



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION  
UNITED NATIONS



System of  
Environmental  
Economic  
Accounting

---

## System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting Revision

### **First Global Consultation on:**

**Chapter 3: Spatial units for Ecosystem Accounting**

**Chapter 4: Accounting for Ecosystem Extent**

**Chapter 5: Accounting for Ecosystem Condition**

### *Comments Form*

**Deadline for responses: 30 April 2020**

**Send responses to: [seea@un.org](mailto:seea@un.org)**

Name:	Solen Le Clec'h
Organization & country:	WUR, The Netherlands

The comment form has been designed to facilitate the analysis of comments. There are nine guiding questions in the form, please respond to the questions in the indicated boxes below. 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).

All documents can be also found on the SEEA EEA Revision website at:  
<https://seea.un.org/content/seea-experimental-ecosystem-accounting-revision>

In case you have any questions or have issues with accessing the documents, please contact us at [seea@un.org](mailto:seea@un.org)

**Question 1: Do you have any comments on the definition and description of ecosystem assets and ecosystem accounting areas and the associated measurement boundaries and treatments?**

It is not clear to me what the difference between ET and EA is. Later on, it written that “Ecosystem assets are classified into ecosystem types”. If it means the same thing, why two different concepts?

I really appreciate the fact that vertical structure is part of the EA but I was wondering whether spatial “horizontal” spatial structure of patches is considered (landscape ecology)? The structure of the landscape can play a very important role in the supply of ecosystem services and in biodiversity.

I am a bit puzzled by the way interactions between spatial levels can be considered. Changes in one EA can affect other EAs. Same concern with EAAs. This does not seem to be included in the framework. I was also wondering how is the separation between EAs done in case of a landscape gradient?

What do you mean by “However, the accounts for each EAA will be discrete and no double-counting is implied.” ?

Narrow linear features might still play an important role in the provision of ecosystem services and in biodiversity, typically the hedgerows around fields that are purposely removed from the framework. Could it be possible to include them in the framework as part of the EAs? For instance, there would be a distinction between field with hedgerows and fields without. This part also raises the question of how to deal with mixed pixels from remote sensing: the way to consider mosaics should be considered in the framework should be expanded upon?

**Question 2. Do you have any comments on the use of the IUCN Global Ecosystem Typology as the SEEA Ecosystem Type Reference Classification?**

It seems very relevant to me. Some minor comments:

- Mosaics are not included
- It seems to me relevant for a global / subnational accounting framework but within a country, I would encourage the use of much more detailed typologies.

Regarding my last point, at the beginning of the classification section it said “classification of EAs used for ecosystem accounting be based on an existing national ecosystem classification scheme”. Then how to ensure comparisons between countries if used for global or subnational assessment?

**Question 3. Do you have any comments on the recording of changes in ecosystem extent and ecosystem condition, including the recording of ecosystem conversions, as described in chapters 4 and 5?**

In the chapter 4, it is stated that “The ecosystem extent account shows changes in ET. These changes are collectively referred to as ecosystem conversions”. Are only changes in the area or also in the structure (edge density for instance)?

**Question 4. Do you have any comments on the three-stage approach to accounting for ecosystem condition, including the aggregation of condition variables and indicators?**

In stage 1, how are key characteristics selected? What data are considered to be relevant? Table 5.3. how was the number of indicators (8) defined? For instance, can one class have more than the number of indicators depicted in the table? Should these variables be explicitly described in the framework to ensure that comparisons, such as between national territories? How can interactions between the various states and the landscape levels characteristics be considered?

In stages 2 and 3. How are the weights decided upon?

I am a bit puzzle regarding the local specificities and the some specific areas of particular importance, such as the critical source areas. How detailed/context specific VS aggregated the accountings are expected to be?

In stage 3, I have the feeling that there is a confusion in this part between environmental pressures and impacts. That aspect might need to be checked carefully. It is also not very clear how multiple pressures can be accounted for.

There also might be a confusion between environmental stocks and pressures. Aren't concentrations of pollutants and the abundance of invasive species pressures, rather than stocks?

I think that indicators of protection status can be relevant, in the absence of other data, but the type of protected areas and the time of its implementation should be checked carefully. A very recently implemented area might not show a significant difference in terms of environmental conditions with the surrounding areas, at the time of the accounting work.

**Question 5. Do you have any comments on the description and application of the concept of reference condition and the use of both natural and anthropogenic reference conditions in accounting for ecosystem condition?**

I agree that aggregation across ETs from different realms or with different reference conditions should not be done.

To establish reference condition, I would suggest a mix approach, based on the options 2 and 7 (from) . #2 for the “natural biomes” and #7 for “semi natural habitats” and agricultural lands.

Reference condition as the condition of the ETs with the minimal impacts of human activities, if any, to maintain the system as such. For natural habitats/biomes that would overlap with the option #2 from the table in the annex 5.5 and be close to the #7 for the semi-natural habitats. For highly human disturbed environments, a “historical” reference and/or target level could be a way forward but if historical, it should not go long back in time. I do not think it makes sense to go back to pre-industrial times, for instance.

**Question 6. Do you have any comments on Ecosystem Condition Typology for organising characteristics, data and indicators about ecosystem condition?**

It seems very relevant.

I think that compositional and structural state should not overlap, although they might sometimes be correlated. Composition, in my understanding, should be about the biological diversity and structure should be about the density/vertical structure.

In the landscape and seascape characteristics, a metric related to edge (e.g. edge density) would be relevant.

**Question 7. Do you have any other comments on Chapter 3?**

Click here and start typing (The length of your response is not limited by this text box.)

**Question 8. Do you have any other comments on Chapter 4?**

Click here and start typing (The length of your response is not limited by this text box.)

**Question 9. Do you have any other comments on Chapter 5?**

It is not really clear either how the framework allows us to go from composition and structure to functionality nor how are temporal on linear dynamics, in relation to the ecosystem resilience, included in the framework