

System of Environmental Economic Accounting



System of
Environmental
Economic
Accounting

INTRODUCTION TO THE SEEA EXPERIMENTAL ECOSYSTEM ACCOUNTING

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United Nations

Outline

- Why an accounting approach?
- Overview of the System of Environmental Economic Accounting (SEEA)
- SEEA revision process
- Status of SEEA implementation



2030 Sustainable Development Agenda and the SEEA

Sustainable Development Policy

Evidence Based

Integrated

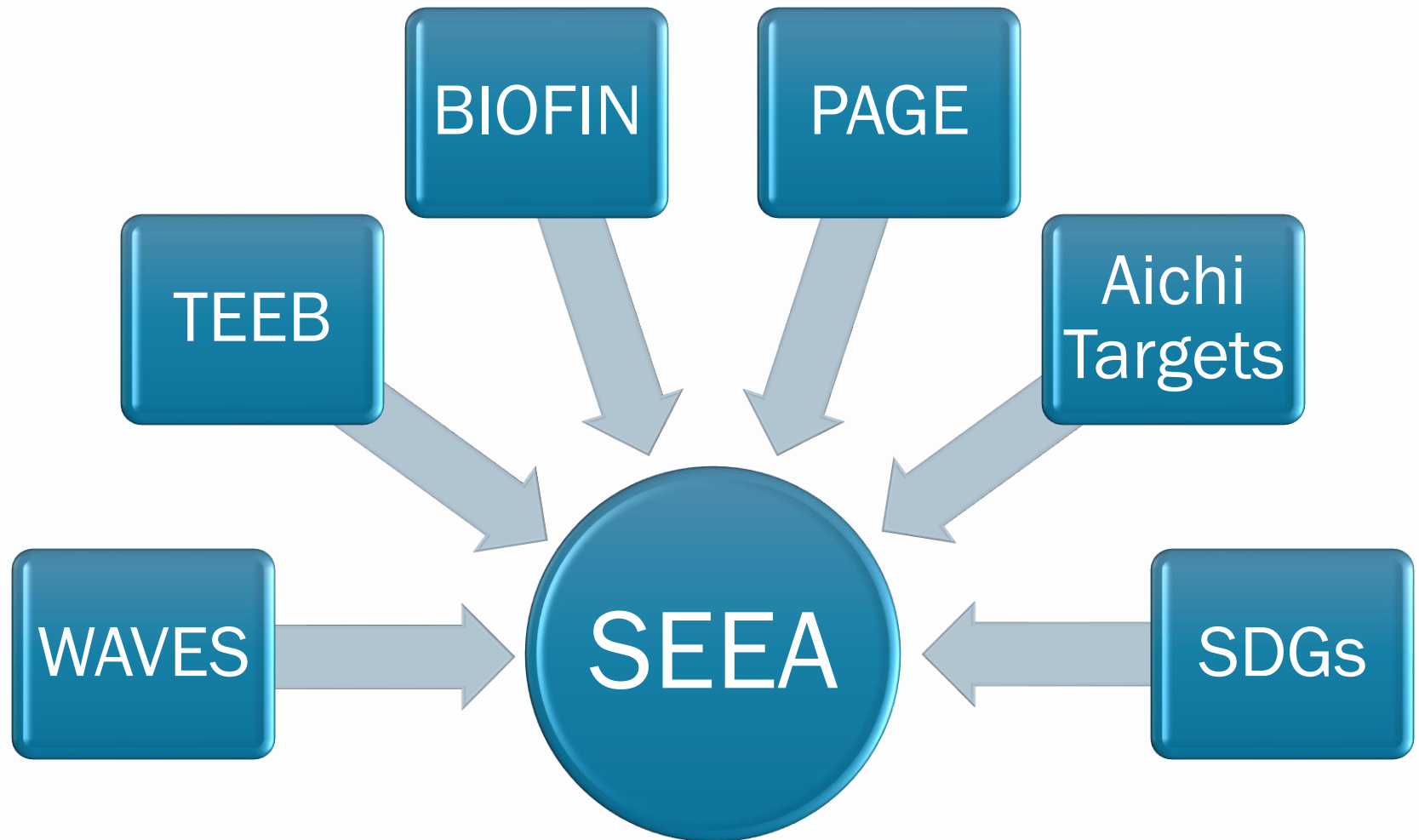
Integrated Information System

Applies a uniform
standard approach

Integrates
environmental,
economic and social
information

Captures synergies and
trade-offs

SEEA and other initiatives





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Overview of the SEEA EEA



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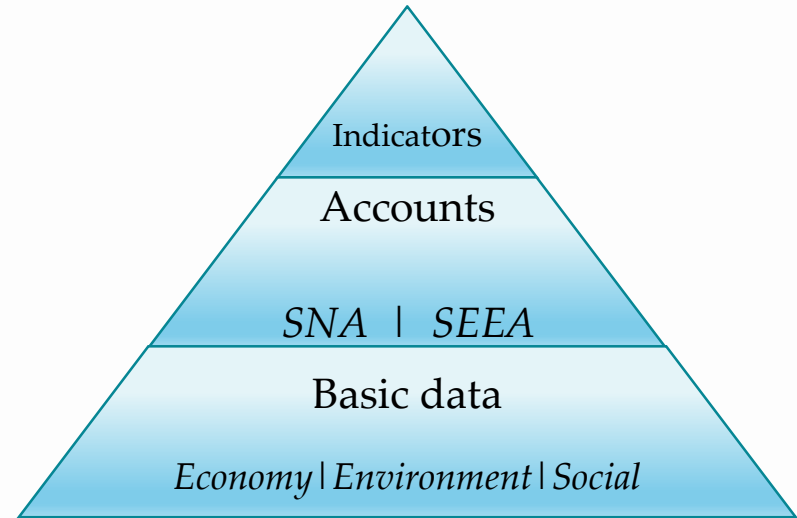
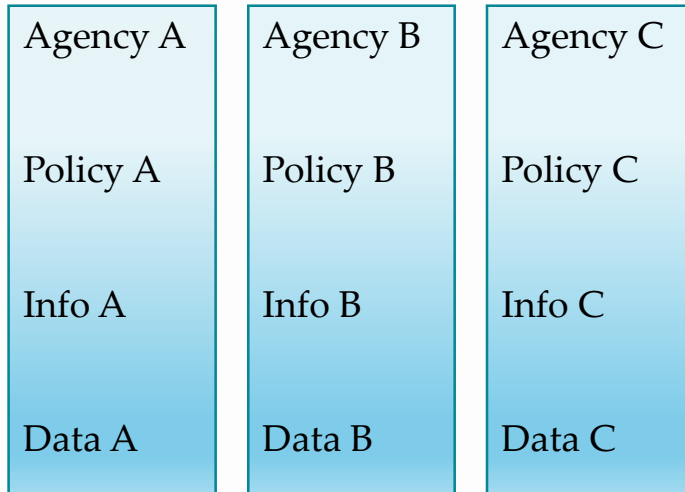
The System of Environmental-Economic Accounting (SEEA)

An internationally agreed statistical framework to measure the environment and its interactions with economy.

- The **SEEA Central Framework** was adopted as an international statistical standard by the UN Statistical Commission in 2012
- The **SEEA Experimental Ecosystem Accounting** complement the Central Framework and represent international efforts toward coherent ecosystem accounting
 - **Technical Recommendations** (2017) present updates and extensions of ecosystem accounting concepts, methods and structure, and providing practical guidance on its implementation
- **SEEA EEA Revision** by 2020



SEEA: From Silo approach to Integration



Natural Capital Accounting

Individual
environmental
assets & resources:

Timber
Water
Soil
Fish



Ecosystems: Biotic
and abiotic elements
functioning together:



Forests
Lakes
Cropland
Wetlands

**SEEA Central
Framework (SEEA-CF)**
starts with economy and
links to physical
information on natural
assets, flows and
residuals

