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Feasibility Of Treating Contractors' Independent Research And Development Costs As A Budget Line Item B-164912

Department of Defense

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

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MARCH 8, 1971

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-164912

MAR 8 1971

Dear Senator Proxmire:

Reference is made to your letter of October 5, 1970, requesting our views as to the feasibility of converting contractors' independent research and development to a budget line item.

We have given this matter serious consideration. Based on our analysis we believe that a line-item control of independent research and development payments to major defense contractors can be developed using estimates based on historical data, together with the Department of Defense's estimate of the amount of research and development and procurement activity to be contracted. However, we suggest that no further legislative controls be imposed pending evaluation of the effect of the legislative restrictions that became effective January 1, 1971.

As you know, the recently enacted Section 203 of Public Law 91-441 requires the Department of Defense to establish certain controls over the payments for independent research and development to its major contractors and to provide the Congress with annual reports on the payments made. Although this law does not contain all of the limitations on independent research and development that were embodied in your bill or in the Senate procurement bill, it does contain certain restrictions on payments for independent research and development that may achieve results comparable to those sought to be obtained through a line-item control mechanism.

For example, the law now requires that a report be made to the Congress by March 15 of each year showing statistics for companies that received payments from the Department of Defense for independent research and development (and bid and proposal) of more than $2 million. Thus, the Congress for the first time will be provided visibility of the extent of the Department's expenditures for independent research and development costs of major contractors, and therefore will have the means for deciding whether more or less restrictions are required.

In view of the recency of this legislation we believe it would be desirable to allow sufficient time--at least one year, preferably

two--for evaluating the law's impact before considering introduction of legislation to establish additional controls.

In this connection, we have been informed by officials of the Department of Defense that preliminary reports show that expenditures by major defense contractors for independent research and development declined during the past year. Comparison of the report to be submitted to the Congress by March 15, 1971, with data for previous years should show the trend of expenditures and should assist in determining whether additional controls may be necessary.

During our study of this matter we prepared a paper (appendix I) describing (1) the present system for allowing independent research and development as a contract cost and (2) a system which we believe would enable line-item control. We asked officials of the Office of the Secretary of Defense for their views on our proposal. In a letter dated December 19, 1970 (appendix II), the Assistant Secretary of Defense (Installations and Logistics) objected vigorously to the suggested system. He described several problems which he believes would be created by imposition of such a system and he contended that implementation of a line-item control could have a serious adverse impact on the technological base of this country.

Although we agree with his position that line-item control of independent research and development would lead to additional administrative burden, we believe such control can be established. If such control is determined to be necessary, we suggest that a system change of this magnitude be tested on a trial basis before legislation is proposed requiring its implementation on a broad scale. Our analysis of the views expressed by the Assistant Secretary is included in appendix III.

We hope this information will serve the purposes of your request. If we can be of further assistance to you in this matter, please let us know. We plan to make no further distribution of this letter unless specifically requested, and then copies will be distributed only after your approval has been obtained or public announcement has been made by you concerning the contents of this letter.

Sincerely yours,

Elmer B. Staats

Comptroller General
of the United States

The Honorable William Proxmire
United States Senate

GAO VIEWS ON FEASIBILITY OF LINE-ITEM CONTROL OF INDEPENDENT RESEARCH AND DEVELOPMENT

DEFINITIONS

In this paper, "line item" is intended to mean a congressionally approved aggregate limitation or limitations that may not be exceeded by the agency or agencies responsible for controlling the applicable appropriated funds. Also, the term "independent research and development (IR&D)" is construed in its broadest sense--it includes bid and proposal (B&P) costs and costs of other technical efforts that are closely related to either IR&D or B&P costs.

PRESENT SYSTEM FOR ALLOWING IR&D AS A CONTRACT COST

At the present time IR&D is considered by the Department of Defense (DOD) as an indirect cost (overhead item). Contractors doing business with DOD accumulate IR&D costs in various overhead accounts and allocate them by various methods to the work they perform for both Government and commercial clients. DOD generally allows such costs to be charged to its contracts if properly allocated and reasonable in amount.

In determining reasonableness of these overhead costs for contractors or their divisions whose work is predominantly or substantially with the Government, DOD has for many years attempted to negotiate advance agreements setting out the maximum amount of IR&D to be recognized as an overhead cost allocable to all of the contractor's activities. Section 203, Public Law 91-441, requires that, beginning January 1, 1971, such advance agreements shall be negotiated for

companies which received from DOD more than $2 million of IR&D and B&P during the preceding year, or for product divisions of such companies which received more than $250,000 during the preceding fiscal year. DOD is planning to expand this requirement to cover the top 100 Defense contractors. DOD estimates that this will cover over 85 percent of the total amount of IR&D costs absorbed under DOD contracts.

