Contracts initiate and conduct *independent research and development* (IR&D) to sustain their business base, creating new products and improving existing product lines. The DoD has an interest in effective IR&D to encourage efficient production of superior US weapons systems, maintain a strong and competitive US defense and industrial base, and promote the development of innovative technology.

*Bid and proposal* (B&P) effort is necessary to win the new business that ensures a company’s continued viability. New business can also benefit Government contracts by distributing costs over expanded allocation bases.

IR&D and B&P are indirect expenses (by definition), usually allocated to contracts over the general and administrative (G&A) base.

This chapter addresses the following topics:

33-1 Defining IR&D and B&P
33.2 Allowability under FAR 31.205-18
33-3 Allowability Under DFARS 231.205-18 (DoD Contracts only)
33-4 CAS 420 Requirements for Accumulating and Allocating IR&D and B&P

**General Audit Guidelines**

Coverage for both IR&D and B&P is contained in FAR 31.205-18 and in the DoD FAR Supplement (DFARS) 231.205-18. FAR 31.205-18(b) provides that all contracts (whether CAS covered or not) are subject to the cost identification and accumulation provisions of CAS 420 (see 33.4.1). Audits will generally be concerned with the following questions:
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- Is the proposed IR&D and B&P effort consistent with the definitions in FAR 31.205-18 and CAS 420?
- Is the proposed IR&D and B&P an allowable cost under applicable FAR and DFARS provisions?
- Do IR&D and B&P allocations to contracts comply with provisions of CAS 420?

33-1 Defining IR&D and B&P

**IR&D**

IR&D, defined at FAR 31.205-18(a) and 48 CFR 9904.420.30(a)(6) is technical effort that is not sponsored by a grant or required in the performance of a contract and consists of projects falling within the following four areas:

- basic research,
- applied research,
- development, and
- systems and other concept formulation studies.

IR&D does not include Manufacturing and Production Engineering (i.e., developing and deploying new and or improved methods of producing a product or service when such new or improved technology is to be used in the contractor’s own productive facilities (see FAR 31.205-25).

**B&P**

B&P costs, defined at FAR 31.205-18(a) and 48 CFR 9904.420-30(a)(2), are the expenses incurred in preparing, submitting, and supporting bids and proposals on potential Government and non-government contracts, provided that the effort is neither sponsored by a grant, nor required in the performance of a contract.

**AUDIT GUIDELINES:**

Document the contractor’s practice for distinguishing between indirect IR&D and B&P costs and similar direct costs and evaluate whether the practice is consistent with the definitions of IR&D and B&P in the FAR 31.205-18(a) and CAS 420.

**IR&D Effort Required Under Existing Contract**

In accordance with the IR&D definition at FAR 31.205-18(a), any efforts that are “sponsored by a grant or required in the performance of a contract” are not IR&D. Auditors must ensure that contractors do not include costs in the IR&D cost pools for developmental effort that are specifically required in the performance of a contract or
those efforts that are not explicitly stated in the contract, but are necessary to perform the contract.

Indirect Allocation of Contractually Required Proposal Effort

Contractually required proposal efforts (e.g., a contract requirement to submit a proposal for a follow-on contract) are generally direct contract costs. However, the CASB interpretation of CAS 402, under certain circumstances, permits contractors to accumulate and allocate these contractually required proposal costs to final cost objectives as an indirect cost. The interpretation explains that contractors may treat proposal preparation costs as direct or indirect depending on the circumstances under which the costs are incurred. Contractors may treat proposal preparation costs arising from a specific contract requirement as direct costs, while ordinary B&P effort (i.e., effort that is not required by a contract) is indirect. 48 CFR 9904.402.61, Interpretation, notes that contractors may elect to charge all proposal costs (including B&P costs and those required by contract) indirect, provided that the practice is applied consistently and the practice results in an equitable distribution of the costs to final cost objectives.

