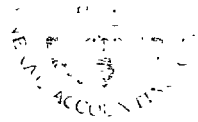


~~4.14.71~~



ARMED SERVICES
UNITED STATES SENATE

095888

~~74-0339~~



LM095888

Department Of Defense's
Implementation Of Section 203,
Public Law 91-441,
Involving Contractors' Independent
Research And Development

B-164972

Department of Defense

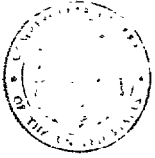
BY THE COMPTROLLER GENERAL
OF THE UNITED STATES

BEST DOCUMENT AVAILABLE

702008

095888

MAY 1 1974



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

B-164912

The Honorable John C. Stennis
Chairman, Committee on Armed Services
United States Senate

\$ 01500

Dear Mr. Chairman:

In your letter of October 4, 1973 (app. 1), you asked us to continue our examination of contractors' independent research and development (IR&D), including followup on the recommendations in the report to you of April 16, 1973 (Payments for Independent Research and Development and Bid and Proposal Costs, B-167034).

We subsequently received a letter from the Chairman, Research and Development Subcommittee, Senate Committee on Armed Services, and the Chairman, Subcommittee on Priorities and Economy in Government, Joint Economic Committee, requesting a comprehensive review of the IR&D program. This review is in process and we plan to submit reports of our findings and recommendations to the Congress in time for the fiscal year 1976 authorization and appropriation cycle.

\$ 00508

70700708

This report basically updates the implementation of section 203 of Public Law 91-441, by the Department of Defense (DOD), including actions taken on recommendations in our April 1973 report. This report also summarizes the comments of Federal agencies on the desirability and practicability of extending DOD's IR&D policies to these agencies on a uniform basis Government-wide.

\$

IMPLEMENTATION OF SECTION 203

Section 203 requires, among other things, that DOD (1) not pay contractors for IR&D or bid and proposal (B&P) costs unless the work has a potential relationship to a military function or operation, (2) negotiate advance agreements to establish dollar ceilings with all companies that received more than \$2 million of IR&D or B&P payments from DOD in the preceding year, and (3) base the IR&D portion of the agreements on company plans that are technically evaluated by DOD before or during the fiscal year covered by the agreements.

Our April 16, 1973, report made seven recommendations to the Secretary of Defense to improve the implementation of these portions of section 203. During the first half of calendar year 1973, DOD issued a series of memorandums which provided new guidance to the services. The guidance included actions in all the areas covered by our recommendations, as follows:

- To bring about more consistent determination of potential military relationships, all services were directed to use the Air Force method. Although this guidance is presently in force, DOD advised us in February 1974 that new criteria for determining relevancy were being considered.
- DOD recognized the desirability of negotiating advance agreements before cost incurrence or early in the contractor's fiscal year and of seeking alternatives to solve the problems of untimely negotiations. The services were instructed to negotiate 3-year advance agreements to the extent practicable.
- Negotiators were directed to meet and exchange views toward achieving uniform values to be used in negotiating advance agreements to insure that all contractors are treated equitably. Major unsolved issues are to be submitted to DOD's Technical Evaluation Group or the IR&D Policy Council for resolution.
- Results of the technical quality evaluation of contractors' IR&D are to have a meaningful and traceable effect on the negotiated ceiling. The effect should be demonstrable. Each service is to use its own procedure as long as the desired effect is achieved.
- DOD encouraged the practice of maintaining negotiation files which show the rationale and effect of factors considered in establishing the ceiling.
- DOD eliminated a practice that violated its own regulations; i.e., negotiators requiring contractors to cost share by spending more than the program ceiling.
- As part of DOD's guidance to insure that all contractors are treated equitably, after-the-fact relevancy reviews are to be conducted as soon as reasonably possible after the close of the contractor's fiscal year.

The new guidance, if properly implemented, should improve the services' administration of IR&D and B&P programs. However, not enough time has elapsed since this guidance was issued for it to be sufficiently implemented to enable us to evaluate its effectiveness. DOD's IR&D Policy Council is considering DOD's policies and procedures and the need for further changes.

As you suggested, we asked DOD and industry associations (Council of Defense and Space Industry Associations (CODSIA)) for their opinions and recommendations. DOD believes that elevating the relevancy requirement to a Government-wide relevance test would be in the best interests of the Government. Industry officials, represented by CODSIA, also support a broader relevance test.