In preparation for advance agreements, the contractors are required to submit brochures describing the IR&D work planned. Section 203 requires that DOD make a technical evaluation of the contractor's IR&D plans. Such evaluation will also serve to determine whether there is a potential relationship of the IR&D project to a military function or operation as required under Section 203.

PROPOSED SYSTEM

We believe that a line-item control for IR&D would be feasible if the limitation is restricted to payments to the larger companies, and if for these same companies IR&D is paid directly under a special contract rather than as an allocated overhead charge under various contracts. It would be extremely difficult, if not impossible, to adequately administer a line-item limitation for any segment of overhead because some type of control would have to be developed to accumulate data on costs allocated to each of thousands of procurement contracts.

In lieu of the overhead advance agreements described above, annual special contractual agreements could be negotiated with the

larger companies providing for direct payment (up to a ceiling) of the appropriate share of the contractor's IR&D. The special agreement for IR&D would be negotiated in a manner similar to the present advance agreements with major contractors and would continue to permit the contractor to conduct IR&D in the manner and to the extent he deems advisable. However, the special agreements would provide for direct payments by DOD to the contractor for up to the agreed amount, rather than establishing an amount acceptable for inclusion in the contractor's overhead allocable to all of his customers which then must be distributed to all of his contracts. The special agreements also would provide that IR&D would be excluded from charges for costs under the contractor's regular negotiated contracts with DOD.

The agreement for IR&D would, in effect, provide for payment of a proportionate share of the actual costs of the contractor's IR&D program not in excess of the agreed ceiling. The agreement also would provide that the payment may not exceed the total costs of IR&D work which, in the opinion of the Secretary of Defense, has a potential relationship to a military function or operation.

The DOD share of the contractor's IR&D program would be based on the ratio of the contractor's negotiated contract activity for DOD compared to the contractor's total workload. Inasmuch as the actual ratio cannot be determined until the end of the year, the proportionate share could be determined on the basis of the ratio for the most recent year completed at the time the contractor's proposed IR&D program is submitted for evaluation. To avoid additional

administrative effort and to enable orderly planning by the contractor, the proportionate share so determined should not be changed even though the actual ratio may differ from the ratio used in determining this share. If the actual ratio differs substantially, DOD might consider its effect as a factor in negotiating the special agreement for the following year.

Those contractors who do not come within the category of "major defense contractors" would continue to be reimbursed for the allocable share of their IR&D costs through distribution of overhead costs, as is presently done. Because of the smaller amounts involved, the IR&D programs of these contractors are not subject to technical evaluation by DOD. Those "major" contractors who prefer similar treatment could be offered the option of limiting their allocable IR&D charges to DOD contracts to a stipulated maximum (perhaps $2 million as the law presently indicates for other than major contractors). Otherwise, "major" contractors would be required to enter into the special contract agreements for IR&D. As a practical matter, it is unlikely that many major contractors would refuse to enter into the special agreements in view of the significant difference in cost recovery.

BUDGET PRESENTATION

In its annual budget request, DOD would set out the amount or amounts for the proposed payments of IR&D to its major contractors. The budget line-item proposal would be developed based in part on historical data. Section 203, Public Law 91-441, requires annual reporting of the latest available Defense Contract Audit Agency

statistics on IR&D or B&P payments to major defense contractors. Similar data is available for the past seven years. Such data, together with DOD's estimate for the amount of research and development and procurement activity to be contracted for, should provide a realistic basis to DOD for estimating the amount to be set out as a line item for the IR&D of major contractors. The budget back-up would explain any significant changes anticipated by DOD in the ratio of the IR&D estimate to the contract work estimate.

At present, IR&D is included without identification in the budget as a part of the appropriations for research, development, test and evaluation (RDT&E), procurement, and operations and maintenance for each of the military services and the Defense agencies. To facilitate control and to eliminate the work involved in making extensive cost allocations to the numerous appropriations, it would be preferable to include the amount authorized for IR&D of major contractors as a part of only one of these appropriations. This appropriation would be used to fund the payments to each major contractor for the agreed share of his IR&D, as distinguished from payments made from the various appropriations for contract work performed.

A reduction in the amounts otherwise requested to be appropriated for DOD would, of course, be warranted corresponding to the amount(s) specifically requested to be appropriated for IR&D.

CONGRESSIONAL ACTION

The data presented by DOD in its budget submission, as explained above, should provide the Congress with good visibility of the basis

for the estimated IR&D costs for major contractors. This should enable the Congress to be in a position to judge the propriety of the requested line-item amount.

