

PART 5 – CLUSTERS OF PROGRAMS

INTRODUCTION

Part 5 identifies those programs that are considered to be clusters of Federal programs. As defined by 2 CFR section 200.17, a cluster of programs means a grouping of closely related programs that share common compliance requirements. The clusters of programs included in this Part are research and development (R&D) and student financial assistance (SFA), as well as certain other programs included in Part 4, “Agency Program Requirements,” that are deemed to be clusters. A cluster of programs must be considered as one program for determining major programs, as described in 2 CFR section 200.518 (major program determination), and, with the exception of R&D as described in 2 CFR section 200.501(c), determining whether a program-specific audit may be elected.

“Other clusters” also may be designated by a State for Federal awards the State provides to its subrecipients that meet the definition of a “cluster of programs.” When designating an “other cluster,” a State must identify the Federal awards included in the cluster and advise the subrecipients of compliance requirements applicable to the cluster, consistent with 2 CFR section 200.331(a). This part of the Supplement does not identify any State-designated clusters of programs.

For the R&D and SFA clusters, this Part is the equivalent of Part 4 coverage. In developing the audit procedures to test for compliance with the requirements for the R&D and SFA clusters, the auditor must determine which of the 12 types of compliance requirements apply and then determine which of the applicable requirements is likely to have a direct and material effect on the cluster at the auditee. For each such requirement other than N, “Special Tests and Provisions,” the auditor must use Part 3 (which includes generic details about each compliance requirement, including audit objectives and suggested audit procedures) and this Part 5 (which includes any cluster-specific requirements) to perform the audit. For N, “Special Tests and Provisions,” Part 3 includes only audit objectives and suggested audit procedures for internal control; all other information is included in Part 5.

The descriptions of the compliance requirements in Parts 3 and 5 are a general summary of the actual compliance requirements. The auditor must refer to the referenced citations (e.g., statutes and regulations) for the complete compliance requirements.

RESEARCH AND DEVELOPMENT PROGRAMS

I. PROGRAM OBJECTIVES

The Federal Government sponsors research and development (R&D) activities under a variety of types of awards, most commonly grants, cooperative agreements, and contracts, to achieve objectives agreed upon between the Federal awarding agency and the non-Federal entity. The types of R&D conducted under these awards vary widely. The objective of an individual project is explained in the Federal award.

II. PROGRAM PROCEDURES

As defined in 2 CFR section 200.87, “research” is a systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Development is the systematic use of knowledge and understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes. R&D means all research activities, both basic and applied, and all development activities that are performed by non-Federal entities. The term “research” also includes activities involving the training of individuals in research techniques where such activities utilize the same facilities as other R&D activities and where such activities are not included in the instruction function. The absence of the words “research” and/or “development” in the title of the Federal award does not indicate it should be excluded from the R&D cluster. The substance of the Federal award should be evaluated by the recipient and the auditor to determine the proper inclusion/exclusion in the R&D cluster.

Grants, cooperative agreements, and contracts for R&D are awarded to non-Federal entities on the basis of applications/proposals submitted to Federal agencies or pass-through entities. These proposals are sometimes unsolicited. An award is then negotiated in which the purpose of the project is specified, the amount of the award is indicated, and terms and conditions are delineated.

The administrative requirements that apply to R&D grants and cooperative agreements arise from OMB Circular A-110 (2 CFR part 215) or 2 CFR part 200, as applicable to an award, and the Federal agencies’ codification of the OMB circular/guidance. The administrative requirements that govern contracts are contained in the Federal Acquisition Regulation (FAR) and agency FAR supplements, e.g., the Defense Federal Acquisition Regulation Supplement (DFARS). The cost principles that apply to R&D cost-reimbursement contracts to non-Federal entities are found in FAR subparts 31.3 (OMB Circular A-21); 31.6 (OMB Circular A-87); and 31.7 (OMB Circular A-122), or in 2 CFR part 200, subpart E, as applicable.

III. COMPLIANCE REQUIREMENTS

In developing the audit procedures to test for compliance with the requirements for the R&D cluster, the auditor must determine, from the following summary (also included in Part 2, “Matrix of Compliance Requirements”), which of the 12 types of compliance requirements apply, and then determine which of the applicable requirements is likely to have a direct and material effect on the R&D cluster at the auditee. For each such requirement, the auditor must use Part 3 (which includes generic details about each compliance requirement other than Special Tests and Provisions) and this cluster supplement (which includes any cluster-specific requirements) to perform the audit.

Compliance Requirements											
A	B	C	E	F	G	H	I	J	L	M	N
Activities Allowed or Unallowed	Allowable Costs/Cost Principles	Cash Management	Eligibility	Equipment/Real Property Management	Matching, Level of Effort, Earmarking	Period of Performance	Procurement/Suspension and Debarment	Program Income	Reporting	Subrecipient Monitoring	Special Tests and Provisions
Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y

When selecting a sample for testing of compliance requirements, the auditor should choose a sample from the universe of R&D awards appropriate to the objective being tested. The selected items should incorporate a variety of award sizes, award types (grants, cooperative agreements, and cost-reimbursement contracts), funding sources, and Federal awarding agencies.