33-2 Allowability under FAR 31.205-18

To the extent that IR&D and B&P costs are allocable and reasonable, the costs are allowable as indirect expenses, subject to the following provisions:

- Deferred IR&D costs incurred in previous accounting periods are unallowable in the current period except when contract provisions specifically allow such costs. FAR 31.205-18(d) describes the detailed requirements for allowability.
- **Cooperative Arrangements.** FAR 31.205-18(e) provides that
  1. Costs incurred by a contractor working jointly with one or more non-Federal entities pursuant to cooperative arrangements should be considered allowable IR&D costs if the work performed would have been allowed as IR&D had there been no cooperative arrangement.
  2. FAR 31.205-18(e)(1) provides that costs contributed by a contractor in performing cooperative R&D agreements entered into under any of the authorities listed below should also be considered as allowable IR&D costs if the work performed would have been allowed as IR&D had there been no cooperative agreement.
    a. Section 12 of the Stevenson-Wydler Technology Transfer Act;
    b. Section 203(c)(5) and (6) of the National Aeronautics and Space Act of 1958, as amended;
    c. 10 U.S.C. 2371 for the Defense Advanced Research Projects Agency; or...
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d. Other equivalent authority. (i.e., applies to any cooperative research and development agreement or similar arrangement entered into under a statutory authority).

The contractor should exclude the Government’s portion of the work, as specified in the agreement, from IR&D costs.

- Costs incurred in preparing, submitting, and supporting offers on potential cooperative arrangements are allowable to the extent they are allocable, reasonable, and not otherwise unallowable.

**AUDIT GUIDELINES:**

Test whether costs correctly classified as IR&D and B&P are otherwise allocable, reasonable, and not otherwise unallowable in accordance with FAR 31.205-18. Consider performing additional tests of IR&D costs in these circumstances:

- Evaluate allowability for IR&D costs incurred in a prior cost accounting period. Deferred IR&D costs are generally unallowable unless required under a specific contract as described in the FAR 31.205-18(d).

- When contractors classify costs incurred for a cooperative agreement with an “other equivalent authority” (FAR 31.205-18(e)(1)(iv)) as IR&D, verify the statutory authority as stated in the agreement or coordinate with the agency that awarded the agreement to determine if the agreement is entered into under a statutory authority. Otherwise, the effort and associated cost may not be classified as IR&D.

**33-3 Allowability Under DFARS 231.205-18 (DoD Contracts only)**

**33-3.1 Contractors Subject to the DFARS Limitations**

DFARS allowability limits are only applicable to contractors that fit the DFARS definition of major contractor. DFARS 231.205-18(a)(iii) defines a major contractor as any contractor whose covered segments allocated a total of more than $11 million in IR&D/B&P costs to covered contracts during the preceding fiscal year. In determining if the contractor meets the $11 million threshold, exclude any contractor segments allocating less than $1.1 million of IR&D/B&P costs to covered contracts. Covered contracts include both DoD prime and subcontracts exceeding the simplified acquisition threshold (FAR 2.101), except for fixed-price contracts/subcontracts without cost incentives.
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**AUDIT GUIDELINES:**

When testing IR&D and B&P costs for allowability, request the contractor’s assessment of its requirement to comply with the allowability requirements of DFARS 231.205-18, including supporting cost information. If the contractor is a *major contractor* under DFARS 231.205-18(a) the contractor’s policies and procedures should be requested to ensure compliance with the requirements.

**33-3.2 Requirement for “Potential Interest to DoD”**

Allowable IR&D and B&P costs that major contractors (as defined in the DFARS – see 33.3.1 above) can allocate to DoD contracts are limited to those projects which have "potential interest to DoD." DFARS 231.205-18(c)(iii)(B) provides seven broad categories of IR&D and B&P projects that are specifically defined to be of potential interest to DoD. The broad definition of "potential interest to DoD" significantly reduces the risk that certain IR&D/B&P projects are unallowable due to a lack of potential DoD interest. However, the audit teams should still document consideration of this risk when costs are significant.