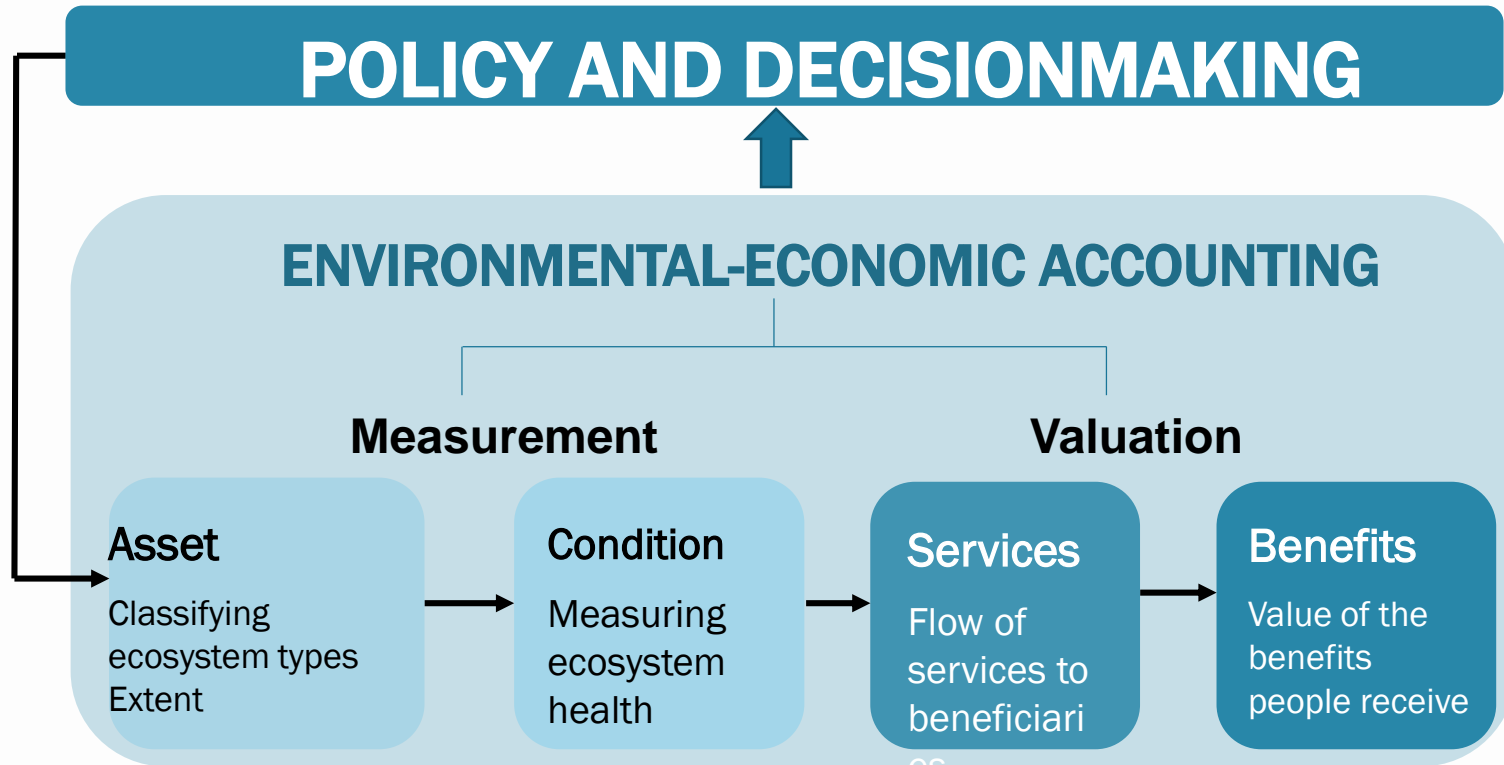


**SEEA Experimental
Ecosystem Accounting
(SEEA-EEA)** starts with
ecosystems and links
their services to
economic and other
human activity

