Subject: Model Certification Issues for Engineering Software in Planning Studies

Applicability: Interim Guidance

1. The purpose of this document is to clarify issues regarding the application of EC 1105-2-407, Planning Models Improvement Program: Model Certification (http://www.usace.army.mil/inet/usace-docs/eng-circulars/ec1105-2-407/toc.htm) to engineering software used in USACE studies.

2. EC 1105-2-407 is specifically directed to software used in USACE planning studies, to ensure that only high quality software is being used for key planning decisions. The EC focuses on certification of planning software, making a distinction between “planning models” and “engineering models used in planning studies” (paragraph 5.a). The EC states that it does not cover engineering models used in planning studies. It references the Engineering and Construction (E&C) Science and Engineering Technology (SET) initiative, where engineering software is being addressed.

3. The SET initiative is being managed through E&C Communities of Practice (CoPs). Thus far, participating E&C CoPs are conducting inventories and assessments of the software they use. We are planning to develop and implement an appropriate process that documents the quality of commonly used engineering software, such as those developed by the laboratories of the Engineer Research and Development Center and the Hydrologic Engineering Center, and other well known and widely used commercial engineering software.

4. Until we complete our strategy for documenting the quality of engineering software, engineering activities in support of planning studies shall proceed as in the past. The responsible use of well-known and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be followed. It is the responsibility of the Engineering function to ensure that the application and proper use of the software is documented in the Independent Technical Review process.

5. Caution should be exercised when using new or unproven engineering software. When used for a planning study, the user should be prepared to prove that the software is technically sound and in accordance with accepted engineering practice.
6. This ECB has been coordinated with the Planning Community of Practice

7. POC for this issue is Mr. Robert Bank, CECW-CE, 202-761-4243.

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MOODY K. MILES, P.E.
Acting Chief, Engineering and Construction
Directorate of Civil Works