**AUDIT GUIDELINES:**

Document consideration of a project’s potential interest to DoD for IR&D and/or B&P costs selected for testing. Contact the cognizant ACO to determine whether the ACO has determined a project has potential interest to the DoD (DFARS 231.205-18(c)). If the ACO has not made a determination, request the contractor to provide their documentation supporting the costs are of potential interest to DoD. If no determination has been made yet, bring it to the attention of the ACO, especially any projects that are clearly not potentially of interest to DoD, as defined in DFARS 231.205-18(c)(iii)(B) and question the associated costs.

**33-3.3 Requirement to Report Allowable IR&D to the Defense Technical Information Center (DTIC).**

Major contractors (as defined in the DFARS) must report IR&D project information to DTIC in order to claim the related costs as allowable (DFARS 231.205-18(c)(iii)(C)). However, contractors are not required to provide classified IR&D project information. The DTIC reporting requirement applies to IR&D project costs that were:

- incurred on or after January 30, 2012; and
- allocated to contracts awarded on or after January 30, 2012.

**Timing and Content of DTIC Reports** - Contractors subject to the regulation must use the DTIC’s input form and instructions found at the Defense Innovative Marketplace to report IR&D projects. Contractors must annually update information in the database for ongoing projects and update the database when the contractor considers the project completed.
Government personnel will use contractors’ approximate IR&D expenditures in the DTIC database to get a sense of the scale and importance of the project, but the amounts in the DTIC database are not required to reflect actual expenditures. There is no expectation that approximate expenditures reported to DTIC will reconcile to costs claimed in the incurred cost submission. Contracting officers and auditors may require additional supporting data to support IR&D allowability and allocability under applicable laws and regulations.

**AUDIT GUIDELINES:**

Test whether the contractor reported the required IR&D project information to the DTIC by requesting input sheets from the contractor and by directly accessing the DTIC database. Contact your region for information on how to access the DTIC database if needed. Coordinate any errors or inconsistencies in the DTIC data with the ACO.

### 33-4 CAS 420 (48 CFR 9904.420) Requirements for Accumulating and Allocating IR&D and B&P

Generally, contracts subject to FAR are required to follow CAS 420 provisions for accumulating and allocating IR&D and B&P.

- All CAS 420 provisions apply to fully CAS-covered contracts.
- All CAS 420 provisions apply to contracts subject to FAR (but not fully CAS-covered), if awarded when the contractor has other contracts that require compliance with CAS 420 ([FAR 31.205-18(b)(2)]).
- All other contracts subject to FAR are also subject to CAS 420, except for [48 CFR 420-50(e)(2)] and [420.50(f)(2)] which prescribe IR&D and B&P allocation methods by home offices and segments, respectively. Instead, [FAR 31.205-18(b)(2)] prescribes the IR&D and B&P allocation methods for these contracts.

#### 33-4.1 Accumulating IR&D and B&P Costs by Individual Project

CAS 420 requires that contractors identify and accumulate IR&D and B&P costs by individual project. The CAS also requires that costs for IR&D and B&P projects be accounted for in the same manner as contracts, and include costs that would be treated as direct costs of that contract, if incurred in like circumstances, and all allocable indirect costs, with the exception of general and administrative (G&A) expenses. For example, if a contractor charges clerical and technical support cost directly to final cost objectives, then it must also charge them directly to IR&D and B&P projects. If, however, the contractor charges these costs to indirect cost pools, such costs incurred in support of IR&D and B&P efforts should also be charged to indirect cost pools.

**AUDIT GUIDELINES:**

Perform audit procedures to test that the contractor uses consistent cost accounting in accumulating costs for contracts and IR&D/B&P projects in similar circumstances, except for G&A allocation to IR&D/B&P projects.
33-4.2 Allocating IR&D and B&P Project Costs.

