

APPENDIX C

TYPES OF CONTRACTS - A COMPARISON AND SUMMARY

Fixed-price (greatest risk on contractor)

Firm-fixed-price (FFP)	Fixed-price with economic price adjustment	Fixed-price Incentive (FPI)	Fixed-price with redetermination (FPR)
<p>Application and essential elements</p> <p>Reasonably definite design or performance specification available.</p> <p>Fair and reasonable price can be established at outset.</p> <p>Conditions for use:</p> <p>Prior purchase experience of the same or similar supplies or services under competitive conditions.</p> <p>Valid cost or pricing data.</p> <p>Realistic estimates of proposed cost.</p> <p>Any other reasonable basis for pricing that can be used to establish fair and reasonable price.</p> <p>Possible uncertainties in performance can be identified and costed.</p> <p>Contract or willing to accept contract at a level that causes it to take all financial risks.</p>	<p>Application and essential elements</p> <p>Unstable market or labor conditions during the production period and contingencies that would otherwise be included in the contract price can be identified and made the subject of a separate price adjustment clause.</p> <p>Contingencies must be specifically defined in contract.</p> <p>Provides for upward adjustment (with ceiling) in contract price.</p> <p>May provide for downward adjustment if price of escalated segment has potential of falling below the limits established in the contract.</p> <p>Three general types of adjustments:</p> <p>Adjustments based on established prices.</p> <p>Adjustments based on actual costs of labor or material.</p> <p>Adjustments based on cost Index of labor or material.</p> <p>FAR clauses: 52.216-2 52.216-3 52.216-4.</p>	<p>Application and essential elements</p> <p>Cost uncertainties exist, but there is potential for cost reduction and/or performance improvement by giving contractor a degree of cost responsibility and a positive profit incentive.</p> <p>Profit is earned, or lost, on the basis of relationship that contract's final negotiated cost bears to total target cost.</p> <p>Contract must contain target cost, target profit, ceiling price, and profit-sharing formula.</p> <p>There are two forms of this contract: firm target (FPIF) and successive targets (FPSIS).</p> <p>Firm target: Firm target cost, target profit, and profit-sharing formula are negotiated into basic contract, profit is adjusted upon contract completion FAR 16.403-1.</p> <p>Successive targets: initial cost and profit targets are negotiated into contract, but final cost target (firm) cannot be negotiated until sometime during performance. Contains production point(s) at which either a firm target, and final profit formula, or a fixed-price contract, can be negotiated FAR 16.403-2.</p> <p>Incentives may be for cost, technical performance, and/or delivery.</p>	<p>Application and essential elements</p> <p>There are two forms of this contract:</p> <p>Prospective: Used when It is possible to negotiate a fair and reasonable price or an initial period of performance but not for entire contract period.</p> <p>Contract is FFP at the start At a specific time(s) during performance, the contract price is redetermined either upward or downward.</p> <p>A price ceiling, if appropriate, should be negotiated into the original contract.</p> <p>Retroactive: Used when realistic fixed price cannot be negotiated initially, or when contract amount is so small, or time so short that any other contract type would be impractical.</p> <p>Realistic ceiling price is negotiated into original contract, and final price is negotiated after contract is completed</p> <p>FAR clauses 52.216-5, 52.216-6.</p>
<p>Limitations/Advantages</p> <p>Price not subject to adjustment regardless of contractor performance costs.</p> <p>Places 100 percent of financial risk on contractor.</p> <p>Places least amount of administrative burden on contracting officer.</p> <p>Preferred over all other contract types.</p>	<p>Limitations/Advantages</p> <p>Price can be adjusted upward or downward upon action of an Industry wide contingency beyond contractor's control.</p> <p>Reduces contractor's fixed-price risk.</p> <p>Fixed-price with EPA is preferred over a cost-reimbursement contract</p> <p>If contingency materializes, the contract administration burden will increase.</p> <p>Used with negotiated procurements and in limited applications with sealed bidding when determined to be feasible.</p>	<p>Limitations/Advantages</p> <p>Requires adequate contractor accounting system.</p> <p>Contracting officer must determine that contract type is least costly and that award of any other type would be impractical.</p> <p>Government and contractor administrative effort is more extensive than under other fixed-price contract types.</p> <p>Used only with negotiated procurements.</p> <p>Billing price must be established for interim payment.</p>	<p>Limitations/Advantages</p> <p>For both: Contracting officer must determine that an FFP contract Will not satisfy requirement.</p> <p>Contractor's accounting system must be adequate for price redetermination.</p> <p>Prospective pricing period must be able to be made to conform to contractor's accounting period.</p> <p>Price must be redetermined promptly at time(s) specified.</p> <p>Redetermination must be done promptly upon contract completion</p> <p>Must establish ceiling price in the original contract that represents the contractor's assumption of reasonable degree of risk</p> <p>Requires approval, in writing, from the head of the contracting activity</p> <p>Used only with negotiated procurements.</p>
<p>Suitability</p> <p>Commercial products and commercial-type products, military items for which reasonable prices can be established, and services.</p>	<p>Suitability</p> <p>Commercial products and commercial-type products, military items for which reasonable prices can be established at time of award, and services.</p>	<p>Suitability</p> <p>Development and production.</p>	<p>Suitability</p> <p>Prospective: Quality production or services.</p> <p>Retroactive: Research and development of \$100,000 or less only.</p>
<p>Federal Acquisition Regulation</p> <p>FAR 16.202.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.203.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.403.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.205 (prospective) FAR 16.206 (retroactive).</p>

