Approval Process for the IUCN Global Ecology Typology (IUCN-GET)

This document takes the IUCN Global Ecology Typology (IUCN-GET) through the approval process of the UN Committee of Experts on International Statistical Classifications (CEISC) for the classification to become an international standard.

The process is applied by the UN Committee of Experts on International Statistical Classifications (hereinafter referred to as 'the CEISC) to follow and check against, when considering endorsing a classification for adoption by the UN Statistical Commission or a similar governing body, and for the classification to become a member of the International Family of Classifications.

The custodian/developer of the classification needs to comply with the requirements of three documents. These documents are the:

- Best Practice Guidelines for Developing International Statistical Classifications (as detailed in Section A of this document)
- Criteria to become a Member of the international Family of Classifications (as detailed in Section B of this document)
- Grading Criteria for International Statistical Classifications (as detailed in Section C of this document)

Based upon the application of this process the classification may/may not be endorsed by the Expert Group.

Final recommendation:

The IUCN Global Ecology Typology (IUCN-GET) is recommended for approval by the CEISC as an international standard, noting that the classification is primarily for analytical purposes rather than purely statistical. It is also recommended that the classification is recommended for endorsement by the UN Statistical Commission.

A. Does the classification meet the best practice requirements for developing an international statistical classification?

For a classification to be considered for membership of the International Family of Classifications, the classification must meet the best practice requirements. The following questions need to be answered and documented by the custodian or organization seeking approval for the classification.

- Does the classification have an identified custodian?
  The custodian is the IUCN Commission on Environmental Management (CEM)

- Is there a well-defined conceptual basis?
  The conceptual basis used for the construction of a global ecosystem typology characterizes ecosystems in terms of their ecological traits, the processes (or 'drivers') that shape them and the interactions and dependencies among different groups of drivers and traits. Traits include aggregate ecosystem level properties (e.g. productivity, diversity, trophic structure), as well as species-level traits of characteristic organisms (e.g. ecophysiology, life histories, morphology).

- Does the classification have a flat or hierarchic structure?
  The classification is a hierarchic classification containing three levels (Levels 1-3) for the international classification with an additional three levels (Levels 4-6) which distinguish functionally similar ecosystems based on biotic composition, corresponding to finer levels of detail on ecosystem types that will be relevant in national and sub-national contexts.

- Is the classification proposed as an international reference classification or an international derived or related classification?
  The classification is proposed as an international reference classification.

- Are the classification categories mutually exclusive?
  No. The ecosystem units are defined for precise and mutually exclusive classification. However, spatial representation (mapping) requires interpretation of available data and may involve a degree of uncertainty in some cases.

- Is the classification exhaustive for all possible values of the variable which the classification represents?
  The classification does not contain residual categories, but this does not prevent the classification from have expansive coverage of relevant content.

- Is the classification statistically balanced?
  No. However this is not seen as relevant for a classification designed primarily for analytical purposes.

- Is the classification statistically feasible? In other words, is it possible to effectively, accurately and consistently distinguish between the categories in the classification based on the information available?
  Yes.

- Does the classification have clearly defined classification or statistical units?
  The statistical unit is the 'ecosystem'.

- Has consideration been given to time-series comparability?
  Yes

Recommendation: The classification does not meet all of the above requirements as it is primarily for analytical purposes rather than statistical. However, this does not preclude it being moved to the next stage of the process.

B. Does the classification meet the criteria to become a member of the International Family of Classifications?

For a classification to be considered for membership of the International family of Classifications, the classifications must meet all the requirements as specified.

1. Is there a custodian for the classification?
   Yes

2. What is the primary use of the classification?
   It is an analytical classification used for producing a typology of ecology types to support the System of Economic and Environmental Accounting (SEEA) and the Kunming-Montreal Global Biodiversity Framework.

3. What are the underlying concepts used in the classification?
   The conceptual basis used for the construction of a global ecosystem typology characterizes ecosystems in terms of their ecological traits, the processes (or 'drivers') that shape them and the interactions and dependencies among different groups of drivers and traits. Traits include aggregate ecosystem level properties (e.g. productivity, diversity, trophic structure), as well as species-level traits of characteristic organisms (e.g. ecophysiology, life histories, morphology).

4. What is the scope of the classification?
   The typology defines the key biophysical features of ecosystem types globally and comprehensively, throughout the ocean, freshwater and land, and describes the processes that sustain them as well as their global distributions. It encompasses ecosystems that are shaped by humans – such as croplands and dams – as well as vast forest wilderness, deserts, deep ocean trenches, and even ecosystems buried below ground and beneath ice sheets.

5. What are the statistical units being measured?
   Ecosystems.

6. How many classification levels are required?
   Three

7. Are the category names precise, unique and reflective of the category scope?
   Generally. The ecosystem units are defined for precise and mutually exclusive classification but there are transitional types to complement levels but not overlap categories.

8. Is the classification code structure logical and sequential?
   No as it is not strictly sequential and uses a combination of alpha and numeric components.

9. Is the classification statistically balanced?
   No. However this is not seen as relevant for a classification designed primarily for analytical purposes.

10. Has there been a consultation process with users of the classification?
    Yes

11. Has the classification been tested?
    Yes

12. Are there correspondences between previous versions and the current classification?
    Yes

13. Is there an implementation plan for the classification?
    No. This is in progress.

14. Is there a maintenance schedule available?
    Yes

15. How will the classification be disseminated?
    Electronically

Recommendation: Whilst the classification does not meet all of the above requirements as it is an analytical classification it can be moved to the next stage of the process.

C. Applying the grading criteria to ascertain the classification's status within the International Family of Classifications?

For the IUCN-GET to be considered for the next stage of the approval process it must have passed the criteria stage before entering the grading stage.

Is the classification to be considered as an international reference classification?

For a classification to be considered as an international reference classification it must comply with the following definition.

"A reference classification is one developed by an international agency. It provides a common framework for collecting and organizing information about a particular statistical system, concept or variable. Their use, either directly or through national adaptations, facilitates the exchange and comparability of statistics and other information between countries. These classifications have generally been developed through extensive international consultation and have achieved broad acceptance and official agree for use."

Recommendation: The classification generally fulfils the requirements of the definition, here is no other like classification/typology for this domain, noting it is primarily for analytical purposes, and should be considered as an international reference classification.