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Notes: First 20 pages of each report requested

For list of released and withheld items, see following page

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Reports released in full or in part:

1. Cable TV Re-regulation Information Provided to the Congress, ADD-5152 [released in full]
2. Advertising Council, Inc., ATL-4349-3 [released in part]
3. Concerns About the Commercial Law Development Program Largely Unfounded, IPE-11027 [released in part]
4. NWS Decisions Compromised Procurement Integrity/Resulted in Higher Costs, NOA-4540 [released in full]
5. Proposed NPOESS Preparatory Project Reduces Operational Risk, but Excludes Demonstration of Critical Ozone Suite, OSE-11103 [released in full]
6. Year 2000 Preparations Were Effective, but Business Continuity and Contingency Planning Needed Improvement, OSE-12200 [released in full]
7. Office of Systems and Telecommunications Should be Reorganized, OSE-6727 [released in full]
8. NPOESS Acquisition Well Planned, but Life-Cycle Cost Estimates for Critical Sensors are Overstated, OSE-9593 [released in full]

Two requested reports withheld in full:

1. Better Management of the Overseas Security Program and Security Funds is Needed, IPE-17446.
2. Commerce's Emergency Preparedness Efforts Are Improving, but Additional Management Guidance and Oversight are Needed, IPE-17198

Request for one report withdrawn:

1. Interagency Review of Foreign National Access to Export-Controlled Technology in the United States, IPE-16177



UNITED STATES DEPARTMENT OF COMMERCE
Office of Inspector General
Washington, D.C. 20230

May 23, 2008

This is in response to your January 29, 2006 letter, in which you request access under the Freedom of Information Act to copies of the first twenty pages of each of the following Office of Inspector General reports:

1. Cable TV Re-regulation Information Provided to the Congress, ADD-5152.
2. Advertising Council, Inc., ATL-4349-3.
3. Concerns About the Commercial Law Development Program Largely Unfounded, IPE-11027.
4. Interagency Review of Foreign National Access to Export-Controlled Technology in the United States, IPE-16177.
5. Commerce's Emergency Preparedness Efforts Are Improving, but Additional Management Guidance and Oversight are Needed, IPE-17198.
6. Better Management of the Overseas Security Program and Security Funds is Needed, IPE-17446.
7. NWS Decisions Compromised Procurement Integrity/Resulted in Higher Costs, NOA-4540.
8. Proposed NPOESS Preparatory Project Reduces Operational Risk, but Excludes Demonstration of Critical Ozone Suite, OSE-11103.
9. Year 2000 Preparations Were Effective, but Business Continuity and Contingency Planning Needed Improvement, OSE-12200.
10. Office of Systems and Telecommunications Should be Reorganized, OSE-6727.
11. NPOESS Acquisition Well Planned, but Life-Cycle Cost Estimates for Critical Sensors are Overstated, OSE-9593.

It is my understanding that you withdrew your request for IPE-16177 on June 9, 2006. We have reviewed the first twenty pages of the remaining requested reports under the terms of FOIA and have determined that the following reports may be released to you in their entirety: ADD-5152, NOA-4540, OSE-11103, OSE-12200, OSE-6727, and OSE-9593. Copies of the first twenty pages of each of these reports are enclosed.

In addition, we have determined that the first twenty pages of ATL-4349-3 and IPE-11027 may be released in part. ATL-4349-3 has been redacted pursuant to FOIA Exemption b(4), which protects privileged or confidential commercial or financial information. 5 U.S.C. § 552(b)(4). IPE-11027 has been redacted pursuant to FOIA Exemption b(6), which protects information in personnel, medical and similar files, the

disclosure of which would constitute a clearly unwarranted invasion of personal privacy. 5 U.S.C. § 552(b)(6). Copies of the first twenty pages of these reports are enclosed, with the FOIA redactions noted.

With respect to the first twenty pages of IPE-17446 and IPE-17198, we have determined that both reports must be withheld in their entirety pursuant to FOIA Exemption b(2), which protects information related solely to the internal personnel rules and practices of an agency. 5 U.S.C. § 552(b)(2). This exemption has been interpreted to encompass substantial internal matters, the disclosure of which would risk the circumvention of a statute or agency regulation.

We apologize for the necessity of the delay in processing the requested reports and appreciate your patience. Your administrative appeal rights, should you wish to request a review of this partial denial, are explained in Appendix A. If you have any questions regarding this letter, please contact Terie Schlee of my staff at 202-482-1578.

Sincerely,

A handwritten signature in black ink, appearing to read "Allison C. Lerner", with a long, sweeping horizontal line extending to the right.

Allison C. Lerner
Counsel

Enclosures

FINAL INSPECTION REPORT
CABLE TV REREGULATION INFORMATION
NTIA PROVIDED TO CONGRESS

NATIONAL TELECOMMUNICATIONS AND
INFORMATION ADMINISTRATION

MARCH 1993

REPORT NO. ADD-5152-3-0001

U.S. DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDITS
ADMINISTRATION AND DEVELOPMENT DIVISION

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EXECUTIVE SUMMARY

On July 22, 1992, members of the House of Representatives were sent a one-page letter signed by the Assistant Secretary for Communications and Information, calling attention to information "...prepared by NTIA [National Telecommunications and Information Administration], on the negative budget impact on consumers..." of then-pending legislation to reregulate the cable television industry. Accompanying the letter were a one-page chart estimating certain potential costs to consumers of cable television reregulation and a one-page data sheet describing why Congress should vote against such reregulation. (See Appendix I.) On August 28, 1992, the House Committee on Energy and Commerce requested that the Office of the Inspector General review the information provided to the Congress by NTIA and the circumstances surrounding its preparation.

Federal agencies have a primary responsibility to provide objective and complete analyses. This principle is inherent in Executive Order 12291. This same principle was more recently reinforced by President Bush in an April 29, 1992, memorandum for the heads of federal departments and agencies on benefits and costs of legislative proposals.

We found that NTIA had based the information it transmitted to Congress largely on a July 7, 1992 draft memorandum prepared at the request of the Deputy Chief of Staff to the Vice President, by the Council on Competitiveness in consultation with NTIA. A major component of the information in the memorandum was obtained from an ICF Consulting Associates study prepared for and funded by the National Cable Television Association. The ICF study statistically estimated the value to consumers of perceived improvements in programming quality since the 1984 deregulation of the cable TV industry and was used to support the Association's arguments in an adversarial rule-making proceeding before the Federal Communications Commission.

Executive Order 12046, which establishes NTIA in the Department of Commerce, assigns to NTIA, in coordination with the Director, Office of Management and Budget, the responsibility of ensuring that the views of the executive branch on telecommunications matters are effectively presented to the Congress. This responsibility was codified into law by the Telecommunications Authorization Act of 1992. The information furnished to Congress by NTIA was first provided to the Department's General Counsel, as well as to OMB. NTIA management, the General Counsel, and the OMB told us that the information was cleared **since** the information merely reflected well-known and long-established Administration **opposition** to cable television reregulation.

We found that the information provided Congress contained misleading estimates because the assumptions and methodologies used, and the form of presentation chosen tended, in general, to inflate the subscriber costs of the estimated items. The information also showed bias. It failed to consider both costs and benefits of proposed legislation, and ignored the societal perspective.

Since NTIA is an agency of the Department of Commerce, its relationship to Commerce gave the reregulation cost estimates undeserved credibility. Unfortunately, this credibility was exploited by the National Cable Television Association in flyers mailed to cable television subscribers quoting cost estimates allegedly prepared by the Department of Commerce.

The information, characterized by NTIA as "advocacy," could endanger the fundamental trust the public and its elected representatives place in the accuracy of information and analyses prepared by the Department and its career civil servants. The Department is responsible for critical data and analyses on population and the nation's economic activity--information which executive and legislative decision-makers and the public have come to rely on as being objective and the best available. To protect that trust, we believe that NTIA must be responsive to issues of independence, bias, perspective, and completeness in preparing statistics and analyses used to inform Congress and others on matters falling within NTIA's expertise and authority.

We recommend that the Assistant Secretary for Communications and Information develop procedures to ensure that in the future NTIA presents accurate data and analyses, properly described or qualified, to the Congress and others.

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On February 17, 1993, NTIA responded to our draft report. The agency generally disagreed with the report's findings and commented that it contains significant factual and analytic errors and mischaracterizations. We have fully considered NTIA's comments and where appropriate modified our report. We disagree with most of NTIA's comments and reaffirm our conclusions. The full text of NTIA's response and our analysis of it are included as Appendix IV.

INTRODUCTION

On July 22, 1992, members of the House of Representatives were sent a one-page letter signed by the Assistant Secretary for Communications and Information, calling attention to information "...prepared by NTIA, on the negative budget impact on consumers..." of then-pending legislation (H.R. 4850) to reregulate the cable television industry. Accompanying the letter was a one-page chart estimating certain potential costs of cable television reregulation to consumers and a one-page data sheet describing why Congress should vote against the pending legislation. (See Appendix I.)

The information NTIA presented to the Congress was based largely on a July 7, 1992 draft memorandum, prepared at the request of the Deputy Chief of Staff to the Vice President, estimating the cost of cable reregulation to consumers. The memorandum was drafted by an Associate Director of the Council on Competitiveness, who as of June 15, 1992, returned to the Federal Communications Commission as the Deputy Chief of the Office of Plans and Policy. The Associate Director was assisted by the Chief Economist of the FCC. NTIA provided substantial comments on earlier versions of the memorandum.

A major component of the information in the July 7 memo was obtained from a study funded by and prepared for the National Cable Television Association by ICF Consulting Associates. The ICF study statistically estimated the value to consumers of perceived improvements in programming quality since the 1984 deregulation of the cable TV industry and was used to support the Association's arguments presented during an adversarial rule-making proceeding before the FCC in May 1990. The July 7 memo also relied on updated information furnished by the FCC's Chief Economist on potential consumer losses in 1990-91 from reregulation. Finally, unlike an earlier draft, the memo did not contain the warnings of both the Chief Economist and NTIA about potential weaknesses in certain assumptions used in the ICF study.

On July 7, the Deputy Chief of Staff to the Vice President sent copies of the draft memorandum to an Associate Director of the Office of Management and Budget, a Special Assistant to the President for Legislative Affairs, and to a Senior Staff Economist with the Council of Economic Advisors. The recipients of the draft memorandum generally agreed that a chart would more succinctly present the administration's position. The final product was NTIA's July 22 packet to the House of Representatives described above.

PURPOSE AND SCOPE

This inspection was performed in response to an August 28, 1992 request from the Committee on Energy and Commerce (see Appendix II.) The Committee expressed

concerns about information provided by NTIA to the Congress on July 22, 1992 describing why Congress should vote against legislation to reregulate the cable television industry.

We reviewed how each of the estimates contained in the chart was derived. We also reviewed documentation related to a draft memorandum on which the estimates were based. In addition, we interviewed officials of the NTIA, Commerce's Office of General Counsel, the Federal Communications Commission, the Office of Management and Budget, and other involved parties. Our inspection was conducted in Washington, D.C.

This inspection was conducted from September 11 to December 8, 1992, in accordance with the Inspector General Act of 1978 and the Interim Standards for Inspections issued by the President's Council on Integrity and Efficiency, as adapted by the Department of Commerce OIG. Throughout the course of the inspection we discussed our observations and conclusions with NTIA officials.

OBSERVATIONS AND CONCLUSIONS

We found that the information provided Congress contained misleading estimates because the assumptions and methodologies used and the form of presentation chosen tended, in general, to inflate the subscriber costs of the estimated items. The information also showed bias because it failed to consider both costs and benefits to the subscriber of proposed legislation, and ignored the more appropriate societal perspective of costs and benefits.

The information, characterized by NTIA as "advocacy," could endanger the fundamental trust the public and its elected representatives place in the information and analyses provided by the Department and its career civil servants. To protect that trust, we believe that NTIA must be responsive to issues of independence, bias, perspective and completeness of materials used to inform Congress and others.

MISLEADING ESTIMATES

All who helped prepare these materials understood that the documents were intended to advocate the Administration's position. While they defended the assumptions, methodologies, and form of presentation used as reasonable, they also conceded that these tended, in general, to push the cost of items estimated close to the upper limit of reasonableness.

Accompanying the July 22 letter to the House of Representatives were a chart and a single page memorandum containing estimates of three items contributing to the costs to the

consumer of cable reregulation and one estimate of the benefits of increased cable competition (see Appendix I). The title of the chart, "Cost of Cable Re-regulation (H.R. 4850) to Consumers," is inaccurate because all costs will not be borne by the subscriber and the three individual estimates of annual costs tend to inflate the subscriber costs of each of those items.

Industry-Sponsored Study Produced High Costs and Never Was Checked for Accuracy

The first cost item listed in the chart, "Decreasing Programming Quality," estimates the value of programming quality that may be lost to cable television subscribers through reregulation of the cable television industry. The methodology and most of the data used in creating the estimates were derived from the industry-sponsored ICF study.

