



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

Classification of Environmental Functions

Global Consultation

Comments Form

Deadline for responses: 31 December 2022

Send responses to: seea@un.org

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***BEA comments provided by Dennis Fixler, Julie Hass, Matthew Chambers, and Scott Wentland**

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

All documents can be also found on the website at: <https://seea.un.org/content/global-consultation-classification-environmental-functions>

In case you have any questions or have issues with accessing the documents, please contact us at seea@un.org

Question 1: Do you have any comments on the proposed structure of the Classification of Environmental Functions structure?

General comments:

A movement toward a more unified, consistent Classification of Environmental Functions structure broadly makes sense; however, we have a number of concerns about the current proposal that, if addressed, should help improve its clarity and consistency.

Generally, this proposal seems more oriented toward the European Statistical System for reporting on EU Directives, falling short in being a comprehensive classification that is inclusive of non-European countries whose economies are more resource-based and face different natural resource management functions. For example, the treatment of resource management for water, minerals, oil and natural gas, and aquatic/marine resources is not adequate for reasons we discuss below. Without addressing a sufficient number of these issues, this classification proposal should not be approved as it is currently presented.

Major Concerns:

There appears to be some important natural resources excluded from this classification without providing any explanation. In the Resource Management section of the Classification of Environmental Activities of the SEEA-CF - see Table 4.1 and Annex 1.A - there are the following categories which have been excluded from the proposed CEF: “10 Management of mineral and energy resources” and “12 Management of aquatic resources.” Since many countries have an abundance of these natural resources, and others depend on the marine environment, it would seem logical that these important natural resources should be included in the proposed CEF. The U.S. and many economies around the world are in the process of going from a carbon-intensive economy to a materials-intensive economy. Management of subsoil assets like rare earth metals, lithium, and other critical minerals will likely have increasing importance in the future. An accounting of related activities in the CEF proposal will be important for monitoring future directions and trade-offs. The management of these resources – and the land (or marine areas) where these resources are located should be to be included in the proposed CEF, which will also help maintain continuity with the SEEA asset accounts. There is no explanation why these have been excluded. For island countries and for countries with maritime dependence, the exclusion of the marine environment is a major flaw of this proposal.

In the proposed CEF there appear to be no appropriate categories for costs related to managing marine fishing such as fishing quotas, or for management of mining or oil and natural gas resources offshore or on land, or the management of grazing lands, or the expenditures for firefighting. These are all important environmental functions of government and need a place in the CEF – more than thrown into “7.3 Environmental activities not elsewhere classified.” The expenditures for cleaning up oil spills, soil and surface waters polluted by old mine tailings, etc. are included but not the management of these natural resources before the pollution happens. This means that this classification is NOT comprehensive – it ignores natural resources that are to be included as assets in the SNA revision and the current SEEA CF.

Minor Concerns:

Each 3 digit category group contains an “other activities” bin; but, R&D does not contain an “other activities” bin. Or, would it make sense to include a 7.4 for “Cross-cutting environmental R&D” for R&D activities that do not neatly fit into these categories and span multiple?

With the potential change in the treatment of tradeable greenhouse gas (carbon) emission units, should these have a place in Division 1 Air, Climate, and Energy?

Question 2. Do you have any comments on the explanatory notes and on the heading reference?

General Comments:

The explanatory notes are not very comprehensive and leaves much to the imagination and interpretation. It was helpful to see examples of what is “included” and “excluded,” since this provides greater specificity, but it would be substantially more helpful to describe *why* it is included and *why* something is excluded using one of the guiding principles. Additional guidance for how to apply the principles for determining what is in and what is out will facilitate comparability across countries implementing this proposed CEF. The guidance does not need to be comprehensive, but more examples of how the principles are applied more generally will help countries implement similar types of activities not explicitly specified here by clarifying the accounting reasoning.

Major concerns:

The relative importance of technical suitability, motivation, and purpose is unclear (since these things need not be closely correlated). Additionally, it is unclear how technical suitability is to be determined; also, whether it is determined *ex ante* or *ex post*.

