

Review Criteria

Project plans are assessed for quality according to three broad criteria: merit and significance, adequacy of approach and procedures, and probability of success (see Exhibit 3: Sample Peer Review Form). The ARS sets the review criteria; however, peer reviewers are encouraged to make additional recommendations for consideration. Specific questions regarding each of the three criteria that should be addressed are discussed below.

Criterion 1: Merit and Significance

For this criterion, ARS is primarily interested in whether the problems to be solved or addressed fit within the National Program Action Plan to which the Project Plan is assigned. The National Program Action Plan has been developed with input from stakeholders, congressional mandates, customers, and ARS and non-ARS scientists. Other aspects of these criteria that should be addressed are:

- Will the successful completion of the project enhance knowledge of a scientifically important problem?
- Will the project lead to the development of new knowledge and technology?
- Are you aware of any other data/studies relevant to this research effort?
- If applied research, of what value is the research to its customers?

Criterion 2: Adequacy of Approach and Procedures

This evaluation criterion measures the scientific quality of the proposed research. Questions to be answered are:

- Are the hypotheses and/or plan of work well conceived?
- Are the experiments, analytical methods, and approaches and procedures appropriate and sufficient to accomplish the objectives?
- How could the approach or research procedures be improved?

Criterion 3: Probability of Successfully Accomplishing the Project Objectives

The feasibility of the project is evaluated by this criterion. The panel will determine:

- The probability of success in light of the investigator or project team's training, research experience, preliminary data if available, and past accomplishments
- Whether the objectives are both feasible and realistic within the stated timeframe and with the resources proposed
- Whether the investigators have an adequate knowledge of the literature as it relates to the proposed research.

Satisfying all three criteria is essential to approval of a Project Plan.

Action Classes

Action classes describe the level of modification necessary to respond to peer reviewer's suggestions. Most project plans will receive some suggestions for improvement as a result of panel evaluations. Action classes provide management with a measurement of project plan quality. The five action classes are:

1. No revision required. No revision is required, but minor changes to the project plan may be made.
2. Minor revision required. The project plan is basically feasible as written but requires some revision to increase quality to a higher level.

3. Moderate revision required. The project plan is basically feasible as written but requires moderate revision to one or more objectives, perhaps involving changes to the experimental approaches, in order to increase quality to a higher level. The project plan may also need some rewriting for greater clarity.
4. Major revision required. Substantial revision to one or more objectives is necessary, but the project plan should be sound and feasible after significant revision.
5. Not feasible. The project plan has major flaws or deficiencies, and cannot be simply revised to produce a sound project. If the project is not terminated, a complete redesign and rewrite are required.

See Exhibit 6 for a matrix describing characteristics of projects plans assigned to the five action classes.

Comments
for Section 10
Criteria and Action Classes