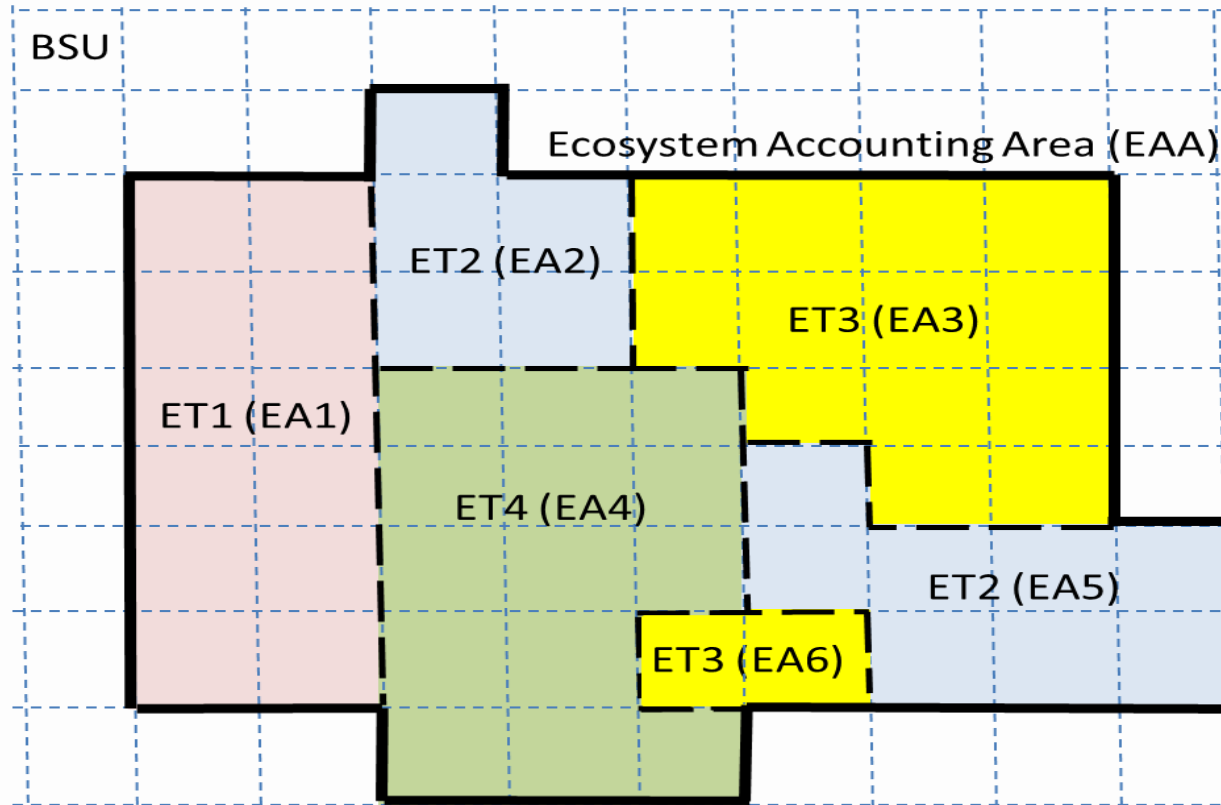


Together, they provide
the foundation for
measuring the
relationship between the
environment, and
economic and other
human activity

