscientific way of looking at Siberia - there is taiga and tundra, also deciduous forests and steppe in huge quantities	this section was extensively revised, far more details now
Germany	Chapter 1	25	668	25	668	Please reconsider the statement on Siberia- there is taiga and tundra, also deciduous forests and steppe are common. This needs to be reflected as well	this section was extensively revised, far more details now
Friedrich Wulf	Chapter 1	25	670			Please change "Eastern Europe" to "Eastern Europe and North Asia"	Not possible to do, since we are mandated to use UN terminology
Germany	Chapter 1	25	674	25	675	This sentence is limiting the policies to very narrow, highly political aspects which give in their wording a wrong view on the policies ("ranging from close ties with Russia to armed conflict"); should be more diplomatically formulated (respecting the fact that all countries are involved in the formulation of this chapter)	reformulated accordingly
Germany	Chapter 1	25	675	25	676	Some countries nowadays have new strategies towards economic diversification (e.g. Kazakhstan); should be mentioned	changed as proposed
Elena Bukvareva	Chapter 1	25	676	25	676	Proposed addition: "While some countries continue to rely on export of natural mineral resources and agriculture goods others are re-focusing their economy..."	changed as proposed
Germany	Chapter 1	25	678	25	680	Energy dependencies of some countries as well as poverty should also be mentioned as factors affecting biodiversity; the impact it has on forestry; also mention earthquake in Armenia	will be extensively dealt with in later chapters
Friedrich Wulf	Chapter 1	25	679			Please change "Eastern Europe" to "Eastern Europe and North Asia"	Not possible to do, since we are mandated to use UN terminology
Maximilian Weigend	Chapter 1	25	682	25	683	Overall, I lack the perspective in all the discussion on "natural landscapes" - I have a feeling that some degree of quantification would be sensible - how much of the area is directly or indirectly affected by human activities? Probably a tiny fraction, compared to western Europe?	some degree of quantification added with human population density
Germany	Chapter 1	25	682	25	683	Some degree of quantification would be very useful. How much of the area in the central and eastern parts of ECA are affected by human activities (compared to Western Europe)?	some degree of quantification added with human population density
Maximilian Weigend	Chapter 1	25	686	25	687	I am not sure we need that here	this section was extensively revised
Maximilian Weigend	Chapter 1	25	689	25	694	I don't agree there - it is mainly political will and neither needs to be spelt out here. I would tend to steer clear of any interpretation in a political sense.	corrected
Douglas Nakashima	Chapter 1	25	689	25	689	Section 1.4.4. Eastern Europe and its landscapes "Eastern Europe is characterized by vast expanses of intact nature in the Taiga and Tundra zone (...)" Be careful with the term "intact nature", can pose the same problems as "wilderness", see line 32 of this table.	corrected
Germany	Chapter 1	25	689	25	695	Stand alone paragraph, partly repeating what was written before; not a good paragraph to finish a subchapter	changed accordingly
Friedrich Wulf	Chapter 1	25	689			Please change "Eastern Europe" to "Eastern Europe and North Asia"	Not possible to do, since we are mandated to use UN terminology
Elena Bukvareva	Chapter 1	25	690	25	690	Proposed addition: "... alpine areas of the Caucasus, Ural and Siberian mountains..."	modified accordingly
Friedrich Wulf	Chapter 1	25	694			Please change "Eastern Europe" to "Eastern Europe and North Asia"	Not possible to do, since we are mandated to use UN terminology
Esra Başak Dessane	Chapter 1	25	695			Not clear what is meant by 'reconcile for individual decisions'	changed to make clearer
Germany	Chapter 1	25	697	26	716	Energy dependencies of some countries as well as poverty should also be mentioned as factors affecting biodiversity; the impact it has on forestry (poor people e.g. in Tajikistan cut down wood to survive)	this will be dealt with in later chapters
Maximilian Weigend	Chapter 1	25	708	25	710	correct, but likely superfluous here	Text has been edited accordingly
Mark Snethlage	Chapter 1	25	717	25	721	This paragraph seems to have been appended but should ideally be integrated with the previous covering several of the same issues, i.e. climate.	Text has been edited accordingly
Maximilian Weigend	Chapter 1	26	717	28	776	cross-regional and cross-subregional issues: this is evidently still very much work in progress. It would be nice to segregate out socio-economical issues from material issues and clearly segregate aspects such as pollution from politics in the descriptive part.	this is still the intro, more details will be in the later chapters
Maximilian Weigend	Chapter 1	26	717	26	721	same statement as paragraph above	this is still the intro, more details will be in the later chapters
Friedrich Wulf	Chapter 1	26	718	26	719	To avoid redundancy with the previous sentence, we suggest to change the sentence to "Due to its arid continental climate, water is a limiting resource in most of the region."	this section has been revised to include more details
Thomas Brooks (IUCN)	Chapter 1	26	723	26	726	What about transboundary pressures/threats? Acid rain, invasive species, etc. Also, funny to lump the first two points raised here under section 1.4.6, and then separate the third as 1.4.7.	corrected
Tom West	Chapter 1	26	725	26	727	The relationship between the EU, the EEA and EFTA needs a little more detail. Eg Many (but not all) EU laws apply throughout the EEA (which excludes Switz). For example, the Water Framework Directive applies to the EEA, but the Habitats Directive does not. It is through EFTA institutions that EU laws applicable to the EEA are upheld.	this is not discussed here for brevity
