DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

SEEA Revision

SEEA Experimental Ecosystem Accounting

Comment form

Comment form for the Consultation Draft

Deadline for responses: 1 January , 2013
Send responses to: seea@un.org

Your name:	Guillaume Mordant (Minister of Ecology)
Your country/organization:	French statistical system (Insee and the Statistical Service of the Minister of ecology)
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To submit responses please save this document and send it as an attachment to the following e-mail address: 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.

As a general introductory remark, if we may consider the current draft as globally quite convenient in presenting what would an ecosystems accounting framework look like in theory, and in particular the state of the art of reflex-ions in this matter, it is insufficient, though, to form the basis of information for deciding to engage in investments in order to produce such

an accounting system.
In particular, two pieces of information are missing to complement such a basis for a good decision making. They both will derive from the tests, and attempts to apply such theoretical approach to reality:

The first one concerns the possible **adaptation of the initial ambitions concerning the accounting framework to the reality of the required information system** (in terms of availability/coverage and accuracy/reliability). Even with a long term plan to develop such information system, it may very well appear that the conceptual framework needs to be adapted into a more applicable version, for instance not considering an ecosystem as a global asset providing a pack of services, but more simply building gradually ecosystems accounts ecosystem service by ecosystem service, starting with the example of the carbon accounting (part 4.4), and expanding this approach of carbon sink service to other important ecosystem services for which we have confidence in the reliability and availability of information at a satisfactory level.
Indeed, the feasibility issue may concern fundamentally the choice of spatial areas as statistical units with extended use of land cover information. The defined spatial areas are not always adapted to reflect the presence of the different ecosystems in quantity and quality. The French experience of ecosystems assessment through geographical information combining land cover general information and different layers of geographical information on agricultural land, forestry, wetlands… show that the classification of ecosystems used on each spatial unit fails to represent reality in a satisfactory manner. In short, there appears in France to be sometimes similar or more variability between the ecosystems of the same classification category than there is variability among categories (for natural areas).

In practice, the list of criteria for prioritization mentioned page 51 (or at least part of it) could be used on different ecosystem services (of the CICES classification...) to assess which ones have more chance to be measurable, independently from the priority derived from national situations and policy demand.
Along with this idea to present different alternatives, comes the surprise of not finding in the document clearer references to the simplified approach proposed by the EEA. A box focusing on this simplified accounting system as an alternative approach and highlighting its differences with the one proposed in the rest of the draft would be of value.

The second element missing for a go/no go on investing in the ecosystem services accounting at a country level is the **test of robustness of the underlying ecosystems/ecosystems services models**, for instance, using the evolution in time of the input data of these models to test the evolution of ecosystem services derived from the models and benchmark it on a given known territory that has evolved and for which evidence based ground information has been gathered by naturalists and other environmental science experts. Limiting here such test to the physical assessment of the services would allow to gain trust in the modelling approach proposed for ecosystems based on geographical units.

In line with this, the first prototypes of accounts in Australia (Victoria state) and of accounts throughout Europe made by the EEA to be expected in 2013 will play an important role in giving to the theoretical approach a more pragmatic colour.

In term, after the macro-regional prototypes have been made available and tested, a second version of the draft including comments on feasibility issues, difficulties encountered and possibly overcome, would enhance the realism of the SEEA-EEA.

This first draft could refer to these two additional inputs by:

- adding comments on the risk that feasibility issues may put on the integrated approach based on geographical units and evoke possible second best solutions in case the difficulty is not overcome, such as focusing on separate accounting of major ecosystem services.
- Referring to alternative simplified approaches like the EEA exercise, and describing them
- Evoke the appropriateness of testing the robustness and the realism of the underlying ecosystems models by running specific case studies, ideally with a changing nature of ecosystems or evolving ecosystems quality through time.

<u>General comments on specific chapters:</u>

Some warnings could be added in part 4.5 “Accounting for biodiversity” to take account of the very partial availability of data on the different species (in France and most European countries, only common birds give rise to yearly measures). It could also be noted that the annual updating of the accounts table for threatened species, even though ideal for annual accounting, would mobilize quite large amounts of human resources without being efficient since the value added of yearly measures for slow phenomena is week. In France, the assessment is made every five years in a system of rolling reviews among species, which is fairly enough to track changes in biodiversity.

Concerning chapter V on valuation methods, different approaches are exposed, discussed and their limits highlighted. This is most welcome. In the end it is difficult, though, to derive from this analysis a practical decision rule for choosing which valuation method is the most relevant for which different situation and ecosystem. The examples of application or the delimitation of boundaries are often given from the SNA angle and less through pure ecosystem measurement issues.

Concerning the sequence of accounts (chapter VI), it should be recalled how the disservices are taken into account in the measurement of the flows of services (net value?) and the degradation. These negative services are discussed in chapter II, but not explicitely represented in the sequence of accounts, either separately, or by considering net flows of services.

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.

* P18: Footnote number 7 could be more developed or reformulated to better understand its meaning.

* Figure 2.3 p20: Mineral and energy products are presented in the third column under SNA benefits, but in the top layer, at the level of ecosystem services-provisioning services (or even regulating services) whereas they should appear separately as SNA benefits but at the lower level close to the abiotic services. We think the mention “SNA benefits” is missing in the low part of the rectangle for benefits.

* §2.70 p28: affecting a special quality of air volume to the different BSU seems not realistic and the relevance of this is questionable.

* §2.82 p30: it would be particularly interesting to be more specific on which kind of ecosystem this evaluation of the total expected flows of services over an ecosystem life can be made, in this situation where current flows would exceed an ecosystem’s capacity to provide the services. It requires the assessment of two types of flows (services currently delivered and the ecosystem’s capacity to generate them), and the feedback loop of this overuse on the degradation of the ecosystem and on is future capacity, taking account of non-linear effects in such modelling. The result in view may easily become out of reach. So for which ecosystems and services are such calculations feasible?

* § 3.59 p48: an example of aggregation method is given with the one that consists in transforming the units into an index representing a rate of change. Another method is given at § 3.60 with the use of prices.
However the most common normalisation methods, using z-scores, min-max or distances could be mentioned. These methods have indeed been chosen for the most known environmental composite indicators (EPI, ESI).

* Table 6.1 p107
In the sources of reduction in stock of ecosystem capital one major cause of degradation seems missing. There is a line for “catastrophic losses due to human action”. But does it include the degradation due to economic activities implying regular emissions of pollutants which accumulation gives rise to perturbations and damages to ecosystems? Or is it only related to particular “catastrophic” events like oil slicks?
When related to human action the term “catastrophic” could be removed. “Losses due to human action” is not limitative and thereby less ambiguous.