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SEEA Central Framework 2028 update

Scoping note for issue A9: “Consistency with the 2025 SNA update issues”

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Prepared by: Carl Obst & Bram Edens

Note: This note is prepared in the context of the SEEA Central Framework update, mandated by the United Nations Statistical Commission in 2024, expected to finish by 2028. There are 29 update issues, and the initial task is establishing a clear scope for all of the issues. This scoping note provides a short description of a specific issue with the aim of supporting a common understanding of the work that will be needed to fully investigate and articulate the alternative approaches and recommendations for change or addition to the SEEA Central Framework. Scoping notes will be discussed by the relevant task team and inform on the further work related to the issue.

1 Background to the issue

1. The short description of issue A9 “Consistency with the 2025 SNA update issues” from October 2024 is:

“In the 2025 SNA revision, several issues have been addressed in the area of natural capital and the environment, and the updated SEEA CF must consider the implications. The issues include a) Biological resources, b) Economic ownership / depletion natural resources, c) Treatment of emission trading schemes, d) Treatment of renewable energy resources as assets, e) Valuation of natural resources, and f) Distinction between taxes and services. In addition, there is a need to understand the implications of changes to the asset classification of the 2025 SNA, as there is a need for a harmonized asset classification for the SNA/SEEA from a SEEA perspective, i.e. the inclusion of natural resources / ecosystems / renewable energy resources etc. In addition, there may be overlaps in terminology between the SEEA CF and 2025 SNA which need to be clarified.

To ensure consistency with the SNA it should be investigated if the changes in the 2025 SNA have an impact on the SEEA. First an overall impact assessment of the proposed changes will be done. Based on this assessment, changes to the SEEA may be proposed. Some of the SNA changes do not impact the SEEA (i.e., cases where SNA will adopt SEEA 2012), but for other proposed changes there will be an impact. In addition, alternative (or additional) recordings may be proposed.”

2. The updated 2025 SNA was subsequently adopted by the UN Statistical Commission in March 2025 and thus there is now a baseline version of the SNA that can be used for consideration of the issues raised above and any other issues of consistency that might be identified.
3. In addition to the issues noted above, the 2025 SNA provides a research agenda and topics from this agenda may overlap with those on the SEEA CF issue list. Where connections can be made considerations might be given to combined investigation. Further, the 2025 SNA provides a complete listing of changes from the 2008 SNA and there may be implications from these changes that affect the SEEA Central Framework. These potential additional topics and changes are discussed further below.
4. It is also noted that as part of the SNA update process, the OECD led the drafting of a Compilation Guide concerning Measuring natural resources in the national accounts. The draft developed by the Expert Group on Natural Capital was released for global consultation in March 2025 and will contain useful information to support the update of the SEEA Central Framework.

2 Motivation for considering a change to the SEEA Central Framework

5. In the development of the SEEA over the past 30 years there has been a consistent intent to align with the accounting treatments of the SNA such that data from both systems can be readily combined to provide more comprehensive and integrated data to support analysis of the links between the environment and the economy.
6. The SEEA 2012 Central Framework (SEEA CF) was drafted using as its basis the content of the 2008 SNA. As part of the update of the SEEA CF, the changes in the 2025 SNA must be considered to ensure ongoing alignment. This is particularly relevant at this time given the range of changes to the accounting for natural resources that were included in the 2025 SNA (noting that a number of these SNA changes were motivated by developments in the SEEA over the past 15 years).

7. Whether all of the relevant changes in the 2025 SNA should be incorporated into the updated SEEA CF is to be determined but there is a strong expectation that the implications of changes to the SNA should be examined closely through the SEEA CF update process.