Tom West	Chapter 1	26	733	25	733	Why use the technical economic term 'natural capital'? Surely what is meant here is nature, especially since EU laws such as the Habitats Directive do not protect natural capital (ie the economic manifestation of nature), but rather nature - compare 'Nature' and 'Nature's benefits to people' in the IPBES Conceptual framework. Protection of the environment has itself become a legitimate aim of the EU, aiming at "a high level of protection and improvement of the quality of the environment" (Treaty on European Union Article 3(3), see also Treaty on the Functioning of the European Union Title XX).	changed accordingly
Mark Snethlage	Chapter 1	26	735	26	742	The loss of ecological connectivity along national borders is also an issue that needs to be dealt with in a transborder context, with the physical closing of national borders inside Europe (in the context of the migration crisis) causing challenges to the conservation of biodiversity and ecological connectivity. Reference: Linnell, J.D.C., Trouwborst, A., Boltani, L., Kaczensky, P., Huber, D., Reljic, S., Kusak, J., Majic, A., Skrbinek, T., Potocnik, H., Hayward, M.W., Milner-Gulland, E.J., Buuveibaatar, B., Olson, K.A., Badamjav, L., Bischof, R., Zuther, S., Breitenmoser, U., 2016. Border Security Fencing and Wildlife: The End of the Transboundary Paradigm in Eurasia? PLOS Biol 14, e1002483. doi:10.1371/journal.pbio.1002483	to be dealt with in later chapters, not the intro
Maximilian Weigend	Chapter 1	26	735	26	742	I would say that transboundary effects are dramatic in radioactivity, talking about southern and western Europe, the Baltic and the Black Sea. Overall, I am not sure what this paragraphs wants to explain - the nature of transboundary issues or their general presence (with detailed to elaborate elsewhere? If the latter, then negative and positive transboundary effects should be clearly set out as examples, maybe 2 each. If the former, then this really has to be several pages of qualified statements and supported with literature.	yes this is only a set of examples
Germany	Chapter 1	26	735	26	742	Please provide references for the statements made in this para. This paragraph would really benefit from the expanding the discussions on the nature of transboundary effects, thereby including negative and positive transboundary effects and showcasing examples.	to be dealt with in later chapters, not the intro
Andrew Stott, UK IPBES National Focal Point	Chapter 1	26	738			Impacts on habitat quality, yes, but also ecosystem services and human health?	corrected
Maximilian Weigend	Chapter 1	26	744	26	748	the last note also refers to this. Either highlighting the presence, or describing their nature and extent and reference to where this is treated in extenso - the export of waste to Africa and Asia and the EU-fisheries off the African coast are major negative impacts that need to be mentioned	The text has been edited accordingly
Germany	Chapter 1	26	744	26	748	We welcome the section on cross-regional issues very much and hope to read a much more detailed analysis in the SOD. Issues such as export of waste to other regions as well as fisheries would be important points which need to be considered as well.	Yes agreed and edited
Esra Başak Dessane	Chapter 1	26	744	27	765	It would be worthwhile to make sure that similar information is not repeated in this section and in section 2.2.4.3.1 of Chapter 2 (lines 1590 onwards)	Yes agreed and edited
Mark Snethlage	Chapter 1	26	746	26	748	The opposite is also true in certain areas of the ECA region such as The Netherlands (second largest exporting country in the world for agricultural products), where one of the most intensive agricultural systems in the world produces for the global market and results in severe environmental degradation and biodiversity loss in The Netherlands (mainly deteriorating hydrology, habitat fragmentation and eutrophication due to excessive Nitrogen inputs).	Yes, agreed and edited
Esra Başak Dessane	Chapter 1	26	749			typo - livelihoods	Changed
Friedrich Wulf	Chapter 1	28	777			We strongly propose to include the work undertaken by Friends of the Earth Europe and the EU Commission on the four footprints and the analysis of global interrelations concerning these footprints: https://www.foeeurope.org/sites/default/files/foee-briefing-four-footprints.pdf and http://creea.eu/index.php?project/8-creea-booklet	Some of this work has been included
Maximilian Weigend	Chapter 1	28	779	50	863	This chapter, again, has no clear link to the ECA-Assessment and this should be made explicit, if such a direct and exclusive link is assumed.	Text has been revised
Maximilian Weigend	Chapter 1	28	780	30	862	This paragraph should be dramatically shortened, since only parts it are ECA-specific and there is going to be broad overlap with the other regional assessments	Text has been revised
Germany	Chapter 1	28	780	30	862	This paragraph is very broad and might overlap with the other regional assessments - please ensure it's more focused on ECA- specific information	Text has been revised
Allan Watt	Chapter 1	28	790			Where did these questions come from and how were they selected? Such details should be included.	Text has been revised
Maximilian Weigend	Chapter 1	28	797	29	821	These questions appear very general, even the "ECA-specific questions", they sure must be coming directly from some other IPBES-document?	This is now discussed in the text
Thomas Brooks (IUCN)	Chapter 1	28	798	28	798	As with ecosystems generally, "ecosystem functions" are part of biodiversity overall (CBD definition). So delete the redundant "ecosystem functions". Same applies throughout (eg L801, L804-5, L807, L810, L1215).	This is correct, but we feel that it's important in this chapter to recognise 'functions' explicitly.