In reviewing that study, an NTIA economist and FCC's Chief Economist expressed concerns about the assumptions and methodologies used. They agreed that the methodology did not approach the effects of reregulation directly and tended to produce results in the upper range of reasonableness. Both economists indicated that with more time, different statistical models might have been developed to provide clearer evidence. But since the ICF study was the only one then available for communicating to the Congress, NTIA relied upon it despite these recognized flaws.

In addition, NTIA failed to verify the accuracy of the basic data used in the ICF study nor did NTIA confirm the statistical results by rerunning the equations to replicate the estimated effects. NTIA officials asserted that the authors of the ICF study had strong economic backgrounds and good reputations for quality work and therefore NTIA did not consider verification and replication necessary. Given the importance placed on this study by NTIA, this was not adequate review.

Potential Criticisms and Background of Study Not Adequately Disclosed

An early version of the July 7 draft memorandum stated that the industry-sponsored ICF study can be criticized on several counts.

First, the draft memorandum asserted that the study can be faulted for its assumption that pre-1984 subscribers were not harmed by cable deregulation. Although some such assumption was necessary in the statistical model chosen to measure the consumer benefits of the 1984 deregulation, its use guaranteed a positive measurement of consumer benefits.

After discussing the matter with the FCC and NTIA economists, however, NTIA senior management concluded that the assumption was reasonable. In our discussions with the economists, we all agreed that other statistical approaches could have measured rather than assumed the effects on the pre-1984 subscribers, but such estimates might have suffered from data and modeling problems of their own.

Second, the draft memorandum asserted that the study can be faulted for its assumption that service quality under reregulation would fall to pre-1984 levels. Fixed investments, such as improved cables and signals, that have been made since 1984 will most likely protect consumers from that outcome. The economists stated to us that while it would be difficult to forecast the effects of reregulation on service quality, some loss of consumer benefits would result. Nevertheless, they acknowledged that the loss of consumer benefits estimated in the study was close to the highest reasonable level and that a total loss of benefits would be a worst-case assumption. However, NTIA senior management believed reregulation might hinder improvements in the quality and choice of programming to a greater extent than was measured in the study.

The chart presented to Congress qualified these losses in consumer benefits from decreased program quality as "potential." With only the chart and accompanying letter, the legislators could not know that the estimated losses were very unlikely to be that high. In addition, the two estimates making up a range of potential consumer losses represent the upper limit for losses derived from two different estimates of price elasticity of demand.

In addition, the footnote for this item of the chart does not adequately describe the background of the original ICF study or the adjustments made in the underlying data when it was updated. That the study was commissioned by a cable industry association for presentation of its views to the FCC as part of an adversarial rule-making proceeding is not mentioned in the information sent to Congress.

**Taxpayers or Industry, Not Subscribers,
Likely to Bear Most Regulatory Costs**

Using FCC and Congressional Budget Office estimates prepared for the Congress, the second item in the chart, "Increased Regulatory Costs," lists the increased costs to federal, state, and local regulatory bodies of implementing the provisions of the reregulation legislation. The regulatory costs of \$22 million to \$60 million account for only 2 percent of the estimated overall cost to cable subscribers. However, since taxpayers will probably bear most of the burden of paying for the increased regulatory costs, it is incorrect to include the entire amount when calculating increased costs to the subscribers. Only if regulatory

agencies charged the costs to the industry and, in turn, permitted the industry to pass them on in higher fees would subscribers bear part of the regulatory costs.

Decisions Made in Estimating Consumer Choice Option Tended to Raise Projected Costs

The third item in the chart, "Increased Cable Operating Costs," estimates the costs of providing the equipment to give all cable subscribers the option of purchasing pay and pay-per-view services without buying basic cable. The cost imposed by the legislation is the increased operating costs of system upgrades to meet the required acceleration in the existing trend toward providing such an option. Several choices made in calculating the costs of this option tended to produce high estimates.

Also, the imprecise presentation of this item in the chart could lead the Congress to expect the total cost of implementing this option to be unrealistically high. There is only a one-time cost of providing and installing the necessary equipment. Since the version of the legislation reviewed required all cable systems to offer the option within five years, the math for calculating an "annual" cost is correct; however, without the benefit of further explanation, Congress could erroneously conclude that these annual costs would recur indefinitely. In addition, the footnote identifies the NCTA as the source of the estimates, when as discussed below, the higher cost estimate was actually developed by NTIA.

The lower, \$3.8 billion, cost estimate (\$760 million annually for five years) for additional converters, associated equipment, and installation was provided by the cable industry association. That estimate was based on current trend data supplied by Paul Kagan Associates. The higher, \$5.0 billion, estimate (\$1 billion annually for five years) was calculated by NTIA. NTIA offered the higher estimate because it concluded that the data from Paul Kagan Associates was based on overly optimistic projections. NTIA's conclusion was based partly on articles from industry publications indicating that households equipped to receive pay-per-view services for the 1992 Summer Olympics and other events were substantially fewer than had been previously projected.

A July 9 draft version of the chart estimated the cost of the pay-for-view option as "\$4 Billion over 5 years to upgrade cable systems" (see Appendix III). This version is close to the lower, industry-provided estimate and clearly indicates the costs will not recur indefinitely.

The installation costs to cable operators were calculated by the cable industry association at \$720 million, or about 19 percent of the total \$3.8 billion estimate. NTIA staff indicated

that while they accepted the association's installation cost estimate as reasonable, they nevertheless considered it a worst-case scenario--or, again, the highest reasonable figure.

More importantly, the increased costs of mandatory system upgrades will not bring a dollar-for-dollar increase in cable rates. Cable operators will not be able to pass all of these costs on to subscribers. If consumer demand is very sensitive to increases in prices, a relatively high proportion of the increased costs will be reflected in lower profits for cable operators rather than in higher prices to cable subscribers.

The July 7 memorandum states that several recent studies showed the demand to be very price sensitive and points out that relatively little of the increased costs might be passed on to subscribers. Only if consumers never considered the price of cable television in choosing whether to subscribe could the entire cost of mandatory system upgrades be covered by consumers.

The title of a July 9 version of the chart, "Anticipated Effects and Financial Implication of Alternative Approaches to Cable Legislation," was more accurate than the final version because it did not assign all the estimated costs of reregulation to the subscribers.

In discussing whether to include an estimate of the cost of the consumer choice option in reviewing the legislation, an early version of the July 7 draft memorandum warned: "...stressing the cost of upgrading cable systems may conflict with our more important point that cable regulation hinders upgrades in quality." NTIA staff indicated that they did not point out the potential benefits of the pay-per-view option because they were uncertain whether consumers would actually be better off with it and the purpose of the chart was to advocate the administration's opposition to reregulation legislation.

Estimate of Benefits of Increased Competition Tended to be High

Unlike the **first three** items, which address subscriber costs of reregulation, the final item in the chart, "**Impact of Increased Cable Competition**," estimates the annual subscriber benefits of increased **cable competition**. The chart indicates that lower cable rates, expanded service offerings, **improved service quality**, and hastened network modernization would result in annual benefits to cable subscribers of \$4.41 billion. The estimate and its methodological basis were presented in the July 7 draft memorandum.

The \$4.41 billion estimate was inflated because it was calculated on an erroneously large figure for the cable industry revenues from subscribers. The estimate of \$20 billion in

revenues from subscribers incorrectly included revenue from other sources, such as \$3 billion received from advertising.

The calculation of the benefits was also based on studies showing that compared to monopoly markets, cable rates were about 20 percent lower in areas with more than one cable operator. The authors of the draft memo estimated the consumer benefits using the 20-percent reduction-in-fee estimate and also assumed head-to-head rivalry in all parts of the country.

In reviewing this element of the estimate, however, both NTIA staff and the FCC's chief economist agreed that since some cable markets might be unable to support more than one cable operator, the actual benefits to consumers might be lower than that projected by assuming overall competition. But they pointed out that the 20-percent decline in fees was a conservative estimate and that consumers would enjoy benefits from improved and expanded service offerings, which were not measured or included in the estimate.

**Footnoted Study Cited Never Attempted to
Estimate Consumer Benefits**

The estimate of increased consumer benefits is cited as being based on a study by Levin and Meisel. However, that study estimated only the extent to which competitive markets reduce cable fees. The increase in consumer benefits is critically dependent on the degree to which consumer demand increases as a result of the expected lower prices--a calculation that Levin and Meisel never attempted to perform. The calculation of estimated consumer benefits was made by the FCC's Chief Economist and reviewed by NTIA. The footnote could mislead the Congress to conclude that the estimated consumer benefits flowed directly from the study cited.

**Use of Unorthodox Approach Results in
Increased Estimated Net Social Benefits of Competition**

OMB Circular No. A-94, which provides guidelines for using benefit-cost analysis as a tool of good public policy, states:

"Analyses should include comprehensive estimates of the expected benefits and costs to society based on established definitions and practices for programs and policy evaluation."

An early draft of the July 7 memorandum presented an FCC estimate of \$5.36 billion per year in consumer benefits resulting from competition in the cable industry. The FCC and

the July 7 draft memorandum used basically the same methodology to calculate consumer benefits. However, the initial draft memorandum goes on to describe an important additional calculation made by the FCC:

"Total gains to society would be considerably less, due to the costs of constructing second systems, and profit losses by incumbents. The FCC assumes that operating profits in the cable industry would be decreased by about \$400 million, and that additional capital costs of \$4.2 billion would be incurred (in the fifth year). This leaves a net social benefit of about \$760 million."

The FCC's Chief Economist agreed that subtracting the cost of creating competition is the generally accepted approach among economists for determining net social benefit. However, the Chief Economist told us that he had developed a theoretical argument concerning appropriate supply and demand curves which concludes that such costs need not be subtracted. NTIA senior managers were unaware of the debate and described their main focus as being the benefits to cable subscribers rather than net social benefit. The potential costs were excluded from the materials sent to Congress.

We did not address the theoretical argument concerning the treatment of costs in determining net social benefits. However, good public policy requires federal agencies to measure costs and benefits in societal terms rather than in terms of specific groups. Clearly, actions that yield small benefits to one group but impose vast costs on society should be considered to have a negative net social benefit and rejected as a matter of public policy. Therefore, we disagree with the decision to focus solely on benefits to cable subscribers. We believe that a societal perspective is also necessary for a federal agency.

**NTIA did not Consider Increased Competition
Associated with the Pending Legislation**

An earlier version of the draft memorandum stated:

"Although nothing in the pending cable bills increases barriers to competition **(in fact competition would be made somewhat easier)**[emphasis added], adoption of a reregulation bill would likely reduce the political incentive to adopt stronger pro-competition measures, such as teleco entry."

While this statement implies that the proposed reregulation legislation might release at least some of the benefits of increased competition, its placement in the chart, along with the comments in the accompanying fact sheet, suggested otherwise. NTIA seemed to want to suggest that the proposed legislation would not encourage competition.

NTIA management acknowledged that they saw their job as estimating the costs associated with reregulation and the benefits gained from competition. They indicated that it was the responsibility of the supporters of the legislation to estimate the benefits of reregulation and the costs involved in creating competition.

INAPPROPRIATE PRESENTATION

Since 1978, pursuant to Executive Order 12046 and incorporated into its Department Organization Order, NTIA has been given the authority to advocate the positions of the executive branch on telecommunications matters. This authority was later codified by the Telecommunications Authorization Act of 1992, which assigns to NTIA the responsibility of ensuring that the views of the executive branch on telecommunications matters are effectively presented to the FCC and, in coordination with the Director of the Office of Management and Budget, to the Congress.

Other NTIA objectives are set out in its Department Organization Order. They include the following: (1) to serve as the President's principal advisor on telecommunications policies pertaining to the nation's economic and technological advancement and to the regulation of the telecommunications industry, (2) to develop and set forth telecommunications policies pertaining to the Nation's economic and technological advancement and the regulation of the telecommunications industry, and (3) to provide for the application of telecommunications technologies and services to avoid waste and achieve an efficient delivery of public services in the furtherance of national goals. These objectives identify NTIA's role as closely allied with societal issues.

Federal agencies have a primary responsibility to provide objective and complete analyses. This principle is inherent in Executive Order 12291, dated February 17, 1981, which states that administrative decisions shall be based on adequate information concerning the need for and consequences of proposed government action, and that regulatory action shall not be undertaken **unless potential benefits to society for the regulation outweigh the potential costs to society.**

This same principle was more recently reinforced by President Bush in an April 29, 1992, memorandum for the heads of federal departments and agencies on benefits and costs of legislative proposals. The President stated that enactment of legislation without consideration of the benefits and costs, as well as other key information, can result in costly and inefficient requirements that slow the rate of growth of jobs and incomes for the American people. Identifying the benefits and costs of proposed regulatory and other federal legislation, along with their indirect effects, is a crucial first step in assuring strong economic performance. The President's guidance further directed that high-quality, accurate, and quantified estimates of the likely benefits and costs of legislative proposals be provided on a timely basis to the Congress.