TYPES OF CONTRACTS - A COMPARISON AND SUMMARY (Continued)

Cost-reimbursement (greatest risk on Government)

<p>Cost-plus-award-fee (CPAF)</p>	<p>Cost-plus-incentive-fee (CPIF)</p>	<p>Cost-plus-fixed-fee (CPFF)</p>	<p>Cost and cost-sharing</p>
<p>Application and essential elements</p> <p>Contract completion is feasible. Incentives are desired but performance not susceptible to finite measurement. Not feasible to devise predetermined objective or target applicable to cost or schedule. Provides for subjective evaluation of contractor performance. Contractor is evaluated at stated time(s) during performance period. Contract must contain clear and unambiguous evaluation criteria to determine award fee.</p> <p>Award fee is earned for excellence in performance, quality, timeliness, ingenuity, and cost effectiveness and can be earned in whole or in part.</p> <p>Two separate fee pools can be established in contract: a base fee not to exceed 3 percent of the contract's estimated cost, and an award fee.</p> <p>The total award fee plus base fee cannot exceed the statutory limits shown in FAR 15.903: production and services (Includes A-E services)- 10 percent, and R&D-15 percent of estimated cost.</p> <p>Award fee earned by contractor determined by the contracting officer and is often based upon recommendation of an award fee evaluation board.</p> <p>10 U.S.C. 2306(d) 41 U.S.C. 254(b) FAR clause 52.216-7.</p>	<p>Application and essential elements</p> <p>Development of a major system has a high probability that it is feasible, and positive profit incentives for contractor management can be negotiated.</p> <p>Performance incentives must be clearly spelled out and objectively measurable.</p> <p>Fee range should be negotiated to give the contractor an incentive over various ranges of cost performance.</p> <p>Fee is adjusted by a formula negotiated into the contract in accordance with the relationship that total allowable cost bears to target cost.</p> <p>Total fee cannot exceed the statutory limits shown in FAR 15.903: production and services - 10 percent, and R&D- 15 percent of estimated cost.</p> <p>Contract must contain target cost, target fee, minimum and maximum fees, and fee adjustment formula.</p> <p>Fee adjustment is made upon completion of contract</p> <p>FAR clause 52216-7 10 U.S.C. 2306(c), 2310(b) 41 U.S.C. 254(b).</p>	<p>Application and essential elements</p> <p>Level of effort is unknown, and contractor's performance cannot be subjectively evaluated.</p> <p>Provides for payment of a fixed fee. Contractor receives fixed fee regardless of the actual costs he incurs during performance.</p> <p>Can take two basic forms:</p> <p>Completion form: Clearly defined task with a definite goal and specific end product.</p> <p>Term form: Scope of work described in general terms. Contractor obligated only for a specific level of effort for stated period of time</p> <p>Completion form is preferred over the term form whenever milestones can be defined well enough to develop estimates.</p> <p>Term form requires the contractor to perform at specific level for a definite period.</p> <p>Government can order more work without an increase in fee, providing the contract estimated cost is increased. Fee reexpressed as percentage of estimated cost at time contract is awarded</p> <p>Maximum fee limits are provided in FAR 15.903. They are production and services-10percent, and R&D-15 percent. These fee limitations are the same for all cost-reimbursement contracts.</p>	<p>Application and essential elements</p> <p>Cost: Typically, for R&D with nonprofit organizations or educational institutions, and facilities contracts.</p> <p>Cost-sharing: R&D projects jointly sponsored by Government and contractor, where contractor contemplates a commercial benefit that it accepts in lieu of fee.</p> <p>Government pays costs in accordance with Cost Accounting Standards and FAR 31.201. No fee is paid.</p> <p>Must present evidence that there is a high probability that the contractor will receive substantial present or future commercial benefits.</p>