Asimina Skouteri	Chapter 1	28	810	28		International level [e.g. How payments for biodiversity conservation can be targeted globally -under evaluation of their strengths and weaknesses - for their application in International Payments for Ecosystem Services IPES (Wunscher and Engel, 2012)]	Thanks
Germany	Chapter 1	30	822	30	893	Here we welcome the overview tables which provide detailed information on how the information in the chapters corresponds to EU Biodiversity targets, Aichi targets and SDGs. It would be useful to reflect back on these tables in the corresponding chapters.	It is not clear which corresponding chapters are being referred to here
Tom West	Chapter 1	29	830	29	830	should read 'Parties to the Convention on Biological Diversity'	Corrected
Esra Başak Dessane	Chapter 1	30	846			Typo SDG and not SGDs	Corrected
Shafiqat Saeed	Chapter 1	30	846	30	846	Its should be SDG rather than SGD	Corrected

Andrew Stott, UK IPBES National Focal Point	Chapter 1	30	847		848	Value statements again 'biodiversity crisis' and also a narrow BD-centric interpretation of the SDGs. The SDGs address different elements across the whole IPBES CF.	The text has been edited accordingly
Friedrich Wulf	Chapter 1	30	856	30	857	table - is this taken from somewhere? (the reference needed) or own compilation?	Own compilation
Andrew Stott, UK IPBES National Focal Point	Chapter 1	30	858			CBD National reports	Not clear what the point is here
Maximilian Weigend	Chapter 1	31	864	32	911	This section is pertinent, since it provides a direct link to the ECA-region. An elaboration is here crucially important.	Thanks
Andrew Stott, UK IPBES National Focal Point	Chapter 1	31	867		885	OK for EU, but the main vehicle for implementation are the policies and plans at the national level and there is a great deal of variation between MS. The simplified emphasis on the EU will mean that the report is not seen to be relevant to the MS	Keep in mind that we are not addressing individual countries. A small sentence has been added about the different levels of implementation between countries
Tom West	Chapter 1	31	869	31	869	Can the EU make a 'global' commitment? It is a regional organisation. Their commitment may have global reach.	Text has been edited accordingly
Tom West	Chapter 1	31	872	31	872	Not sure what 'both documents' refers to.	Text has been edited accordingly
Tom West	Chapter 1	31	875	31	875	1) It is the Common Agricultural Policy (not Agriculture). 2) Evidence needed for ES approach being adopted into the CAP - the cited Maes et al source refers to an old Commission proposal. Pillar II of the current CAP (2014-20) does contain 6 priorities (http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_5.2.6.html), two of which are environmental, but they do not refer to ES. This stance on CAP seems to go against the one seen earlier (p23) too: the more nuanced and equivocal stance seen on p32 is perhaps more reflective of the CAP. 3) On the whole, it would make more sense to refer to the Birds and Habitats Directive when discussing EU biodiversity law and policy, as these are the cornerstones of EU biodiversity protection (and some of the most powerful biodiversity laws in the world).	Text has been edited accordingly
Sophie Condé	Chapter 1	31	886			Table 1.5: Section on National targets: can be completed with this CBD tool: https://www.cbd.int/nbsap/targets/default.shtml	Thanks
Germany	Chapter 1	31	886	32	888	Table 1.5 is not fully compiled. According to CBD (https://www.cbd.int/nbsap/targets/default.shtml) the Kyrgyz Republic does have national targets which have relevance for Aichi target	The table has been edited accordingly
Andrew Stott, UK IPBES National Focal Point	Chapter 1	31	886			This table should be expanded to show the diversity within the EU. Few MS have adopted the EU targets directly.	The table has been edited accordingly
Friedrich Wulf	Chapter 1	32	888			The list of Countries in table 1.5 is quite incomplete. It needs to take national strategies into account, both within and outside the EU. For example, Germany has a very extensive and ambitious NBSAP that is currently being implemented; Norway also has a brand new NBSAP. On the other hand, the Swiss NBSAP (the only one mentioned in the table) is on hold as the action plan that was developed to implement it currently still in the political process at national and cantonal level. For a complete overview updated on Jul 18 (yesterday!), see https://www.cbd.int/doc/nbsap/nbsap-status.doc	The table has been edited accordingly
Tom West	Chapter 1	32	889	32	889	According to the list on p19 and the CBD's website, all ECA countries are Parties to the CBD.	With the exception that we list
Roger Keller	Chapter 1	32	895	32	907	The "European Landscape Convention" should be added here, because there is a strong link to Cultural Ecosystem Services	This has still to be implemented
Allan Watt	Chapter 1	32	895	32	907	Presume this will be expanded and fully referenced. [And Natura 2000 corrected.]	This has been done
Germany	Chapter 1	32	895	32	911	We welcome very much an overview of relevant other environmental and non-environmental policies and governance. However, the selection here is not transparent neither complete. Also, this might better fit in chapter 6?	The text has been revised in the SOD
Andrew Stott, UK IPBES National Focal Point	Chapter 1	32	895		907	If not, links to chapter 6 should be inserted here.	