In preparing its July 22, 1992 information packet for Congress, NTIA neglected this societal role in favor of advocacy of the administration's opposition to pending legislation. Although NTIA selected assumptions, methodologies, and a form of presentation that it considered reasonable, these approaches almost certainly exaggerated the yielded potential costs of cable television reregulation for the items estimated. The benefits of reregulation were not considered and reported, and the larger issues of the costs and benefits to society as a whole were ignored. An agency of the Department of Commerce is expected to consider such issues.

An early draft of the July 7 memorandum suggested that a more thorough analysis be performed. While pointing out that precision would be difficult, the early draft concluded by suggesting that the Administration prepare a more formal and comprehensive cost-benefit analysis of the effects of a cable television reregulation bill. That suggestion was not included in the final July 7 draft memorandum.

NTIA consulted OMB and the Council of Economic Advisors on the contents of the information packet. NTIA indicated to us that since everyone involved understood that the packet was intended to be an advocacy document, no attempt was made to reflect potential benefits from enactment of the reregulation legislation.

NTIA clearly **failed** to follow the principles requiring objective and complete analyses in preparing the **information** that advocated the administration's position to the Congress. NTIA ignored its responsibility to prepare objective and well-researched data on the effects of the pending legislation on society as a whole. As a minimum, NTIA should have accurately described the limitations on the work it produced.

Predictably, NTIA's advocacy approach created misunderstanding later. After July 22, 1992, when NTIA provided its information to the Congress, the National Cable Television

Association prepared and mailed flyers to cable TV subscribers warning of the legislation's potential costs and quoting estimates allegedly prepared by the Department of Commerce. The Department is responsible for critical data and analysis on population and the nation's economic activity--information which executive and legislative decision-makers and the public have come to rely on as being objective and the best available. Identifying the Department as the source of the cable television reregulation cost estimates gave the estimates undeserved credibility. The release of incomplete or biased information by an agency of the Commerce Department erodes the trust that executive and legislative decisionmakers and the public have placed in our Department.

CONCLUSIONS

Although NTIA has the authority to advocate the administration's views on pending legislation to the Congress, it should do so as a federal agency, and not from the perspective of an industry trade association. In our opinion, good public policy requires that a federal agency present accurate data and analyses in a justifiable and honest manner even during advocacy. Incomplete data or studies should be properly qualified. We believe that by presenting generally inflated estimates and imprecise charts accompanied by incomplete disclosure, and by failing to consider analyses leading to a more complete picture of the issue, NTIA acted inappropriately.

Such actions endanger the fundamental trust the public and their elected representatives place in the information and analyses provided to them by the Department and career civil servants. To ensure that trust, NTIA must be responsive to issues of independence, bias, and perspective and to the completeness of materials with which it informs Congress and others.

RECOMMENDATION

We recommend that the Assistant Secretary for Communications and Information develop procedures to **ensure** that in the future NTIA presents accurate data and analyses, properly described or **qualified**, to the Congress and others.



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Communications
and Information
Washington, D.C. 20230

JUL 22 1992

Honorable
House of Representatives
Washington, DC 20515-2218

Dear Mr.

This week the House of Representatives may consider H.R. 4850, the "Cable Television Consumer Protection and Competition Act of 1992."

Enclosed is information, prepared by NTIA, on the negative budget impact on consumers of this legislation. Cable re-regulation would be very costly. In many communities, rates would increase, and cable subscribers would lose the benefits of improved programming and other services.

Expanded competition, not massive re-regulation, would best serve consumers. Eliminating barriers to competition would not only drive down cable rates, but also create incentives to improve service.

Should you desire additional information regarding the attached charts, please contact Mary Dewhurst, NTIA's Director of Congressional Affairs at (202)-377-1551.

Sincerely,

A handwritten signature in dark ink, reading "Gregory F. Chapados", is written over a horizontal line.

Gregory F. Chapados

Attachments

Cost of Cable Re-regulation (R. 4850) To Consumers

DECREASED PROGRAMMING QUALITY



**Potential \$491 Million to \$1.75 Billion
Annual Loss in Consumer Benefits**

Based on KCF Consulting Associates Estimate

INCREASED REGULATORY COSTS



**\$22 to \$60 Million Annually in Federal,
State, and Local Regulatory Costs**

FCC and CBO Estimates

INCREASED CABLE OPERATING COSTS



**\$760 Million to \$1 Billion Annually
for mandatory system upgrades**

NOTA Estimate

**\$1.27 to \$2.81 Billion Increased Annual Costs
(Equivalent to \$23 to \$51 for each of the
Nation's 55 Million Cable Subscribers)**

Impact Of Increased Cable Competition

LOWERED CABLE RATES

EXPANDED SERVICE OFFERINGS

IMPROVED SERVICE QUALITY

HASTENED NETWORK MODERNIZATION



**\$4.41 Billion Annual Benefits
(\$80 per year for each of the Nation's
55 Million Cable Subscribers)**

*Based on Levin and Glaser,
Telecommunications Policy (Dec. 1991)*

10f

Why You Should Vote Against Massive Cable Re-regulation

H.R. 4850 is

- **Anti-Consumer**

and results in

Cable prices per channel for "most popular" Basic Cable Packages decreased 2.4 Percent from December 1986 to April 1991. Industry investment in programming quintupled, and channels typically available to consumer doubled since 1984. H.R. 4850 would raise costs of cable service and limit availability of programs to consumers.

- **Increased Costs**

Attached chart shows massive re-regulation would cost \$1.27 to \$2.81 Billion per year, equivalent to \$23 to \$51 per year for each cable subscriber.

- **Regulatory Burdens**

FCC is already empowered to permit states to regulate problem areas, and the FCC regulatory standard was recently toughened. H.R. 4850's re-regulatory costs to FCC would be between 17% and 44% of its entire current budget. Regulation would harm the economy by limiting this growth industry. The \$22 to \$60 million annual increase in Federal, State, and local regulatory costs will be paid either by the taxpayer or the cable subscriber.

- **Constitutional Questions**

Cable operators required to carry local broadcast channels regardless of interests and tastes of local subscribers. Similar regulations have been found to be unconstitutional.

The Preferred Alternative - Competition In The Video Marketplace

Competition, not rate or service regulation, best keeps cable rates low and quality high. Competition could result in \$4.41 billion annual benefits, or \$80 per year for each cable subscriber.

To increase competition in the video marketplace:

- *Outlaw exclusive cable franchising practices;*
- *Permit telephone companies to compete in offering cable; and*
- *Eliminate regulatory burdens on other competitors to cable.*

ONE HUNDRED SECOND CONGRESS

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U.S. House of Representatives
Committee on Energy and Commerce
Room 2125, Rayburn House Office Building
Washington, DC 20515-6115

August 28, 1992

The Honorable Frank D. DeGeorge
Inspector General
Department of Commerce
Washington, D.C. 20230

Dear Mr. DeGeorge:

Pursuant to their jurisdiction over the regulation of interstate and foreign communications under Rule X of the Rules of the U.S. House of Representatives, the Subcommittee on Oversight and Investigation and the Subcommittee on Telecommunications and Finance have initiated an investigation of a matter pertaining to the operation of the cable television industry and, more specifically, to legislation that has passed both the House and Senate and is now pending in conference.

We are enclosing a copy of a letter we have sent today to Secretary of Commerce Barbara Franklin, describing an August 27, 1992 Washington Post article that suggests the National Cable Television Association (NCTA) represented certain statistical data as an estimate of the U.S. Department of Commerce when in fact that data was generated by NCTA itself or consultants hired by NCTA. The article also suggests that the estimate may be overstated and otherwise suspect.

Our letter to Secretary Franklin also refers to a letter written to Members of Congress by Assistant Secretary for Communications and Information Gregory F. Chapados purporting to enclose "information, prepared by NTIA, on the negative budget impact on consumers of [H.R. 4850]" (emphasis added), cable legislation then pending before the House of Representatives. The enclosure in fact does no more than cite cost estimates prepared by others -- notably NCTA and its consultants.

We are concerned both by the implication of the Post article that NCTA represented its own statistical data as that of the Department of Commerce and by the use in Mr. Chapados' letter of

The Honorable Frank D. DeGeorge
August 28, 1992
Page 2

data from other sources that allegedly NTIA itself never analyzed independently. If true, this situation reflects poorly on the quality of statistical data issued generally by NTIA (and perhaps the entire Department). We believe serious questions are also raised by a Department official's use of industry-supplied conclusions when the industry-supplied data on which those conclusions are based have not been independently verified.

For these reasons, we respectfully request that you immediately undertake an investigation of the source of the data at issue here, the characterization of the estimate in question as a Department of Commerce product, the use by Assistant Secretary Chapados of NCTA-supplied material, and the Commerce Department's policies (or lack thereof) for the use of industry-supplied data in taking positions on pending legislation. In particular, we request that you make recommendations on the level of independent Departmental analysis that should occur with respect to such data before a Department official publicly relies on that data or conclusions drawn therefrom.

If you have any questions concerning this request, please feel free to contact Mr. David Leach of the Committee staff at 225-3147. We appreciate your cooperation in this matter.

With best wishes,

Sincerely,



John D. Dingell
Chairman

Subcommittee on
Oversight and Investigations



Edward J. Markey
Chairman

Subcommittee on
Telecommunications and Finance

Enclosures

cc: The Honorable Matthew J. Rinaldo
Ranking Republican Member
Subcommittee on Telecommunications and Finance

The Honorable Thomas J. Bliley
Ranking Republican Member
Subcommittee on Oversight and Investigations

The Honorable Barbara H. Franklin
Secretary of Commerce

The Honorable Gregory F. Chapados
Assistant Secretary for Communications and Information



UNITED STATES DEPARTMENT OF COMMERCE
Office of Inspector General
Office of Audits
ATLANTA REGIONAL OFFICE
401 W. Peachtree St., N.W., Suite 2342
Atlanta, Georgia 30308
(404) 730-2788 FAX
(404) 730-2780

SEP 30 1993

MEMORANDUM TO: Louis W. Perrygo, Chief
Census Procurement Office

William M. Manto
FROM: William M. Manto
Regional Inspector General
for Audits

SUBJECT: Postaward Contract Audit
Final Audit Report No. ATL-4349-3-0001
Contract No. 50-YABC-7-66029
Auditee: Advertising Council, Incorporated

Attached are two copies of the subject audit report for your action in accordance with DAO 213-5, "Audit Resolution and Follow-up." We did not send a copy to the contractor, however, we do not object to your doing so if you believe it will assist the Department in its decisionmaking and the Office of General Counsel approves.

The contractor claimed \$4,738,517 in costs. We recommend that you take action to recover the overpayment of \$2,504,165 and close out the contract.

Under DAO 213-5, you must submit your decision on actions to be taken on each audit finding and recommendation. As applicable, your decision should include the rationale and/or legal basis for reinstating any questioned costs in the report, for proposing settlement of any claim by the government, and for treating other issues differently from that recommended in the report. Instructions for preparing a contracting officer's decision under the Disputes Act are contained in FAR 33.211. Instructions for preparing a contracting officer's demand for payment are in FAR 32.610(b).

As we discussed in our March 10, 1993 meeting, our staff will be available to consult with you during negotiations and provide assistance in achieving a reasonable resolution. This includes review and comment on any additional information provided by the contractor. As we also discussed, many of the findings resulting in \$2.5 million in questioned costs raise issues related to the adequacy and cost of contractual services provided both within and outside the scope of the contract. Resolution of these findings may require technical determinations and separate

contract actions which are solely the responsibility of Census. We recognize that judgment will be exercised in these areas because of the lack of documentation, and have no objection provided the decisions reached are sound, logical and legal.

Any inquiry regarding this report should be directed to Richard Bassett or William Bedwell of this office at (404) 730-2780. All correspondence should refer to the audit report number given above.

Attachments

cc: Pat Boteler, Management Liaison, Census

bcc: Frank DeGeorge, Inspector General
Michael Zimmerman, Deputy Inspector General
John D. Newell, Assistant Inspector General
for Auditing
Ronald D. Lieberman, Deputy Assistant Inspector
General for Regional Audits
George Ross, Assistant Inspector General
for Compliance and Audit Resolution
Karl Schnornagel, Director, Financial Management
Division
Michael Behan, Regional Inspector General for
Atlanta Investigations
K. Wayne Weaver, Counsel to the Inspector General
Barbara Bynum, Information Center, Resource Management
Division
Annie Holmes, Management Assistant
Master File
Follow-up File
Library

FINAL AUDIT REPORT NO. ATL-4349-3-0001
THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
CONTRACT NO. 50-YABC-7-66029
SEPTEMBER 1993

UNITED STATES DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDITS
ATLANTA REGIONAL OFFICE

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FINAL AUDIT REPORT). ATL-4349-3-0001
THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
Contract No. 50-YABC-7-66029

EXECUTIVE SUMMARY

In January 1987, the Bureau of the Census awarded the Advertising Council, Incorporated a cost reimbursement contract to develop and implement a national advertising campaign for the 1987 Economic and Agricultural Censuses, and the 1990 Population and Housing Census. The estimated cost of the contract was \$4.8 million. The Ad Council subcontracted with various private for-profit advertising agencies for most of the work on the campaign. The advertising agencies, in turn, subcontracted much of their work.