3 Nature of the proposed change and research questions

8. The broad proposal for consideration is determining which changes reflected in the 2025 SNA should be incorporated into the updated SEEA CF. As noted in the short description above, the proposed process is to work through (a) whether the changes to the SNA are of relevance to the SEEA CF; and (b) to consider what changes might be needed.
9. The short description above highlights a number of changes to the 2025 SNA that should be examined (these are highlighted in bold). In addition, a review of the full listing of changes to the 2025 SNA has highlighted some additional topics for consideration.
 - a. **Treatment of biological resources:** The 2025 SNA has no change to the asset boundary overall for biological resources but the distinction between cultivated and non-cultivated resources has been changed. The main effect on accounting for biological resources concerns the timing of recording of production for timber resources from non-cultivated forests as well as implication for the boundary between economy and environment and hence for material flow accounts.
 - b. **Economic ownership and the depletion of natural resources.** The 2025 SNA has adopted the “split asset” approach for recording the value of natural resources extending the treatment described in the SEEA CF. It has recognised depletion as a cost of production and placed more prominence on presenting net measures of economic activity and wealth which adjust for both depreciation and depletion. (The recording of depletion in SEEA CF Table 5.10 will also need reconsideration). Related to these changes, it will be relevant to clarify whether depletion is included in the sum-of-cost approach (if output for own use is undertaken by government units). In addition, the SEEA CF treatment of depletion of renewable natural resources may need to be reassessed as it presumes the use of biophysical models while alternative approaches may be feasible (as discussed in the guide). A final consideration is whether the discussion of depletion and the split asset approach should continue to feature in the SEEA CF as these topics are now included in the 2025 SNA sequence of economic accounts (and these are not usually considered SEEA accounts).
 - c. **Treatment of emission trading schemes:** In the 2025 SNA emission permits are treated as financial assets with taxes on production recorded at surrender and valued at issuance prices. This treatment emerged following extensive consultation and discussion that commenced shortly after the 2008 SNA was released.
 - d. **Treatment of renewable energy resources as assets:** The asset boundary of the SNA has been extended to include the value of renewable energy resources. The SEEA CF treatment includes a value to the extent it is embedded in the value of land. The SNA extension needs consideration in the SEEA CF context.

- e. **Valuation of natural resources:** The 2025 SNA clarifies a range of valuation aspects including the definition of exchange values, the inclusion of an estimate for the return to capital for non-market producers in applying the sum-of-costs approach and measurement of depreciation and capital services on produced assets. Also, the compilation guide on measuring natural resources contains more detailed guidance on the use of the NPV of future resource rents for valuing natural resources including the choice of discount rate, the rate of return to capital in deriving resource rent. The effects of these clarifications on the SEEA CF guidance will need to be assessed.
- f. **Treatment of specific taxes / subsidies in driving resource rent:** Discussions emerged during the development of the guide on measuring natural resources on the treatment of specific taxes and subsidies in deriving resource rent. The SEEA CF adjusts for specific taxes less subsidies, however this treatment warrants further discussion especially in relation to the recommendation to split assets between legal owner and extractor, and the 2025 SNA clarification that specific taxes are to be treated as rent.
- g. **Distinction between taxes and services:** Clarifications have been included concerning payments for the use of natural resources and a decision tree concerning payments to government has been incorporated. The effects on recording these flows as they concern the environment will need to be examined.
- h. **SNA asset classification:** The 2025 SNA asset classification now recognises natural resources, including cultivated biological resources, as a separate category at the top level of the classification (distinct from produced assets). The connection of this to the current SEEA CF classification of environmental assets will need investigation noting also the SNA's inclusion of supplementary items on non-renewable and renewable energy resources.
- i. **Terminology and definitional changes:** There have been a range of changes to terms and definitions in the 2025 SNA that will need to be considered in re-drafting the SEEA CF. These include terms such as natural capital, natural resources, depreciation, remuneration of employees, and implicit financial services on loans and deposits. Also, the names of accounts and tables in the sequence of economic accounts and the integrated framework of national accounts have been altered. Finally, the term "accounts" is applied in the 2025 SNA in a narrow sense as referring to presentations that have balancing items, which does not apply to almost all SEEA accounts.
- j. **Changes in SUT and IOT entries:** There have been clarifications made in the SUT and IOT chapters with respect to entries concerning globalisation, especially factoryless goods production, and also recommendations made for extended SUT, measures of trade in value added, and the valuation of imports and exports. These should be examined to consider potential effects on the discussion of SUT in the SEEA CF.
- k. **Sustainable finance:** The 2025 SNA (Chapter 35) introduces supplementary items concerning sustainability related financial instruments (e.g. green bonds) for recording in the financial accounts and balance sheets. The definitions and

approach to recording these financial products should be examined. Related content in the updated Balance of Payment manual annex on sustainable finance should also be considered.

