Submission of Documentation to Engineering Review Board

Procedure Number: SOP # 3.3.1.1
Created: August 7, 2007
Created By: Manoj Samant
Modified: September 14, 2012
Modified By: Bruce Servary
Approved By: Manoj Samant, Engineering and Development Branch Chief

1. **Title**
   SOP # 3.3.1.1 Submission of Documentation to Engineering Review Board

2. **Purpose**
   This document explains what and how documentation is submitted to the Engineering Review Board (ERB). The ERB review ensures standardization across CO-OPS designs with respect to engineering design, compatibility with existing CO-OPS systems, and that follows the best engineering practices.

3. **Background/History**
   The CO-OPS Reliable Operating System (ROS) is a process improvement system. More information about ROS can be found at the ROS Home Page available to all CO-OPS employees.

   The CO-OPS ROS has eight step functions. The ERB is structured to review and guide the projects with respect to engineering design, as these approved projects transition from ROS Step 2 to Step 3. For projects that are similar to the past approved projects where CO-OPS has prior experience, ERB will review the project documents and guide the project team to the lessons learned from the previous experience and appropriate design methods. For projects that are new in scope, the ERB will help the project team formulate a design methodology.

4. **Scope/Applicability**
   The scope and oversight of the ERB is applicable to all of CO-OPS observing systems – the National Water Level Observation Network (NWLON), Physical Oceanographic Real Time Systems (PORTS®), the National Currents Observation Program (NCOP), the Coastal Oceanographic Applications and Services of Tides and Lakes (COASTAL) Program, NOS Vertical Datum Transformation (VDatum) Program, and hydrographic and shoreline mapping projects.

5. **Main Processes**
   The Project Lead submits the required design documentation with a completed cover sheet (see Appendix A) to the ERB.
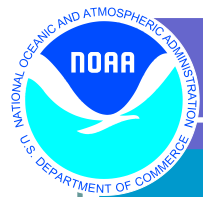
6. Detailed Sub-Processes/Checklists

The following documentation must be submitted for approval after review:

    (1) Site reconnaissance documentation, if required
    (2) CO-OPS standard license agreement, if required
    (3) Design team charter and roles and responsibilities
    (4) Engineering system design decision tree analysis
    (5) Engineering system design plan, documentation, references
        (a) Functional and technical requirements
        (b) Risk management plan
        (c) Quality management plan
        (d) Detail design including SOP, templates, drawings, sketches, and other references, as appropriate)
        (e) Other documentation, if required
    (6) CO-OPS task order, if required
    (7) CO-OPS MOA, if required
    (8) Updated MS Project plan
    (9) Updated MS Excel Spending plan

7. Quality Assurance/Control

The Chair for the Engineering Review Board, or his designee, will ensure that the process is followed.

8. Management/Responsibility

The Chair for the ERB is responsible for reviewing and approving the required documentation. The Engineering Division Chief (or Deputy) is responsible for maintenance of this SOP and associated cover sheet template.

Appendix A

Template for Submission of Documentation
To CO-OPS Engineering Review Board

Memorandum For: CO-OPS' Engineering Review Board

From: Your Project Lead's Name

Subject: ROS Project # and Your Project Name

Date of Submission:

Attached are the following documents for ERB review:

(1) Site reconnaissance documentation, if required
(2) CO-OPS standard license agreement, if required
(3) Design team charter and roles and responsibilities
(4) Engineering system design decision tree analysis
(5) Engineering system design plan, documentation, references
       (a) Functional and technical requirements
       (b) Risk management plan
       (c) Quality management plan
       (d) Detail design including SOP, templates, drawings, sketches, and other references, as appropriate)
       (e) Other documentation, if required
(6) CO-OPS task order, if required
(7) CO-OPS MOA, if required
(8) Updated MS Project plan
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Please review the documentation and provide guidance and comments.