SEEA-Ecosystem Accounting

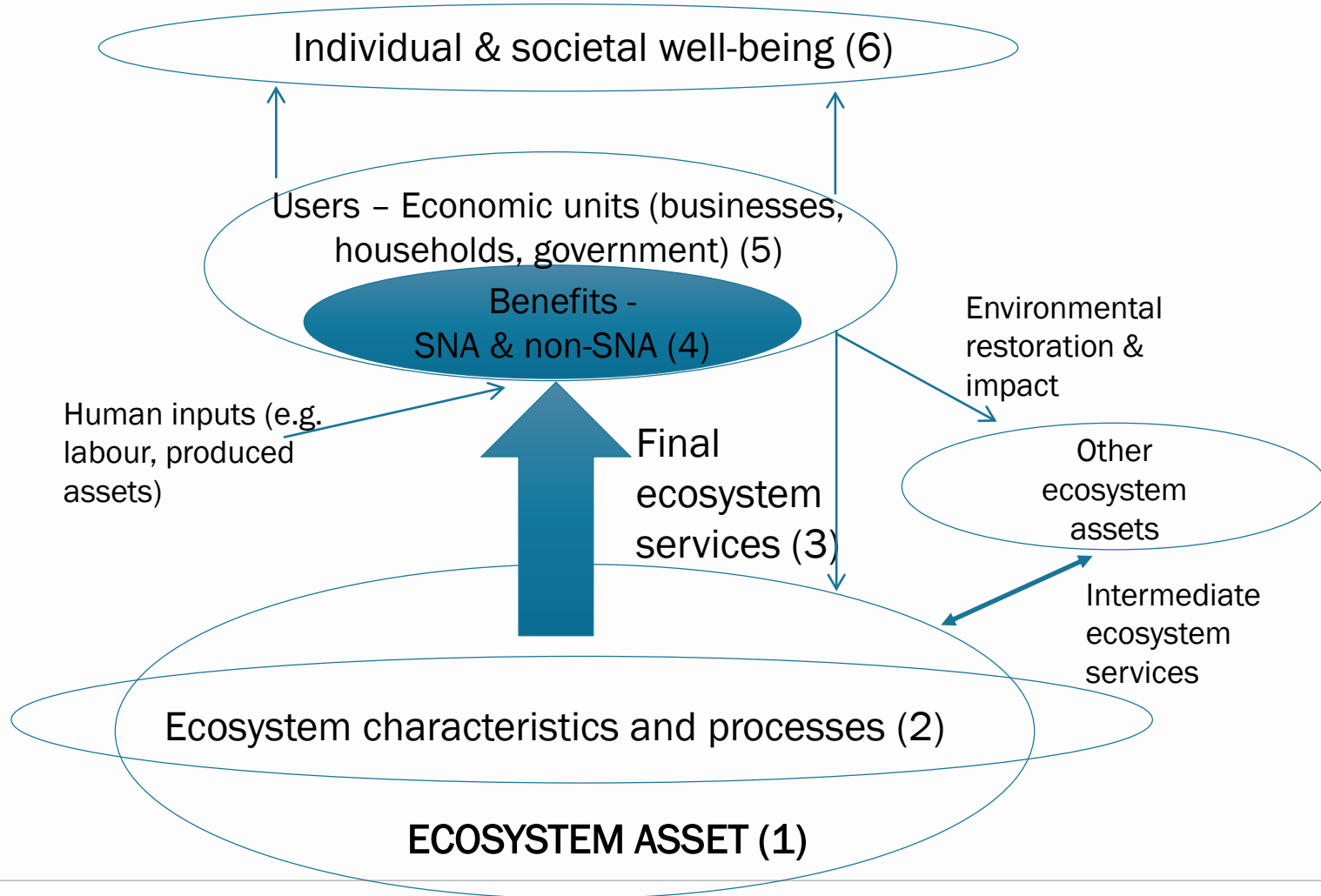


Delineating ecosystem assets



Stylised presentation of six separate Ecosystem Assets (EA) of four different Ecosystem Types (ET)

Full ecosystem accounting model



**ACCOUNTS IN
PHYSICAL
TERMS**

1. Ecosystem extent
account

2. Ecosystem
condition account

3. Ecosystem services
supply and use account
- physical

Ecosystem
capacity*

Pricing of ecosystem services / valuation assumptions

**ACCOUNTS IN
MONETARY
TERMS**

4. Ecosystem services
supply and use account -
monetary

5. Ecosystem monetary
asset account

Integrated accounts

Combined
presentations

Extended supply
and use accounts

Sequence of
accounts

Balance
sheets

SEEA EEA: Background

- Complements SEEA Central Framework with focus on the ecosystems perspective
- Developed as part of broader process of revising SEEA 2003
- Integrated statistical framework for accounting for ecosystem assets and associated ecosystem services
- Not a statistical standard – “Experimental” for now
- “Technical Recommendations in support of the System of Environmental-Economic Accounting 2012–Experimental Ecosystem Accounting” published in 2017



- SEEA EEA Revision

Key features of the SEEA EEA

- Part of official statistics
- Uses an accounting approach to organize information
- Close link with the SNA
 - > Agreed measurement boundaries, terms, definitions, classifications, accounting structures, etc.
 - > Common language
- Close link with the SEEA Central Framework
- Conceptual document
- Spatially explicit, can be applied at different scales, national, catchment, individual ecosystem