- l. Household production and consumption of electricity and heating: The 2025 SNA clarified a range of issues on this topic, for example recording the production of electricity from solar panels. The recording of these entries in physical terms will connect to the recording of data in the energy PSUT.
 - m. Application of the concept of enterprises and establishments and defining statistical units. Some clarifications have been made on these topics and since the underlying concept of economic units is the same in the SNA and SEEA, an assessment of the implications is needed.
 - n. Delineation and recording of rent: in the 2025 SNA the definition of rent is now not limited to natural resources with an infinite life but includes all payments related to the use of non-produced non-financial assets. The implications of this need to be examined.
 - o. Treatment of catastrophes in recording non-life insurance: The 2025 SNA now provides guidance on which events are considered catastrophes and extend changes to include non-financial assets. This guidance may be relevant in the compilation of asset accounts for natural resources.
 - p. Leasing of land under buildings: In the 2025 SNA long term leases are now treated as transactions in land not capital formation. It is not expected to have implications for the SEEA CF but it should be confirmed.
 - q. Stranded assets: The 2025 SNA and the compilation guide on natural resources both include guidance on this very relevant topic that should be considered for inclusion in the SEEA CF. A link should be made on this topic to the definition and treatment of downward reappraisals in the SEEA CF.
10. As noted in the introduction, the research agenda of the 2025 SNA also identifies the following topics that might be considered as part of the ongoing research of the SEEA CF. At least, the links between the SEEA CF update process and the advancement of the SNA research agenda should be articulated. Discussion of these connections should also consider the wider discussion on alignment across macro-economic standards.
- a. Accounting for the economic activities of non-resident units making use of quota established for fishing in a country's EEZ. This issue arose at the end of the 2025 revision process and highlighted a tension between recording on the basis of economic ownership compared to the basis of location of the resources. The SEEA CF may wish to investigate options for recording.
 - b. Recording flows involving the harvest of biological resources by units other than the economic owner or where there is no economic ownership. This issue also arose at the end of the 2025 revision process in discussion of the recognition of resource value where the harvester/extractor is not the legal owner of the resource. The SEEA CF may wish to investigate options for recording.
 - c. Treatment of radio spectra: This treatment was unchanged from the 2008 SNA but it was recognised that the treatment was not fully aligned with other changes

made to the recording of natural resources. While the radio spectra is not an environmental asset in the SEEA CF, some consideration may be given to expanding the asset boundary and if so, the appropriate recording would need to be determined.

