

# SEEA Central Framework update

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## 1. Introduction

Nine years ago, in March 2012, the SEEA Central Framework (SEEA CF) was adopted as an international statistical standard by the United Nations Statistical Commission (UNSC). Since its adoption, global implementation of the SEEA CF has gained broad momentum. According to the 2020 global assessment, 89 countries have now implemented elements of the SEEA CF.

However, the global implementation of the SEEA CF has resulted in new user demands from different use communities (e.g. BIOFIN<sup>1</sup>, TRACKFIN<sup>2</sup>, climate change, biodiversity, Sustainable Development Goals (SDGs)), new conceptual and implementation issues and new statistical insights. In addition, advancement has been made on several interim classifications that are included in the SEEA CF (although much remains to be done in this domain). Furthermore, several other SEEA or SEEA-related manuals and guidelines have been published or finalised, such as the SEEA-Energy, SEEA Agriculture Forestry and Fisheries (SEEA AFF), the Statistical Framework for Measuring the Sustainability of Tourism, and last but not least, the SEEA Ecosystem Accounting (SEEA EA) manual.

Based on country implementation experiences, we may conclude the SEEA CF is still broadly up to date. Since 2012, work has been ongoing in various areas based on the issues identified during the drafting of the SEEA CF and that have arisen in subsequent years. In order to move the SEEA CF research agenda forward, a revised complete list of issues has been developed, which has been updated every year. Since 2012, some progress has been made for several topics on the research agenda (EW MFA indicators, integrated framework for monetary accounts, harmful subsidies etc.). However, several important issues of the research agenda have progressed slowly and remain unresolved—and are likely to progress slowly. Many of the issues of the research agenda focus on policy-relevant issues with high user demand. Without accelerated progress, there is a risk that other initiatives respond to these policy demands instead of the SEEA CF.

The question of advancing the SEEA CF research agenda and possibly updating the SEEA CF was first discussed at the UNCEEA meeting of June 2019. Opinions at that moment were mixed and it was decided to continue working on the SEEA CF research agenda, but not decide (yet) on a possible

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<sup>1</sup> The biodiversity finance initiative

<sup>2</sup> Tracking financing to sanitation, hygiene and drinking-water

update of the SEEA CF. In March 2021, the revision process of the SEEA EA was brought to a close. In addition, the UNSC has endorsed the work programme of the SNA update, which will result in a revised SNA in March 2025. Classifications such as ISIC and CPC will also be revised by 2025. Therefore, it is opportune for the UNCEEA to reconsider the possible update of the SEEA CF.

This document addresses two key questions for the UNCEEA to consider. First, what are the priority areas for the SEEA CF research agenda that need to be addressed in the coming years. Second, how and when should the outcomes of work on the research agenda be published. To support discussion of the first question this document describes the main reasons why further work on some conceptual issues is warranted and then proposes four priority areas of work. Concerning the second questions, some options are provided on the way forward.

## 2. Why update the SEEA CF ?

Here we describe in more detail the main reasons why further work on the SEEA CF research agenda and a possible update of the SEEA CF in the coming years would be appropriate and needed.

### 2.1 General user needs

The statistical community needs up-to-date statistical standards and guidelines to produce reliable, high quality, internationally comparable statistics. Adequately meeting user needs is the primary reason why the SEEA needs regular updates. Implementation and application of the SEEA has been ongoing since 2012 and there is a need to integrate the user experiences into an up-to-date SEEA CF that reflects lessons learned from implementation. Improved clarity of the text in the SEEA CF would help increase implementation of the accounts and ensure that country implementation of the accounts is up-to-date and consistent.

In addition, updating the text of the SEEA CF would provide the opportunity to bring on board the various communities that have been working on developing methodologies independently and develop bridges with their work. Several communities (e.g. BIOFIN, TRAKFIN, circular economy initiatives, various climate change initiatives, etc.) are developing or advancing methodologies that overlap with one or multiple aspects of the SEEA CF. To ensure that national statistical offices and line ministries are able to streamline production and avoid duplication of effort, there is a need to align or build bridges between related initiatives and frameworks.

### 2.2 Responding to new policy demands

New policy demands are increasingly revealing critical data gaps with respect to the environment and the economy, which the SEEA Central Framework has the potential to fill. While the SEEA CF is a conceptual handbook, in order to stay relevant and promote the usage of the accounts, the SEEA CF needs to articulate more clearly what key data or indicators can be derived from the system to respond to policy demands. In other cases, the methodology may have to be adjusted to make it more usable for policy demands. Below we describe some key policy areas where this is currently the case.