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SEEA EEA Revision process



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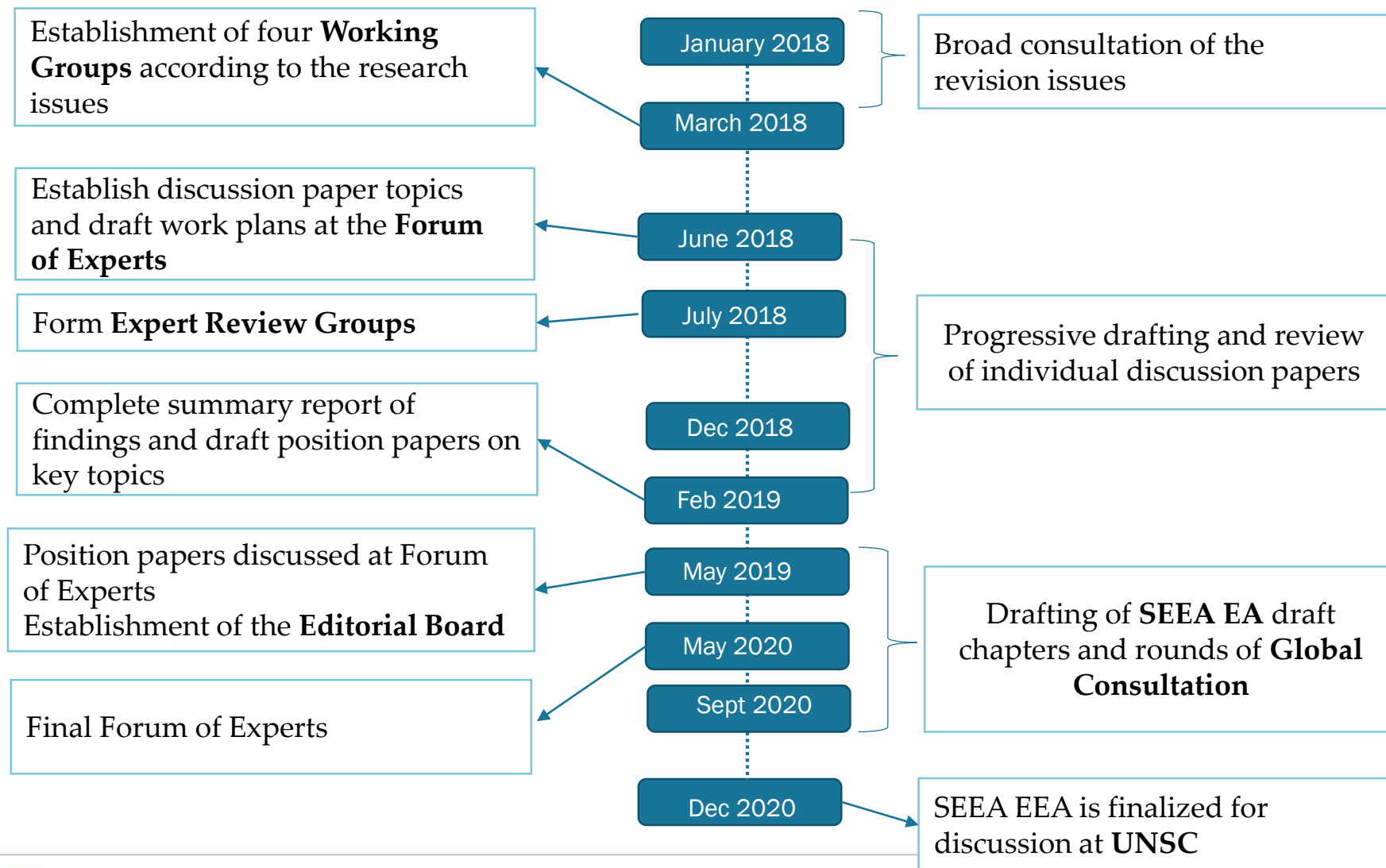
Revision of the SEEA Experimental Ecosystem Accounting

- Elevation to an agreed methodological document
- Engagement with various stakeholders
- Obtaining buy-in
- Timeline by end of 2020 – endorsement by UN Statistical Commission by March 2021
- Process aligned with the Post-2020 biodiversity framework, review of SDG and Climate change process
- Seek for broad involvement of partners and experts in the process

Research agenda for the revision

- Revision structured around **four research areas**:
 - > **Spatial areas**: Classification of ecosystem types
 - > **Ecosystem condition**: Characteristics and indicators of ecosystem condition
 - > **Ecosystem services**: The description and classification of ecosystem services
 - > **Accounting treatments and valuation**:
 - Valuation concepts for ecosystem services and ecosystem assets
 - Valuation methods for key ecosystem services
 - Accounting for ecosystem capacity, degradation and enhancement
- There is also a number of **crosscutting domains**, such as oceans and marine ecosystems, freshwater ecosystems, urban ecosystems, etc..
- Testing and experimentation of specific topics (e.g. SDG indicator 6.6.1 on freshwater extent and 6.3.1 on land degradation, etc.)