- d. Treatment of the atmosphere as an asset: This topic is explicitly picked up in the SEEA CF update process under issue D8.
 - e. Accounting for land: During the 2025 SNA update process it became clear that a range of issues concerning the valuation of land and changes in the value of land were not fully reconciled in the SNA. This included the treatment of land improvements, the valuation of agricultural land and the treatment of holding gains and losses on land. Consideration should be given to whether these and other related issues should be further investigated in the SEEA CF update process.
 - f. Emission permits: see note above, while a treatment for emission permits was determined for the 2025 SNA, some issues concerning particular types of permits require further guidance. The issues might be picked up in the SEEA CF update process.
 - g. Climate offsets: The SNA research agenda notes that there is currently no guidance in the SNA on the treatment of climate offsets. This issue might be picked up as part of SEEA CF update issue C5 on climate mitigation and adaptation expenditure.
 - h. Sustainability related data: While the 2025 SNA includes definitions for sustainability related financial instruments, the research agenda notes a range of topics for which additional detail might be provided to support sustainability discussions. The potential link to the update of the SEEA is explicitly noted and links to a range of SEEA CF update issues including C1 (classification of environmental purposes), C6 (potentially environmentally damaging subsidies), and C7 (Environmental tax abatements).
11. Given the large number of topics to be consider under this issue, separate Guidance Notes will be drafted covering four groups of topics. Thus,
- GN A9.1 will focus on accounting for natural resources and prepared in co-operation with TT-D. This will cover topics concerning biological resources (including research agenda topics), economic ownership and depletion, renewable energy resources, valuation of natural resources, specific taxes and subsidies.
 - GN A9.2 will focus on accounting for environmental transactions and prepared in co-operation with TT-C. This will cover topics concerning emission trading and emission permits, sustainable finance and climate offsets.
 - GN A9.3 will focus on classifications, terminology and definitions.
 - GN A9.4 will focus on all other issues and will cover topics concerning the recording of catastrophes, leasing of land, stranded assets, accounting for land, SUT/IOT globalisation, household electricity and sustainability data.
12. In developing the various GN particular focus will need to be placed on co-ordination with other TT and links to other issues as documented in the section below. It will also be relevant to consider the

balance of content written in the 2025 SNA compared to the SEEA CF on the same issues, particularly where the 2025 SNA has more discussion of a topic, for example on biological resources, compared to the 2008 SNA.

13. An additional proposal which will build on the content of GN A9.3 is the development of a common glossary recognising that consistent use of terms is an important ambition.

4 Links to other SEEA CF update issues

14. In taking forward work on assessing the consistency of the SEEA CF with the 2025 SNA, links should be made to the following SEEA CF update issues. Also, since many of the SNA issues concern accounting for natural resources, it may be relevant to involve experts from Task Team D directly on specific topics notwithstanding that this update issue falls under the responsibility of Task Team A.
 - a. Issue A5 – Harmonisation with other international classifications and updates of relevant frameworks and manuals. There are a number of other update processes recently completed and underway that have connections to the recent revisions to the SNA and to the SEEA CF. These include BPM, GFS, MFSM, COFOG, and ISIC. The accounting treatments should be aligned.
 - b. Issue A6 – Introduction of thematic accounts and strengthening the link to policy. The 2025 SNA replaced the term “satellite accounts” with “thematic accounts” and examination is needed to align the interpretations.
 - c. Issue B1 – Description of PSUTs. There have been some refinements in the SNA text concerning SUT and IOT. These changes should be checked to ensure ongoing alignment as appropriate.
 - d. Issue C8 – Incorporation of sustainable finance into an accounting framework. The 2025 SNA update process investigated some aspects of sustainable finance, in particular definitions of relevant instruments and a section in Chapter 35 summarises the findings. The BPM update process also considered the issue and included an annex covering a range of associated topics.
 - e. Issue D3 – Inclusion of accounts for physical produced assets. This issue should be investigated using the 2025 SNA text on produced assets as the starting point.
 - f. Issue D4, D7, D8 concerning accounting for water and the atmosphere. Work on these issues should consider relevant content in the 2025 SNA noting that these assets remain largely outside the SNA asset boundary.

5 Existing materials

15. Potential materials that may be considered in developing the Guidance note include (but are not limited to):
 - a. 2025 SNA (white cover version adopted in March 2025). Specific note is made of the usefulness of Annex 4 describing the full range of changes to the 2008 SNA.
 - b. OECD Compilation guide on Measuring natural resources in the national accounts

- c. Guidance notes on various issues drafted through the 2025 SNA update process.
 - d. Updated Balance of Payments Manual (BPM) and associated documents
- 16. In developing the Guidance note it will be necessary to identify the relevant experts and stakeholders for the purposes of both drafting the content of the note and also ensuring appropriately wide consultation. These experts and stakeholders have not been identified at this stage.