WSR-88D Algorithm Process Template

Purpose: Provide the triagency Software Recommendation and Evaluation Committee (SREC) members with information they can use to determine the readiness of a projected major software change or addition for integration into the WSR-88D baseline and the expected impact of the change on the WSR-88D and NEXRAD agency operational requirements. The information will also assist the ROC in planning software development, testing, documentation, and WDTB training resources needed.

Date Of Preparation/Revision: Self Explanatory

Name And Contact Information Of Preparer: Self Explanatory.

Title/Name Of Algorithm/Change. Self Explanatory.

SECTION 1: CHANGE JUSTIFICATION INFORMATION

1. Configuration Change Request (CCR) Number. Also provide identification of associated CCR's, Case Files and/or Requests For Change.

2. Operational Or System Requirement To Be Met With Change. Include either new or existing agency requirements/goals/strategic plans addressed by this proposed change. Identify which NEXRAD agencies and types of users will benefit.

3. General Description Of Change Being Proposed. Include identification of new functionality, improvement to existing functionality or repair of defect(s).

SECTION 2. ASSOCIATED INFORMATION

1. Concept Of Operations. Attach a short/one-page document that describes how the change will be used by operators and potential training issues. Also, identify if the new algorithm or product will be a replacement for an existing algorithm or product. When early prototype product displays are available, provide sample(s).

2. Sponsoring Agency And Implementation Technical Point Of Contact Information. Self Explanatory.

3. Projected Build. Sponsoring agency's projected software build for deploying this change.

4. Projected Release Date To Begin Integration Work. Date (month/year) integration deliverables are expected to be delivered to the ROC.

5. Identification Of External Dependencies. List and/or describe how external-interfacing systems will be impacted by this change or if a change to an external system is driving this change.

6. Identification Of Internal Dependencies. List and/or describe RPG changes that must precede or accompany this change.

7. Agency/Organization That Will Maintain The Externally Implemented Software. State who will provide post-deployment software maintenance support for the change.

8. Agency/Organization That Will Provide Support For Technical/Scientific Questions. State who will provide post-deployment scientific and technical support of the software (i.e., who will the ROC turn to for detailed questions/troubleshooting assistance).

9. IV&V Of Scientific Validation. Describe what validation of the technical goodness of this change has been completed and who has reviewed the validation work (e.g., NEXRAD Technical Advisory Committee, published scientific journal).

10. Identify Programmatic Risks Associated With This Change And Any Mitigating Measures That Can Be Taken. Scientific, schedule, impact on users, impact on system, impact on external interfaces. Quantify likelihood of occurrence and impact.

SECTION 3. CURRENT STATUS OF CHANGE

1. In Development Or Implementation Stage. Self Explanatory.

2. If in development, percentage of Algorithm Enunciation Language (AEL) Or Functional Requirements Completed. Self Explanatory.

SECTION 4. CHANGE ATTRIBUTES

1. Projected System Usage Data. Provide information on the system usage observed during development or implementation activities. For example: product sizes, CPU usage, memory, and secondary storage requirements determined using defined tools and data sets.

2. List Of Baseline Documents To Be Created Or Updated As A Result Of Implementing This Change (Yes/No).

> System Specification (SS)
> Software Requirement Specification (SRS)
> Algorithm Enunciation Language (AEL)
> Product Specification
> Interface Control Document(s) (ICD(s))
> Software Description Document (SDD) (VISIO diagrams)

3. Number Of Adaptable Parameters Added, Modified, Or Deleted. Self Explanatory.

4. List Of Any Approved or Expected Waivers Or Deviations From The System Specification. Examples of possible changes: coding language, testing, noncompliance with the Scientific Applications Software Insertion Process.

5. New Product Data. Provide any known product sizing (minimum, average and maximum) and methods/plans for distribution.

SECTION 5. INTEGRATION ISSUES AND SPECIAL CONCERNS REGARDING THE
IMPLEMENTATION AND INTEGRATION OF THIS CHANGE.

Use this section to identify integration issues, change concerns, and unique support requirements that
extend beyond the normal roles defined for the integration activity. Examples of items to be listed in this
section would include:

$ Changes or patches required for external systems
$ Need for simulation or drivers
$ Non-availability of expected implementer input(s) or support for integration activities such as
         output analysis, product verification and anomaly investigation
$ Any required system or hardware upgrades
$ Any substantial new functionality required in the RPG to support the change (e.g., compression,
         new VCP, additional capacity)
$ New interfaces or connectivity