CODSIA believes that section 203 and DOD's implementation has repressed IR&D and B&P effort. It also believes that data indicating cost growth is misleading in that there has not been an increase in manpower expended. CODSIA states that it is costly and time consuming to prepare program brochures, go through technical evaluations and relevancy reviews, and conduct negotiations of advance agreements. It contends that B&P expenses, most of which are beyond its control, cannot be realistically subjected to the constraints of section 203.

See appendixes II and III for copies of DOD's and CODSIA's letters.

NEED FOR A UNIFORM GOVERNMENT-WIDE POLICY

You also asked us to obtain the positions of Federal agencies having research and development programs on extending DOD's IR&D policy to these agencies on a uniform basis Government-wide. We did so, principally through correspondence. We contacted DOD; the National Aeronautics and Space Administration; the Atomic Energy Commission; the Department of Transportation; the Department of Commerce; the Department of Health, Education, and Welfare; the Department of Housing and Urban Development; and the Environmental Protection Agency. We will be glad to provide you with copies of their comments if desired.

There is no unanimity among Federal agency officials on the need for a uniform Government-wide policy on IR&D and B&P nor on whether that policy should be an extension of the DOD policy. Some agencies do not look upon IR&D as a major procurement problem warranting special treatment. These agencies consider it a matter affecting only the defense/space/system-oriented agencies.

We concur with the recommendation of the Commission on Government Procurement that IR&D and B&P receive uniform treatment, Government-wide, with exceptions to be treated by an Office of Federal Procurement Policy.

A requirement that IR&D be relevant to each individual agency's needs is looked upon by some agencies as cumbersome to administer. Industry spokesmen also oppose such a requirement. If there must be relevancy, a requirement that the projects meet a Government need would be more acceptable to most agencies.

The Commission recommended that only contractor cost centers with more than 50 percent cost-type contracts be subject to an agency relevancy requirement. We do not agree but believe that all allowable projects should have a potential relationship to an agency function or operation in the agency head's opinion.

BEST DOCUMENT AVAILABLE

An executive agency task group is still studying the Commission's recommendations to arrive at a position on establishing a Government-wide policy on IR&D and B&P.

OTHER MATTERS

Small, fast-growing companies

In September 1973 we reported to DOD that a few small companies had received what they considered to be inequitable treatment in negotiations with DOD. Other small companies were expecting to encounter similar difficulties in the near future but hesitated to air them prematurely. We could not locate a significant number of instances when the reported situation had occurred.

DOD took the position that its regulations provide an adequate alternative to the formula approach, including provision for analyses to be used where small companies have not maintained adequate historical records. Also DOD does not believe it is a major problem but has alerted its procurement officials to the possibility of the situation arising. We plan to monitor the area.

IR&D data banks

We also performed work concerning DOD's IR&D data banks. Our report to the Commission in 1970 (Allowances for Independent Research and Development on Non-Negotiated Contracts--Issues and Alternatives, B-164912, Feb. 16, 1970), suggested that information on contractors' IR&D programs be recorded in a data bank to assist Government scientists and engineers in selecting research projects. DOD subsequently established such a data bank at the Defense Documentation Center (DDC). It is still in a trial period, which will end July 1, 1975.

The Army also has an IR&D data bank at its Missile Command in Huntsville, Alabama. The Command established this data bank in 1970 to satisfy the needs of its own scientists and engineers.

In August 1973 we informed the Secretary of Defense of the results of our study of the two banks. We concluded that there was duplication of data, limited use of banks' outputs, and low participation by contractors in providing input.

DOD expects that eventually no more than one IR&D data bank will be required, but the decision as to which bank it will be will not be made until after trial period for the DDC bank. Meanwhile DOD plans to continue improving both banks. It is conceivable that neither bank will prove to be desirable and economically possible to retain, but DOD does not believe this will be the decision.

We will be glad to provide you with copies of these reports to DOD.

CONCLUSIONS

Our work since our last report to you indicates that DOD is trying, through issuing new guidance, to improve the services' administration of IR&D and B&P. The effectiveness of its actions depends upon the implementation of the guidance by the services. Not enough time has elapsed for full implementation; consequently, we have not yet evaluated the effectiveness of DOD's action.

Concerning the need to revise section 203, the relevancy requirement continues to be the major area of criticism by industry and DOD. Industry would like to see the relevancy test dropped completely, but if there must be a test, industry would prefer that it be applied to the national interest rather than strictly to DOD. DOD also believes that a Government-wide test would be in the Government's best interests.

