

Frequently Asked Questions

Engineering Change Request—Engineering Change Order and Engineering Work Request—Engineering Work Order

What are the ECR/ECO/EWO Systems?

The Engineering Change Request (ECR) system is a web-based set of tools used by the Atmospheric Radiation Measurement (ARM) Climate Research Facility (ACRF) to submit requests for products and services from the ARM Engineering Group. Having the need to request a change within the ARM computing environment, instrument systems, or data products can come about for a variety of reasons: to address recognized problems, to add new functionality, and for immediate operations need. Once the ECR is approved, an Engineering Change Order (ECO) is established and placed into the ExtraView System where it is planned, tracked, and deployed using an engineering process culminating with a change to the operational or functional baseline of ARM. The Engineering Work Order (EWO), a complement to the ECR/ECO, is used where “quick-turnaround” tasks can be accommodated. Detailed information about the ECO/EWR/EWO processes can be found online at <http://ewo.arm.gov>.

What is the ExtraView System?

ExtraView is a comprehensive, web-based issue tracking and workflow management system, which is specially designed to provide a powerful way to manage complex processes involving multiple users. ExtraView automatically detects the identity of each user and serves up screens and options that are appropriate to the task.

Who manages the ECR/ECO/EWO Systems?

The ECR review team, assigned by the Technical Coordinator and Chief Engineer, will route the ECR to engineers with the domain expertise to assess the impact and content of the request. Final disposition of the ECR is made by the Engineering Review Board (ERB) and an ECO is submitted and assigned an owner. The ERB consists of the ARM Coordination Team and Chief Engineer. The owner is responsible for implementation, documentation, and completion of the task. An EWO can be initiated by ARM/ACRF internal staff.

Who can submit ECR/ECO/EWOs?

An ECR can be submitted by members of the ARM Infrastructure and Science Team. An ECO is put into the ExtraView System by the system administrator. An EWO can be initiated by staff currently registered in the ExtraView system.

Why can't I update an ECO/EWO?

You need to be currently enrolled in the ExtraView application, and cookies must be enabled. If you are presently not enrolled in the ExtraView System, select "Register as a new user." If you have forgotten "User Name" and/or "Password," notify the system administrators by email janice.gunter@pnl.gov / phone (509) 375-6580 or nicole.keck@pnl.gov / phone (509) 375-6479. Several attempts to login will alert the ExtraView Administrator of the failure to login into the system and the administrator will notify the individual to resolve the issues. Once into the ExtraView system, click "EDIT" to perform your updates. Currently, we have ten licenses for ten users to be logged into the system simultaneously. Because of security reasons and to make the most efficient use of the ExtraView licenses, our idle timeout value is 1.5 hours. After this expires, the system will log you off. When many ECO/EWOs need to be updated and/or figures and spreadsheets added, a rule of thumb is to do your comments in either a word processor or text editor and paste them into the system later. This guarantees your work will not be lost.

Who gets copies on the comments I enter for an ECO/EWO?

Any comments entered into the ExtraView system are automatically distributed to the Technical Coordinator, Chief Engineer, Data Quality Office (DQO), administrator, and selected members listed on the interest list. The owner can add as many individuals to the interest list as they wish.

When will the ECO/EWO status change?

An ECO/EWO is placed into the system as a "Request;" the administrator changes this to "Not Started." When the owner of the ECO/EWO opens and begins work on the particular task, the status changes to "In Process." If delays occur, the owner can then put the task into "Waiting" status until they begin working again on the task. Once the task is finished, the owner changes to "Complete" status. After review by the Technical Coordinator, the administrator then puts the disposition to "Completed" and it remains in the ExtraView system for documentation purposes.

How will the ECO/EWO status change?

Setting the ECO/EWO status is the responsibility of the owner and/or administrator. The owner has the following status options: Request, Not Started, In Process, Waiting, and Completed. Science applications and value-added products (VAPs) owners also have disposition options: Stopped, In Development, Stopped, In Maintenance, Stopped, and Input Unavailable that needs to be filled in.

I've lost the email I received with the link to the ECR/ECO/EWO. What do I do?

If you are not sure where to find the ECR/ECO/EWO database system, access your browser as follows:

- Link for the ECR: <http://ecr.arm.gov>.
- Link for the ECO/EWR/EWO: <http://ewo.arm.gov>

- Other links are found on the ARM Web page <http://www.arm.gov>. Click on the Internal ARM Site and a new screen displays documentation that leads you through each of ECR/ECO/EWR/EWO processes.

How to I find a certain ECO/EWO?

When you are looking for a particular ECO/EWO that you own or want to review one owned by another, you can type <http://ewo.arm.gov> into your Web browser. A screen will appear where you fill in your User Name and Password. Your personal ExtraView Web page displays lists of issues originated by you and those assigned to you. If you are new user, click on “New User Registration” and fill out the information highlighted in bold, then select “Update.”

What is the connection between the ECR/ECO/EWO and BCR systems?

The ECR process is a method of formally requesting a change be made to the infrastructure. This could be to a particular instrument, data system, data process, data stream, measurement method, or facility. The ECR forces discipline in assuring that all aspects of the infrastructure are considered prior to making any changes. The ECO is an engineering task or project directly resulting from an ECR. The ECO addresses project requirements, analysis, design, development, testing, and documentation. The EWO is used to request engineering resources where no design or redesign is required. The BCR is a Web-based tool that is used to discuss, review, and approve an “engineered project” or other changes to infrastructure components as it is turned over to ARM Operations.

How do I attach images or files to an ECO/EWO?

ExtraView gives you the ability to add an unlimited number of file attachments to any ExtraView issue. Attachments can include anything from a screen shot with a particular message to a document outlining the specifications for a particular instrument. From the Edit screen, click “Add Attachments” located at the bottom, browse your local drive or network for the file and double click on it, enter the description, and then click “Submit.”

About ACRF

To provide more research capability for the global scientific community, ARM’s field research sites are now being made available for use by scientists worldwide through the ACRF. The ACRF has enormous potential to contribute to a wide range of interdisciplinary science such as hydrology, ecology, and weather forecasting to name only a few.

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