Friedrich Wulf	Chapter 1	32	899			For the EU this is actually more important than the EU Biodiversity Strategy because Directives are legal instruments. Deserves more consideration.	Text has, and will continue, to be revised
Tom West	Chapter 1	32	907	32	907	The EU CAP has added a second pillar focusing on rural development and including biodiversity-related payments, but it has not changed its focus, which still is to subsidize and foster large-scale industrial farming. See e.g. Pe'er et al (2014): http://www.cb.lee.unibe.ch/unibe/phlnat/biology/zoologie/cb/content/e7117/e7118/e8739/e423795/e508038/Peer_Sci2014.pdf . We suggest to delete the "moving away" and rather write: "the CAP has been extended to include policies concerning the broad implications...."	The section has been re-written
Thomas Brooks (IUCN)	Chapter 1	32	907	32	907	The Natura 2000* network is a result of the Habitats Directive. This could hardly be described as an 'other policy that affects EU biodiversity' but rather is the cornerstone of EU biodiversity policy.	The text has been revised
Marianne Penker	Chapter 1	32	910		910	TTIP and CETA (negotiation completed for the latter but not for TTIP) are not yet implemented. However there are many bi-lateral agreements of single EU countries, which have been implemented for many years and which put pressure on countries outside of the EU.	corrected
Maximilian Weigend	Chapter 1	33	913	38	1117	This paragraph is fairly generic and the connection to ECA does not become explicit. If this is the general procedure as per IPBES-spec, then it is superfluous. If not, then it needs to be spelt out more clearly.	The text has been revised to be more ECA-specific
Germany	Chapter 1	33	923	33	923	Not clear, what you mean by, "the author team, including ILK". This should be explained. ILK-holders?	it has been corrected to experts on ILKP
Germany	Chapter 1	33	943	33	949	We welcome the use of uncertainty statements very much. However, they are not (yet) coherently used in the assessment. Furthermore, additional expressions are used. We strongly urge to ensure this is the case for the SOD in order to provide transparency regarding the uncertainty of all relevant statements throughout the report.	uncertainty statements are used for key findings only. (IPBES guidelines)
Roger Keller	Chapter 1	33	952	33	952	I wasn't able to find more information about the "ILK Procedures". Please add link. I would be interested in knowing which stakeholders had been included.	More information about ILK has been added to the SOD
Esra Başak Dessane	Chapter 1	34	953			authors team's - apostrophe needed	Corrected
Germany	Chapter 1	33	955	33	960	We welcome the use of so called "traceability accounts" to ensure transparency of the choice of appropriate uncertainty statements. However, it seems that such accounts are not yet used throughout the assessment. Please ensure consistency in the chapters with what is outlined in chapter 1.	traceability accounts will have to be used for key findings only (IPBES guidelines).
Germany	Chapter 1	33	961	33	967	We welcome the attempt undertaken to apply uncertainty levels for statements in the ECA assessment. However, we wonder why the IPCC approach is being referred to, which is based on the likelihood scale taken from AR5 (while the qualitative communication of confidence is extracted from AR3?), and no reference is made to the confidence terms used by IPBES? We strongly encourage you to look into the use of confidence terms used by the IPBES as outlined in IPBES/4/INF/9 pages 58-65. Surely, the confidence terms used here are based on the experiences of the IPCC. But it would be helpful to refer to this IPBES document as all regional assessments as well as the global assessments and IPBES thematic assessments should align to referring to the same confidence terms in order to ensure consistency in the treatment of uncertainty across all regional reports as this is an essential prerequisite for the global assessment.	we now refer to the IPBES deliverable which indeed this is based on.