We have reported in the past that the relevancy requirement of the law is not clear as to criteria and intent. However, we doubt that it would be an improvement to revise the law to provide that IR&D and B&P for which DOD pays the costs be relevant to interests of the Federal Government. In our opinion, the relevancy requirement is only one aspect of the entire question of how contractors' IR&D and B&P programs should be treated by the Government.

An interagency task group, headed by a DOD official, is studying the recommendations on IR&D and B&P of the Commission on Government Procurement, including the recommendation for a Government-wide policy. We believe that any action on this matter should be deferred until the task group's study has been completed and the executive branch position is finalized.

- - - -

Due to time limitations, we did not obtain formal comments from the Secretary of Defense or other agency heads on this report. However, we discussed it with DOD officials.

As your office agreed, we are sending copies of the report to the Chairmen of the House and Senate Committees on Appropriations and Government Operations and the House Committee on Armed Services. Also, as agreed, we are sending copies to the Director, Office of Management and Budget; the Secretary of Defense; the Director of Defense Research and Engineering; the Secretaries of the Army, Navy, and Air Force; the Secretary of Commerce; the Secretary of Health, Education, and Welfare; the Secretary of Housing and Urban Development; the Secretary of Transportation; the Chairman, Atomic Energy

BEST DOCUMENT AVAILABLE

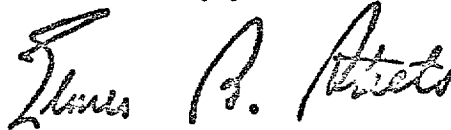
B-164912

Commission; the Administrator, National Aeronautics and Space Administration; the Administrator, Environmental Protection Agency; and the Executive Secretary, CODSLA.

We plan no further distribution unless you agree or publicly announce the contents.

We responded to your question regarding the development of major weapon systems under competitive cost-type contracts on March 15, 1974. We expect to report to you on the other items in your letter within 1 month.

Sincerely yours,

A handwritten signature in cursive script that reads "James P. Stets". The signature is written in dark ink and is positioned above the typed name and title.

Comptroller General
of the United States

JOHN C. STENNIS, MISS. CHAIRMAN
 STUART SYMINGTON, MO
 HENRY M. JACKSON, WASH.
 SAM J. ERVIN, JR., N.C.
 HOWARD W. CANNON, NEV.
 THOMAS J. MCINTYRE, N.H.
 HARRY F. BYRD, JR., VA.
 HAROLD E. HUGHES, IOWA
 SAM NUNN, GA.
 T. EDWARD BRASWELL, JR., CHIEF COUNSEL AND STAFF DIRECTOR

STRONG T. CARMON, S.C.
 JOHN G. TOWLER, TEX.
 PETER H. THOMPSON, COLO.
 BARRY GOLDWATER, ARIZ.
 WILLIAM B. VICKI, OHIO
 WILLIAM L. SCOTT, VA.

United States Senate

COMMITTEE ON ARMED SERVICES
 WASHINGTON, D.C. 20510

October 4, 1973

B-167034

Honorable Elmer B. Staats
 Comptroller General of the United States
 General Accounting Office
 441 G Street, N. W.
 Washington, DC 20548

Dear Mr. Staats:

The committee has completed and published its report (93-385) on the fiscal year 1974 procurement authorization bill.

There are a number of items in the report which involve actions to be taken by the General Accounting Office. Information on each of these items follows:

1. Independent Research and Development

Page 104 of the subject report states,

"While there is general satisfaction to date in the Department of Defense and in industry, additional time is needed to complete the implementing actions and acquire more experience as a basis for any changes which may be indicated as necessary to existing law. The General Accounting Office is in agreement with the need for additional time, and has expressed its intention to continue with the examination of this subject.

"The committee intends to follow these actions closely and consider the requirement for any possible further legislative actions in conjunction with the review of the fiscal year 1975 authorization request."

Request that the General Accounting Office conduct this further investigation including follow-up on the recommendations contained in your report B-167034, dated April 16, 1973. The opinions and recommendations of both the Department of Defense and appropriate industry associations should be obtained and reflected in your report. Discussions should be held with other governmental agencies such as the Department of Transportation, Atomic Energy Commission,

BEST DOCUMENT AVAILABLE

Honorable Elmer B. Staats
Page Two

and the National Aeronautics and Space Administration, all of whom have substantial research and development programs to determine the desirability and practicability of extending the independent research and development policy to include their organizations on a uniform basis with the Department of Defense. The investigation of this subject also should include consideration of the possibility of broadening the definition and application of relevancy to include all Federal agencies while at the same time extending the IR&D provisions as represented in the applicable Military Procurement Authorization Acts to these various agencies. The results of these discussions together with appropriate recommendations also should be included in your report.

