

Criteria for the Review of Revisions to CMECS

1) Introduction

- a) Criteria for evaluating proposed revisions to CMECS are intended for those who administer the Dynamic Standard Process (DSP), those who are asked to review proposed revisions, those who have offered proposed revisions to CMECS, and those who are outside the DSP to provide transparency. The criteria provide context about the purposes and principles of CMECS, identify issues and questions to be considered in evaluating revisions and offer a sense of how the DSP is conducted. The criteria document is not a procedural manual, although procedures are discussed. Detailed protocols for carrying out the DSP will be developed subsequently, taking into consideration factors such as the resources available for carrying out evaluations of changes proposed for the standard.
- b) Criteria are required at three points in the DSP
 - i) Determining whether a proposal has met submission guidelines
 - ii) Determining the type of review required
 - (1) Internal only
 - (2) Internal + peer (including how many peer reviewers)
 - (3) Internal + peer + public
 - iii) Identifying issues for consideration by reviewers (especially peer reviewers)

2) General Criteria

- a) Reviewers must assure that revisions adhere to the basic tenets and guiding principles of CMECS as described in the CMECS Section 1, Introduction, and especially Section 1.7, Guiding Principles¹.
- b) These include:
 - i) CMECS is intended as a *lingua franca* for marine habitat classification. It:
 - (1) Offers a way to organize and interpret data about the marine environment
 - (2) Provides a common platform for inter-relating data
 - (3) Builds upon approaches from published national, regional, and local habitat classification procedures
 - (4) Offers an umbrella under which a national coastal and marine ecological classification can grow and evolve
 - ii) CMECS allows investigators to determine the types of data to be collected. Its structure accommodates data from multiple disciplines.

¹ Federal Geographic Data Committee, Marine and Coastal Data Subcommittee. 2012. Coastal and Marine Ecological Classification Standard. FGD STD018-2012. Washington, D.C. 353 pp

- iii) CMECS is not technologically constrained. Its use is not limited to specific gear types or to observations made at specific spatial or temporal resolutions.
- iv) CMECS is compatible with relevant FGDC-endorsed national standards.
- v) CMECS domain encompasses waters from the head of tide or inland incursion of ocean salinity to the splash zone of the coasts to the deepest portions of the oceans and the deep waters of the Great Lakes. This domain includes all marine and coastal waters under U.S. jurisdiction.
- vi) CMECS is for application in the territorial waters of the United States (including the Exclusive Economic Zone); however, its architecture and underlying approach do not preclude application in other parts of the marine world.
- vii) Distinctions between units in CMECS reflect factors believed to shape biological communities.
- viii) CMECS addresses applications whose scales range from local to national to global. It operates at multiple spatial scales to allow users to address different objectives.
- ix) CMECS units are unique and non-duplicative.
 - (1) It strives to be internally consistent.
 - (2) It employs comparable concepts and classifiers at analogous levels within a component, to the extent practical.
- c) DSP reviewers should be “change averse.”
 - i) Revisions should be approved primarily to correct errors, to add information or to achieve enhanced clarity/ increased usership.
 - ii) Preserving the text of the standard should be the norm unless there are compelling reasons for a change.

3) Criteria for determining if proposed revisions meet DSP

Submission Guidelines

- a) Does proposal adequately* address each of the six principal requirements listed in the [CMECS Catalog Proposal Submission Field Definitions and Guidelines](#) (biographic information, category of proposed change, summary of concept, justification of change, documentation)? “Adequately” is defined as “providing sufficient information to permit a rigorous review of the proposal, including technical details of the proposed revision as well as information on the consequences of the revision to major user groups, existing practice, and the most current version of CMECS.”
- b) Decision should be “yes” or “no”; not conditioned on any assumption, including the provision of corrections and/or augmentations by the submitter at a future time.
- c) If a proposal meets the Submission Guidelines, the level of review will be determined by the IG and, if necessary, it will be assigned to technical reviewers.

- d) If a proposal does not provide adequate information for a successful review, it will be rejected and sent back to the submitter with a summary of the issues identified. The submitter may revise the proposal and resubmit.
- e) To prevent misunderstandings, reviewers will not correct or add information to a proposed CMECS revision, even at the request of a submitter. The text to be reviewed must be that provided by the submitter.

4) Criteria for determining type of review for an accepted proposal

- a) Minor edits
 - i) Definition: Changes that do not alter the defined concept of CMECS units. Such changes include corrections of typographical errors, spelling, or grammar; corrections (not revisions or improvements) for graphic or tabular material; clarifications of meaning, and similar non-controversial, easily documented modifications.
 - ii) Submissions relating to minor edits shall be reviewed by three members of the IG or designated replacement body.
- b) New type concept
 - i) Definition: Adding, removing or modifying a CMECS unit.
 - ii) New type concept submissions shall be reviewed by the IG, as described in 4a.ii, above, plus a minimum of three extramural (i.e., non-IG) technical specialists from academia, government, or the private sector (including NGOs).
 - iii) The choice of extramural reviewers will be based on familiarity with CMECS and take into consideration the scientific, geographic, and application implications of proposed revisions.
 - iv) If needed, additional extramural reviewers (i.e., beyond three) may be assigned to provide input on all potentially contentious aspects of proposed revisions.
- c) Major concept changes
 - i) Definition: Alterations entailing changes to significant structural elements of CMECS. This includes but is not limited to revising component hierarchies, re-bundling CMECS units within or among CMECS components, or adding, deleting or redefining one or more class of CMECS units.
 - ii) Proposals of major concept changes shall be reviewed as described in sections 4b.ii-4b.iv, above.
 - iii) In addition, proposals associated with major potential impacts to users, governmental policy (at any level), or significant potential economic effects may be made available for public comment through a formal Federal Register process.
 - iv) Few proposed CMECS revisions are expected to require public comment. The suitability of most proposals will be decided on technical and operational merits.
 - v) The decision to include public comment as part of the DSP shall be made on a proposal-by-proposal basis by the IG or designated

replacement body. Public comment entails a comment period announced in the *Federal Register*.

- 5) **Additional instructions and specific questions to be conveyed to IG and peer reviewers** (Beyond assessments of fundamental issues such as technical soundness or proposer's comprehension of standard, including goals, underlying principles, and rationale for its structure and organization)
- a) How is CMECS in its current form (before proposed revision) deficient?
 - i) Does the perceived problem relate to the standard itself or to ancillary issues such as coding, applications, mapping protocols, or data management?
 - (1) The DSP relates only to the text of the standard.
 - (2) Other forums need to be established for ancillary issues.
 - ii) Is the proposed change really needed? Can the identified deficiency be addressed through alternate applications of the current version of CMECS?
 - iii) Is the proposed change primarily a matter of adopting an approach that is familiar to, preferred by or convenient for the proposer?
 - b) Is the proposal in keeping with the tenets of CMECS as described in CMECS Section 1, Introduction, and especially Section 1.7, Guiding Principles? (See Section 2:General Criteria, above.)
 - c) Is the proposed revision likely to be at odds with or unfavorably impact other FGDC standards, especially:
 - i) Classification of Wetlands and Deepwater Habitats in the United States, FGDC-STD-004,
 - ii) National Vegetation Classification Standard (Version 2.0), FGDC-STD-005-2008,
 - iii) Metadata Profile for Shoreline Data Standard (FGDC-STD-001.2-2001
 - d) Is proposed approach included in or congruent with widely accepted foreign ecological classification standards?
 - e) Should this proposal be made available for public comment (in addition to technical review) because of potential economic implications or possible significant impacts to user groups or governmental policy (at any level)?