<p>Limitations/Advantages</p> <p>Weighted guidelines will <u>not</u> be used to determine either base or award fee.</p> <p>Government's determination of amount of award fee earned by the contractor is not subject to <i>Disputes</i> clause.</p> <p>CPAF contract cannot be used to avoid CPIF or CPFF types if either is feasible.</p> <p>Should not be used if the amount of money, period of performance, or expected benefits are insufficient to warrant additional administrative effort.</p> <p>Very costly to administer. Contractor must have an adequate accounting system for determining costs.</p> <p>Used only with negotiated procurements.</p> <p>Determination and findings required.</p>	<p>Limitations/Advantages</p> <p>Difficult to negotiate range between the maximum and minimum fees to provide an incentive over entire range.</p> <p>Performance must be objectively measurable.</p> <p>Costly to administer.</p> <p>Used only with negotiated procurements.</p> <p>(See FAR 16.301-3.)</p> <p>Appropriate Government surveillance during performance to ensure effective methods and efficient cost controls are used.</p> <p>Determination and findings required.</p> <p>Contractor's accounting system must be adequate to determine costs.</p>	<p>Limitations/Advantages</p> <p>Contractor has minimum incentive to control costs.</p> <p>Normally not used for development of major weapons systems once initial exploration contract has determined project feasibility</p> <p>Costly to administer.</p> <p>Contractor must have an adequate accounting system.</p> <p>Least preferred type because contractor assumes no financial risk</p> <p>Used only with negotiated procurements.</p>	<p>Limitations/Advantages</p> <p>Used only when uncertainties involved make it impossible to use a fixed-price contract.</p> <p>FAR 16.301-3</p> <p>Use only when-</p> <ul style="list-style-type: none"> Contractors accounting system is adequate to determine applicable costs. Government surveillance during performance will provide assurance that cost controls are used. A determination and findings has been executed. <p>Used only with negotiated procurement</p> <p>FAR 15.903(d)</p> <p>Statutory fee limitations: 10 U.S.C. 2306(d) and 41 U.S.C. 254(b). Production and services- 10 percent, R&D-15 percent.</p> <p>(These limitations are the same for all cost-reimbursement contracts.)</p>
<p>Suitability</p> <p>Level-of-effort services that can only be subjectively measured and contracts for which work would have been accomplished under another contract type if performance objectives could have been expressed as definite milestones, targets, and goals susceptible of being actually measured.</p>	<p>Sortability</p> <p>Major systems development and other development programs where it has been determined that this contract type is desirable and administratively practical.</p> <p>Development and test programs when a target cost and a fee adjustment formula can be negotiated that are likely to motivate the contractor to manage effectively.</p>	<p>Suitability</p> <p>Completion form: Research or other development effort when the task can be clearly defined, a definite goal or target is expressed, and a specific end product is required.</p> <p>Term form: Research, preliminary exploration, or a study when the level of effort is initially unknown. Can be used for development and test when a CPIF is determined to be impractical.</p>	<p>Suitability</p> <p>R&D.</p> <p>Facilities (cost contract only).</p>
<p>Federal Acquisition Regulation</p> <p>FAR 16.404-2.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.404.1.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.306.</p>	<p>Federal Acquisition Regulation</p> <p>FAR 16.302 (cost) FAR 16.303 (cost sharing).</p>

TYPES OF CONTRACTS - A COMPARISON AND SUMMARY (Continued)

Other contractual devices (special uses)

