

# PGI 216.104-70 Research and development.

(1) *General.* There are several categories of research and development (R&D) contracts: research, exploratory development, advanced development, engineering development, and operational systems development (see DFARS [235.001](#) for definitions). Each category has a primary technical or functional objective. Different parts of a project may fit several categories. The contract type must fit the work required, not just the classification of the overall program.

(2) *Research and exploratory development.*

- (i) Price is not necessarily the primary factor in determining the contract type.
- (ii) The nature of the work to be performed will usually result in a cost-plus award fee, cost-plus fixed fee term, cost-no-fee, or cost-sharing contract.
- (iii) If the Government and the contractor can identify and agree upon the level of contractor effort required, the contracting officer may select a firm fixed-price level-of-effort contract, except see DFARS [235.006](#).
- (iv) If the Government and the contractor agree that an incentive arrangement is desirable and capable of being evaluated after completion of the work, the contracting officer may use an incentive type contract.

(3) *Advanced development.*

- (i) The nature of the work to be performed often results in a cost-plus fixed fee completion type contract.
- (ii) Contracting officers may select incentive contracts if—
  - (A) Realistic and measurable targets are identified; and
  - (B) Achievement of those targets is predictable with a reasonable degree of accuracy.
- (iii) Contracting officers should not use contracts with only cost incentives where—
  - (A) There will be a large number of major technical changes; or
  - (B) Actions beyond the control of the contractor may influence the contractor's achievement of cost targets.

(4) *Engineering development and operational systems development.*

- (i) When selecting contract types, also consider—
  - (A) The degree to which the project is clearly defined, which in turn affects the contractor's ability to provide accurate cost estimates;
  - (B) The need for effort that will overlap that of earlier stages;
  - (C) The need for firm technical direction by the Government; and
  - (D) The degree of configuration control the Government will exercise.
- (ii) For development efforts, particularly for major defense systems, the preferred contract

type is cost reimbursement.

(iii) Contracting officers should use fixed-price type contracts when risk has been reduced to the extent that realistic pricing can occur; e.g., when a program has reached the final stages of development and technical risks are minimal, except see DFARS [235.006](#).

**Parent topic:** [PGI 216.104 Factors in selecting contract type](#).