- **Climate and energy policies:** The SEEA CF can be made more user friendly by indicating which parts are relevant to climate change and energy policy (including highlighting some key indicators) and how the SEEA CF can complement existing indicators and data systems

used for established processes (e.g. IPCC guidelines). In this context also the issue of quarterly accounts could be addressed.

- **Circular economy (CE):** This is an important policy theme in many countries. Over the last few years it has been shown that the SEEA CF is an appropriate framework to provide the underlying physical and monetary data needed to promote circular economy. This should be more clearly articulated in the SEEA CF, both with regard to the basic framework (PSUTs) and key indicators that can be derived for circular economy.
- **Natural capital and biodiversity:** Although biodiversity is primarily the topic for SEEA EA, there is also a clear link to SEEA CF, namely with regard to accounts for timber, fish, biological resources, but also with regard to related expenditures and transfers. A more clearly articulated link between biodiversity, the SEEA EA and the SEEA CF could facilitate the use of the accounts for the post-2020 global biodiversity framework.
- **Environment related expenditures:** While this is by no means a new policy demand in and of itself, experience with the policy making community has shown that policy makers are often more interested in categorizing expenditures in terms of impact, rather than primary purpose. Reconciliation of impact versus primary purpose of expenditures could help make the SEEA CF more relevant and useful to policy makers in finance and planning ministries. A big policy demand in this area is, for example, the establishment of a classification of climate change expenditures.
- **Sustainable Development Goals (SDGs):** The SEEA CF can be used to monitor several SDGs.<sup>3</sup> An elaboration of this in the SEEA CF could promote the use of the SEEA CF as an integrated system for the SDGs. Furthermore, it could be articulated how the SEEA CF can provide supplementary information which highlights the economic dimension of current environmental SDG indicators and allows analysis of interlinkages between SDGs.
- **Beyond GDP movement:** The Beyond GDP movement has been growing rapidly and is a focus of groups such as the High-Level Group on the Measurement of Economic Performance and Social Progress (hosted by the OECD) and the UN Chief Economists network. The movement has focused on moving beyond headline economic indicators to incorporate information on social and environmental aspects of wellbeing and sustainability. There is a large opportunity for the SEEA to play here, particularly given its links with the SNA. The inclusion of text in a revised SEEA CF on integrated headline indicators could provide strong policy relevancy.

### 2.3 Work on the SNA research agenda

At its 52<sup>nd</sup> session the UNSC discussed and endorsed the work programme to update the SNA by 2025. A three-pronged approach is envisaged for the update of the 2008 SNA: (a) undertaking technical research on prioritized and other national accounts issues, including better supporting sustainable development from a macroeconomic perspective; (b) engaging in a broad consultation on the issues relating to the thematic areas of globalization, digitalization, and well-being and sustainability; and (c) ensuring overall consistency within the system of economic statistics, taking both a macroeconomic and microeconomic perspective. I

In 2019 the Intersecretariat Working Group on National Accounts (ISWGNA) started technical research about prioritized and current national accounts issues, taking into consideration current issues under discussion in the Advisory Expert Group on National Accounts. This resulted in a list of

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<sup>3</sup> [https://seea.un.org/sites/seea.un.org/files/sdg\\_cover\\_note\\_broadbrush.pdf](https://seea.un.org/sites/seea.un.org/files/sdg_cover_note_broadbrush.pdf)

research issues. These are grouped in three priority areas for the SNA research agenda, each with its own dedicated task team undertaking technical research and drafting guidance notes<sup>4</sup>: (1) globalization, (2) digitalisation and (3) well-being and sustainability. In particular with the last topic there is an overlap with the SEEA CF research agenda<sup>5</sup>. Some other key issues where there is overlap between the SNA and SEEA research agendas include the valuation of assets, the generation of electricity by households (solar power etc.) and payments for use of the environment including carbon schemes.

The objective of the Task Team on Well-being and Sustainability is to define a broader and more detailed framework of accounts, which can provide a tool to arrive at an improved monitoring and analysis of well-being and sustainability related to various policy goals, including the 2030 Agenda for sustainable development. The Task Team has made good progress and is currently preparing guidance notes and papers for the following topics:

- Refining economic ownership of natural resources
- Accounting for biological resources
- Recording of environmental taxes and subsidies
- Recording of emissions permits
- Recording of provisions
- Recording of depletion
- Accounting for renewable energy resources

The work on the SEEA CF research agenda could contribute to addressing the issue of well-being and sustainability in the SNA research agenda. To maintain and clarify the link between SNA and SEEA, work on the research agendas should be further aligned, with a parallel process for some joint research items.