<p>Time-and-materials (T&M)</p>	<p>Labor-hours (L-H)</p>	<p>Letter contract</p>	<p>Indefinite-delivery</p>
<p>Application and essential elements</p> <p>A T&M contract maybe used only when it is not possible at the time of placing the contract to estimate accurately the extent or duration of the work or to anticipate costs with any reasonable degree of confidence.</p> <p>Calls for provision of direct labor hours at specified hourly rates and materials at cost (or some other basis specified in contract).</p> <p>Ceiling price established at time of contract award.</p>	<p>Application and essential elements</p> <p>A variant of T&M contract differing only in that materials are not furnished by contractor.</p> <p>Often used in conjunction with other contract types.</p>	<p>Application and essential elements</p> <p>Gets contractor going quickly.</p> <p>Interest of national defense demands that contractor be given binding commitment so that work can commence immediately and not possible to negotiate definitive contract in sufficient time.</p> <p>Letter contracts shall contain expected dates for contractor's proposal and start of negotiations, and also a contract definitization tar et date (all within 180 days or before 40 percent of the work is complete, whichever comes frst). In extreme cases, additional time may be authorized FAR clause 52.216-25.</p> <p>Government's maximum liability shall not exceed 50 percent of total estimated cost of procurement.</p> <p>Contract contains ceiling price.</p> <p>Requires completion prior to award when such competition is practical.</p> <p>Clauses:</p> <p>FAR 52.216-23. Execution and Commence of Work. FAR 52.216-24. Limitation of Government Liability. FAR 52.216-25. Contract Definitization. FAR 12.304 and FAR 52.212-7. Notice of Priority Rating for National Defense.</p>	<p>Application and essential elements</p> <p>The exact time and/or quantities of future deliveries are not known at time of contract award.</p> <p>There are three types of Indefinite-delivery contracts:</p> <p>Definite-quantity: Definite quantity of specified supplies or services for a fixed period. Deliveries or performance at designated locations, upon order. Supplies regularly available or after short lead time.</p> <p>Requirements: Fills all actual Government requirements for specified supplies or services of designated activites during specified contract period. Contract contains estimated total quantity, maximum limit of contractor's liability, and a limit to the Government's ordering obligation. Funds are obligated by each order and not by the contract</p> <p>Indefinite-quantity: Contractor provides, within stated limits, specified supplies or services during specified contract period. Contract contains a minimum Government obligation and a stated maximum order quantity. Funds are obligated for the minimum quantity only. Used when impossible to determine precise need and Government does not wish to commit to more than minimum quantity.</p>
<p>Limitations/Advantages</p> <p>Used only after the contracting officer executes determination and findings that no other contract the is suitable.</p> <p>Does not encourage effective cost control.</p> <p>Requires almost constant surveillance by Government to ensure effective contractor management.</p> <p>Used only with negotiated procurements.</p> <p>Ceiling price required in contract.</p>	<p>Limitations/Advantages</p> <p>Same as those for T&M contracts.</p>	<p>Limitations/Advantages</p> <p>Must have written determination that no other contract type is suitable.</p> <p>Must be superseded by definitized contract at earnest possible date.</p> <p>Maximum Government liability until definitization.</p> <p>Used only with negotiated procurements.</p> <p>Letter contracts shall not –</p> <ul style="list-style-type: none"> • Commit funds in excess of those available at the time of letter contract. • Be entered into without competition. • Be amended to satisfy a new requirement. 	<p>Limitations/Advantages</p> <p>Requirements: Flexibility in quantity an 3delivery schedule Orders placed only after need materializes.</p> <p>Indefinite-quantity: Flexible quantity and delivery schedule. orders placed only after need materializes Limited Government obligation Minimum stock levels maintained Direct shipment to users.</p> <p>Catalog or market prices are used.</p> <p>Used only with fixed-price contracts.</p> <p>FAR 16.202 FAR 16.203 FAR 16.205 FAR 15.804-3(c)</p>
<p>Suitability</p> <p>Engineering and design services in conjunction with the production of supplies, engineering, design and manufacture of dies, jigs, fixtures, gauges, and special machine tools; repair and maintenance and overhaul work to be performed in emergencies.</p>	<p>Suitability</p> <p>Used only for services.</p>	<p>Suitability</p> <p>Manufacture of supplies and performance of services, including production planning and procurement of necessary materials.</p>	<p>Suitability</p> <p>Commercial or modified commercial supplies or services when the need is recurring.</p>
<p>Federal Acquisition Regulation FAR 16.601.</p>	<p>Federal Acquisition Regulation FAR 16.602.</p>	<p>Federal Acquisition Regulation FAR 16.603.</p>	<p>Federal Acquisition Regulation FAR 16.501.</p>