The proposed line-item amount should, in our opinion, be considered by the Congress in conjunction with the total of the RDT&E appropriations. The activities carried out by contractors under their IR&D programs are closely related in nature to research and development work performed under Government contracts or in Government laboratories. If DOD's costs for participating in IR&D programs and its costs for direct RDT&E activities are considered as a package, the Congress would obtain a clearer picture of the total current expenditures authorized for research and development.

COMPLIANCE AND CONTROL BY DOD

The total amount of the planned IR&D programs for major contractors which DOD can determine to be reasonable and potentially relevant to a military function or operation obviously will not be known until all of the programs have been received and evaluated by DOD. When such determination has been made, the DOD would be in a position to gauge whether its share of such amount would be within the line-item limitation, or whether reductions will be needed. Consequently, it would be necessary for DOD to arrange for early submission and evaluation of major contractors' IR&D programs.

In order to permit continuation of IR&D efforts at the level authorized by Congress, it may be desirable to stipulate in each agreement that the amount payable by DOD may be increased at DOD's option, under specified conditions, to the extent funds are available

within the line-item limitation. For example, if because of the appropriation limitation, DOD is unable to agree to support its full proportionate share of a contractor's IR&D program even though technical evaluation shows that the program is considered desirable and DOD-oriented, upward adjustment of the ceiling may be warranted if DOD determines that the full amount authorized for IR&D under the appropriation line-item will not otherwise be spent. This may provide an incentive to the contractor to continue IR&D efforts beyond the amount that DOD has agreed to support, but would assure that the amount of DOD funds spent for IR&D would remain within the limitation.

EFFECT ON OTHER AGENCIES

The implementation of line-item control of IR&D applicable to DOD would probably create some additional burden on other Government agencies which negotiate contracts with major defense contractors, particularly the National Aeronautics and Space Administration (NASA).

At present NASA participates with DOD in the negotiation of advance agreements on IR&D, and such agreements are considered to be applicable to NASA, as well as DOD contracts. If special agreements are negotiated by DOD for direct payment of IR&D such agreements would not have any effect on NASA, and separate agreements would be required. Inasmuch as the negotiations leading to the IR&D special agreements would be similar to those presently used for advance agreements, it does not seem that the execution of separate agreements for NASA's participation in IR&D should require extensive time and effort.

NASA was asked to review our proposal for line-item control and to comment on problems it might present. A NASA official replied informally that his agency felt that a line item control would cause them problems that they do not now have, but until they know what DOD's procedures would be they could not reasonably evaluate the impact.

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

INSTALLATIONS AND LOGISTICS

B-164912

19 DEC 1970

Honorable Elmer B. Staats
Comptroller General of the United States
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Staats:

Recently, members of your staff furnished to us draft copies of a GAO Study titled "Feasibility of Line-Item Control of IR&D." I understand that this study was prepared at the request of Senator Proxmire. The paper describes a method of establishing budget line-item control which requires very significant changes from past practices that have been followed by the Government and Industry. There is no evidence that any in-depth study has been made of the impact. Yet, the report gives the impression that the approach is simple to administer, assures equitable treatment to contractors, provides good visibility of IR&D and B&P costs and, in the opinion of the GAO, is feasible. There is no evidence that the detailed analysis required to support these claims has been undertaken.

In the short time we have had to consider this proposal we have found a number of problems. I would like to touch briefly on some of these.

Budget Planning

The GAO paper expresses the view that a realistic line item amount could be established for IR&D and B&P using historical data on payments to contractors and relating this to the procurement budget. Such an approach is no more than a projection of historical costs without consideration of the value of the effort that is to be supported. In addition, for budget purposes, our latest data would have to be projected two years in advance. We believe that it is unrealistic to expect Congress to approve such a line item without some detail as to the projects that are to be supported. At the same time, we believe it is unrealistic to expect that contractors can furnish valid information two years in advance on IR&D projects to be performed. If they are required to do so, it is inevitable that they will find it increasingly more difficult to depart from "approved" projects and contractor initiative will disappear. With respect to B&P projects, advance information could not possibly be furnished.

Comparison of an IR&D and B&P line item with the Defense procurement budget is also an inappropriate approach because such a comparison is not valid. Items in the Defense budget will be placed on contracts to be performed over a period of several years. The IR&D/B&P line item is to be expended in the fiscal year for which it is appropriated. The proposed comparison should therefore be made with contractors' sales to the DoD in an appropriate fiscal year. This figure is not readily available until the year is near its end. Even if it were proper to compare the IR&D/B&P line item to the procurement budget we would have the problem of determining that portion of new procurement dollars that would be awarded to contractors who had been selected for negotiation of advance agreements and we would need to know the dollar amount of their new contracts that would be performed in house and the amount to be performed by subcontractors who were not on the advance agreement list. The difficulty of this task is apparent when you consider that at this point in time we would not know what contractors would be successful in capturing the new awards.

