



# **UNSD SEEA-EEA revision: Spatial units**

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Sjoerd Schenau 26-6-2019

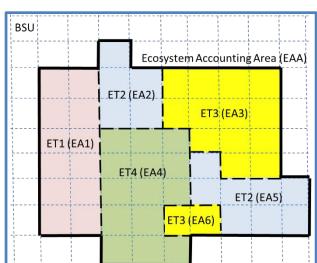
#### Introduction

• Spatial units are key to ecosystem accounting

General approach for delineation of ecosystem assets well

established

Several key research issues remaining



# **Key revision issues**

 Development of a reference classification that better represents the concept and coverage of ecosystems

Delineation of urban areas and treatment of their ecosystem assets

3) Treatment of the atmosphere and marine areas



## 1 An ecosystem type classification for SEEA EEA

- A classification describing the ecosystem types and a map are essential components of ecosystem accounting
- **SEEA EEA (2014):** recommended the use of an interim, land-cover classification as a starting point for an ecosystem classification
- Key revision issue for SEEA EEA is to develop a proposal for a classification that better represents the concept and coverage of ecosystems

#### Goal:

- 1. Provide options for the construction of a reference classification of ecosystem types.
- 2. Provide guidance for further disaggregation for ecosystem accounting at a national or sub national scale.



# 1 Options for a (high level) reference classification scheme for ecosystem types

- 1. IUCN Red List of Ecosystems
- 2. USGS/Esri GDBBS
- 3. A two-tier approach building upon and linking IUCN RLE and USGS/Esri GDBBS
- 4. Existing habitat classifications (e.g. IUCN, EUNIS)
- 5. Existing land cover classifications (e.g., FAO; Corine)

Of these, the first three are the recommended options due to their conceptual relevance and depth and their coverage of all relevant environmental domains.



# 2. Delineation of urban areas and treatment of their ecosystem assets: Why?



- 1. Ecosystems and their services in urban areas may be the most used and valued
- 2. Ecosystem in urban areas may be different than their "natural" and semi-natural" counterparts
- 3. Ecosystems in urban areas may deliver a different basket of ecosystem services
- 4. Ecosystem assets may potentially require a different accounting approach



# 2. Delineation of urban areas and treatment of their ecosystem assets



#### 1. The urban ecosystem accounting area

- 1. What size urban area should be included in ecosystem accounts for urban areas?
- 2. How to delineate the urban ecosystem accounting area?
- 3. How much urban periphery should be included?

#### 2. Classification of urban ecosystem assets and types

- 1. What urban ecosystem asset categories are relevant for a hierarchical urban/built-up ecosystem type classification?
- 2. What are the physical and other characteristics of an urban green/blue area that differentiate it from non-urban ecosystem types?
- 3. To what extent do these characteristics reflect the urban ecosystem extent and condition?

#### 3. The question of scale

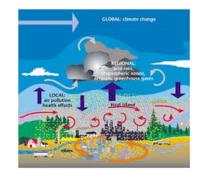


# **3a Treatment of the atmosphere**

Currently, it is not yet clear how the atmosphere should be treated in an ecosystem accounting context.

**Two options** are proposed:

1. The atmosphere as a part of ecosystem assets



2. The atmosphere as a separate unit





#### **3b Treatment of marine areas**

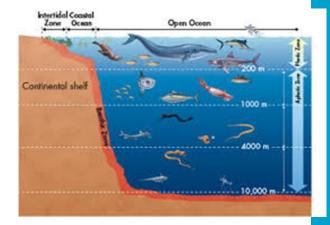
**Option 1:** each area of the seas/oceans belongs to one single ecosystem asset

CO2

Denote

Processor

**Option 2:** The water column and underlying sediments may belong to different ecosystem assets



### **Process and next steps**

- April: three Discussion papers ready
- May 2019: Expert review
- June 2019: Discussions at the Forum of Experts and Technical Expert Meeting
  - → Revising discussion papers
  - → Testing of the options
  - → Adressing remaining research issues
  - → Final recommentations for SEEA EEA revision



# **Spatial units at the Forum**

**Session 3a: Spatial units** (meeting room: Nassau)

Chair: Sjoerd Schenau (Statistics Netherlands)

#### **Presentations:**

- Emily Nickolson (Deakin University): Presentation of option 1
- Roger Sayre (U.S. Geological Survey): Presentation of option 2
- Patrick Bogaart (Statistics Netherlands): Presentation of option 3

**Session 5a: Urban areas** (meeting room: Nassau)

Chair: François Soulard (Statistics Canada)

**Session 5b: Marine areas** (meeting room: Maple)

Chair: Michael Bordt (ESCAP/Government of Canada)