Some activities appear to be included twice: “ETIGA activities linked to the management of forest resources” is found under 3.2.1 AND under 4.3.4 although in this latter case only ‘sustainable’ management is to be included. However, there is no definition of ‘sustainable management of forests’ – this is all very problematic. The more the explanatory notes and structure of the CEF can clarify how these categories are mutually exclusive, the more comparable these numbers will be across countries.

Can the explanatory notes explain more about what education and training is environmental in its primary purpose versus education and training that is related to the environment but not primarily environmental in function? Education/training have becoming larger expenditures for countries for decades, so this is an important one to be precise about.

The “activities related to the management of fossil energy resources” are excluded from 3.2 – but there is no information regarding where these should be included.

Why are ‘measures and activities that improve the efficiency of mineral resource extraction’ excluded from 3.2.2. Minerals when this can greatly reduce the mining waste?

Including “activities for protection and remediation of marine environment” under ‘4.1 Protection of soil, surface and groundwater’ does not make any sense. “Surface water” is not the same as “marine.” Surface water are lakes and rivers on land masses whereas marine is usually meant to refer to seas and oceans. This is not a sensible category – this should be considered for revision or more explanation is needed.

The references to EU regulations may be helpful to European countries required to report to Eurostat, but the definitions and references need to be from the SEEA-CF manual or need to be explicitly stated. For example, definitions of waste, recovery, sustainable management of forests or what is considered energy from renewable sources may differ from country to country. For example, is nuclear fusion a renewable energy? Or is it a non-renewable energy without carbon emissions? To assume that definitions in European Directives (such as the waste directive) are universally applicable are not necessarily appropriate for adoption in UN classifications.

It appears that marine fishing quotas are to be placed under ‘4.2.4 Other activities’ since this includes “...general government activities for preserving stocks through the enforcement of quotas... for e.g. fishing activities” – Of course categorized this way, the fishing activities from surface waters and from marine environments would be put together. This is not an ideal way of identifying the management of the marine environment – consider revising.

Management of water is not covered sufficiently or clearly in the classification – a search of the explanatory notes is the only way to find where water is to be included, although it appears from the Division 2 title that this is where “water resources management” is located. But in this category only “Activities, measures and products aimed at... safeguarding stocks of water” are included. The actual management of water resources and how to allocate these is not included here or anywhere else in this classification.

‘2.2 Water savings and management of natural water resources’ would appear to be the most logical place for finding the management of water allocation activities but “It excludes activities of collection, treatment and distribution of water.” Does this exclusion only refer to drinking water? Or is this all water? The water behind dams is used for agriculture purposes as well as for drinking water, recreation purposes, electricity production, etc. There are large water channels that transport water from one water shed to another in the USA. Where should these be placed in the CEF? The allocation of water in the Colorado River basin, for example, affects 7 Western States and the population and economies of these States depends on this water. Where in this classification would these natural water resource management activities be located in the CEF? There are also water rights owned by municipalities, farmers, ski areas, and others. Where are these management instruments to go? The management of the extraction of water from surface and groundwater sources has no place in the classification.

‘2.2.3. Replenishment of water resources’ covers “Activities, measures and products aimed at increasing water stocks.” There is no mention of the infrastructure most

commonly used for this purpose, i.e. dams. Of course, these were excluded at the 2.2 level. This should be clarified or reconsidered in a revised CEF.

Minor concerns:

Putting references to other sections of the classification is not helpful – what is meant by these cross references? Is the activity described supposed to be included in the activity referenced in the parentheses? Only in two places at the top of page 16 do are there specific instructions stating “included in...” The instruction “see” is not clear, the instructions need to state “included in” to be useful. Spell check should be used, there are several misspellings, such as: ‘for exemple’ and ‘including.’

There are so many different abbreviations that are not explained, such as ‘WFD,’ ‘IPMs,’ and ‘EEA’ that these “explanatory notes” need their own explanatory notes to be correctly understood.

Organic farming is located under 4.1.1. Prevention of pollutant infiltration? How does this make sense?