Advance Agreement Negotiations

The fiscal year used by most contractors is the calendar year. The Government's fiscal year begins with July. The GAO plan provides for the IR&D/B&P line item to be expended during the Government's fiscal year. This would require advance agreements to be negotiated with two six-month ceilings. The problems this may cause require investigation. Advance agreements would have to provide for after the fact negotiation to adjust for changes in the business mix between DoD and other customers since this can only be estimated at the outset. This would substantially increase administrative effort.

Other Administrative Problems

Present contracts have all been negotiated under existing law and the ASPR. These contracts would still recover IR&D and B&P costs in overhead. Until they phased out over a period of several years they would not be affected by the proposed line item approach. This would present problems in budgeting, negotiating ceilings and segregation of costs. None of these problems have been considered in the GAO proposal.

Effect on Competition

The impact of the proposed plan on competitive awards presents a major problem that would have to be resolved before such an approach could be considered. Payment of IR&D and B&P as a direct cost removes

these costs from the overhead accounts of those contractors subject to the proposed control. This means that in competitive situations, these contractors would be relieved of this burden and would be able to quote lower prices than companies who do not have advance agreements; or, conversely, would receive duplicate recovery of IR&D and B&P costs. The proposal does not indicate how this would be handled.

IR&D plays an important part in maintaining the technological base of this country and careful consideration is imperative before any revolutionary changes are made that could have a serious adverse impact. There is no indication that the GAO proposal is supported by anything approaching the type of in-depth study required. Yet it infers that the proposed line item approach is feasible and desirable. I urge that a report of this nature, with its inferences, not be furnished the Congress or anyone else. I would also suggest that a complete in-depth study of this vitally important matter be conducted before any conclusions or recommendations are made.

Sincerely,

Barry J. Shillito

BARRY J. SHILLITO
Assistant Secretary of Defense
(Installations and Logistics)

GAO COMMENTS ON ASSISTANT SECRETARY OF DEFENSE LETTER OF DECEMBER 19, 1970, ON INDEPENDENT RESEARCH AND DEVELOPMENT

The Assistant Secretary refers to our line-item proposal as being a revolutionary change, and suggests that a complete in-depth study be made before considering it for implementation. He also commented on several problems that he felt would result from establishing a line-item control on IR&D.

BUDGET PLANNING

DOD believes that presenting a budget item based on historical data would not take into consideration the value of the IR&D effort to be supported; that the Congress would not approve a line item without some detail of the projects to be worked on by the contractors; that the contractors could not realistically predict in advance the content of projects to be performed during the budget year; that if required to submit such data, contractors would hesitate to depart from their planned IR&D programs, and thus would lose their initiative; and that advance information on bid and proposal projects could not possibly be furnished.

We recognize that a line item in DOD's budget covering the IR&D costs to be reimbursed to contractors must necessarily be based on estimates and cannot be supported by a detailed listing of contractors showing the precise amounts to be paid each contractor. However, we

believe that the historical data now available showing the total costs to DOD for supporting IR&D programs of major contractors during the past seven years should serve as a realistic base for projecting the line-item estimate for the next budget year. While such back-up support may not be as detailed as the normal support for budget line items, we believe the information would be useful to the Congress inasmuch as it should present an understandable and verifiable basis for the amount proposed. Although we cannot predict that such information would be acceptable to the Congress as support for the budget line item, we believe it may suffice under the circumstances.

DOD also questions the validity of comparing a proposed line-item amount for IR&D with the Defense procurement budget. Although many of the problems and points discussed by DOD in raising this question appear to be valid, it seems to us that DOD is suggesting that we are proposing much more preciseness in justifying an IR&D line item than exists in justifications for other portions of the Defense budget. There obviously is a relationship between IR&D and the procurement budget and all we are suggesting is that the best information available and the best estimates of contractual activity that can be made, using historical and other data, be presented to the Congress for use in its deliberations.

ADVANCE AGREEMENT NEGOTIATIONS

DOD says that because most contractors use the calendar year as their fiscal year, whereas the Government fiscal year begins with July,

the special IR&D contractual agreements would have to be negotiated with two 6-month ceilings.