2. Incremental Programing of RDT&E

Pages 112-115 of the subject report cover this subject and set forth a consolidated and current policy statement, including definitions which resulted from the coordinated efforts of the committee staff, the Department of Defense, and the General Accounting Office. In fact, as the report states, the revised incremental programing policy was worked out to the mutual satisfaction of the committee and the Department of Defense. In accordance with the committee report, you are requested to continue with your review of the implementation of this policy as a follow-on to your earlier efforts as reported in General Accounting Office reports B-167034 of April 18, 1973, and May 15, 1973. Your study should include a reexamination of the Trident weapon system and such other major weapon systems which would represent an equitable sampling of the programs of each of the military departments. The extent to which first-tier subcontractors are being utilized should be made a matter of specific treatment since this is a new significant item covered under the revised policy. Comments should be submitted on the results of your findings together with any recommendations which you may deem appropriate.

3. Major Weapon Systems Developed Under Competitive Cost Reimbursement Type Contracts

This subject is covered on pages 115 and 116 of the committee report which includes an expression of the concern of the committee that there may be a need for the Department of Defense to examine the criteria, policy, and procedures contained in the Armed Services Procurement Regulations and other directives to insure that the source selection process is being uniformly applied and that the interests of all parties involved including the government are equitably considered and fully protected. The report requests that the Department of Defense conduct such an examination and advise the

Honorable Elmer B. Staats
Page Three

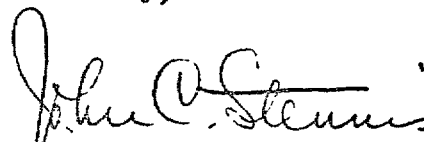
committee what if any changes should be made as a result of the committee's views. As indicated in the report, the General Accounting Office is requested to participate in this review and submit its independent findings and recommendations to the committee.

4. Use of Special Termination Costs Clause on Certain Research and Development Contracts

On pages 118 and 119 of the committee report the committee explains the use of the special termination costs clause on research and development contracts and encourages the use of this clause to a greater extent by all of the military departments. The General Accounting Office is requested to examine the use of this clause to the extent that it has been included in recent contracts and obtain the opinions of the various industry associations and the Department of Defense on the wider application of this clause in future Department of Defense contracts. Comments with appropriate recommendations will be submitted to the committee.

Informal meetings have been held between the committee staff and the representatives of your agency to discuss each of the items contained in this letter. In order for your reports to be useful to the committee in its consideration of the fiscal year 1975 military procurement authorization request, such reports should be submitted by March 1, 1974.

Sincerely,


John C. Stennis
Chairman

BEST DOCUMENT AVAILABLE



DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING
WASHINGTON 25, D. C.

12 FEB 1974

Mr. Harold H. Rubin
Deputy Director (Technology
Advancement)
General Accounting Office
Washington, D.C. 20548

Dear Mr. Rubin:

This letter forwards DoD's response to the questions raised in your letter of 6 November 1973 concerning independent research and development (IR&D). The responses have been coordinated within the Department through the IR&D Policy Council composed of Assistant Secretaries of R&D and ISL from OSD, the Army, Navy and Air Force. Representatives from AEC and NASA act as observers to the Policy Council and, although they may differ with our response in some places, they did participate with us in developing this response.

Our response represents current DoD policy which has evolved through nearly continuous study over the past 15 years. However, during the development of this response, certain issues arose which seem worthy of further examination during this spring and summer. Accordingly, through the use of various resources, we are exploring in greater depth these issues. They include: a reexamination of the benefits of IR&D both to the contractor and to the Government; an analysis of possible additional improvements to the process of evaluation, negotiation and utilization of IR&D and finally an examination of other alternatives for accomplishing the objectives of IR&D.

Based both on my industrial and my government experience, I am a strong supporter of IR&D. I am convinced that the United States' technology base needs the fresh, unfettered independent research that IR&D provides. In this light, each of the examinations mentioned in the previous paragraph is seeking to maximize the return on our investment in IR&D.

As we complete our future studies, they will be available to the Congress and the GAO. I believe you may find them useful in your continuing studies on IR&D. If you have any questions regarding our responses to your questions or on our future studies, please call me or any member of my staff.

Sincerely,

Malcolm R. Currie
for Malcolm R. Currie

BEST DOCUMENT AVAILABLE

Enclosure

8 February 1974

DOD RESPONSE TO GAO LETTER OF 6 NOV '73

Question A - "The actions taken and your comments on our seven recommendations relating to DoD's administration of contractor's IR&D and E&P programs summarized on pages 36 and 37 of our report dated April 16, 1973."