Germany	Chapter 1	33	965			wrong reference: Mastrandrea et al. 2011 (not 2010). Moss and Schneider not in references list	All of the chapter references have been updated and checked
Maximilian Weigend	Chapter 1	34	971	34	978	usually, the methods section is written in the first steps of any kind of review article, because knowing what you do and how you do it is the prerequisite to actually carrying out the task at hand. Unfortunately, especially chapter 3 gives the distinct impression that these preliminary steps were never carried out.	this comments was transferred to chapter 3
Germany	Chapter 1	34	971	34	978	We welcome the section on methods. To be clear on the methodologies used in the assessment is extremely important to ensure the transparency and finally credibility of the assessment. We therefore would like to encourage the authors to provide a thorough and well-structured overview of the methodologies.	thanks
Adrian Wójcik	Chapter 1	34	979	35	1017	There should be a straightforward definition of what are "anthropocentric" and "non-anthropocentric" values. The same applies for "instrumental" and "relational" values. Without such definitions the whole paragraph is not clear especially for non-social-scientists. Possible literature: Snelgar, R. S. (2006). Egoistic, altruistic, and biospheric environmental concerns: Measurement and structure, 26, 87–99.; Stern, P. C., Dietz, T., Kalof, L., & Guagnano, G. A. (1995). Values, beliefs, and proenvironmental action: Attitude formation toward emergent attitude objects. <i>Journal of Applied Social Psychology</i> , 25, 1611–1636.	definitions have been added according to definitions given in IPBES/4/INF/13
Tom West	Chapter 1	35	981	35	981	It is not the case that 'value' is only used anthropocentrically in the IPBES framework, since the framework includes nature's intrinsic value.	definitions have been added according to definitions given in IPBES/4/INF/13
Esra Başak Dessane	Chapter 1	35	984			Space between values and methods	corrected
Germany	Chapter 1	35	986	35	986	It would be good to reference to the preliminary guide on the conceptualization of values IPBES/4/INF/13. In order to allow the focus on ECA, it would be good to condense the information here, as definitions and general information about values may be beyond the purpose of the ECA-assessment	ok done (referenced)
Tom West	Chapter 1	35	987	35	990	1) There is an enormous body of philosophical, political and legal literature that engages with the concept of nature's intrinsic value (ie non-anthropocentric value). As such, it is hard to see how "non-anthropocentric values are addressed mainly through the science of...". See comments to Chapter 3. 2) The assessment methods for intrinsic value are not detailed in this paragraph, although line 986 says that they will be.	non-anthropocentric values are acknowledged, their importance is recognized, but we are making no attempt at quantifying them in this chapter. Methods are listed (biological diversity, ecological integrity, modelling)
Tom West	Chapter 1	35	987	36	1029	Overall, it would improve the report to have a section 1.7 Values. This would set out clearly how the report defines the pluralistic types of values under consideration and the associated methodologies used.	the sub section about values has been detailed further which we believe fulfills the role of demonstrating the pluralistic approach of ipbes
Germany	Chapter 1	35	987	35	990	987 and 1011ff. How do ecology, biology and (bio)geochemistry address non-anthropocentric values. Biology and ecology might address phenomena that inhere intrinsic values, but then there has to be consensus that non-anthropocentric values (i.e. things that have value independent from human valuation) actually exist, which is a value judgement and therefore might not be dealt with by biology or ecology.	definitions have been added according to the definitions given in IPBES/4/INF/13
Roger Keller	Chapter 1	35	991	35	1017	Results from Social Sciences don't seem to be fully considered. The description of "Relational values" shows that natural sciences can not fully apprehend this category. Nevertheless it is not described here what the authors understand by "cultural and social methods and a transdisciplinary approach" since references are missing. Reading recommendation: <i>Moon and Blackman (2014): A guide to understanding social science research for natural scientists. In: Conservation Biology.</i>	definitions have been added according to the definitions given in IPBES/4/INF/13
Tom West	Chapter 1	35	992	35	992	The values cannot be assessed through natural science methods, only the interactions can be measured. Given the definition of value in line 981 (which only applies to anthropocentric, not the non-anthropocentric values that IPBES also includes), natural science methods cannot provide ways to understand values, given their aim to minimise the subjective perspective that is essential to the notion of 'value'.	natural science can still contribute to understanding values, many of the values are based on natural science recognizing the importance of certain ecosystem processes to human life

Tom West	Chapter 1	35	998	36	1029	I found the paragraphs on the whole rather confused and confusing (eg see previous comment). Definitions of key terms is needed, in particular: value, anthropocentric value, intrinsic value, economic value, monetary value, comprehensive value, instrumental value, relational value, holistic value, narrative value, integrated value. All of these are referred to, yet it is not clear what is meant/understood by many of them. As such, the section does not provide an overview of the methodological approach to values used in assessment (as per the section title). A suggested alternative approach is to go through each of these terms in turn, defining what they mean and how they are used in the IPBES assessment process.	definitions have been added according to the definitions given in IPBES/4/INF/13
Esra Başak Dessane	Chapter 1	35	998			Repetition of 'the' twice	corrected
Tom West	Chapter 1	35	999	35	999	It is their role or importance that can be understood here, not their value. Anthropocentric value requires, by literal definition, the consideration of the perspective of a human valuer: this is captured in the notion of a 'desirable state'. Desirable to whom? To humans (since we are here considering anthropocentric value). It is the desirability of the state that generates value.	importance = value. however, this is elaborated in the IPBES valuation guidelines which are closely followed here.