## 2.4 Alignment with SEEA EA

In March 2021 the revision process of SEEA EA came to an end with its adoption by the UNSC. The new SEEA EA provides many new insights which also have an impact on the SEEA CF. To ensure that the SEEA CF and SEEA EA are fully aligned, the text of the SEEA CF needs to be subsequently updated.

First, the relation between SEEA CF and SEEA EA needs to be made clear upfront. The current text in the SEEA CF about ecosystem accounting, which was written while the first SEEA EA was still being developed, is inadequate and outdated.

Second, there are several areas and topics where the SEEA CF and SEEA EA overlap or are closely related. Examples include land accounting, valuation of biological resources and renewables, environmental expenditures and changes in ecosystem condition, natural inputs and provisioning services, and residual flows and regulating and maintenance services. All these topics should be well described and explained in relation to the two frameworks. Third, the SEEA CF and SEEA EA should describe how accounts from both documents could be integrated. For example, how the physical PSUTs could relate to the physical supply and use tables for ecosystem services, or how the monetary activity accounts from SEEA CF could be linked to the extent and condition account of SEEA EA.

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<sup>4</sup> The task teams include experts from the Balance of Payments and International Investment Position Manual, the Government Finance Statistics Manual, the Manual on Monetary and Financial Statistics, the SEEA, the International Standard Industrial Classification of All Economic Activities/Central Product Classification and other economic statistics-related manuals.

<sup>5</sup> <https://unstats.un.org/unsd/statcom/50th-session/documents/BG-Item3f-2019-NationalAccounts-Supplement-v3-E.pdf>

Integration with the accounts of the SNA may also be considered linking to the general alignment with the SNA as discussed above.

Finally, there are some areas of accounting, for example accounting for the atmosphere, which are not developed in either the SEEA CF or the SEEA EA and would benefit from a joint consideration of the conceptual and methodological issues.

### 3. Priority work streams

There are several larger and smaller issues related to the SEEA CF that could or should be improved. As resources and time are limited, we describe here four work streams that are particularly relevant:

1) Classifications: The SEEA CF contains several (interim) classifications that need further work. The classification of environmental protection and resource management expenditures is currently being revisited by Eurostat and a dedicated taskforce. This will provide an important input for an agreed methodology to measure expenditures on climate change, biodiversity, ocean, etc., green finance/green investments. In addition, there are several other classifications that may need further work (land use, land cover, residuals etc.). Work on classifications is time consuming so further prioritization may be needed.

2) Links between SEEA CF and SEEA EA – As already explained in section 2 of this document, there are a number of issues in which the relationship between the SEEA CF and the SEEA EA needs to become more completely articulated and the concepts and treatments made fully consistent.

3) Valuation issues – The research agendas of the SNA, SEEA EA and SEEA CF contain several basic issues related to valuation, which call for further work in the short term and a joint approach.

4) Input-output, indicators linked to a statistical framework. This is a group of research issues that is more related to implementation and application of the SEEA CF, and thus not (or much less) conceptual. As such they are of less importance with regard to a possible update of the SEEA CF. However, this work is of particular importance in order to keep SEEA CF policy relevant, i.e. with regard to important policy themes such as climate change, spillover effects in the context of the SDGs, etc.

The annex of this document describes how these areas relate to the research topics on the current SEEA CF research agenda. Although many topics relate to one of the four work streams just listed, it should be noted that there are several topics that are not captured.

## 4. Way forward

In order to determine the way forward, the UNCEEA has to address three questions concerning the revision of the SEEA CF, namely a) what is the envisaged output, b) when do we want to achieve this, and c) how can we support this process to meet these targets. Below we address these questions and provide some options.

The first question is what we want to achieve with regard to the final output. There are two options:

- a) Produce and publish an update of the SEEA CF manual. As previously mentioned, large parts of the SEEA CF are in good shape and the text does not warrant a full-blown revision. Accordingly, an update of the SEEA CF manual would only entail updating a limited amount of text. A limited revision of SEEA CF would include a) incorporation of the current and new work on SEEA CF research agenda, b) incorporation of the work on the (overlapping) issues with the SNA research agenda, c) an up-to-date description of the relationship with SEEA EA which addresses links and overlaps, d) making SEEA CF more up to date to meet some important policy needs.

### *Advantages*

- The SEEA CF will be up to date with other SEEA manuals / standards (e.g. SEEA AFF, SEEA energy).
- The SEEA CF will become more suitable for many policy applications and policy needs
- Alignment with the new work on the SNA research agenda

### *Disadvantages:*

- This option will require a significant investment of time and effort by the SEEA community
- Funds need to be raised

- b) Produce and publish technical notes. This option entails continuing working on the SEEA CF research agenda and publishing the outcomes, once approved by the SEEA CF TC and UNCEEA, as technical notes on the SEEA website as a clarification or amendment of the SEEA CF. This would be similar to the SNA News and Notes process, where methodological and conceptual clarifications have been published as amendments to the SNA.