In the Schedule of Findings and Questioned Costs, the auditor must associate any questioned costs with the specific award number(s) in the audit finding detail. When the finding applies to the entire R&D cluster (i.e., systemic findings), the auditor must clearly indicate that the finding applies to the R&D cluster and also identify by award number the questioned costs for the specific award impacted. This information is necessary for the auditee to prepare the corrective action plan, and for Federal awarding agencies and pass-through entities to issue a management decision on the audit findings in a timely manner.

A. Activities Allowed or Unallowed

The objectives of individual R&D projects are explained in the applicable award. Testing of compliance with this requirement should ensure that funds were used only for such objectives.

B. Allowable Costs/Cost Principles*Compensation*

Individual employee compensation and related benefits generally comprise a significant portion of total R&D project costs. The auditor should give particular attention to individual employee compensation and related benefits costs. See Frequently Asked Question 200.430-1, which addresses changes to current processes and compliance with the documentation standards of 2 CFR section 200.431(i) (<https://cfo.gov/wp-content/uploads/2015/09/9.9.15-Frequently-Asked-Questions.pdf>). 2 CFR section 200.430 provides that Federal agencies may approve alternative methods of accounting for salaries and wages based on achievement of performance outcomes, including instances where funding from multiple programs/awards is blended to more efficiently achieve a combined outcome.

1. For non-Federal entities that have completed the transition to the documentation standards of 2 CFR section 200.430(i), costs of compensation for personal services are allowable to the extent the total compensation for individual employees:
 - a. Is reasonable for the services rendered and conforms to the established written policy of the non-Federal entity consistently applied to both Federal and non-Federal activities;
 - b. Follows an appointment made in accordance with a non-Federal entity's rules or written policies and meets the requirements of Federal statute, where applicable; and
 - c. Is determined and supported as provided in 2 CFR section 200.430(i), including that charges to Federal awards for salaries and wages must be based on records that accurately reflect the work performed. In part, these records must:
 - (1) Be supported by a system of internal control which provides reasonable assurance that the charges are accurate, allowable, and properly allocated.
 - (2) Be incorporated into the official records of the non-Federal entity.
 - (3) Reasonably reflect the total activity for which the employee is compensated not exceeding 100 percent of compensated activities.
 - (4) Support the distribution of the employee's salary or wages among specific activities or cost objectives if the employee works on more than one Federal award; a Federal award and non-Federal award; an indirect cost activity and a direct cost activity; two or more indirect activities which are allocated using different allocation

bases; or an unallowable activity and a direct or indirect cost activity.

- (5) Comply with the established accounting policies and practices of the non-Federal entity (2 CFR section 200.430(h)(1)(ii) addresses treatment of incidental work for institutions of higher education).
2. For non-Federal entities that have not completed the transition to the documentation standards for compensation in 2 CFR part 200, the confirmation of salaries must be performed by a person with first-hand knowledge of the effort (OMB Circular A-122, Attachment B.8); the principal investigator or responsible official(s) using suitable means of verification that the work was performed (OMB Circular A-21, paragraph J.10); or a responsible official(s) of the governmental unit (OMB Circular A-87, Attachment B.8).
3. The auditor should determine if the awards contain any negotiated wage or salary rates, or contain any restrictions on salaries and wages, such as the NIH restriction on the amount that may be charged for individual salaries (https://grants.nih.gov/grants/policy/salcap_summary.htm). If so, a sample of these should be included as a part of allowable costs testing.

Indirect (facilities and administrative) costs and cost transfers

1. Indirect or facilities and administrative (F&A) costs are a second major category of cost charged to R&D projects. (See the coverage in Part 3 relating to the review of indirect costs.)
2. Transfers of costs between cost centers or research projects are commonly used to correct the financial records (such as transfers of costs between projects when costs were initially charged to the wrong project and the non-Federal entity's control system found the error) and for other valid reasons.
 - a. Cost transfers should be reviewed for allowability. A cost transfer from one project to another project may appear to be an unallowable charge to the second project. However, the auditor should assess whether, because of the closely linked nature of the research as verified by the auditee, the costs would be allowable charges to either project. Alternatively, transfers would not be allowable under the second project if the terms and conditions of that project identify the costs as unallowable.
 - b. The auditor should determine if journal entries and transfers of costs were made to Federal R&D projects. If so, the auditor should select a separate sample of these R&D cost transfers and test the sampled items to determine the allowability of the costs transferred using the applicable Federal regulations and award requirements for the receiving project. If the number of cost transfers between unrelated projects is significant, this could be an indication of poor internal control and might result in a noncompliance finding.

G. Matching, Level of Effort, Earmarking**1. Matching**

Non-Federal entities may be required to share in the cost of research either on an overall entity or individual award basis. The specific program regulations or individual Federal award will specify matching requirements, if applicable.