Revision process: keystones & timeline





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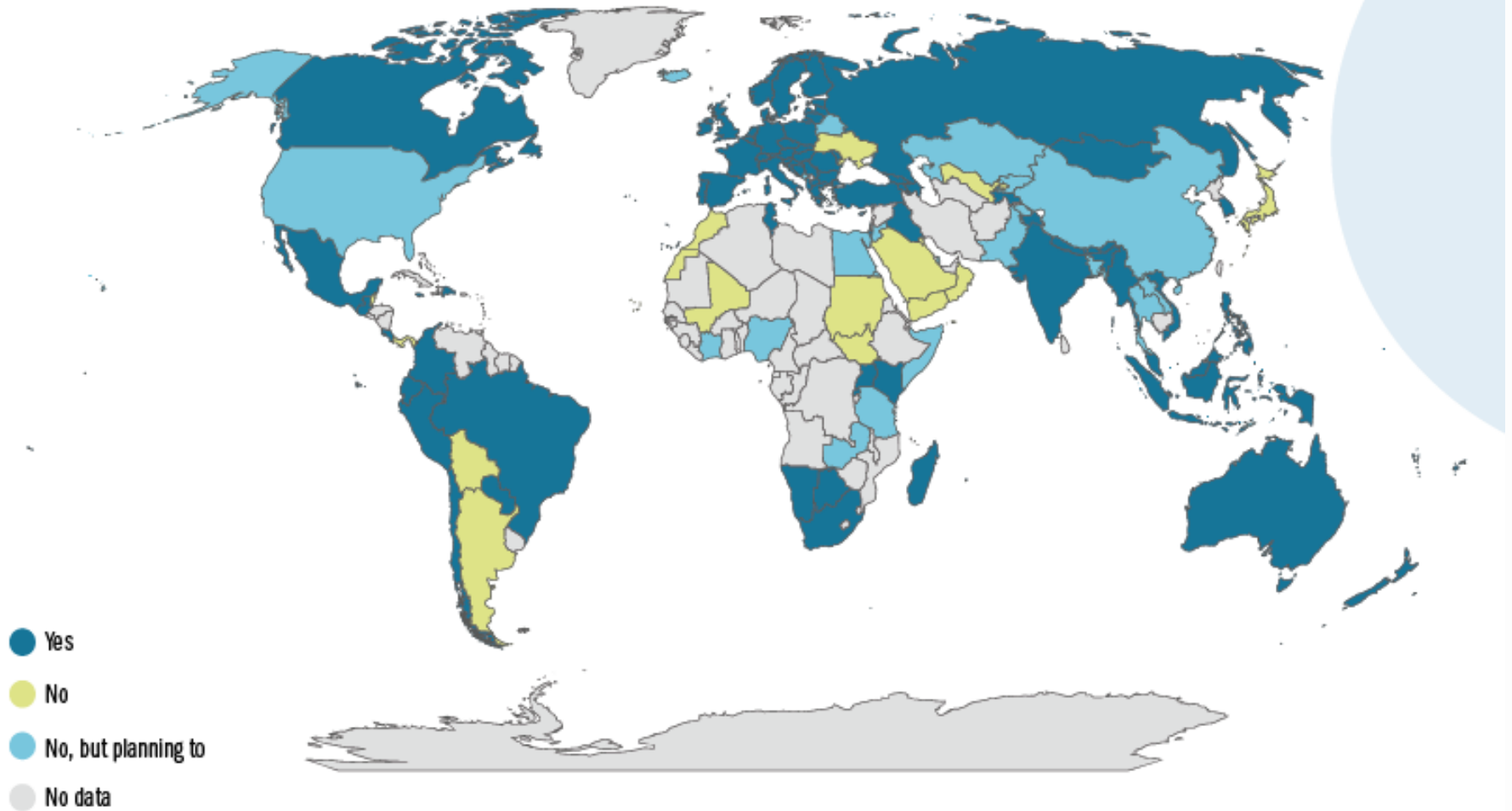
Status of implementation