Costs Accumulated at the Business Unit (including IR&D/B&P allocations from a home office or other segment). As a general rule, CAS 420 requires IR&D and B&P allocations to contracts over the business unit G&A allocation base. However, where specific projects clearly benefit other profit centers or the entire company, such costs shall be allocated through the G&A of such other profit centers or through the home office to benefitting segments, as appropriate.

Costs Accumulated at the Home Office (including IR&D/B&P transferred from another home office or segment). CAS 420 requires contractors to allocate IR&D and B&P specifically identified with one or more segments to those specific segments. Home offices generally allocate other project costs to segments using the residual cost base, established in accordance with CAS 403.

Special Allocations – Exceptions to the General Rule. The Government and the contractor may agree to a special allocation of IR&D/B&P project costs if a particular segment (home office level) or final cost objective (business unit level) would receive significantly more or less benefit than would be reflected by allocations using the residual cost base (home office level) or G&A base (business unit level). The special allocation should reflect the benefits received. The IR&D/B&P pool must exclude the agreed-to special allocation, and the allocation base must exclude the segment or final cost objective receiving the special allocation.

Contracts Not Subject to 48 CFR 9904.420-50(e)(2) and 9904.420-50(f)(2). A contract is not subject to CAS 420 provisions for (1) home office IR&D/B&P allocation over the CAS 403 residual cost base, and (2) business unit IR&D/B&P allocation over the CAS 410 G&A base when:

- the contract is not CAS-covered or only subject to modified CAS coverage, and
- the contractor is not performing any other contract that requires compliance with CAS 420 when the contractor receives the award.

In this case, FAR 31.205-18(b) provides for:

- IR&D/B&P cost allocation over the base used to allocate the G&A expense pool of the profit center (unless the costs clearly benefit other profit centers or the entire company and are allocated through the G&A of the other profit center or the corporate G&A, as appropriate); and
- contracting officer approval a different base if allocations through the G&A base do not provide equitable allocations.
AUDIT GUIDELINES:

Document the contractor’s cost accounting practices for allocation of IR&D and B&P costs and compare them to the contractor’s submission. Compare the method used to the CAS 420 requirements for IR&D and B&P cost allocation. If the contractor has entered into agreements for special allocations, determine if the contractor properly classified the costs and allocated them in accordance with the advance agreement.

Frequently Asked Questions

1. When should the audit team begin testing whether contractors submitted the required IR&D project information to the DTIC database?

Answer: Consider testing for compliance after the contractor is required to input IR&D project information as a condition of allowability. Contractors normally should report the required information to the DTIC annually, therefore the information should be input prior to submitting their incurred cost proposal.

2. What types of errors or inconsistencies should be considered when looking at the DTIC database?

Answer: The audit team should test whether the contractor provided the required input to the DTIC database and whether the project description and other identifying information is consistent with IR&D project descriptions in the contractor's supporting documentation in the accounting records. If project descriptions in the DTIC database are not consistent with descriptions in the accounting records the audit team should bring errors or inconsistencies to the attention of the ACO.

3. Why would the amounts in the DTIC database be different from the costs incurred by the contractor?

Answer: In promulgating the DFARS change, the DoD did not intend to require reporting of actual project costs. The DTIC instructions require the contractor to provide the “approximate dollars to be spent in the Fiscal Year.” Therefore, we would not expect the amounts to reconcile with incurred costs.

4. If the IR&D project cost is unallowable because the contractor failed to submit the required data to the DTIC, is the unallowable cost subject to penalties in accordance with FAR 42.709?

Answer: No, DFARS 231.205-18(c)(iii)(C) states: “For a contractor's annual IR&D costs to be allowable, the IR&D projects generating the costs must be reported to the Defense Technical Information Center (DTIC)...”; The cost principle does not explicitly identify the costs as unallowable if the contractor failed to submit the required data to DTIC. One may infer the costs are unallowable, however as it is not specifically stated in the cost principle, they are not considered expressly unallowable. Thereby the costs are not subject to the penalty provision of FAR 42.709-1.
5. Should the audit team establish dual rates if they question significant IR&D costs related to the DTIC reporting requirement, and the contractor allocates the IR&D costs under audit to contracts subject to DFARS, and others not subject to DFARS?