Answer - Our letter of 1 August 1973 responded to the recommendations of the GAO report referenced in this question (Report B-167034, OSD Case 3609). We have only the following additional comments to add at this time:

Re the determination of potential military relevance

The DoD Technical Evaluation Group for IR&D has considered alternate FMR criteria proposed by Industry and the Services. A draft of new criteria for FMR determination to replace those of the 13 March ODDRE memo has evolved. The IR&D Policy Council will review this study to determine whether further policy guidance is required. This action will be taken during the first half of 1974.

Re uniform negotiation procedures

By the joint DDRE/ASD(IGL) memorandum of 18 April 1973, the Military Departments' central offices and the DSA/CAS central office were requested to exchange views and information in an endeavor to find a basis for uniform treatment of contractors. The IR&D Policy Council will consider the efforts to date to determine whether and what policy guidance may be required.

Re quantification of technical quality of IR&D programs for the purpose of uniformly recognizing technical quality in negotiated ceilings -

The above referenced 18 April 1973 memorandum also provided guidance for the achievement of this recommendation. The results of this guidance have not yet been assessed or reviewed by the Policy Council. This will be done and the need for further action will be determined.

Re elimination of cost sharing from the first dollar

This has been resolved and all Government negotiators have eliminated the practice.

BEST DOCUMENT AVAILABLE

Question - "Your comments on the recommendations contained in the report of the Commission on Government Procurement."

Answer - The DoD has not yet adopted a position on the COGP recommendation E-10 or on the two dissenting positions. We, therefore, are able to provide only limited comments.

Both the majority recommendation and the first dissent are based on present procedures and differ primarily as to amount of control to be exercised by the Government.

The majority position would provide the IR&D/B&P costs of any contractor cost center with 50% or more fixed price Government and commercial sales would be allowed without regard as to amount. Our analysis of this, based on 1972 costs, indicates that over \$100 million would be added to DoD costs if this were adopted. The recommendation further states that the DoD formula would be used to negotiate ceilings for the few remaining contractors. This would add still more cost to DoD contracts. We do not believe such a policy is acceptable to the Congress and we are not prepared to absorb these additional costs.

In the case of dissent number 1, the recommendation appears to provide for continuation of present procedures except that the Government would be given the right to examine non-Government work in contractors' plants. We understand the rationale for this additional requirement, but we are very concerned about the size of the workload that might be generated. Our major contractors may have hundreds of non-Government contracts that would be subject to review by DoD technical personnel, and we simply do not have the manpower resources to devote to the examination of these contracts.

Both the majority recommendation and the first dissent include the current requirement for relevancy; that is, relevant to a agency's mission or operations. We believe in conjunction with NASA, that the requirement for relevancy to an agency mission or operation is an illogical and largely unproductive control which could, in some instances, operate to the detriment of the overall, best interests of the Government. We further believe that agency relevancy would prove unworkable in the context of a Government-wide policy and procedure. DoD supports a Government-wide relevancy requirement.

Dissent #2 provides some ideas worth investigating more deeply for possible innovative approaches to handling IR&D and B&P. These will be further studied during this year.

BEST DOCUMENT AVAILABLE

Question C - "Current Status of the Study and Recommendations of the IR&D Policy Council."

Answer - Recommendations under consideration by the IR&D Policy Council are not presently defined. The new Council, which first met in October 1973 will be considering in its future meetings current IR&D policies and procedures and the need for changes. Among the topics for Council attention will be any recommendations offered by the ad hoc working group reconstituted by Dr. Currie in October 1973. An updated report will be available where review is completed by the Policy Council.

[See GAO note.]

Question E - "Your comments on the requirements of section 203, Public Law 91-441, based on another year's experience, and your recommendations, if any, of actions required by the Congress to improve implementation."

Answer - Based on our additional year of experience, we have no suggestions for changing the statute. We do believe, however, that elevating the relevancy requirement to a Government-wide relevancy test is in the best interests of the Government.

As far as our implementation of the current policy, we will be studying the conversion of the memorandum guidance into more permanent type of document. As part of this conversion, the effectiveness of the guidance will be considered and any lessons learned will be used to improve the EIR determinations.

GAO note: Question D and questions F through S and DOD's answers have been deleted as not being pertinent to the report.