2. Level of Effort – Not Applicable**3. Earmarking – Not Applicable****L. Reporting****1. Financial Reporting**

The specific program regulations or the Federal award will specify any required financial reports. The auditor is responsible for testing the standard Federal financial reports (see Part 3 of this Supplement) and also should consider alternate forms of financial reporting (e.g., public vouchers submitted on the SF-1034 or through the Wide Area Workflow for reimbursement requests submitted to the Federal Government on cost-reimbursement contracts) that report the same or similar information. Reporting requirements for cost-reimbursement contracts may be listed in the Contract Data Requirements Listing (CDRL) section of the contracts.

2. Performance Reporting – Not Applicable**3. Special Reporting – Not Applicable****M. Subrecipient Monitoring**

When deciding whether the subrecipient monitoring compliance requirement applies, the auditor must first assess whether the non-Federal entity entered into any relationships under the Federal award that it identified as subawards. A subrecipient relationship exists when funding from a pass-through entity is provided to another entity to perform a portion of the Federal award. It does not include payments for the purpose of obtaining goods and services (such as office or laboratory supplies; and data analysis or processing services) for the non-Federal entity's own use. A subaward may be provided through any form of legal agreement, including an award that a pass-through entity makes under a Federal cost-reimbursement contract that is subject to the FAR, in which case the subaward is termed a subcontract. In determining whether a subrecipient relationship exists, the substance of the relationship is more important than the term used to describe it (2 CFR section 200.330).

N. Special Tests and Provisions

R&D awards may contain special terms and conditions that could have a direct and material effect on the R&D cluster. The auditor should make inquiries of the non-Federal entity's management and review a sample of the R&D awards to ascertain if such special terms and conditions exist. Entities should have internal controls to ensure (1) that Federal awards are reviewed to identify special award terms and conditions, and (2) compliance with the special terms and conditions identified. When special terms and conditions exist that could have a direct and material effect on the R&D cluster, the auditor should determine the audit objectives and develop and perform procedures for internal control and compliance as required under 2 CFR sections 200.514(c) and (d). One example of a specific cross-cutting special term and condition is key personnel.

Key Personnel

Applications/proposals or awards may include staffing proposals that specify individuals who will work on the project and the extent of the planned involvement of personnel. The non-Federal entity may change the staffing mix and level of involvement within limits specified by agency policy or in the award, but may be required to obtain Federal awarding agency approval of changes in key personnel (as identified in the award, which may differ from the non-Federal entity's designation in the application/proposal) and changes in the principal investigator's/project director's time commitment/level of participation in the project. For grants and cooperative agreements, this may include not only a change in the principal investigator or project director but also the disengagement from the project for more than 3 months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator (OMB Circular A-110 §§_25(c)(2) and (3)/2 CFR sections 200.308(c)(1) (ii) and (iii)). For cost-reimbursement contracts under the FAR, specific key personnel requirements are included in the contract (or task order).

Audit Objectives – To determine whether the non-Federal entity adhered to key personnel commitments specified in the application/proposal or award (which may be an incorporation by reference of the approved application/proposal) and obtained any required Federal awarding agency approval for changes.

Suggested Audit Procedures

- a. Review the non-Federal entity's procedures for determining if key personnel were involved in the project.
- b. Review a sample of projects and determine if key personnel identified in the application/proposal and award were involved in the project as required.
- c. Determine if the non-Federal entity complied with any award requirements for approval of changes in key personnel or absence from, or changes in time committed to, the project by the approved project director or principal investigator.

IV. OTHER INFORMATION

Schedule of Expenditures of Federal Awards

Quality control reviews have identified the lack of documented audit procedures to ensure that the presentation of awards in the Schedule of Expenditures of Federal Awards (SEFA) is accurate and complete. Under 2 CFR section 200.514, the auditor should determine and provide an opinion on whether the Schedule of Expenditures of Federal Awards (SEFA) is presented fairly in all material respects in relation to the auditee's financial statements as a whole. Further audit procedures for compliance should be performed to obtain sufficient and appropriate audit evidence supporting the accuracy and completeness of the SEFA, including the identification of Federal programs in the schedule.

Equipment and Real Property Management

Entities are required to appropriately safeguard and maintain all equipment purchased with Federal funds. Quality control reviews have identified that, in many cases, auditors are only considering equipment purchased under Federal awards during the current audit period to assess whether the requirement is direct and material. For the R&D cluster, only considering equipment purchased under Federal awards during the current audit period to assess whether the requirement is direct and material may not properly address requirements for the continued use of equipment on federally sponsored projects or programs and the safeguarding of equipment that is maintained by entities over multiple years. When assessing whether this compliance requirement is direct and material, auditors should consider the significance, both qualitative and quantitative factors, of all equipment purchased with Federal awards that are part of the R&D cluster. Based on this assessment, auditors should design appropriate procedures to determine internal control over and compliance with equipment management requirements.

Hurricane Sandy Relief Cluster

The Hurricane Sandy Relief Cluster in Part 4 of this Supplement provides information which is relevant when the R&D cluster includes funding provided under either CFDA 93.095 or 93.096.