Germany	Chapter 1	35	1005	36	1006	Please ensure that you have a coherent language for this and try to link - if possible - to the preliminary guide on the conceptualization of values IPBES/4/INF/13. The guide talks for instance about integration of the different values and not about 'complementing' monetary values as it reads now ("monetary valuation should always be complemented with other methods"). All value systems should be considered.	Text has been revised accordingly
Esra Başak Dessane	Chapter 1	35	1010			No need to put a coma at the end	Text has been revised accordingly
Anna Augustyn	Chapter 1	35	1018	36	1029	Assessment of trade-offs could be added	Text has been revised accordingly
Adrian Wójcik	Chapter 1	35	1018	36	1029	It is not clear how the procedures of values assessment like deliberation are related to the content of the chapter. Although it may be an interesting comment for epistemology of values, I do not think that the IPBES will implement the deliberative strategy for defining its basic values.	Text has been revised accordingly
Esra Başak Dessane	Chapter 1	36	1021			Capital B for Baggethun	Text has been revised accordingly
Douglas Nakashima	Chapter 1	36	1030	36	1050	section 1.6. Methods and approaches used in the assessment / 1.6.4. Consideration of indigenous and local knowledge ADD (as stated in first recommendation...): ILK is made available in published scientific literature. Sources can report observations from indigenous and local populations about ecosystems characteristics and trends, and drivers of changes. They can represent complementary sources of knowledge, often working at different scales of time and space, addressing different kinds of issues, and informing for areas that science has not investigated. EXAMPLE: Kittl et al. 2006 (Sweden and Finland): (p156-157) "In this study, herders' knowledge has provided information about several factors and their contributions to pasture quality. Some of this information corresponds to that provided by the scientists (Table 7.2). Other aspects represent different dimension and expose the need to reconsider the exclusively scientific approach as it relates to studies of pasture quality."	Thanks. The suggested message was taken and built in to 1.6.4.
Douglas Nakashima	Chapter 1	36	1030	36	1050	FOR CONTEXT ON ILK SEE Nakashima & Roué 2002. For example: (p5): "Since the 1993 UN Conference on Environment and Development, and in particular the coming into force of the Convention on Biological Diversity, increasing attention has been drawn to the contributions that indigenous knowledge can make to global biodiversity conservation objectives. This emerging role for indigenous knowledge holders has flowed quite naturally from the recognition that most remaining regions of the world that are biodiversity rich are also homelands for traditional and indigenous peoples."(p5): "While scientists and development agencies are only beginning to acknowledge their significance, their enduring role as the mainstay of local food production and health care in the developing world cannot be questioned. In sub-Saharan Africa, for example, local knowledge guides the decisions and practices of small-scale farmers who represent 70-90% of agricultural producers and more than 60% of the population. Artisanal fishers, who represent more than 90% of the fisheries work force world-wide, rely on their own knowledge and skills to locate fish, navigate safely at sea and bring home the catch. Similarly, it is estimated that some 80% of the world's population fulfills their primary health needs through the use of traditional medicine." Refer to CBD, article 8j: "Each contracting Party shall, as far as possible and as appropriate: Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices." Why ILK is relevant for biodiversity and ecosystem changes assessments: Nakashima & Roué 2002 (p5): "Inventories of local biodiversity can also benefit from knowledge encoded in local languages in the form of indigenous categories of natural objects. Finally, as indigenous peoples retain within their knowledge systems an inter-generational memory of fluctuations, trends and exceptional events in relation to the local environment, they can contribute importantly to understanding processes of change, whether these might be long-term, global transformation processes or circumscribed local events. The invaluable contribution of indigenous knowledge to environmental and social impact assessment processes, for example, has been convincingly demonstrated." SEE ALSO Roué & Nakashima 2002. Knowledge and foresight: the predictive capacity of traditional knowledge applied to environmental assessment.	Thanks. The suggested message was taken and built in to 1.6.4.
Douglas Nakashima	Chapter 1	36	1030	36	1050	Take into consideration that incorporation of ILK into scientific assessment as this has implications for the integrity and preservation of the knowledge in question: SEE Nakashima & Roué 2002 (p1): "For the time being, the scientific and the development communities views indigenous knowledge first and foremost as a resource to be appropriated and exploited. Integration with (or more accurately into) science implies the application of a validation process based on scientific criteria that purportedly separates the useful from the useless, objective from subjective, indigenous 'science' from indigenous 'beliefs'. Through this process, knowledge corresponding with the paradigm of Western science is extracted, and the rest is rejected. While this cognitive mining may be profitable to science, it threatens indigenous knowledge systems with dismemberment and dispossession". Agrawal 2002. Indigenous knowledge and the politics of classification. The process of how incorporation of indigenous knowledge into databases, here in the context of development, alters the knowledge in question. Nadasdy 1999. The politics of TEK: power and the "integration" of knowledge. [abstract] "This paper takes a critical look at the project of "integrating" traditional knowledge and science. The project of integration has been and continues to be the cornerstone of efforts to involve northern aboriginal peoples in processes of resource management and environmental impact assessment over the past 15 years. The idea of integration, however, contains the implicit assumption that the cultural beliefs and practices referred to as "traditional knowledge" conform to western conceptions about "knowledge." It takes for granted existing power relations between aboriginal people and the state by assuming that traditional knowledge is simply a new form of "data" to be incorporated into existing management bureaucracies and acted upon by scientists and resource managers. As a result, aboriginal people have been forced to express themselves in ways that conform to the institutions and practices of state management rather than to their own beliefs, values, and practices. And, since it is scientists and resource managers, rather than aboriginal hunters and trappers, who will be using this new "integrated" knowledge, the project of integration actually serves to concentrate power in administrative centers, rather than in the hands of aboriginal people." Smith 1999. Decolonizing methodologies: Research and indigenous peoples.	Thanks. The suggested message was taken and built in to 1.6.4.