BEST DOCUMENT AVAILABLE

COUNCIL OF DEFENSE AND SPACE INDUSTRY ASSOCIATIONS (CODSIA)

WATERGATE SIX HUNDRED, SUITE 420

WASHINGTON D. C. 20037

(202) 338-6212 and 6213

February 11, 1974

Harold H. Rubin, Deputy Director
U.S. General Accounting Office
Procurement and Systems Acquisition
Division, Technology Advancement
441 G Street, N. W.
Washington, D. C. 20548

Dear Mr. Rubin:

This is in response to your letter of January 10, 1974 requesting the views of the Council of Defense and Space Industry Associations (CODSIA) concerning various aspects of Independent Research & Development (IR&D) and Bid and Proposal (B&P) costs. To give full significance to our comments, you are respectfully reminded that CODSIA is a voluntary council of seven industry trade associations whose members have common interest in the defense and space fields. CODSIA member associations represent virtually all of the major defense and space contractors as well as many smaller firms engaged in both prime and subcontracting including the supply of components, parts and services. Over one thousand small, medium and large companies, located in all areas of the nation, are represented by CODSIA's current member associations. Most of these companies, although contributing significantly to defense and space efforts, are primarily commercially oriented. Thus, you may be assured that our comments fairly reflect industry's views on IR&D and B&P.

BROADER RELEVANCY DEFINITION

If there is to be an "application of relevancy" (presumably this refers to a statutory requirement similar to the "potential relationship to a military function or operation"), it should encompass the total interests of the U. S. Government, not limited to the mission of an individual agency. We believe very strongly that this broader definition would promote the best interests of the nation, whether applied only by DoD or by other Federal agencies as well. This would be consistent with interests expressed by Congress in defense/aerospace contractors' diversification into other (non-military) areas of national concern, such as energy, pollution, health, and housing.

Conversely, application by each agency of a relevancy test limited solely to its functions or operations would be prejudicial to the national interest. Government contractors are being repeatedly asked, both privately and publicly, what reasonably can be done to enable them individually and collectively to participate more fully in stimulating

BEST DOCUMENT AVAILABLE

APPENDIX III

broadening and applying national technology and thereby assist in improving the deteriorating balance of payments, in encouraging diversification of government contractors, and in supporting other high priority national social and economic objectives. Certainly, basing allowance of contractors' IR&D on any individual agency's needs to the exclusion of other government and national interests can not reasonably be expected to motivate contractors to address the multiple government needs.

We would be remiss if we did not again point out that prices paid for goods and services procured by all commercial customers and Federal agencies, not just those which have substantial R&D programs, must reflect a portion of the suppliers' IR&D and B&P costs. Extension of the IR&D policy to additional agencies with anything other than a broad requirement for potential relationship to total U. S. Government interests would create a chaotic situation.

In considering this matter of the acceptance of IR&D expense based on the relationship of those efforts to particular agencies' interests, it should be recognized that the Government obtains the benefits flowing from a contractor's total IR&D program while participating in only a share of the costs. For example, the recently published DoD report summarizing the statistics from 77 major contractors showed that in 1972 DoD obtained access to \$776 million of IR&D work while accepting only \$400 million as its share of the costs.

BROADER APPLICATION OF DOD POLICY

You invited our comments on the desirability and practicability of extending the IR&D policy to other Federal agencies having substantial R&D programs, on a uniform basis with DoD.

It is our firm conviction that present statutory and regulatory limitations imposed on suppliers under DoD contracts and subcontracts are detrimental to the national interest. Extending the current DoD restrictions to other agencies, therefore, would be equally undesirable. However, if there must be special restrictions, as for example, cost ceilings as well as the test for potential relationship, we then reaffirm our position in favor of a common policy for all Government agencies, provided it is equitable and practical. In such case, broader application of the DoD policy would be acceptable. It is our understanding that your current comprehensive examination of IR&D and B&P includes consideration of alternative policies, and we plan to provide our inputs on alternative approaches later during the course of your study.

TRACING OF IR&D BENEFITS

You solicited our comments on the benefits of IR&D and whether any such benefits can be quantified and convincingly presented to the Congress.

BEST DOCUMENT AVAILABLE

Industry is now in the process of developing information and examples of the several types of benefits flowing from IR&D, which may help secure a wider understanding of this fundamental and vital subject. Upon completion of this effort, it is industry's intent to present this information to you.

The complexity of the task of tracing the contributions of R&D to operational systems or hardware fielded operationally many years later is not widely understood. Perhaps the best documented study of this nature is DoD's Project Hindsight which required 40 professional man-years over a calendar period of 2½ years beginning in 1964 to study 20 systems. Significantly, in the words of the Study Director, Dr. Chalmers W. Sherwin:

"It is not the great breakthrough, but rather the cumulative, synergistic effect of some 40-odd innovations which make the radical improvement. Each of the innovations, taken by itself, would produce little or no improvement."

