

System of
Environmental
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SEEA CF Update

SEEA CF update : Issue A9 – Consistency with 2025 SNA

Presentation to the London Group – Tallinn 22-25 September, 2025



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Issue A9: Consistency with the 2025 SNA update issues

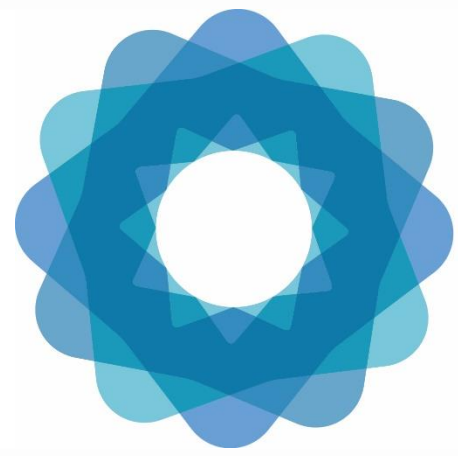
Issue description October 2024:

“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.”

Approach to the drafting of A9 Guidance Note

- Clear that there are many issues to examine and considering all within one Guidance Note (GN) appears too challenging for processes of review and consultation
- Propose to apply a four stream approach:
 - i. GN A9.1: Focus on **accounting for natural resources** and in co-operation with TT-D
 - Cover biological resources (including research agenda topics), economic ownership and depletion, renewable energy resources, valuation of natural resources, specific taxes and subsidies
 - Note treatment of radio spectra and atmosphere already covered in Issue D8
 - ii. GN A9.2: Focus on **accounting for environmental transactions** and in co-operation with TT-C
 - Cover emission trading and emission permits, sustainable finance and climate offsets
 - iii. GN A9.3: Focus on **classifications, terminology and definitions**
 - Cover SNA asset classification, terminology and definitions, statistical units
 - iv. GN A9.4: **All other issues**
 - Cover recording of catastrophes, leasing of land, stranded assets, accounting for land, SUT/IOT globalisation, household electricity and sustainability data



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Issue A9.1 : Natural resources



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Scope of GN A9.1 – Natural resources

- a. **Economic ownership and the depletion of natural resources:** 2025 SNA recognizes depletion as a cost of production and also applies the “split asset” approach to accounting for the value of natural resources attributable to different economic owners.
- b. **Treatment of biological resources:** Particularly concerning the boundary between cultivated and non-cultivated production contexts.
- c. **Treatment of renewable energy resources as assets:** Asset boundary of the SNA has been extended to include the value of these resources which is distinct from the value of associated land.
- d. **Valuation of natural resources:** Range of clarifications and additional guidance provided in the 2025 SNA and the OECD compilation guide that should be considered.
 - > **Treatment of specific taxes and subsidies in estimating resource rent:** Issue emerged in drafting of the OECD compilation guide and clarification is needed to align with the 2025 SNA discussion of specific taxes being treated as rent.
- e. **Other issues related to natural resources**
 - > Accounting for the economic activities of non-resident units making use of quota established for fishing in a country’s EEZ.
 - > Recording flows involving the harvest of biological resources by units other than the economic owner or where there is no economic ownership.
 - > Treatment of radio spectra

GN A9.1 – Key points

Economic ownership and the depletion of natural resources:

- SEEA CF considers environmental assets from a physical existence entry point whereas SNA starts from an economic owner perspective.
- SEEA CF doesn't generally describe accounting for the value of assets to institutional units – i.e. it is economy-wide
- Generally speaking the 2025 SNA does not change the economy-wide value of natural resources
- Two main changes in 2025 SNA
 - > Split asset approach – match the value of an asset to the share of economic benefits obtained
 - > Depletion recorded as a cost of production against the extractor in the first instance then allocated to all beneficiaries
- Also – 2025 SNA has updated its definition of depletion to align with the content of the SEEA CF
- Range of considerations in the measurement of depletion to be investigated further:
 - > Measuring depletion for non-cultivated biological resources and water resources
 - > Allocation of depletion to multiple economic units
 - > Accounting for depletion in the case of land use and land cover change
 - > Distinguishing between depletion and degradation