Douglas Nakashima	Chapter 1	36	1030	36	1050	for examples of existing methods of incorporation of ILK SEE EXAMPLE FROM Danielsen et al. 2014. Testing focus groups as a tool for connecting indigenous and local knowledge on abundance of natural resources with science-based land management systems. [Abstract] "One of the clearly stated intentions of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) is to bring both "western scientific" and "indigenous and local" knowledge systems within synthetic global, regional, and thematic assessments. A major challenge will be how to use, and quality-assure, information derived from different knowledge systems. We test how indigenous and local knowledge on natural resources in Misquito and Mayangna communities in Nicaragua, validated through focus groups with community members, compares with information collected on line transects by trained scientists. Both provide comparable data on natural resource abundance, but focus groups are eight times cheaper. Such approaches could increase the amount and geographical scope of information available for assessments at all levels, while simultaneously empowering indigenous and local communities who generally have limited engagement in such processes." AND Case studies in Huntington et al. 2002. Observations on the workshop as a means of improving communication between holders of traditional and scientific knowledge. [Abstract] "Traditional ecological knowledge (TEK) and the information and insights it offers to natural resource research and management have been given much attention in recent years. On the practical question of how TEK is accessed and used together with scientific knowledge, most work to date has examined documentation and methods of recording and disseminating information. Relatively little has been done regarding exchanges between scientific and traditional knowledge. This paper examines three workshop settings in which such exchanges were intended outcomes. The Barrow Symposium on Sea Ice, the Exxon Valdez Oil Spill Restoration Program Synthesis/Information Workshops, and the Alaska Beluga Whale Committee illuminate certain features of the preparation, format, and context of workshops or series of workshops and their eventual outcomes and influence. The examples show the importance of long-term relationships among participants and thorough preparation before the actual workshop. Further research should look more systematically at the factors that influence the success of a given workshop and the various ways in which participants perceive success." ALSO ADD A recent example of co-produced knowledge: Sezdebek and Albek 2016 (Kyrgyzstan): Cooperation of Aigine CRC with sacred site guardians and traditional practitioners in co-production of knowledge	Thanks. The suggested message was taken and built in to 1.6.4.
Maximilian Weigend	Chapter 1	37	1062	37	1070	The overall rise of scientific publication is deceptive, since many questions can be addressed by an ever increasing body of publicly available and increasingly informative global and regional databases. Overall, little use seems to have been made of these. Individual articles come into play as specific processes and patterns are addressed in a second step.	We have now made explicit reference to these potential opportunities
Germany	Chapter 1	37	1062	37	1070	Please ensure that you tap into the wealth of information provided by publicly available and increasingly informative global and regional databases. This information can then be complemented with scientific papers for more detailed information on processes, functions and most recent information.	This process is an assessment and so it is not our place to conduct new analyses but we have highlighted these opportunities exist.
Andrew Stott, UK IPBES National Focal Point	Chapter 1	37	1068			Presumably the reference to England should be United Kingdom?	Change made
Jari Niemelä	chapter 1	46	1090	46	1092	collecting wild berries, such as blueberry, lingonberry and cloudberry (Rubus chamaemorus) is important also for economic reasons. Furthermore, in recent years a lot of berry pickers from other countries (e.g. Thailand) have arrived in Finland and Sweden to pick these berries for money during the summer	We feel this is too much detail for an introduction chapter, but will be covered in other parts of the ECA assessment

Tom West	Chapter 1	38	1118	42	1271	The various meanings and types of 'value' is surely a challenge to the assessment? How can all these different values be accounted for in one framework? Can they be meaningfully compared?	This is a very broad question and not possible to cover briefly but we have expanded the section at the start of 1.7 to include a mention of the different types of values (e.g. as defined in Pearson 2016)
Friedrich Wulf	Chapter 1	39	1133	39	1143	This chapter also needs to address that the collection of field data on habitats and species is not sufficiently supported by governments who often take it for granted that volunteers hand in their data.	We have now acknowledged the issue with data (expense in collecting it) and the potential of citizen science to fill this gap
Andrew Stott, UK IPBES National Focal Point	Chapter 1	39	1134		1143	Only focus is on EU? What about national and international (global) scale initiatives that are relevant?	Added in a sentence to acknowledge this point
Thomas Brooks (IUCN)	Chapter 1	39	1135	39	1143	It would be appropriate to mention the European Red List work here, which is an ongoing data collection process (see http://ec.europa.eu/environment/nature/conservation/species/redlist/).	Added in reference
Andrew Stott, UK IPBES National Focal Point	Chapter 1	39	1136			I don't think that MAES is a statutory requirement?	Wording changed to reflect this