If the special IR&D contractual agreements were to be negotiated on the basis of the contractor's fiscal year (apparently the calendar year for most contractors) DOD's comment would appear to be valid. Under such circumstances, DOD could not enter into a contract covering the contractor's IR&D program for the second half of the calendar year until funds covering that period of time had been appropriated by the Congress. While the special contractual agreements would be similar in many respects to the advance agreements presently negotiated with major contractors, a significant difference would be that they would cover the contractor's IR&D program to be conducted during the Government's, rather than the contractor's, fiscal year. This would preclude the need for two 6-month ceilings.

We believe that the contractors would be able to prepare a proposed program to be implemented during the Government's fiscal year even though their planning in the past may have been on a calendar-year basis. Actually, IR&D programs are generally planned by contractors on a long-range basis--two or more years--and, therefore, the contractors should not have great difficulty in preparing a plan for the Government's fiscal year.

DOD also says that increased administrative effort would be required by the need for after-the-fact negotiation to adjust for changes in the contractor's business mix between DOD and other customers. This comment was prompted by the draft proposal reviewed by DOD which suggested that

the proportionate share of a contractor's IR&D program to be paid by DOD be adjusted to conform to the actual ratio of Defense work to all of the contractor's work, in the same manner as presently followed.

In view of the administrative problems involved and to facilitate effective programming by the contractors, we have revised the suggested proposal to provide that once a special IR&D agreement has been negotiated, the contractor will be paid for the work performed using the proportionate share considered in negotiating the agreement. No adjustments of the share would be made if the mix of business changes during the year, but DOD should give consideration to the effects of such a change in negotiating the agreement for the following year.

OTHER ADMINISTRATIVE PROBLEMS

DOD states that there would be problems in budgeting, negotiating ceilings, and segregating costs due to the fact that present procurement contracts would continue to recover IR&D costs in overhead.

There undoubtedly will be problems encountered in converting from the present system to another, but such problems should be eliminated once the conversion is completed. In making the conversion, we believe the problems mentioned by DOD may be minimized through amendments to major contractors' current contracts eliminating amounts equivalent to the IR&D costs to be included in the special agreements. These contractors will probably find it essential to continue to receive substantial funds for IR&D from DOD in order to sustain their technological capability,

and should, therefore, be willing to adjust their current contracts in consideration of DOD's guarantee of additional financing.

EFFECT ON COMPETITION

DOD contends that contractors receiving direct payments of IR&D from DOD would have a competitive advantage as they would be able to quote lower prices than companies not having special IR&D agreements; or, conversely, such contractors receiving direct payments of IR&D could obtain duplicate recovery of IR&D.

We recognize that additional safeguards would be needed to preclude competitive advantages in bidding for Defense contracts. However, we believe the problems cited by DOD can be substantially avoided. IR&D costs generally represent a very small portion of a contractor's costs and, therefore, a small portion of his bid price. To the extent that the share of IR&D paid by DOD (which is based on the business mix of the preceding year) is greater than the actual DOD share, the contractor may have a slight competitive advantage. However, the share paid by DOD also could be lower than the actual. In any event, we believe that any competitive advantage would probably be minor.

Nevertheless, we agree that steps will be required to reduce or eliminate such advantage wherever possible. We believe there are ways to do this, but we doubt that it will be possible to ensure that companies are always bidding on precisely equal terms.

One procedure that could be adopted as a means of offsetting such competitive advantage so far as Government business is concerned would be to add a factor to the major contractor's bids to offset the amount of IR&D paid directly by DOD. This factor could be derived from the special IR&D agreement as it would be based on the ratio of the maximum DOD payment to the total estimated sales; in fact, to minimize administrative effort, it might be advisable to include in the special agreement the agreed factor for use in evaluating any bids presented by the contractor during the following year.

While use of a factor to enable equitable comparison of bids would entail some additional administrative effort, we believe it should not be too difficult inasmuch as a similar technique is used by DOD in other situations, such as in evaluating bids of companies, some of which have Government-owned property or equipment at their disposal.

EFFECT ON TECHNOLOGICAL BASE

In the last paragraph of his letter, the Assistant Secretary states that "IR&D plays an important part in maintaining the technological base of this country and careful consideration is imperative before any revolutionary changes are made that could have a serious adverse impact."

We understand that the basis for this statement is DOD's concern that through the line-item method Congress would gradually impose further controls that would lead to the elimination of the independence of

contractors in selecting work projects and eventually cause a drying up of this source of new technology.

We cannot, of course, predict what the Congress may do in the future. It is our view that a budget line-item method as suggested would not affect the contractor's independence in selecting work projects to any greater degree than the advance agreement method required under Section 203 of Public Law 91-441. Under current procedures, the contractor determines the research and development projects he wishes to pursue in his IR&D program. This procedure would not be affected under the suggested line-item method.