GN A9.1 – Key points

Treatment of biological resources:

- 2025 SNA has no change to the asset boundary in monetary terms – consistent with 2008 SNA and SEEA CF
- Change in the distinction between cultivated and non-cultivated biological resources where there is a clear “*continuum from intensive to extensive forms of control, responsibility and management*” (2025 SNA, para 11.208)
 - > This change does not affect aquatic (fish) resources
 - > This change means that all timber resources within scope of the SNA (i.e. economic assets) are treated as cultivated
 - > There is extensive text in the SEEA CF and a number of table structures that would need to be changed to reflect this change in treatment.
 - > There are likely implications as well for recording in the general PSUT and Economy-Wide Material Flow Accounts

Treatment of renewable energy resources:

- 2025 SNA includes renewable energy resources as a distinct asset class
- SEEA CF has a discussion of recording relevant values but incorporates any additional resource rent into the value of associated land (SEEA CF para 5.225-234).

GN A9.1 – Key points

Valuation of natural resources:

- No fundamental changes to the conceptual basis for valuation in the 2025 SNA but a range of clarifications including:
 - > Definition of exchange values
 - > The inclusion of a return to capital in the valuation of output by non-market producers using the sum-of-costs
 - > Measurement of depreciation and capital services on produced assets; guidance on NPV and discount rates
- Some specific SEEA CF related issues require further investigation
 - > Definition of resource rent in relation to specific taxes and subsidies
 - > Treatment of taxes when there is a non-government legal owner
 - > Description of alternatives to the use of the net present value approach and the residual value method for estimating resource rent
- Need to consider the implications of the change in the sum-of-costs approach in the measurement of environmental expenditures

GN A9.1 – Key points

Accounting for timber resources:

- Changes to cultivated / non-cultivated are fundamental but measurement scope unchanged
- Continue to reinforce the distinction between timber resources and forest land – already in SEEA CF
- Clarify the entries for depletion of forest land
- Recognise important developments in discussion of the valuation of timber resources and different methods
- Consider full accounting implications of cases where there are multiple beneficiaries of timber resources

Accounting for aquatic (fish) resources:

- No effect of changes to cultivated / non-cultivated allocation
- Greater clarity around the treatment of quotas and the valuation of the resource and associated flows of rent
- Need to consider contribution of SEEA CF to recording data associated with non-resident fishing in EEZ

Accounting for radio spectra:

- In 2025 SNA no change in treatment and so permit to use is still recorded as an asset. This does not apply to other natural resources
- Radio spectra not included as an environmental asset in SEEA CF
- Could be included to align scope with the 2025 SNA natural resources scope but treatment approach needs to be determined.

GN A9.1: Proposals and questions

1. Is the general tone, focus and content of the Guidance Note appropriate with respect to discussing the alignment between SEEA CF and 2025 SNA?
2. Concerning economic ownership and depletion
 - a. Should the SEEA CF continue to endorse the split asset approach while retaining its focus on economy wide measures?
 - b. What detail on the sequence of accounts should be presented (wrt depletion adjusted entries)?
 - c. Should the definition of depletion be fully aligned with the 2025 SNA?
 - d. What additional topics about depletion should be further researched?
3. Concerning the treatment of biological resources
 - a. Is it agreed that the conceptual boundary for the measurement of biological resources in monetary terms is unchanged?
 - b. Should the distinction between cultivated and non-cultivated biological resources be changed, primarily for timber resources, to align with the 2025 SNA?