The Ad Council's accounting system and procurement practices, as they relate to the Census contract, did not meet federal standards. Council officials said that they have since made certain changes which corrected the problems. Nonetheless, Census needs to obtain assurances from the Council that its accounting and procurement practices meet federal standards before the agency enters into any new contracts with the Council.

We are questioning \$2.5 million in costs the Ad Council claimed against the contract. Almost \$1.9 million of the costs is questioned due to significant deficiencies in subcontracting practices by the Ad Council and its subcontractors that violated numerous federal procurement regulations. The most serious procurement violations included the failure of the Council and its subcontractors to:

- o Adequately seek competition or the written consent of the contracting officer to subcontract; and
- o Obtain adequate written contractual agreements.

The remaining \$600,000 in questioned costs was for services that were outside the scope of the contract or did not benefit the project, and for costs which lacked adequate support documentation.

We recommend that the Bureau of the Census:

- o Disallow \$2.5 million in costs claimed and recover that amount from the Advertising Council; and
- o Require the Council to provide certain assurances that its accounting and contract administration procedures and practices meet federal standards before any new contracts are awarded to the organization.

INTRODUCTION

On January 5, 1987, the Bureau of the Census awarded the Advertising Council, Incorporated, a negotiated sole source cost reimbursement contract to develop and implement a national advertising campaign for the 1987 Economic and Agricultural Censuses, and for the 1990 Population and Housing Census. The estimated cost of the contract was \$4.8 million. The Ad Council subcontracted with various private for-profit advertising agencies for most of the work on the campaign. The advertising agencies, in turn, subcontracted much of their work.

The Ad Council is a nonprofit corporation which develops and manages advertising campaigns of a public service nature for government agencies and private companies. Many of the council's advertising campaigns are done for federal agencies. For example, just prior to receiving the Census contract, the Council was working on nine federal advertising contracts totaling about \$5.1 million. Among the agencies were the Departments of the Treasury, Agriculture, Defense, Health and Human Services, Transportation and the Interior.

The Council's income is primarily derived from annual contributions by about 450 private companies and from fixed rate indirect cost charges based on each campaign's direct cost. The fixed indirect cost rate for the Census contract was [REDACTED] percent.

PURPOSE AND SCOPE OF AUDIT

b(4)

The purpose of the audit was to determine the allowability, allocability and reasonableness of the costs the Ad Council billed or claimed on the Census contract. These costs must be in accordance with Office of Management and Budget Circular A-122, Cost Principles for Nonprofit Organizations, or Federal Acquisition Regulation cost principles for for-profit commercial firms.

The audit was conducted during the period January 10, 1991, through February 24, 1993. We reviewed Census contract files, and the Ad Council's and five of its subcontractors' support for certain claimed costs. We also interviewed responsible Census, Council and Council subcontractor officials as deemed necessary. As discussed in the following section, the audit took longer than anticipated due to the Council's inadequate accounting for the Census campaign costs.

We did not evaluate internal controls or rely on the Ad Council's certified public accountant's internal control reviews, but instead determined that the audit could be performed more efficiently through expanded substantive testing of transactions. The certified public accountant's reports did not express opinions on the system of accounting control taken as a whole because of scope limitations. Our expanded testing disclosed that, as they related to the Census contract, internal accounting and procurement controls were inadequate.

There were no other federal audits of the Ad Council during the period of the Census contract. The Defense Contract Audit Agency performs annual audits of the Ad Council's indirect cost rate proposals, but had not conducted an audit for the period we audited.

Except as described later in this report, the results of our tests indicate that, with respect to the items tested, the Council complied in all material respects with the regulatory provisions of the applicable federal cost principles. With respect to items not tested, nothing came to our attention that caused us to believe that the Council had not complied in all material respects with those provisions.

We conducted our audit according to generally accepted government auditing standards, and performed it under authority of the Inspector General Act of 1978, as amended, and Department Organization Order 10-13, dated May 22, 1980, as amended.

FINDINGS AND RECOMMENDATIONS**INADEQUATE ACCOUNTING FOR CAMPAIGN COSTS**

The Ad Council did not adequately account for the Census contract's campaign costs. Therefore, as shown in Appendix I to the report and explained in the reference notes, \$2.5 million of questioned costs is attributable to inadequate accounting as either the primary or secondary reason. Council officials said that they have since made changes to the accounting system which corrected the problems. Nonetheless, Census needs to obtain adequate assurances from the Council that its financial management system will adequately account for costs before the agency enters into any new contracts with the Council.

While the Council is exempt from the federal Cost Accounting Standards because it is considered a small business, federal regulations require that all contractors adequately account for the accumulation and billing of contract costs. For example, the contractor's accounting system should, at a minimum, provide for:

- o Accurate, current and complete disclosure of the financial results of a federally sponsored project.
- o Records that adequately identify the source and use of funds for federally sponsored activities.
- o Procedures for determining the reasonableness, allowability and allocability of costs.
- o Accounting records that are supported by source documentation.

Because of their accountability to the federal government, contractors must also require their subrecipients to meet these minimum accounting standards.

The Council's financial management system did not meet any of the above basic requirements. This condition existed because neither direct costs for campaigns or projects, including the Census campaign, nor the related incomes were recorded in the Council's income and expense accounts. Instead, all direct costs of campaigns or projects and their related incomes were recorded only in balance sheet accounts. Such accounting did not provide for accurate, current and complete disclosures of the expenses or for an adequate audit trail. Due to the inadequate audit trail, we were forced to audit the costs based on Council billings to Census, which is not customary and is extraordinarily inefficient.

The Council had no procedures for determining the reasonableness, allowability and allocability of costs. In addition, the Council's inadequate accounting practices also made it very

difficult and, in many incidences, impossible for Council officials to find the documentation they needed to support the costs claimed.

Finally, the Council failed to require most of its subcontractors to adequately account for their expenses claimed against the contract. As a result, many of the problems associated with the Council's poor accounting, such as the lack of adequate documentation, were mirrored at the subcontractor level.

Ad Council officials said that the weaknesses in its financial management system have been corrected since our audit, and that their current system meets federal standards. On February 24, 1993, Council officials provided us with the organization's 1992 audit report, which states that the audit was conducted in accordance with federal standards and that the Council generally complied with the federal financial management standards.

Census will soon be requesting proposals to conduct the advertising campaign for the year 2000 census. If the Ad Council submits a proposal for that campaign or for any other contract, Census should obtain assurances that the Council's financial management system meets federal standards before considering another award to the organization.

Recommendation

We recommend that the Director of the Bureau of the Census require the Council to engage a certified public accountant to conduct an accounting system survey and issue an opinion that the Council's accounting procedures and practices meet federal standards before the agency entertains awarding any new contracts to the organization.

PROCUREMENT PRACTICES VIOLATED
FEDERAL REGULATIONS

The Ad Council's and its subcontractors' procurement practices flagrantly violated federal procurement standards and resulted in the improper use of federal funds. Specifically, the Council and its subcontractors:

- o Purchased almost \$1.9 million in goods and services without adequately seeking competition or the written consent of the contracting officer; and
- o Routinely failed to obtain adequate, if any, written contractual agreements.

Lack of Competition

Contractors are generally required to purchase goods and services through competition since the government is best served when all potential contractors have an equal opportunity to compete for its business. Full and open competition also reduces the likelihood of favoritism by the procuring activity, as well as collusion and price-fixing among contractors. When competition is unduly restricted or eliminated, the government loses these benefits. Accordingly, Federal Acquisition Regulation, Competition in Subcontracting, Clause 52.244-5, requires that all contractors adhere to certain basic standards. In particular, the regulation mandates that all procurements be made in a manner that provides open and free competition to the maximum extent practical.

In addition to the general requirement to compete awards, federal regulations, FAR 52.244-2, and the contract require the contractor, in most cases, to notify, provide certain information to, and obtain written consent from the Census contracting officer in advance of entering into subcontracts. In addition, the contract specifically required that, for subcontracts of \$25,000 or more, at least three bids be obtained. Information which the contractor must supply to the contracting officer includes, among other things:

- o A description of the goods or services to be bought;
- o The price;
- o Evidence of competition;
- o The basis for selecting the subcontractor;
- o A cost or price analysis; and
- o Detailed price negotiation information.

All redactions b(4)

Contrary to federal regulations, the Ad Council and its subcontractors purchased almost \$1.9 million in advertising goods and services with insufficient competition through at least 29 subcontractors. Appendix II identifies those subcontractors and the amounts paid to them. Moreover, the Council and its subcontractors seldom notified, provided the required information to or obtained the Census contracting officer's consent to subcontract. Had they done so, the contracting officer would have had an opportunity to ensure that the contractor complied with the terms of the contract regarding competition.

The Ad Council purchased about \$664,000 in goods and services from subcontractors without adequately seeking competition. The following two subcontracts account for about \$530,000 of the goods and services purchased.

Vitt Media International

The Ad Council paid Vitt Media about \$[REDACTED] for two advertising projects. Council officials contend that Census officials directed them to contract with Vitt because of time constraints and Vitt's experience in the 1980 census. However, none of the correspondence or other documentation provided supported their contention.

Vitt also used two subcontractors, Bruskin Associates and Media Monitors, who were paid a total of about \$[REDACTED]. Vitt officials said that three bids were solicited and received on the work Bruskin was contracted to do, but they could not provide bid documentation. Vitt officials said that Media Monitors was a sole source contract, but they could not provide supporting documentation, such as a market survey, justifying their selection as a sole source supplier. See Appendix I, reference note 4.A. for details.

The Gallup Organization

The Ad Council paid Gallup \$[REDACTED] to prepare an evaluation of a Census publicity campaign. The Council's Executive Vice President said that Gallup was selected as a sole source because of its reputation, experience and work on the 1980 Census. The Council did not prepare a sole source justification and the vice president acknowledged that Gallup had several competitors; and was, therefore, not the only source for the services. See Appendix I reference note 4.C. for details.

There were five Ad Council subcontractors who, in turn, awarded a large number of subcontracts (commonly referred to as second and third tier subcontracts). These subcontractors are: Ogilvy & Mather, West Indies & Grey, The Mingo Group, Castor GS&B and Muse Cordero Chen, Inc. These subcontractors frequently obtained goods and services without adequately seeking competition or the written consent to subcontract from the contracting officer. Examples of the lack of competition and consent are as follows.

All redactions b(4)

Ogilvy & Mather

Ogilvy paid the Daniel Yankelovich Group about \$[REDACTED] for a study of public awareness and knowledge about the census. The contract was not competed nor was there written consent from the contracting officer to award it. See Appendix I, reference note 10.B. for details.

West Indies & Grey

West Indies paid Specialty Plus about \$[REDACTED] for 10,000 T-shirts and 10,000 baseball caps which were distributed for advertising purposes. While an estimate provided to the Council indicated that one other company submitted a quote for the goods, West Indies could not provide the quote. Moreover, two quotes for the purchase of the T-shirts and baseball caps is insufficient competition for which a lack of vendors should not have been a problem and does not comply with the contract's requirement for at least three bids on subcontracts greater than \$25,000. Additionally, there was no written consent from the contracting officer for the contract award. See Appendix I, reference notes 14.B.(1) and (2).

The Mingo Group

Mingo paid Ringmaster \$[REDACTED] for production and editorial services. The firm had no documentation to indicate that competitive bids or quotes were sought. Additionally, Mingo paid Henway Productions \$[REDACTED] for TV production services; however written consent to subcontract was not given by the contracting officer. See Appendix I, reference notes 17.A.(1) and (2) and B.(3), for details.

Castor GS&B

Castor paid Guede Films almost \$[REDACTED] for TV production services. Guede was one of only two bidders and was the highest bidder. However, during the two months after the bids were received, Guede was permitted to reduce its quote three times until it arrived at an amount lower than the original low bid, and was then given the contract. The original low bidder was not advised of this process or given the opportunity to revise its quote. Not only were two bids insufficient competition on a \$[REDACTED] contract, but the low bidder should have been given an opportunity to rebid. Guede also subcontracted \$[REDACTED] in work to Production Brokers, Inc., which Guede did not compete. Written consent to award the subcontracts was not received from the contracting officer. See Appendix I, reference notes 19.A. and B., for details.

All redactions b(4)

Muse Cordero Chen, Inc.