Harald Pauli	Chapter 1	39	1147	39	1155	It surprised that plants are far less covered than animals - over all, the knowledge of biodiversity should be far better for plants. Sure, yes, compared to birds and mammals, but they are just a tiny groups among all animals in terms of species numbers.	re-worded to reflect this point
Andrew Stott, UK IPBES National Focal Point	Chapter 1	39	1148		1155	The text here only refers to biodiversity data. The data requirements for the assessment are for more diverse and the socio-economic data are even more diverse and gappy.	We are updating this section to include details on other types of information
Thomas Brooks (IUCN)	Chapter 1	39	1150	39	1150	Actually 82,845	changed - a few more have now been added and the exact figure as accessed on 31/10/16 has been included thanks
Thomas Brooks (IUCN)	Chapter 1	39	1151	39	1151	Not just all birds and mammals, but also all amphibians, reef-building corals, chameleons, seasmakes, sharks and rays, tarpons and ladyfishes, parrotfishes and surgeonfishes, groupers, tunas and billfishes, hagfishes, angelfishes, blennies, butterflyfishes, picarels, porgies, pufferfishes, seabreams, sturgeon, wrasses, freshwater caridean shrimps, cone snails, freshwater crabs, freshwater crayfish, lobsters, cacti, conifers, cycads, seagrasses, and plant species occurring in mangrove ecosystems (Brooks et al. 2016 Sci Data).	The text has been updated based on access to The IUCN Red List of Threatened Species website on 31/10/16 and the text now reflects that
Allan Watt	Chapter 1	39	1153	39	1154	There is a huge amount of information available on the ecological functions of other taxa.	Text has been rewritten but more work is needed here
Allan Watt	Chapter 1	40	1220	41	1266	Various typos lines 1220 and 1266.	Edits done
Adrian Wójcik	Chapter 1	41	1223	41	1235	ILK is often presented as a knowledge that is deeply grounded within history and its current state is perceived as a result of transmission of knowledge from previous generations. However, the work of cultural anthropologists has showed that in communities where the oral knowledge transmission is dominating, knowledge is often result of current needs and processes. Therefore it is crucial to create procedures that could test the reliability and validity of ILK. Please see: Edgerton, R. B. (1992). Sick societies: challenging the myth of primitive harmony. New York : Toronto : New York: Free Press ; Maxwell Macmillan Canada ; Maxwell Macmillan International.	Yes, agree. This is the responsibility of the authors. However, hybrid knowledge can also be important for the assessment, our work should not be restricted to real/true/original ILK.
Marianne Penker	Chapter 1	41	1226		1235	Missing information on the number and characteristics of ILK holders, selection process or at least a reference to another chapter, where this is explained.	Information has been updated
Andrew Stott, UK IPBES National Focal Point	Chapter 1	41	1249		1253	Seems to imply a narrow focus on 'impacts on biodiversity'. The issues around scope are for more diverse than this.	Text has been re-written
Andrew Stott, UK IPBES National Focal Point	Chapter 1	42	1272			This is a draft of the final assessment report. Should it include a roadmap saying how it will be produced? Would that not be a separate document?	It is not a roadmap on how the assessment is produced but is literally a roadmap on where to find what information.
Friedrich Wulf	Chapter 1	42	1274			The summary of chapter 1 is too brief. We suggest to add "Chapter 1 sets the scene, explains how the assessment has been developed and introduces both the purpose of the assessment and the geographical characteristics of the region."	added.
Tom West	Chapter 1	42	1277	42	1277	What are biophysical values: does this mean biophysical data? And in what way(s) does Ch3 consider non-anthropocentric (intrinsic?) values? Neither are clear.	More information on values is found in Deliverable 3(d): Policy support tools and methodologies regarding the diverse conceptualization of values of biodiversity and nature's benefits to people including ecosystem services. A short overview is given in chapter 1.1.3. Nevertheless it is clarified a bit in the text of 1.1.8.
Andrew Stott, UK IPBES National Focal Point	Chapter 1	43	1284			Delete 'will'?	Done
Andrew Stott, UK IPBES National Focal Point	Chapter 1	43	1307			I'd like to see a lot more thought about how the assessment will be used by who. That should shape both the analysis undertaken and the way in which it is presented.	this is partly found in section 1.3.
Esra Başak Dessane	Chapter 1	44	1315	48	1492	Many dots appear in the cited references. Not completed I guess?	Correct
Asimina Skouteri	Chapter 1	46	1427	46		Lipsky, Z., (1995). The changing face of the Czech rural landscape. Landscape and Urban Planning, 31, 39-45	Reference has been reviewed and treated appropriately
Asimina Skouteri	Chapter 1	47	1460	47		Schomers, S., & Matzdorf, B. (2013). Payments for ecosystem services: A review and comparison of developing and industrialized countries. <i>Ecosystem Services</i> , 6, 16-30.	Reference has been reviewed and treated appropriately
Mark Snethlage	Chapter 1	47	1469	47	1469	http://data.worldbank.org/indicator/ER.LND.PTLD.ZS/countries/1W?display=default link does not lead to the data. Update with this link: http://data.worldbank.org/indicator/ER.LND.PTLD.ZS	Done
Asimina Skouteri	Chapter 1	48	1492	48		Wünscher, T., & Engel, S. (2012). International payments for biodiversity services: Review and evaluation of conservation targeting approaches. <i>Biological Conservation</i> , 152, 222-230.	Reference has been reviewed and treated appropriately
Petr Petrik	Chapter 1	49	1502	49	1502	There is an updated version of Strategy on Biodiversity in the Czech Republic for 2016-2025	Corrected