



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION  
UNITED NATIONS

**SEEA Revision**

**SEEA Experimental  
Ecosystem Accounting**

**Comment form**

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## Comment form for the Consultation Draft

**Deadline for responses: 1 January , 2013**  
**Send responses to: [seea@un.org](mailto:seea@un.org)**

Your name:	Daniel Clarke
Your country/organization:	UNESCAP
Contact (e.g. email address):	<a href="mailto:clarke@un.org">clarke@un.org</a>

To submit responses please save this document and send it as an attachment to the following e-mail address: [seea@un.org](mailto:seea@un.org).

The comment form has been designed to facilitate the analysis of comments.

In Part I general comments on the structure and content of the draft document are sought. In Part II any other comments, particularly those of a technical nature should be included.

### **Relevant documents**

Before submitting responses you are encouraged to read

*Cover Note to the Consultation Draft*

*SEEA Experimental Ecosystem Accounting – Consultation Draft*

### **Part I: General comments**

In the box below please supply any comments on the structure of the document, the balance of material and the coverage of the draft including any thoughts on missing content.

Comments on the style, tone, and readability of the text are also welcome.

**Please reference paragraphs numbers or section numbers as appropriate.**

When explaining the “two perspectives” of SEEA Central Framework and SEEA EEA (paras. 2.10, 2.107) it should be clear that these perspectives complement each other; they are not alternatives to one another and taking both perspectives does not result in double-counting. Users of this manual should not have the impression that they need to choose between the Central Framework and EEA. While the two perspectives may have different priorities, it’s a false choice between one or the other because almost inevitably both are relevant.

The term “sustainability” shouldn't use quotation marks. It's not clear why quotation marks are needed or what is the source of the quotation (if any). This term has a clear and distinct meaning in an accounting because of how assets are defined. Perhaps this requires some explanation (I didn't find a definition anywhere) but simply putting “sustainability” in quotation marks could be easily misinterpreted.

The discussion that distinguishes “SNA benefits” and “non-SNA benefits” in section 2.2.1 is technically well formulated but may still be misleading to some readers. It is well known, for example, that unpaid housework is not part of the SNA production boundary, but point (i) in **para 2.19** seems to suggest that it may be part of “SNA benefits”. So the distinction remains unclear. Moreover, related to this section is the concept of an exchange value and the use of transactions or whether it “can be bought and sold on markets” to help determine boundaries for valuation. These issues should be given further description (or references), perhaps in Chapter 5.

The proposed accounting treatment for the atmosphere in **para 2.70** seems generally inappropriate and not intuitive. Only in very special cases (which are not particularly important to EEA) is delineating concentrations of gases to an individual BSU relevant or feasible. It is especially not relevant or feasible for GHGs, which is the example given. The special case is for the concentrations of certain urban air pollutants that can accumulate (or at least be continuously recharged) in local areas. This is a special case that could easily be applied to EEA. But the more general case is that concentrations of pollutants don't stay concentrated anywhere for an accounting period. Thus, the “air volume” concept seems generally non-operational.

The proposed accounting treatment for biodiversity is also unclear and not intuitive (see detailed comments below).

## **Part II: Other comments**

In the box below please supply any additional comments including those of a more technical nature.

**Please reference your responses with the relevant paragraph number or section number.**

**Chapter 1, para 1.53:** “...ecosystem as a complex, self-regulating system that, while influenced by economic activity, also operates outside of traditional economic management regimes.” This issue is perhaps a bit broader than is suggested by this statement, and it relates to the general topic of externalities. It's not only about “management regimes”, but also has to do with price determination and the scope and boundaries of traditional measures for economies. This is central to the relevance/importance for EEA.

**Chapter 2, para 2.4:** Why is resilience called a “function” of ecosystems here. Resilience seems more like a reference to an ecosystem’s capacity to function, perhaps, but not a function in itself. **Para 2.8** seems to suggest that the resilience of an ecosystem can be “enhanced” through management. This may be questionable or at least requires some further explanation. Management can help protect certain characteristics of an ecosystem that may be related to resistance but isn’t this different than “enhancing” resilience? An example would be helpful.

**Para 2.11** suggests that EEA expands the scope of asset accounting. It could be added that this broader scope is defined by the ecosystem services – this makes the boundary expansion clearer. **Para 2.17** states that ecosystem services: “provide the link between ecosystem assets on the one hand, and the benefits used and enjoyed by people on the other”. But this is still not explicit enough. It’s not only that the services “provide the link”, they must *define* how the assets are identified and measured.

**Para 2.24:** Do not use vague phrasing like: “ways in which humans relate to ecosystems”. Should substitute this with: “may benefit from ecosystems.” There are other ways humans relate to ecosystems besides these benefits. Ecosystem services are defined by benefits.

**Figure 2.3:** The arrows of inputs into the benefits boxes seem to have missing text or errors. First arrow should read: “Input to production of SNA goods **and services**”. Second arrow should read: “Input to production of SNA **goods and services**”. Third arrow should read: “Direct input to non-SNA benefits **and SNA services** [cultural services input to the SNA services related to tourism?]”