The Ad Council subcontracted with Muse to produce the portion of the campaign targeted at Asian-Americans. Muse then subcontracted with The Film Place and Action Video and paid the two firms a total of about \$ [REDACTED] for editing and duplicating services. Muse officials said the two firms were selected because of their reputation for quality work within the advertising community and because of the on-going working relationship Muse had with them. The subcontract was awarded without competition or written consent from the contracting officer. See Appendix I, reference note 21.A.(2), for details.

Inadequate or No Written Contractual Agreements

OMB Circular A-122, Attachment B, Paragraph 35, requires that a professional service subcontract have an adequate contractual agreement which should include at a minimum:

- o A description of the services;
- o An estimate of time required;
- o A rate of compensation; and
- o Termination provisions.

Our review of the Ad Council's and its subcontractors' procurement records revealed that basic contract administration practices were seriously deficient. With respect to nearly every advertising service procurement we examined, the Council or its subcontractors neglected to obtain an adequate written contract, if in fact they obtained any written contract at all. For example, none of the previously discussed subcontracts with advertising agencies were documented by written contractual agreements. As a result, during our audit we were not able to compare contract award amounts for subcontracts to the total payments made.

The Ad Council and its subcontractors' failure to obtain adequate written contracts containing clear, accurate and complete work statements is a serious deficiency which greatly hampers proper contract administration and could lead to legal disputes. Without clearly defined contractual terms, it is difficult, if not impossible, to determine whether a contractor has met the requirements of the contract and is thus entitled to payment.

Recommendation

We recommend that the Director of the Bureau of the Census require the Council to engage a certified public accountant to conduct a procurement system survey and issue an opinion that the Council's procurement procedures and practices meet federal standards before the agency entertains awarding any new contracts to the organization.

RESULTS OF FINANCIAL AUDIT

Costs of \$4,738,517 were billed to Census by the Ad Council through January 1991, constituting the total claimed costs on the Census contract. We are questioning \$2,508,364 of these costs. Examples of the more significant costs questioned include:

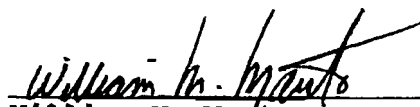
- o \$1,890,336 because the Ad Council and its subcontractors failed to follow federal procurement requirements in purchasing goods and services.
- o \$179,401 in costs for goods and services not within the scope of contract requirements.

The results of our financial audit of claimed costs are shown below. See Appendix I for details.

Contract Payments		\$4,734,318
Costs Claimed	\$4,738,517	
Less: Costs Questioned	<u>2,508,364</u>	
Costs Accepted		<u>2,230,153</u>
Amount Due Census		<u>\$2,504,165</u>

Recommendation

We recommend that the Census contracting officer take action to recover the overpayment of \$2,504,165 and close out the contract with the Advertising Council.


William M. Manto
Regional Inspector General
for Audits

9/30/93
Date

APPENDIX I
Page 1 of 49

All redactions b(4)

THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
CENSUS CONTRACT NO. 50-YABC-7-66029
SUMMARY OF FINAL FINANCIAL AUDIT OF COSTS CLAIMED
JUNE 26, 1987 TO JANUARY 29, 1991

TOTAL CENSUS CONTRACT

<u>Cost Category</u>	<u>Costs Claimed</u>	<u>Costs Questioned</u>	<u>Costs* Unsupported</u>	<u>Costs Accepted</u>
Magazines	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Newspapers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Print Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Radio	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
TV Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Trade	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Outdoor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Promotion	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Research	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Agricultural Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Economic Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Travel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Direct	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Indirect	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Costs	<u>\$4,738,517</u>	<u>\$2,508,364</u>	<u>\$2,452,340</u>	<u>\$2,230,153</u>
		Total Contract Payments		\$4,734,318
		Less Total Costs Accepted		<u>2,230,153</u>
		Amount Due Census		<u>\$2,504,165</u>

* Included in questioned costs.

APPENDIX I
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THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
CENSUS CONTRACT NO. 50-YABC-7-66029
SUMMARY OF FINAL FINANCIAL AUDIT OF COSTS CLAIMED
JUNE 26, 1987 TO JANUARY 29, 1991

All redactions b(4)

THE ADVERTISING COUNCIL
NEW YORK, NEW YORK

<u>Cost Category</u>	<u>Costs Claimed</u>	<u>Costs Questioned</u>	<u>Costs* Unsupported</u>	<u>Costs Accepted</u>	<u>Ref. Notes</u>
Magazines	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	1
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Newspapers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Print Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Radio	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	2
TV Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Trade	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	3
Outdoor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Promotion	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	4
Research	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Agricultural Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	5
Economic Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Travel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	5
Total Direct	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	6
Indirect	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Total Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	

* Included in questioned costs.

All redactions b(4)

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THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
CENSUS CONTRACT NO. 50-YABC-7-66029
SUMMARY OF FINAL FINANCIAL AUDIT OF COSTS CLAIMED
JUNE 26, 1987 TO JANUARY 29, 1991

OGILVY & MATHER
NEW YORK, NEW YORK

<u>Cost Category</u>	<u>Costs Claimed</u>	<u>Costs Questioned</u>	<u>Costs* Unsupported</u>	<u>Costs Accepted</u>	<u>Ref. Notes</u>
Magazines	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Newspapers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Print Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	7
Radio	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	8
TV Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	9
Trade	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Outdoor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Promotion	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Research	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	10
Agricultural Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Economic Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Travel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Total Direct	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Indirect	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	11
Total Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	

* Included in questioned costs.

All redactions b(4)

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THE ADVERTISING COUNCIL, INC.
NEW YORK, NEW YORK
CENSUS CONTRACT NO. 50-YABC-7-66022
SUMMARY OF FINAL FINANCIAL AUDIT OF COSTS CLAIMED
JUNE 26, 1987 TO JANUARY 29, 1991

WEST INDIES & GREY
SAN JUAN, PUERTO RICO

<u>Cost Category</u>	<u>Costs Claimed</u>	<u>Costs Questioned</u>	<u>Costs* Unsupported</u>	<u>Costs Accepted</u>	<u>Ref. Notes</u>
Magazines	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Miscellaneous	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	12
Newspapers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Print Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Radio	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
TV Production	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	13
Trade	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Outdoor	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Promotion	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	14
Research	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	15
Agricultural Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Economic Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Travel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	
Total Direct	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	
Indirect	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	16
Total Costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	

* Included in questioned costs.

February 5, 1990

THE MEDIA BUSINESS: ADVERTISING; Census Bureau Tries New Promotional Tack

LEAD: The Census Bureau's decennial advertising campaign, to be presented today by Secretary of Commerce Robert A. Mosbacher, differs from previous campaigns in its attempt to include more members of minority groups in its count.

The Census Bureau's decennial advertising campaign, to be presented today by Secretary of Commerce Robert A. Mosbacher, differs from previous campaigns in its attempt to include more members of minority groups in its count.

To supplement the main spot that was prepared by Ogilvy & Mather, the Mingo Group has created ads aimed at blacks. Its subsidiary Muse Cordero Chen, Los Angeles, prepared ads for Asians. Castor GS&B created ads aimed at the Hispanic population, and West Indies & Grey did so for Puerto Rico.

Ogilvy & Mather's general campaign emphasizes the connection between the Census and the allocation of resources.

"The United States Census isn't just a population count," the narrator says. Matchsticks, first used to illustrate counting, then build up into a hospital, a school and a day-care center. The campaign was coordinated by the Advertising Council.

U.S. DEPARTMENT OF COMMERCE
Office of Inspector General



OFFICE OF GENERAL COUNSEL

***Concerns About the Commercial Law
Development Program Largely Unfounded***

Final Inspection Report No. IPE-11027/September 1998

Office of Inspections and Program Evaluations





UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, D.C. 20230

SEP 30 1998

MEMORANDUM FOR: Andrew J. Pincus
General Counsel

FROM: Johnnie E. Frazier
Acting Inspector General *Johnnie Frazier*

SUBJECT: Final Inspection Report on the Commercial Law Development
Program (IPE-11027)

This is the final report on our review of specific allegations and related management issues concerning the Office of General Counsel's Commercial Law Development Program. Our observations are described in the Executive Summary on page i, and the recommendations are listed on page 12.

This report is a follow-up to our July 16, 1998, draft report and includes comments from your August 26, 1998, written response. A copy of the entire response is included as an appendix to the report.

We thank the Office of General Counsel staff for the assistance and courtesies extended to us during our inspection.

Attachment

cc: Katherine Lunney, Deputy General Counsel
Barbara Fredericks, Assistant General Counsel for Administration

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EXECUTIVE SUMMARY

The Office of Inspector General conducted a review to follow up on several allegations and concerns regarding the Office of General Counsel's (OGC) Commercial Law Development Program (CLDP). These concerns were brought to our attention by officials in the State Department and the U.S. Agency for International Development (USAID). Specifically, it was alleged that [REDACTED] may have misused USAID funds, transferred to the Department of Commerce through interagency agreements, to authorize excessive performance awards for herself and other CLDP employees. In addition, it was alleged that [REDACTED] may have used these USAID funds to take unauthorized overseas trips to countries beyond the scope of the program described in the interagency agreements.

CLDP was established in 1992 to assist emerging market economies to further develop their legal systems and regulatory infrastructures necessary to attract trade and investment. Since 1992, OGC has received over \$10.7 million through four interagency agreements with USAID, to administer commercial law development programs in Central and Eastern Europe and the Baltic countries, Russia and the New Independent States (NIS), and Egypt.

CLDP Performance Bonuses, Although Generally Proper, Need Closer Management Oversight

Although we found no instance in which [REDACTED] received excessive performance bonuses, we did find that two staff members had received bonuses in excess of 10 percent of base salary, the general limit applicable to employees under DoC policy. A CLDP employee received a regular performance award and later received a special award that together exceeded the 10 percent limit, but the second bonus did not involve USAID funds and both the general performance award and the special award were found to be properly documented and justified. In the other instance, two performance awards were paid to a personal services contractor and, while not in violation of the 10 percent policy, which does not affect contractors, the second award (\$1,000) was found to have been improperly characterized as a performance award. Specifically, the second bonus was awarded to compensate the contract employee for an error made in the calculation of the contract base salary rather than amending the contract to correct the error (see page 3).

We also found that OGC did not follow proper procedures in the nomination and awarding of cash bonuses to [REDACTED] and other OGC employees. According to Department Administrative Order 202-451 (Incentive Awards Program), cash awards over \$5,000 for performance for general workforce employees must be submitted through the Department's Office of Human Resources to the Incentive Awards Board for review and recommendation. According to OHRM officials, there is no record that OGC followed this procedure (see page 6).

State Department and USAID officials were also concerned about the use of interagency agreement funds for performance awards. Performance bonuses are allowable costs under financial assistance agreements such as interagency agreements. The current interagency agreements between USAID and CLDP do not address this matter and therefore do not prohibit the payment of bonuses. However, due to the concerns raised, OGC and CLDP need to specifically discuss the issue with State Department and USAID officials and clearly specify in the terms and conditions of future interagency agreements whether performance awards may be paid and agree on a budget for such awards (see page 6).

We also noted, however, that when we compared CLDP's performance award level to those of other OGC units, CLDP's award level was considerably higher. At a minimum, this creates a negative perception that OGC may be taking advantage of the reimbursable funding to provide a disproportionate level of bonuses to CLDP staff. This is a management issue that OGC should address for future performance awards (see page 6).

Overseas Travel of CLDP Staff Was Authorized
and Costs Were Properly Allocated

We found the concerns about [REDACTED] travel to be unfounded. While [REDACTED] traveled to countries other than those covered by the interagency agreements with USAID, the travel was properly authorized and paid for by other federal monies. A questioned trip to Egypt was at the invitation and expense of the USAID/Cairo mission, and the two trips to Vietnam were paid for by OGC and the Department's International Trade Administration. Both trips were justified and within the scope of the CLDP mission. Our examination of other CLDP program travel revealed no discrepancies (see page 7).

Some CLDP Management Issues Need Attention

During our review, we did find other management issues that need to be addressed including (1) inadequate communications between CLDP officials and State Department and USAID officials regarding CLDP progress reports and program expenditures, and (2) questionable use of personal services contracts to hire CLDP staff (see page 9).

On page 12, we offer recommendations to address our concerns.

In its August 26, 1998, written response to our draft report, OGC agreed with all of our recommendations and offered clarifications to our observations. Where appropriate, we have provided additional information to address OGC's comments in response to specific sections of our report. A copy of OGC's complete response to the report is attached as Appendix A.

INTRODUCTION

Pursuant to the authority of the Inspector General Act of 1978, as amended, the Office of Inspector General conducted a limited review of specific allegations and concerns raised about the Office of General Counsel's (OGC) Commercial Law Development Program (CLDP). The CLDP unit was created in 1992 to apply the experience gained by the Department in assisting emerging market economies to restructure their legal and regulatory environments to better facilitate expanding trade and investment opportunities for U.S. companies.