### *Advantages*

- Less resources are needed
- The output can be published step by step once it is finalized

### *Disadvantages*

- This is the process that was set up so far for the work on the SEEA CF research agenda (which did not produce fast progress), and is thus not likely to produce all prioritized work by 2025.
- This will not result in a fully harmonized manual

The second question is when we want to publish. Here we have three options;

- a) Align with the SNA revision process and publish the SEEA CF update (a revised manual or a series of technical notes) in 2025.

- b) Publish after 2025. The advantage here is that there will be more time to work on the issues and it will be easier to incorporate all the proposed changes of the SNA.
- c) Publish once the outcomes become available (this applies for the option to publish a series of technical notes).

Whatever is decided with regard to the 'what and when', the last critical question is how we can achieve this. Experience from the past has shown that progress on the SEEA CF research agenda has been slow. First, because there was no clear target and deadline with regard to what we want to achieve. Second, without funding, resources and time to work on these issues are limited. The way forward may be further prioritization on the items on the research agenda and to organize some dedicated subgroups with key experts working in the field, to start working on the different work streams. The UNCEEA is asked to reflect on how best to bring this process forward.

### **Questions for the UNCEEA**

1. Does the UNCEEA agree with the four work streams proposed here to prioritize the work on the SEEA CF research agenda?
2. Which option for the final output does the UNCEEA prefer: an updated SEEA CF manual or a series of technical notes describing amendments to the SEEA CF ?
3. When do we want to finalize this program of work (2025, after 2025, when the outcomes become available) ?
4. How can we organize and achieve these targets ?

## Annex: overview of research issues for SEEA CF, categorized into five different groups.

Issue	Status	Topic SNA research agenda	Short description
	<i>O=ongoing N=not started F=finished</i>		
<b>Classifications</b>			
Classification of environmental activities (CEA)	O	X	CEA classification is revised to better align with policy needs (Eurostat)
Residuals /waste	N		develop high level classification (?)
Natural inputs	N		Review plus link to SEEA EA
Environmental assets	O (?)		Align with SEEA EA
Land use	N		still an interim classification
Land cover	N		still an interim classification
Energy products	N		Links with SIEC, CPC etc.
<b>Links SEEA CF - SEEA EA</b>			
Overview links (based on what is already in SEEA EA)	O		
Natural inputs - provisioning services/ abiotic flows	N		More a clarification....
Air emission accounts / LULUCF / carbon account	N		Emissions from the environment due to antropogenic causes (inlcuding what is reported unde (LULUCF) now only are recorded in the SEEA EA carbon stock account. This should e clarified, and or there inlcusion should be considered in the SEEA CF air emission accounts.
Accounting for soil resources	N		
Recording physical flows to ET (??)	N		
<b>Valuation</b>			
Valuation issues	O	X	The SEEA CF does not address the valuation of stocks and flows that are neither “market” nor “near market”, but that fall within the measurement boundary in physical terms. An example are the types of valuation made for water stocks and flows, but may also include other environmental assets. update and align with SEEA EA
Depletion of natural assets (renewable resources, relationship with degradation, etc.)	N	X	
<b>Implementation - indicators</b>			
Input- output techniques	O		
Development of policy relevant Indicators	O		
EW MFA	F		In principle, EW MFA and the PSUT should be consistent
Global DSDs for data exchange for SDMX	F		
<b>Other</b>			
Integrated framework monetary account	F		The different aspects of monetary activity accounts can be further integrated into a single accounting framework.
Biological resources	O	X	Topic on SNA research agenda
Economic ownership / depletion natural resources	O	X	Topic on SNA research agenda
Emission permits	O	X	Topic on SNA research agenda.
Recording of environmental taxes and subsidies	O	X	Topic on SNA research agenda.
Accounting for renewable energy resources	O	X	Topic on SNA research agenda.
Treatment of losses	N	X	There are a number of issues related to losses which are not fully described in the SEEA CF and which need to be further clarified to assist countries in implementation. These include energy losses and water losses.
Atmosphere as an asset?	N	X	
Physical produced assets	N		SEEA CF does not describe produced assets in physical terms. This may be of interest in particular with regard to circular economy.
Harmful subsidies	O		Out of scope of current SEEA CF
Adaptation expenditure	N		Out of scope of current SEEA CF