IR&D is that effort which a contractor undertakes at his own discretion for the purpose of maintaining and enhancing technical competence to serve future customer requirements. It is the fundamental source of new ideas, new products or techniques which enable a contractor to provide improved products or services to meet customer demands. Prudent company management must tailor its research and development program in accordance with such factors as the competitive environment, its chosen fields of technical expertise, the most productive use of its resources, and the relevance of the program to the objectives of the company and its customers. In this process, company management must have the freedom to choose the fields of endeavor and to terminate projects or initiate new projects when judgment deems such action appropriate. The most successful breakthroughs in technology are usually evolutionary and only through the continued efforts of many programs in many companies can the nation be assured of realizing a sufficient number of breakthroughs that will enable it to maintain technical superiority.

IR&D in this respect is thus quite different from funded effort. Under funded programs the technological building blocks have usually been established, frequently as a result of IR&D efforts, and a particular goal has been identified. The funded effort is much narrower in scope because each project is aimed at a specific task. Thus, funded effort and independent effort are complementary to each other. There is a need for each.

In our view, an underlying benefit of the IR&D program is the reduction of risk to the government. For example, industry rarely has been successful in attracting contract R&D funding from DoD laboratories to support new "breakthrough" devices or emerging technologies without some prior homework establishing feasibility. After all, Government laboratory managers want to succeed, too, and it is natural for them to favor projects which have demonstrated reasonable probability of success. Similarly, proposals for large engineering development and

production programs must include considerable proof by the contractor that major technical risks have been identified and reduced to a practical minimum. Such proof will include error analysis under simulated mission profiles, environmental studies, and sometimes the construction and flight test of hardware, all before the government commitment to the program has been made. In our opinion, this kind of forward projection is responsible for the technical superiority this nation has achieved over the rest of the world.

IMPLEMENTATION OF SECTION 203

The third and last matter on which you requested comment was in regard to DoD's implementation of Section 203 of the current law. In view of the more extensive GAO study now underway, we have chosen to limit our comments to the following problem areas:

Reduction in Actual Effort - We continue to be concerned with the arbitrary reductions of contractors proposed IR&D/B&P program costs recoverable under government contracts, reported to you in our letter of November 21, 1973 on the same subject. In commenting on this aspect, GAO Report B-167034, Payments for IR&D and B&P Costs, dated April 16, 1973, stated that industry views in this respect could not be supported at the time of the GAO study. Nevertheless, industry is still of the view that arbitrary negotiation objectives continue to erode the actual technical effort available to apply to IR&D and therefore seriously impact contractor's and the industry's long term ability to provide needed technology to DoD and other government agencies. In this respect, we urge that the GAO reexamine this matter as a part of its current studies.

Further, with regard to B&P specifically, the government has a powerful and direct influence on B&P costs through its procurement policies. For example, industry's experience has been that more and more recent solicitations are calling for a variety of program management plans (configuration, reliability, maintainability, quality, etc.) to be included in the proposals. These plans are often identified in terms of Data Item Descriptions and might more properly be required as post-award contract data items. Usually, the plans submitted with the proposal are considered as drafts with revisions only required after award. The net result is the shifting of what would be a contract expense to a B&P expense. Frequently, proposals often also require the submission of one or more appendices. Therefore, a contractor is not in sole control of the amount of B&P effort required to be responsive to the Government's competitive procurement objectives. Congress and the Government should understand that there is a major inconsistency between ceilings on B&P effort and the Congressionally mandated policy of competitive procurement.

The data submitted by DoD with respect to IR&D and B&P costs incurred by major contractors indicated approximately a 10% growth for 1972 over the 1971 costs. However, that cost increase resulted from mandatory expansion of definitions, mandatory changes in contractor

cost accounting systems, and inflation - not from an increase in manpower expended on IR&D/B&P. Senator McIntyre, Chairman, Research and Development Committee, Senate Armed Services Committee, also discussed this aspect in his report to the Senate on May 8, 1973 (see Congressional Record of May 8, 1973, pages S-8582 and S-8583).

We believe that the erosion discussed above is continuing and for this reason, we are working on an up-date of the chart appended to our CODSIA letter of November 21, 1972. Upon completion, the results of this current survey will be submitted to the GAO.