Inspections are special reviews that the OIG undertakes to provide agency managers with timely information about operations, including current and foreseeable problems. Inspections are also done to detect and prevent fraud, waste, and abuse, and to encourage effective, efficient, and economical operations. By highlighting problems, the OIG intends to help managers move quickly to address those identified during the inspection and avoid their recurrence in the future. Inspections may also highlight effective programs or operations, particularly if they may be useful or adaptable for agency managers or program operations elsewhere. This inspection was conducted in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency. Our fieldwork was performed during the period from April 13 through May 15, 1998. At the conclusion of the inspection, we discussed our observations and recommendations with the Deputy General Counsel.

PURPOSE AND SCOPE

We conducted a review of several allegations and concerns regarding CLDP brought to our attention by officials in the State Department and the U.S. Agency for International Development (USAID). Specifically, it was alleged that [REDACTED] may have misused USAID funds, transferred to the Department of Commerce through interagency agreements, to authorize excessive performance awards for herself and other CLDP staff members. In addition, it was alleged that [REDACTED] may have used these USAID funds to take unauthorized overseas trips to countries beyond the scope of the program described in the interagency agreements. The scope of our review was limited to addressing the specific allegations and related management issues. Our work included interviews with OGC and Commerce officials, and representatives of USAID and the State Department's Office of the Coordinator of U.S. Assistance to the New Independent States (NIS), as well as a review of pertinent documentation and records.

BACKGROUND

CLDP is led by a director, operating under the general management of OGC. CLDP has as its objective to assist the target emerging market countries, through technical assistance and

training, in establishing the necessary commercial environment and legal infrastructure to promote domestic and international trade and investment. The Department, in particular, has broad experience in such matters as international trade and investment law, intellectual property rights law, and other issues such as government procurement and insurance regulation, that are particularly useful to countries with emerging market economies.

CLDP entered into its first interagency agreement with USAID in 1992 to assist the countries of Central and Eastern Europe to develop and operate under legal and regulatory frameworks that would foster international trade and investment to facilitate the transition of those countries to free-market economies. Since that time, CLDP's programmatic relationship with USAID has resulted in additional interagency agreements to further assist Central and Eastern European countries in developing legal systems to promote trade and investment. These interagency agreements have totaled over \$5.1 million. Furthermore, CLDP has increased the number of agreements it has with USAID to include helping Russia and the NIS to develop the legal infrastructure to improve their proposed accession to the General Agreements on Tariffs and Trade/World Trade Organization (GATT/WTO). These efforts are focused on Russia, Ukraine, and Moldova, for a project total of over \$4.4 million. CLDP has received an additional \$250,000 from USAID to work with the Russian government in combating commercial crime. Finally, CLDP entered into its latest agreement with USAID in January 1998 to help the Egyptian government with developing its business law and regulatory structure, for a project total of more than \$900,000. Thus far, CLDP has or will receive over \$10.7 million from USAID for these four agreements.

The CLDP staff presently consists of 10 employees: a director, a deputy director, and five staff members in Washington, D.C., and three resident advisors, one each in Russia, Ukraine, and Albania.

OBSERVATIONS AND CONCLUSIONS**I. CLDP Performance Bonuses, Although Generally Proper,
Need Closer Management Oversight**

The issue brought to our attention from State Department and USAID officials was that, under the terms of the agreement between the USAID and the Commerce Department, [REDACTED] may have misused USAID funds, transferred to the Department through interagency agreements, to authorize performance awards for herself and other CLDP staff, in excess of the annual limit of 10 percent of base salary, as established by statute and Commerce policy.

Although we found no instance in which [REDACTED] received a performance bonus in excess of the annual limit of 10 percent of base salary, we did find examples of two CLDP staff members who received bonuses in excess of 10 percent. One of the individuals received both a performance bonus, and a second bonus for a special act or achievement award, both of which were justified and properly documented. The second individual, a personal services contractor, received a performance bonus, and a second bonus to compensate for a reportedly incorrect contract salary level. This second bonus has been questioned and is addressed later in this report.

Based on information provided by the CLDP director and the Department's Office of Human Resources Management, we calculated the total amount of employee performance awards paid to CLDP staff for fiscal years 1994-98 (see Table 1 below). We also verified that the portion of the total awards paid by USAID were according to the allocable salary, travel, and administrative costs of the CLDP staff supporting those projects. Although State Department and USAID officials may question the propriety, or at least the perception, of granting employee awards with assistance funds authorized by the Foreign Assistance Act of 1961 and the FREEDOM Support Act of 1992, nothing in these acts, or in the interagency agreements, restricts Commerce from authorizing such awards.

Table 1: Total Performance Awards for CLDP Staff in Fiscal Years 1994-98

Performance awards reimbursed by USAID	\$60,989 (76.8%)
Performance awards paid by OGC	\$18,373 (23.2%)
Total	\$79,362 (100%)

Contrary to the allegations, we found no instance in which [REDACTED] received a cash award in excess of 10 percent of her base salary. The highest award she received was for \$[REDACTED] or 9.76 percent of her salary. This award was made based on her fiscal year 1997 [REDACTED] performance rating, and was paid through a proper allocation of OGC and USAID funds in

November 1997:

We expanded our review to determine if other CLDP staff members had received large awards. In examining personnel records, we found two occasions in which CLDP staff members received total cash awards in excess of 10 percent of their salary. [REDACTED] received a cash award of 10 percent of his salary, based on his [REDACTED] performance rating for that year. [REDACTED] also received a separate award of \$1,000 (Special Act or Service Award, 5 U.S.C. § 4503) for being named CLDP's Outstanding Legal Office Attorney for [REDACTED]. This award was for [REDACTED] ability to handle the program's expanding workload. The two awards together resulted in a combined cash award of \$[REDACTED], or 12.25 percent of [REDACTED] salary for that year.

[REDACTED] combined performance awards were not improper, however. [REDACTED] regular performance award was paid by funds received from USAID and OGC in proportion to his work on their behalf. The special award that was paid later, and which caused him to exceed the 10% limit, was paid entirely by funds provided by OGC and not reimbursed by USAID. Commerce Department policy (Department Administrative Order 202-451) and federal statute (5 U.S.C. § 4505a) allow for the award of total performance-based cash awards of up to 10 percent of salary, with a provision that exceptional performance can be recognized by the agency head up to a maximum performance award level of 20 percent. Because Commerce funds were used and proper documentation supported the awarding of the two bonuses, we concluded that [REDACTED] performance awards did not (1) violate Commerce's personnel policies or (2) the interagency agreements with USAID, which do not address the issue of paying performance bonuses.

The other award in excess of 10 percent was made in fiscal year 1998. In this case, a CLDP staff member, employed under a personal services contract as a program assistant, received a performance award of \$[REDACTED] (9.01 percent of her salary) and an additional \$[REDACTED] performance award. When combined, the two cash awards equaled 13.08 percent of her base salary. The full amount of these awards was reimbursed by USAID.

We found the characterization of the \$[REDACTED] payment as an award to be inappropriate; if a salary adjustment was justified, it should have been paid as base salary pursuant to an amendment to the contract. The CLDP director explained that with the resources available in the CLDP budget, she drafted a personal services contract to reflect the duties and responsibilities for a program assistant at the salary level comparable to that of a GS-7, step 2. The CLDP director later realized that the salary level in the contract was in error, for it was incorrectly calculated at \$26,760, rather than the correct amount for a GS-7, Step 2. The CLDP director explained that the second performance award of \$[REDACTED] was awarded to compensate the contractor for the error made in the calculation of the base salary. Although performance recognition and/or incentive awards are permitted for personal services contractors, these awards should not be used to adjust

a salary or contract level. This distorts the purpose of an employee incentive awards program, which is designed to recognize and reward superior performance. Rather, the personal services contract should have been amended to correct any such mistake in calculating the contractor's base salary.

We also calculated the total level of cash awards as a percentage of total salaries for CLDP employees and compared that figure with similar calculations for the cash awards of other OGC units. As shown in Table 2, CLDP's cash award level for fiscal year 1997 was considerably higher than all other OGC units. The total dollar value of CLDP's awards was 7.55 percent of the total salaries of its staff. Although there may be some justification for the disparity, at a minimum it gives the impression that OGC may be taking advantage of reimbursable funding to reward its CLDP staff. There is also the question about whether the disproportionate awards to CLDP may be seen as overly generous when compared to other OGC units.

Table 2: Comparison of OGC Performance Awards to CLDP Awards for Fiscal Year 1997

OGC Office	Salaries	Awards	Awards as a % of Salaries
General Counsel's Immediate Office	\$402,806	\$9,937	2.47%
Assistant General Counsel for Legislation and Regulation	1,064,465	27,270	2.56
Assistant General Counsel for Administration	2,975,462	61,920	2.08
Assistant General Counsel for Finance and Litigation	2,255,079	43,245	1.92
Chief Counsel, Import Administration	2,307,902	43,345	1.88
Chief Counsel, International Commerce	1,025,718	23,455	2.29
Chief Counsel, Export Administration	994,212	18,766	1.89
Chief Counsel, Economics and Statistics Administration	280,082	3,144	1.12
Chief Counsel, Technology Administration	473,716	8,336	1.76
Office of Executive Support	483,428	26,553	5.49
Commercial Law Development Program	382,953	28,931	7.55
TOTAL	\$12,645,823	\$294,902	2.33%

Finally, State Department and USAID officials had concerns about CLDP staff performance.

[REDACTED]

The Commerce Deputy General Counsel, who is the performance rating official for [REDACTED], assumed her present position in early September 1997, just prior to rating [REDACTED] in mid-October. To help form her evaluation of [REDACTED] performance during the 1997 rating period (October 1, 1996 to September 30, 1997), she met with the General Counsel and spoke with her two predecessors about the past performance of [REDACTED]. We believe that it would help the Deputy General Counsel in future performance ratings of [REDACTED] to also consult with both the State Department Coordinator's Office and appropriate USAID officials to gain a more comprehensive understanding of the status of CLDP projects.

Another issue regarding the awarding of cash bonuses is the need for OGC to submit cash award nominations exceeding \$5,000 to the Department's Office of Human Resources Management (OHRM) for review by the Incentive Awards Board. According to Department Administrative Order 202-451 (Incentive Awards Program), Section 6.06a, the Incentive Awards Board reviews and recommends action on award nominations for "Cash awards over \$5,000 for performance for general workforce employees." Based on information provided to us by CLDP and OGC, [REDACTED] received cash awards exceeding \$5,000 for the past four consecutive rating periods and, for the most recent rating period, three other general workforce employees in other OGC units also received cash awards exceeding \$5,000. According to OHRM officials, however, there is no record that these awards were submitted for review and recommendation by the Incentive Awards Board.

It would also be advisable for the Deputy General Counsel to review and approve the granting of performance awards to CLDP staff to ensure that these awards are appropriate and in line with other OGC awards and to help reduce the negative perception that CLDP staff are inappropriately receiving disproportionate awards due to the availability of reimbursable funding. In addition, OGC should work with USAID to modify, to their mutual satisfaction, the terms and conditions of the interagency agreements to specifically address the issue of performance bonuses for CLDP staff and the source of funding for those bonuses.

.....

In its response to our draft report, OGC concurred with our recommendations to ensure that the CLDP performance award program is well-justified, documented, and in line with OGC and Department-wide policies; to ensure that the Incentive Awards Board reviews all future awards exceeding \$5,000; and to consult with appropriate State Department and USAID officials before preparing the performance evaluation for [REDACTED]. OGC also agreed to discuss with the State Coordinator and USAID whether the current agreements should be modified to specify that USAID agreement funds can be used for performance awards, or whether that point should

be clarified by program implementation letters. OGC noted that two of the current agreements (Egypt and Russia Crime) already contain language indicating that such awards may be paid through the funds authorized under those projects. We reiterate our recommendation that all of the agreements should specify whether or not part of the approved administrative funding under the agreements can be used to pay for performance awards for work performed under the terms of the agreements.

II. Overseas Travel of CLDP Staff Was Authorized and Costs Were Properly Allocated

It was alleged that [REDACTED] had taken numerous trips to countries (Vietnam and Egypt) outside the scope of those identified in the interagency agreements. Based on available documents and records, we determined that [REDACTED] did not use USAID funds for travel or time and attendance (direct labor) costs to unauthorized foreign destinations while on official overseas travel. The purpose of [REDACTED] two trips to Vietnam, in March 1996 and February 1997, was to conduct discussions with officials of the Vietnamese government as a preliminary step to establishing a CLDP program in that country. These trips were paid for by OGC and the Department's International Trade Administration. The trip to Cairo, Egypt, in October 1996, was at the invitation and expense of the USAID/Cairo mission connected to the American Embassy in Cairo. The purpose of this visit was to explore collaborative efforts with the USAID mission director concerning trade and investment issues in Egypt, and to conduct discussions with officials of the Egyptian government. The exploratory discussions in Cairo have since resulted in an interagency agreement for CLDP to do legal system development work in Egypt.