**Answer:** The audit team may report dual rates if the auditor questions IR&D cost because the contractor did not report IR&D projects to the DTIC, as required, and the contractor allocates significant IR&D to some contracts subject to, and others not subject to, the DFARS. The audit team should include information in the audit report note on the applicability of significant questioned costs to particular contracts.

**Call Out**

**IR&D Performance of a Contract** – FAR 31.205-18 and CAS 420 definitions exclude costs directly allocable to cost objectives from IR&D and B&P. (Return)

**Manufacturing and Production Engineering** - See FAR 31.205-25 for definition and allowability of Manufacturing and Production Engineering costs. (Return)

**B&P Performance of a Contract** - FAR 31.205-18 and CAS 420 definitions exclude costs directly allocable to cost objectives from IR&D and B&P. (Return)

**48 CFR 9903.202** - contains regulations describing the timing and content of Disclosure Statements, including the required format on CASB Forms DS-1 and DS-2. (Return)

**48 CFR 9903.201-4** - If the contractor is required to submit a Disclosure Statement, the clauses stated the disclosed practices include "methods of distinguishing direct costs from indirect costs and the basis used for accumulating and allocating in costs." (Return)

**Cooperative Arrangements** - FAR 31.205-18(e) lists examples of cooperative arrangements: joint ventures, limited partnerships, teaming arrangements, and collaboration and consortium arrangements. (Return)

**Other Equivalent Authority** - A cooperative agreement with an "other equivalent authority" applies to any cooperative research and development agreement or similar arrangement entered into under a statutory authority. (Return)

**Fixed Price Contract/Subcontracts without Incentives** - Most commonly, exclude firm-fixed-priced contracts from "covered contracts," but also exclude fixed-priced contracts subject to adjustments not related to cost incentives such as economic or level-of-effort price adjustments. (Return)

**Accounting System Deficiency** - As with any accounting system deficiency, the finding must be properly developed to show it is systemic and a material weakness. (Return)
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**FAR 31.205-18(b)(2) excerpt:** However, non-CAS-covered or modified CAS-covered contracts awarded at a time the contractor has CAS-covered contracts requiring compliance with 48 CFR 9904.420, shall be subject to all the requirements of 48 CFR 9904.420. (Return)

**CAS 420** - requires home office allocation of IR&D and B&P to segments over the same base used to allocate residual costs under CAS 403 unless the contractor and Government agree to a special allocation. (Return)

**CAS 420** - requires segment allocation of IR&D and B&P to final cost objectives over the same base used to allocate G&A expense under CAS 410 unless the contractor and Government agree to a special allocation. (Return)

**FAR 31.205-18(b)(2)** - Unless a project clearly benefits other profit centers or the entire company, or the ACO approves a different base, IR&D and B&P are allocated to final cost objectives over the G&A base of the profit center incurring the cost. (Return)

**Definitions**

**Teaming Arrangements** - An arrangement between two or more companies, either as a partnership or joint venture, to perform on a specific contract. See Chapter 37 for more information on Teaming Arrangements. (Return)

**Business Unit** - 48 CFR 9904.420(a): Business unit means any segment of an organization, or an entire business organization which is not divided into segments. (Return)

**Segment** - 48 CFR 9904.420(a): Business unit means any segment of an organization, or an entire business organization which is not divided into segments. (Return)

**Covered Segment** - DFARS 231.205-18(a) - a product division of the contractor that allocated more than $1.1 million in IR&D and B&P to covered contracts during the preceding fiscal year, or the contractor as a whole if there are no product divisions. (Return)