Recommendation: Reports by DoD and the GAO to Congress should show trends in technical effort, as well as cost, and should include explanations of the factors causing changes in both costs and levels of effort.

Recovery by Smaller Contractors - The regulations provide that those contractors whose IR&D/B&P programs do not exceed the two million dollar threshold, and hence, are not subject to mandatory advance agreements, will be reimbursed on a formula basis. This provision recognizes that it is not financially prudent to impose on the contractor or DoD, the administrative burden of negotiating advance agreements within the criteria of the present ASPR at this relatively low level of expenditure. However, it has been the practice of some of the implementing personnel in the field to require these contractors to submit data pertaining to potential military relationship. As this data is not readily available, or considered available, the contractors are subjected to losses based upon unilateral determinations.

These regulations also provide that a contractor under this two million dollar threshold may seek a negotiated ceiling in lieu of the formula, recognizing that many small companies in a period of rapid growth would be prejudiced by the formula allowance. However, no implementing instructions have been issued defining the criteria for negotiation under these circumstances or identifying the DoD official responsible for the negotiation. The GAO report and recommendations to DoD (Office Letter B-167034 dated September 17, 1973) do not solve these problems as they basically endorse the application of the present ASPR which requires historical detail not customarily kept by small businesses. In this regard, perhaps GAO should also examine the total practicability of the statute.

It is recognized that these problems may involve a relatively small number of companies, and represent only a small portion of the total IR&D dollars. However, we are sure that many elements of Congress have a keen interest in the small enterprising, technological companies as important contributors to the American economy.

Recommendation: Appropriate changes should be made in the statute and regulations.

BEST DOCUMENT AVAILABLE

IR&D VERSUS B&P

There is another matter that concerns us in connection with the several current Government activities related to IR&D and B&P costs - - - namely, the too-frequent practice of lumping B&P into IR&D and considering them as one and the same for all purposes. Doing so causes confusion and misunderstanding and frequently results in failure to view each type of effort in its own distinct perspective.

IR&D and B&P are similar in that both are vital to maintaining technological capability and adequate competition within our private enterprise system, and both are normal costs of doing business which must be reflected in the prices of goods and services sold to all customers, commercial as well as government.

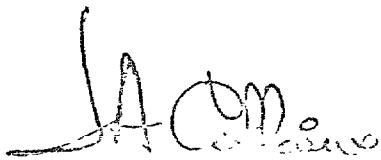
However, IR&D and B&P are not identical. In particular, they are quite distinct as to their purposes and, as previously noted, as to the extent of contractors' control over the timing and the amounts of effort to be expended.

IR&D and B&P complement each other and both complement other key elements in the Government's procurement policies and practices.

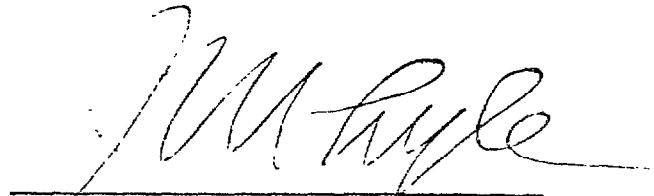
We hope that the differences between IR&D and B&P, as well as their similarities, and their complementary aspects will be accorded appropriate consideration in the current Governmental studies.

In closing, we wish to express our appreciation for the opportunity to provide these comments as the consensus of the opinions expressed by the member associations of CODSIA. We trust that they will receive due consideration in the course of your review and, as has been your custom, will be appended to your final report to the Chairman of the Senate Armed Services Committee.

Sincerely,

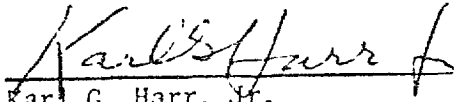


J. A. Caffraux
Staff Vice President
Electronic Industries Assn.

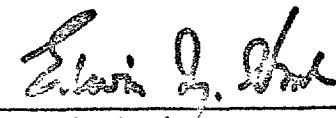


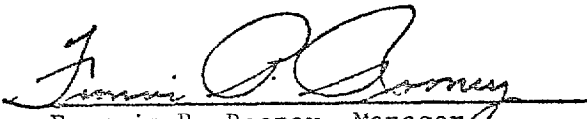
Joseph M. Lyle
President
National Security Industrial Assn.

BEST DOCUMENT AVAILABLE


Karl G. Harr, Jr.
President
Aerospace Industries Assn.


John C. Beckett
GEMA


Edwin M. Hood
President
Shipbuilders Council of America


Francis P. Rooney, Manager
Defense Liaison Department
Motor Vehicles Manufacturers Assn.