Although outside the scope of the core CLDP projects, [REDACTED] travel to these countries was nonetheless justified. Depending on the level of USAID-related program activity during past fiscal years, 78 to 94 percent of [REDACTED] time has been supported by USAID funding. The remaining time was spent on other activities within the scope of her official duties. In those cases, the trips to Vietnam and Egypt were in response to legitimate interest shown by officials of host governments, the State Department, and USAID. Further development of the CLDP program is consistent with the Commerce Department's goals of promoting exports and assisting U.S. exporters with tariff and non-tariff barriers, such as the global legal and regulatory structure, which can affect trade and investment opportunities. As long as these activities support the mission of OGC and the Department, and do not interfere with [REDACTED] other responsibilities, we believe such travel is appropriate.

We also reviewed all travel taken by other CLDP staff and all travel using CLDP funds taken by non-CLDP staff. We found that all travel costs incurred by CLDP staff were properly allocated between USAID and non-USAID projects. Additionally, CLDP occasionally requested the

assistance of other Commerce bureaus to send their officials to attend overseas conferences and participate in CLDP projects. Examples of such assistance were trips taken by Patent and Trademark Office officials to discuss intellectual property rights, and those trips taken by officials from the Bureau of Export Administration to provide technical assistance on export control issues. In each of these examples, only the travel costs were charged to the appropriate USAID project code. The travel was, therefore, properly billed to USAID because it was within the scope of the core CLDP program.

State Department and USAID officials were also concerned that [REDACTED] travels more than they believe is necessary to properly manage the program. These officials were concerned that the travel taken by [REDACTED] to explore potential projects in new countries or regions, although correctly reimbursed by OGC, ITA, or another USAID mission, diverts her attention and energies away from properly managing the ongoing USAID projects for which she is responsible. The suggestion was made that [REDACTED] absence had direct and negative impacts on the effectiveness of the core CLDP projects. Reportedly, her travel contributed to the delay in recruiting the replacement resident advisors for Moscow and Kiev and also to the continuing difficulty in obtaining the proper credentials for the Moscow resident advisor that are necessary for access to the Russian trade ministry.

Cognizant OGC officials offered us their responses to the above concerns. First, the recruitment of the resident advisor for Moscow required three separate efforts by the CLDP staff. CLDP first began its recruitment efforts for Moscow in March 1997. The first and second rounds of offers were turned down by the candidates at the last minute. Only after going back through the list of other candidates did CLDP find a person willing to accept the position. The incumbent Moscow resident advisor completed his assignment in late August 1997, and the newly hired advisor arrived in early January 1998, causing a gap of just over four months. The resident advisor for Kiev left his post in June 1997. While recruiting for his replacement, CLDP placed an interim resident advisor in Kiev until November 1997, and the new resident advisor arrived in early January 1998, causing a gap of two months. OGC attributes its recruiting difficulties to the international interest generated by the economic and political reforms occurring in the former Soviet Union, which have placed a premium on Russian-speaking attorneys with international trade experience.

The delay faced by the Moscow resident advisor in acquiring his credentials, although such delays are not unexpected, was especially long and unforeseen. According to CLDP, the recent shakeup by the Russian president of his cabinet, as well as the current Russian monetary crisis, have caused a great deal of uncertainty and insecurity among Russian officials. Not only is the Russian trade ministry not expediting the granting of the credentials to the resident advisor, but the overall sentiment in the Russian government is presently negative toward outside workers. Prior to sending the resident advisor to Moscow, the CLDP director conferred with officials of the Office of the U.S. Trade Representative, the State Department, and USAID. All parties

agreed that it would be more advantageous to send the resident advisor in advance of credentials being issued to save time; however, they did not anticipate such an extended delay in getting the proper credentials. Based on these other circumstances, it does not appear that [REDACTED] [REDACTED] travel schedule during this period (one domestic and three foreign trips) was the cause of the deficiencies cited by USAID and the State Department.

In its written response to our draft report, OGC asserts that [REDACTED] travel did not interfere with the efforts to recruit Resident Advisors for Russia and Ukraine. OGC claims that of the four trips taken by [REDACTED] during the 10-month hiring search, all of the trips were at least partly devoted to seeking candidates for the Resident Advisor positions, attempting to extend the current advisor's contract, or expediting the approval of the new advisor.

III. Some CLDP Management Issues Need Attention

A. Improved communications needed with USAID and the State Department

During our review of the aforementioned allegations, we noted that USAID and State Department officials had other concerns about the overall management of the CLDP program. A primary concern was the reported poor communications between CLDP officials and State Department and USAID officials regarding CLDP progress reports and program expenditures.

It was the view of officials in the State Department Coordinator's Office that the CLDP director had provided, after some delay, only vague and seemingly evasive answers to their specific questions regarding CLDP program expenditures. This perception by State Department officials of the CLDP's director's responsiveness has heightened State's concerns about OGC's oversight of the CLDP program office. For example, in response to questions from officials with the State Department Coordinator's Office about employee performance awards, the CLDP director reportedly answered with the total amount of awards for all CLDP employees, and did not provide a detailed breakout of awards to individual recipients. This response apparently lacked the level of detail expected by the State Department Coordinator's Office.

We have been told by USAID officials, however, that this lack of communication may not only be attributable to the CLDP director. According to the terms of the interagency agreements, the CLDP director is responsible for preparing and transmitting to State Department and USAID officials quarterly progress reports for each of the countries supported by the interagency agreements. Although both State Department and USAID officials acknowledged that they have received these reports, USAID officials admitted that they, the State Department, and OGC could probably have all done a better job in overseeing the program and communicating questions or

concerns.

State Department and USAID officials also expressed their concerns to us that the CLDP director had not submitted a formal request for FY 1998 funding for the Russia/NIS WTO project, given that funding for this project is due to expire at the end of FY 1998. Under the terms of the most recent interagency agreement for the Russia/NIS World Trade Organization project, signed with USAID in August 1997, CLDP received a transfer of two-year funding, due to expire on September 30, 1998. Based on past experience, USAID's allocation of FY 1999 assistance funds is not expected to occur until well into the next fiscal year. Therefore, the State Department and USAID requested a funding proposal from CLDP in January 1998 for additional FY 1998 funding (which will also have a two-year life) to bridge the gap from October 1, 1998, to approximately the end of April 1999, when a new allocation from USAID would likely be available.

Although the CLDP director sent a letter to the State Department Coordinator's Office on January 28, 1998, in response to its request, the letter only provided general information to support the request for \$1.4 million for FY 1998-99. State Department officials stated that this letter does not represent a formal proposal. The CLDP director explained that this letter was only a preliminary step and was kept purposely brief, given that the scope of the program was not changing materially. The CLDP director further stated that the practice in the past has been for a new interagency agreement to be signed between USAID and Commerce, then a complete program proposal, with project activities and a detailed budget estimate, would be forwarded for inclusion with the agreement.

Because of the concerns raised by USAID and the State Department, it is apparent that more effort should be taken to communicate CLDP's progress and future resource requirements. Given that officials in the State Department Coordinator's Office do rotate to other assignments in Washington and overseas, it is important for Commerce officials to establish more frequent communications with that office. We recommend that the appropriate OGC, CLDP, USAID, and State Department officials meet to clarify CLDP reporting requirements and to discuss program progress and other issues of concern. In addition, supervisory OGC officials should expand oversight of the program and ensure that the CLDP director engages in more frequent and detailed communication with USAID project staff and the State Department Coordinator of U.S. Assistance to the NIS. The response to their questions concerning both program accomplishments and resource expenditures should be more detailed and timely.

OGC concurred with our recommendation to ensure that the lines of communication between the State Department, USAID, and Commerce are good. OGC notes that the Acting Coordinator for the State Department has agreed to resume interagency coordination meetings and is satisfied

with the existing program and field communications among the three agencies. However, OGC's CLDP Director and the USAID program manager have been unsuccessful thus far in meeting on a more regular basis. The General Counsel said that the CLDP Director would redouble her efforts to meet more regularly with the USAID program manager and his superiors, and take other actions to strengthen CLDP's communication with both State and USAID.

B. Use of personal services contracts needs reevaluation

Another issue that came to our attention involved CLDP's use of the services of two program assistants as personal services contractors (PSCs). These services were acquired without advertising for a competitive procurement, although at least two bids were requested from temporary employment agencies. CLDP's justification for doing this was that USAID could only promise six months of funding at a time. Thus, the contracts were written for six-month performance periods. However, these contracts were renewed several times, extending them for nearly two years. We believe that CLDP could have written and advertised these contracts for a one-year period, with the condition that they would be subject to funding availability. Our review of USAID funding documents did not indicate any restriction on the available funding. Furthermore, the cumulative salary paid to the program assistant over a 12-month period exceeds \$25,000, the threshold beyond which a competitive contract must be advertised.

For one of these contracts, actions have already been taken to address our concerns. Commerce's Office of Acquisition Management (OAM) is reviewing the statement of work in order to prepare the contract for full competition. Because of OAM's workload, the current contract has been extended from the end of June through September 1998 to provide sufficient time to properly advertise and complete the selection process. The new contract will have a one-year term that is subject to the availability of funds. We urge CLDP to ensure that the work of this PSC will be exclusively dedicated to USAID projects and the salary will be exclusively paid from USAID funds. CLDP also decided to allow the second contract to expire in June 1998 and recruit for a full-time permanent position.

We are also concerned with the use of PSCs in general. In the past, we have investigated instances in which other Commerce agencies have misused PSCs. We must point out that OGC does not have authority to engage PSCs. It is only through USAID's statutory authority to hire PSCs, conveyed to OGC via an interagency agreement, that CLDP has the authority to do so. Furthermore, PSCs must work exclusively on USAID projects and be paid exclusively with USAID funds. According to information furnished by CLDP, the total personnel costs for each of the PSCs noted above was funded between 3 and 5 percent by non-USAID sources in fiscal years 1996 and 1997. This practice is in violation of USAID's statutory authority. OGC and CLDP must ensure that the work of the remaining PSC is devoted exclusively to USAID projects and the personnel costs are paid exclusively from USAID funds. To eliminate these concerns, CLDP could consider converting the remaining contract position to a term or full-time temporary

position as soon as practicable, thus removing any conflicts from using PSCs.

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OGC concurred with our recommendation to convert the remaining personal services contract to a one-year competitive contract, subject to the availability of funds, and ensure that the contractor will be devoted exclusively to USAID reimbursable work.

RECOMMENDATIONS

We recommend that the General Counsel take the following actions:

1. Ensure that the performance awards for CLDP program staff are well justified and documented. The awards should also be in line with OGC-wide award levels and Department-wide policies. The performance awards also must not be used as a means to compensate for management's error in calculating the proper salaries for staff under personal services contracts (see page 3).
2. Direct the Deputy General Counsel or other appropriate OGC rating official to consult with appropriate State Department and USAID officials before preparing the performance evaluations for [REDACTED] (see page 6).
3. Ensure that all performance awards exceeding \$5,000 for OGC general workforce employees are submitted to the Department's Office of Human Resources Management for review by the Incentive Awards Board (see page 6).
4. Ensure that both current and future interagency agreements with USAID are modified or amended to specifically address the payment of employee performance bonuses for work performed under the terms of the agreements, and the source of funding for the bonuses (see page 6).
5. Ensure that the CLDP director engages in more frequent and detailed communication with USAID project staff and the State Department Coordinator of U.S. Assistance to the NIS. As appropriate, all information to their questions concerning both program accomplishments and resource expenditures should be complete and timely (see page 9).
6. As soon as practicable, convert the remaining personal services contract to a one-year competitive contract, subject to the availability of funds and provided that the contractor will be devoted 100 percent to the USAID reimbursable work (see page 11).

APPENDIX A: AGENCY RESPONSE



GENERAL COUNSEL OF THE
UNITED STATES DEPARTMENT OF COMMERCE
Washington, D.C. 20230

August 26, 1998

MEMORANDUM TO: Johnnie E. Frazier
Acting Inspector General

FROM: Andrew J. Pincus *APJ*
General Counsel *APJ*

RE: Response to Draft Inspection Report on the Commercial Law
Development Program

Thank you for providing us with the opportunity to comment on the draft report on the Commercial Law Development Program. This memorandum contains our responses to the recommendations contained in your report and offers a few suggested revisions to ensure the report's accuracy and completeness.

We were pleased that you found CLDP to be extraordinarily cooperative during your inspection and, with a few minor procedural exceptions, to be consistent with Departmental rules and regulations. Given the nature of their work and the exhaustive nature of your investigation, we think that your conclusions speak very well for CLDP's compliance with the spirit and the letter of their obligations and commitments to DOC, the Department of State and the Agency for International Development.