“4.1.3 Protection from erosion... of soil and water” includes ‘anti-erosion walls’ – and since 4.1 includes marine then measures to protect shorelines from erosion would be placed here. Is that correct? ‘Anti-erosion walls’ are also used in the case of landslide prevention – so why are measures to prevent landslides excluded?

‘4.3.2 Protection against forest fires’ states that “the control of forest fires” is included – it would be good to clearly state that the activity of firefighting is part of what is meant by “control.” If this is not the case, it is unclear where this activity will be placed – since extinguishing fires is one way that countries protect forests. Since the management of national resources includes “safeguarding of those resources against depletion (Annex 2) and wildfires certainly lead to depletion, then this activity should be part of category 4.3.2. The description needs to clearly state that firefighting is included in 4.3.2.

The monitoring, measurement and similar function in 2.1.5. only includes monitoring pollution, so this is not related to managing water extraction or allocation.

2.2 includes activities and products aiming at minimising water losses – which would mean drinking water distribution systems, but drinking water itself is excluded. This may make sense when taking an Environmental Goods and Services perspective, but it is not an appropriate one for a comprehensive classification of environmental functions.

‘2.2.5. Other activities’ does include, “release of licenses for water abstraction, activities of general government units or parts thereof that administer and regulate the use of water resources...” From this description, it would appear that all of the water abstraction activities is supposed to be placed under this ‘other activities’ category when this is a major activity of resource management and allocation. This resource management is much more important than the ‘water savings’ activities – that is important but secondary to the allocation and management of the water resources.

Should country specific additions to the set of CEF classifications all exist a specific level (e.g., level 4)? In this way, 3-digit CEF codes might always comparable across countries.

Question 3. Do you have any other comments on the Classification of Environmental Functions?

General Comments:

The CEF is a classification for environmental functions and should be based on the CEA from SEEA-CF Table 4.1 and Annex I.A. and not only on the European subset of the CEA. The CEF needs to be able to be used for other purposes than the development of EGSS statistics, as it should also inform the revision of COFOG, and be useful for comprehensive environmental expenditure statistics and accounts. Therefore, the natural resources that are not part of this proposed CEF should be included (minerals, energy resources, aquatic (marine) resources, as argued above.

In general, there is inevitably some subjectivity in determining purpose, and this is problematic because according to these definitions the same activity may be in or out of scope depending on its purpose. This is one reason why we are pressing for more specifics, clearer explanations/rationales for what is included/excluded, and greater consistency throughout the proposed CEF.

To the extent that something is being excluded in the proposed CEF that was included previously (or something is excluded that is currently in the SEEA), there should be additional guidance in the explanatory note about *why* this is the case. We cite a number of examples of this above, where further explanation would help us understand whether this was an error or deliberate. And, if it was deliberate, what are the guiding accounting principles?

Other Comments:

The descriptions for the different levels need to be understandable when seen in isolation of the whole system. For example, 5.2.1 Protection of ambient media could mean many different things and is impossible to understand. It would be better to have a complete title, such as 5.2.1 Protection of ambient media against radiation. This is also the case for each of the categories 'monitoring, measurement and similar' and 'other activities' – the description explaining 'for what' needs to be added like the groups in Division 6.

In many cases there are specialized government agencies that are involved in the management and regulation of specific natural resources. For example, the U.S. Forest Service has specialized government units under the natural resource for which they are responsible and not lumped all together under 7.1 General environmental administration, management, regulation, dissemination and consultancy. But this is the only place where the government management function is mentioned. In this example, almost half of the budget for the U.S. Forest Service goes to fighting fires – so would that go in 4.3.2 or in 7.1? The explanatory note does not make these kinds of situations very clear, which are likely very common.

Regarding specific categories:

1.2.1 Biomass can be unsustainably produced, so should it be considered renewable by definition?

4.1.2 If pollution prevention is separated between categories 2 and 4 based on whether it's being prevented from entering surface or ground water, why is cleanup grouped together? Should we consider prevention and clean-up as separate activities?

4.2 Is there a place city greenery management should be included?

4.3.1 "Afforestation" is listed as an excluded activity, but is also in the title. Please clarify.