**Para 2.36:** The point of this paragraph is not clear. This is confusing in light of the importance of *defining* ecosystem assets in terms of ecosystem services (see comment above). At least in principle (or at the conceptual level) there should be no reason to describe assets completely independently from any consideration of benefits. It must at least be assumed that the asset measures are correlated to services, even if this is not easily proven.

**Para 2.54:** I suggest deleting this paragraph. Why, in this context of EEA, would a user develop a “core set of classes” for an “ecosystem classification”? What do we need for accounting purposes that is not provided by the BSU, LCEU or EAU? If something additional is needed than this should be explained. Otherwise this para can be deleted as it will only confuse.

**Table 2.2:** Why not keep a more typical asset accounting structure, with a beginning of period and end of period value and changes in between down the left column, for each capacity measure (vegetation, biodiversity, etc.)? This would be simpler – it’s not clear how this table is populated and with what type of data.

**Table 2.3:** The purpose of this table is not very clear. Why is it in this section?

**Chapter 3, Para 2.7:** The last sentence of this para is not clear. Public benefits from private assets are not necessarily incorporated in values of assets already included in the standard national accounts (because of externalities). Therefore it is not clear how these benefits are “associated” with values already in standard national accounts.

**Para 3.11-3.12:** text states: “people also value species diversity...independent of the role of...ecosystem services”- I’m not sure this is correct. Can we really separate a value for biodiversity from the benefits it provides? I doubt it.

In EEA, biodiversity should be treated strictly as a (crucial) asset underpinning ecosystem services. It’s important not to confuse biodiversity, and its various roles in ecosystem functioning, with the way we value “iconic species”. In fact, this is a good example of why biodiversity should be treated strictly as an asset, and not as a service. Without sufficient diversity (at the genetic level for the species and across species for the habitat), an endangered species will not be able to continue to survive. However, the value related to that particular single species’ existence really has nothing to do with biodiversity. (obviously if one more species becomes extinct, iconic or otherwise, this would diminish species diversity; however, this marginal change to diversity is not the reason for valuing the iconic species – otherwise the same value should apply to non-iconic species). On the other hand, some species are of particular importance to biodiversity (keystone species) because of their special role in the food web. So we can use information on those species to proxy measure biodiversity – but again these should be asset accounting measures, not services.

**Para 3.21:** The term “ecosystem effects” is unclear and undefined. Should replace with “effects on ecosystem assets”.

**Para 3.28-29:** On disservices, actually a part of ecosystem services may be insurance, protection or buffering from the disservices; thus accounting for disservices separately seems superfluous and possibly double-counting.

**Para 3.39 (iii):** For added clarity, suggest adding at end: “However, for the case of uncultivated crops and other plants, the ecosystem services are measured by the harvested materials.”

**Para 3.48** states that “it may be relevant to use indicators of changes in ecosystem condition and ecosystem characteristics as indicators.” An example should be given here as to what this means.

**Chapter 4, Para 4.13:** This paragraph doesn’t seem to have any relevance for EEA. Are we comparing between ecosystems in EEA? If so, why? As noted in the following paragraphs in the text, assessing a condition measure and not only its changes over time could be relevant for certain special analyses, but not for literally comparing across ecosystems. I think the point that should be made here instead is that any reference condition used should be flexible to the different types, and expected conditions, of ecosystems so that it may be used to construct an index to review aggregated changes over time. If the way we

measure changes to condition over time is “normalised” across the different types of units, than we can aggregate the changes to get the broad picture for a region or a nation.

**Chapter 5, Para 5.36** correctly points out that in the special cases where a “costs of production” valuation approach is used in the SNA, the assumption is that the producer surplus is equal to zero. This section could also note that this is an equally reasonable assumption for ecosystem systems because we cannot expect the producer, i.e. the ecosystem, to be able to collect anything above a normal return from consumers. It is not logical to assume that consumers will voluntarily pay more than the cost of production of the services (the ecosystem certainly won't ‘charge’ them for it). So, if we are to stick strictly to an exchange value, that any ‘price’ above cost seems illogical and incomparable.

**Chapter 6, Para 6.3:** the statement “the standard economic measures of production, consumption, income and wealth are not designed to fully account for the non-market services that ecosystems provide”. This statement is not incorrect but it's perhaps not completely accurate. The benefits provided by ecosystems for which there is no transaction (or no exchange) are beyond the boundaries applied to the measurement of economic production, consumption, etc. This is for both practical and conceptual reasons. It's not so much that the measures are not ‘designed’ to account for ecosystem services (fully or partially or at all). Economic production and ecosystem services should be understood clearly as distinct concepts that do no overlap (although the latter is often an input to the former). In some places in the manual this is not entirely clear. It would probably help to add some simple explanations on the importance of the concept of externalities.

**Para 6.65:** The point here is well taken but is it really necessary for SEEA to “strongly advise” that the term Green GDP be avoided? As acknowledged here, the term “Green GDP” appears in a wide variety of contexts and is often understood as a generic term and not necessarily a precise measurement or accounting standard. Even though this terminology appears nowhere else in SEEA, it might not be best to judge here whether it is useful for communicating a message in another context.