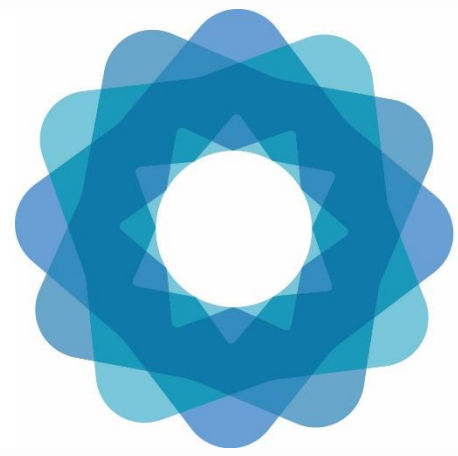
GN A9.1: Proposals and questions

4. Concerning the renewable energy resources
 - a. Is it agreed to include renewable energy resources as a distinct class of environmental assets in line with the treatment and classification in the 2025 SNA?
 - b. Do any additional topics need to be discussed in the GN?
5. Concerning the valuation of natural resources
 - a. Is it agreed that there have been no changes in the 2025 SNA concerning the principles of valuation?
 - b. What additional topics need to be investigated concerning the valuation of natural resources?
6. Concerning accounting for timber resources
 - a. Is it agreed that additional text is required in the SEEA CF to explain the depletion of forest land?
 - b. Do you agree that the full entries to reconcile SUT and asset accounts for timber resources in physical and monetary terms be included in the updated SEEA CF?
 - c. Do you agree to update the discussion on the valuation of timber resources?
 - d. Do you agree not to investigate further the full accounting implications with respect to additional extractors?

GN A9.1: Proposals and questions

7. Concerning the aquatic (fish) resources
 - a. Is it agreed to follow the 2025 SNA accounting entries concerning fishing right, quotas and related transactions?
 - b. Should the SEEA CF incorporate additional information on the fishing activity of residents and non-residents and the associated changes in resources within the EEZ?
 - c. Should the SEEA CF leave aside further work on the accounting entries required for the integrated accounts, for example on establishing a notional resident unit?

8. Concerning radio spectra
 - a. Should the SEEA CF introduce the radio spectra to the set of environmental assets?
 - b. If so, which treatment should be used to record the relevant entries?



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Issue A9.3 : Terminology



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GN A9.3 – Terminology and classifications

- a. **SNA asset classification:** The 2025 SNA now has a separate high level class of natural resources covering all environmental assets both produced and non-produced. The details and the scope of the SNA classes needs consideration
- b. **Terminology and definitional changes:** There is a range of changes including to standard national accounts variables (e.g. consumption of fixed capital is now called depreciation) and labelling of the sequence of accounts to be considered.

Key topics:

- > **Environmental assets and Natural capital:** Need to consider whether to retain the use of the term environmental assets, and/or incorporate the term natural capital; and also which definition to apply – a range of options exist
- > **Coverage of natural resources:** Need to determine how to apply the term natural resources given (a) changes to the boundary between cultivated and non-cultivated resources; and (b) the scope of natural resources in the 2025 SNA (including land, renewable energy resources and radio spectra).
- > **Classification of biological resources:** Need to determine whether to apply the 2025 SNA classification of biological resources which highlights type of production context or classify by type of biological resource – timber, fish, etc.

Current SEEA CF Classification of Environmental Assets

1 Mineral and energy resources

1.1 Oil resources

1.2 Natural gas resources

1.3 Coal and peat resources

1.4 Non-metallic mineral resources (excluding coal and peat resources)

1.5 Metallic mineral resources

2 Land

3 Soil resources

4 Timber resources

4.1 Cultivated timber resources

4.2 Natural timber resources

5 Aquatic resources

5.1 Cultivated aquatic resources

5.2 Natural aquatic resources

6 Other biological resources (excluding timber resources and aquatic resources)

7 Water resources

7.1 Surface water

7.2 Groundwater

7.3 Soil water

GN A9.3 – Terminology and classifications

Key topics (continued):

> Treatment of individual resources:

- Need to consider whether to retain the SEEA CF treatment of land as reflecting space (for land use and land cover) or move to the ownership perspective in the 2025 SNA.
- Consider whether to incorporate additional discussion of accounting for “land improvements”
- Consider whether to adopt the more detailed classification of mineral and energy resources including the distinction between non-renewable and renewable resources
- Consider whether additional classes of mineral and energy resources could be included – e.g. critical minerals
- Assess alignment with definitions of individual resources including water, timber and fish.

> Commonly used national accounting terms and definitions

- Consider whether there are any general national accounting terms, definitions or account titles in the 2025 SNA that the SEEA CF should not adopt.
- Recognise the need for further investigation into specific terms including economic benefits, exchange values, resource rent, rent, resource lease, present value, depletion and degradation