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80 countries and counting

SEEA Around the World

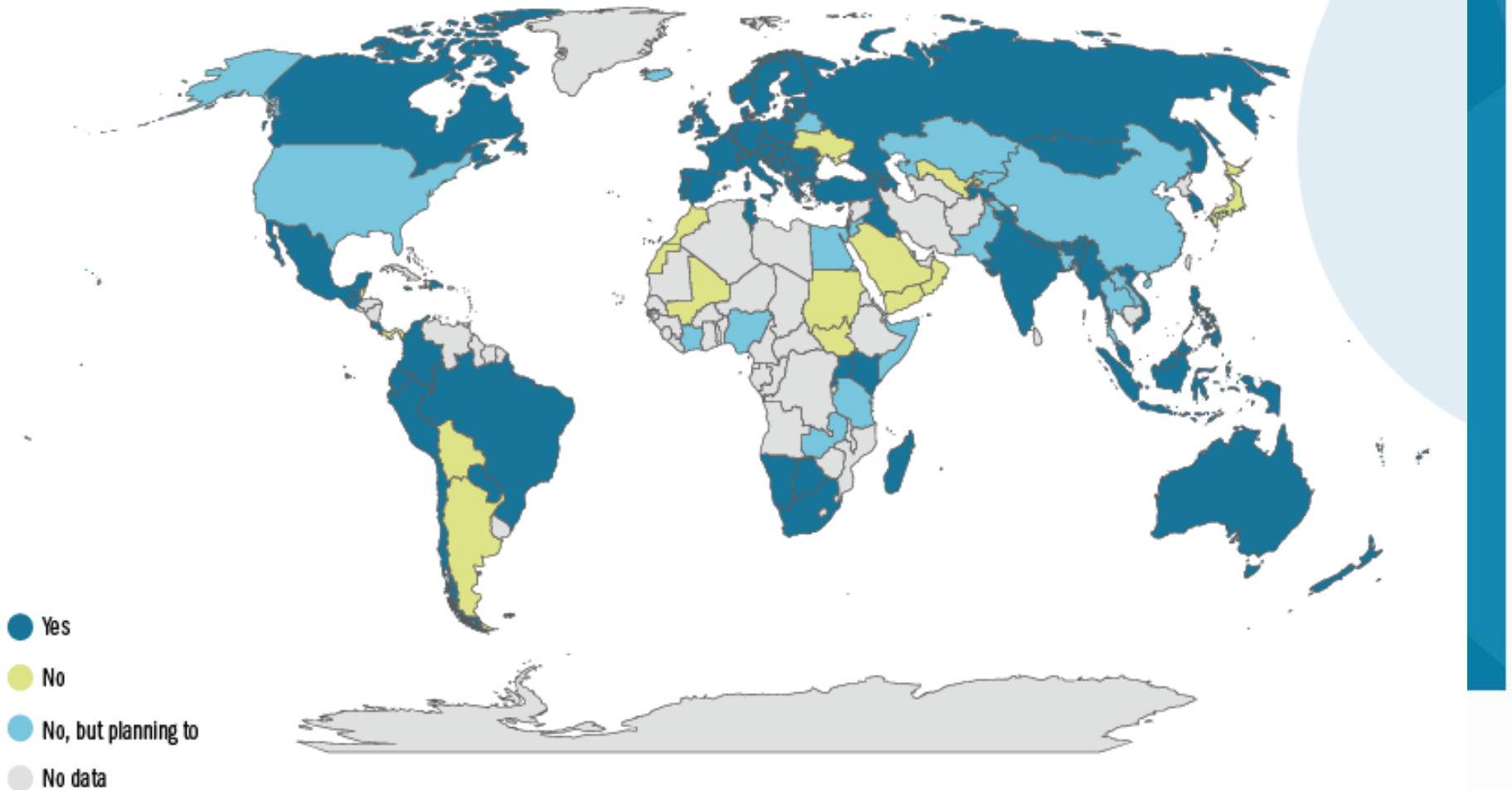




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Global Assessment 2017: Summary of results

SEEA Around the World





THANK YOU

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