RESPONSES TO RECOMMENDATIONS

1. Performance Awards

RECOMMENDATION: *Ensure that the performance awards for CLDP program staff are well justified and documented. The awards should also be in line with OGC-wide award levels and Department-wide policies. The performance awards also must not be used as a means to compensate for management's error in calculating the proper salaries for staff under personal services contracts.*

We agree that performance awards should be well-justified, documented and in line with OGC and Department-wide policies. We believe all awards paid to CLDP employees have been justified and properly documented in each instance. We will continue to carefully consider all proposed awards to ensure that they are well deserved and properly issued.

We also accept your assessment that the \$[REDACTED] payment made to a CLDP personal services contractor should have been made by correcting the contract to show the correct base pay level, rather than by characterizing the payment as an award. CLDP will ensure that the correct procedure is followed in the event a similar situation arises in the future.

The Deputy General Counsel, the CLDP Director and I met with the Acting Coordinator and other members of the staff of the Department of State Office of the Coordinator of Assistance to the New Independent States on July 30. During our meeting, the Acting Coordinator

confirmed that his office is comfortable with CLDP's use of a compensation structure that uses performance awards to encourage and reward outstanding performance.

2. Consulting with State and AID Regarding Performance Evaluations

RECOMMENDATION: Direct the Deputy General Counsel or other appropriate OGC rating official to consult with appropriate State Department and USAID officials before preparing the performance evaluations for [REDACTED].

The Deputy General Counsel will consult with appropriate State and USAID officials before preparing future performance evaluations for [REDACTED]. In response to a similar suggestion from AID, the CLDP Director consulted with State, AID and other individuals rendering or receiving CLDP assistance, both in Washington and overseas, prior to preparing evaluations of her staff last fall and she will continue this practice.

3. Award Procedures

RECOMMENDATION: Ensure that all performance awards exceeding \$5,000 for OGC general workforce employees are submitted to the Department's Office of Human Resources Management for review by the Incentive Awards Board.

You correctly point out that certain performance awards must be approved in advance by an Incentive Awards Board. All OGC awards were submitted to the Office of Human Resources Management but they were not reviewed by an Incentive Awards Board. We will ensure that such a board reviews future awards that exceed \$5,000.

4. IAA Language

RECOMMENDATION: Ensure that both current and future interagency agreements with USAID are modified or amended to specifically address the payment of employee performance bonuses for work performed under the terms of the agreements, and the source of funding for the bonuses.

The Egypt and Russia Crime IAAs already contain language indicating that performance awards may be covered by those funds. The NIS/WTO and CEE/WTO IAAs use standardized contract language that does not identify any expenditure with that level of detail. We will discuss with the Coordinator and with AID whether it would be advisable or helpful either to add such language to the NIS/WTO and CEE/WTO IAA agreements or to clarify the point by program implementation letters. We will also discuss how they wish to handle the point in future agreements.

State and AID specifically approve the amount of their funds going to CLDP administrative expenses under all four of those programs and, whether the inter-agency agreement specifically addresses the point or not, the State and AID officials responsible for approving CLDP's budgets and reimbursement claims are aware that a part of the approved administrative funding is used to cover performance awards. The use of State and AID funds for this purpose was specifically covered during our discussion with the State Department Acting Coordinator for NIS Assistance during our meeting with him and his staff on July 30, 1998.

5. Communication with AID and State

RECOMMENDATION: Ensure that the CLDP Director engages in more frequent and detailed communication with USAID project staff and the State Department Coordinator of US Assistance to the NIS. As appropriate, all information to their questions concerning both program accomplishments and resource expenditures should be complete and timely.

We agree that good communication is essential to the success of these joint initiatives among State, AID and Commerce and we will do whatever we can to ensure that the lines of communication among us are good. Responses to questions concerning program accomplishments or resource expenditures will be complete and timely.

Although the nature of her responsibilities brings the Director into contact with AID and State less frequently than the CLDP staff members who are implementing specific activities (arranging seminars, forwarding reports, etc.), she agrees that more frequent meetings with State and AID would be beneficial and already has been working toward this objective. We have requested and the Coordinator's Office has agreed to resume interagency coordination meetings. The CLDP Director and the AID program manager have been trying for several months to schedule a meeting during the periods he is in the US. She will redouble her efforts to meet more regularly with him and his supervisors.

During our July 30 meeting with the Acting Coordinator, Bill Taylor, and his staff, he indicated that he was satisfied with the existing communications among CLDP staff and the AID and State officials who have been responsible for our program in Washington and in the field (Nicholas Klissas and Matt Bryza, respectively) and that he did not feel it was necessary for CLDP to do anything different or additional to what it already is doing in this area. CLDP will continue to work with AID and State to develop and periodically revise CLDP's work plans, provide written monthly and quarterly reports to State and AID, forward written trip and program reports when they are received and meet periodically to talk about program implementation issues and consult with Resident Advisors during their US visits.

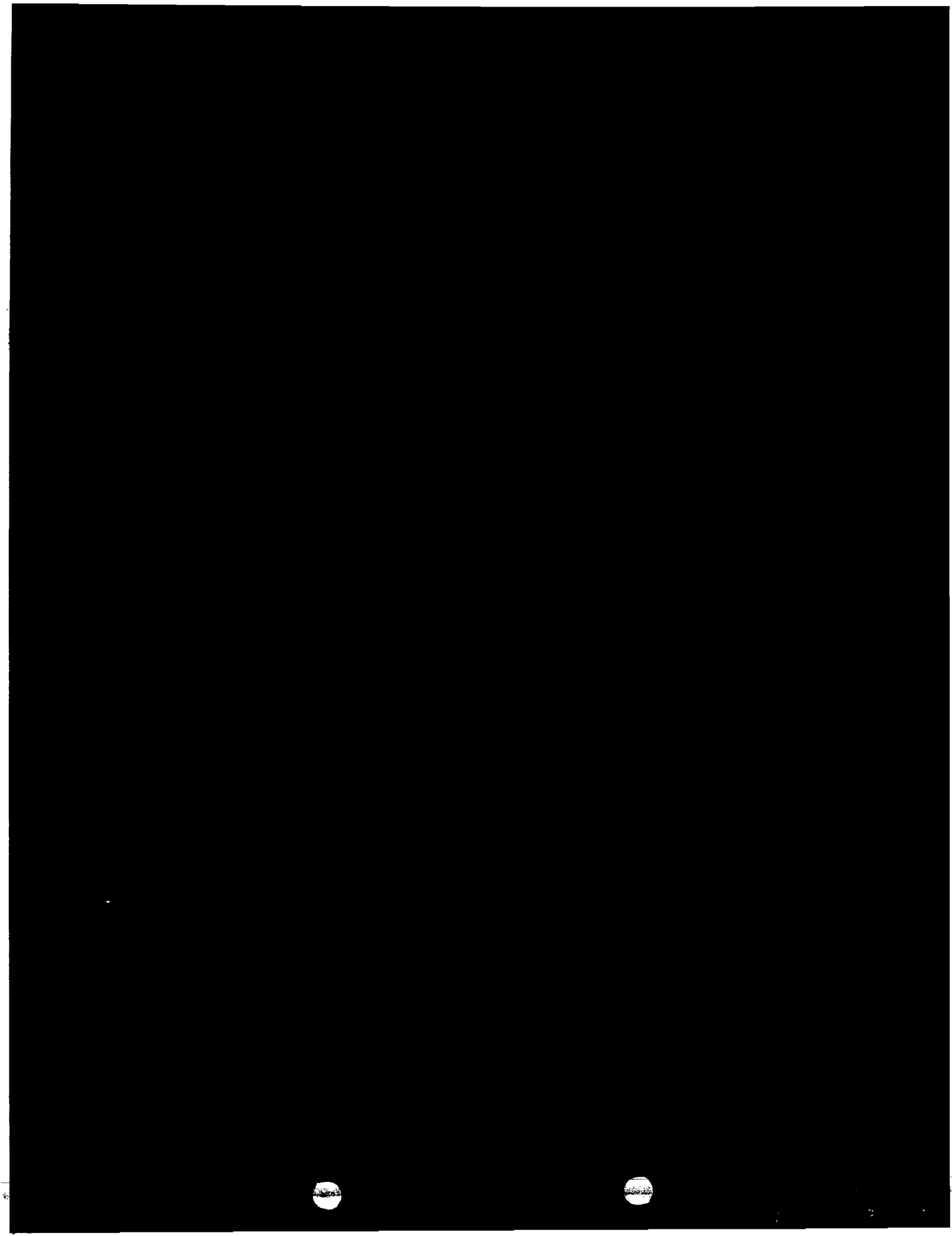
6. Personal Services Contractors

RECOMMENDATION: As soon as practicable, convert the remaining personal services contract to a one-year competitive contract, subject to the availability of funds and provide that the contractor will be devoted 100 percent to the USAID reimbursable work. Furthermore, consider converting this contract position to a term or temporary position to avoid any potential problems with PSC statutory authorities.

As you point out in your report, CLDP has been trying to convert its one remaining short-term Personal Services Contract position into a long-term PSC since it learned that it was allowed to do so nearly one year ago. Staffing shortages in the DOC Procurement Office have prevented it from completing the paperwork for the procurement, which was submitted by CLDP in November of 1997. We will ensure that personal service contractors are used henceforth only for projects for which PSC authority has been granted.

Attachment

cc: Kathryn Lunney
Linda A. Wells
Barbara Fredericks

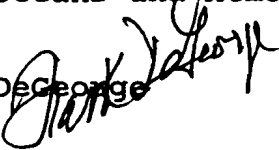




UNITED STATES DEPARTMENT OF COMMERCE
Office of Inspector General
Washington, D.C. 20230

JUL 08 1993

MEMORANDUM FOR: Dr. D. James Baker
Under Secretary and Administrator
for Oceans and Atmosphere

FROM: Frank DeGeorge 

SUBJECT: NOAA and NWS Decisions Compromised
Procurement Integrity and
Resulted in Higher Costs
Final Report Number NOA-4540-3-0001

The Office of Inspector General has completed its audit of the award and management of the contract with TRW, Inc., to support the National Weather Service. Our final report is attached. An executive summary of the report is presented on page i, and our recommendation is on page 11.

Appendix I contains NOAA's detailed responses to selected audit issues and the recommendation in the draft report, along with our analysis of each response. NOAA's response is presented in its entirety as Appendix II to the report.

Please provide your audit action plan addressing the recommendation within 60 calendar days, in accordance with Department Administrative Order 213-5. The plan should be in the format specified in Exhibit 7 of the DAO. Should you have any questions regarding the preparation of the audit action plan, please contact Andrew R. Cochran at (202) 482-0067.

We appreciate the cooperation and courtesies extended to us by NOAA officials during the review.

Attachments

~~PROCUREMENT SENSITIVE~~

**NOAA AND NWS DECISIONS
COMPROMISED PROCUREMENT
INTEGRITY AND RESULTED IN HIGHER COSTS**

NOA-4540-3-0001

JULY 1993

**U.S. DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDITS
NOAA DIVISION**

~~PROCUREMENT SENSITIVE~~

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EXECUTIVE SUMMARY

The National Oceanic and Atmospheric Administration is implementing its strategic plan to modernize and restructure the National Weather Service. In 1983, NOAA awarded a contract to TRW, Inc., to provide engineering, technical, and program support services for the modernization. On September 30, 1992, we issued a postaward contract audit report on the payment of fixed fees under the second five-year contract awarded to TRW ("NWS Should Recover Fees Paid to TRW," NOA-4646-2-0001). This performance audit report covers the award and administration of the same contract.

Our review disclosed that improper decisions by NOAA and NWS officials compromised the integrity of the competitive procurement process. Those decisions also resulted in higher average hourly labor costs during the contract than those initially proposed by TRW or the other offerors. Specifically:

- The Request for Proposal (RFP) did not meet Federal Acquisition Regulation (FAR) requirements to provide all necessary information to contractors. The workload and labor skill mix requirements for modernization support were ambiguously described, a fact which enabled TRW to submit an unrealistic bid. (See page 4.)
- NWS selected TRW's proposal even though it was based on employing fewer highly skilled employees than NWS anticipated needing over the life of the 1987 contract, than TRW used during the 1983 contract, or than the other offerors proposed. (See page 5.)
- The contracting officer's technical representative (COTR) and the Source Selection Advisory Board knew of TRW's significantly lower proposed skill mix and labor rates. Yet we found no evidence that they attempted to reconcile the differences among TRW's proposed rates, those billed under the 1983 contract, and those proposed by other offerors. (See page 6.)
- We found no evidence that the contracting officer conducted meaningful discussions with TRW or its competing offerors, as required under the FAR. (See page 7.)

NOAA and NWS Decisions Compromised
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- Almost immediately after the award, NWS officials approved TRW's use of more highly skilled labor than was proposed in the contract. This resulted in higher hourly labor rates during contract performance than those proposed by TRW or the other offerors. (See page 10.)

We recommend on page 11 that the Under Secretary and Administrator for Oceans and Atmosphere take administrative action against officials who made improper procurement decisions with respect to TRW Contract No. 50-DGNW-7-00077.

NOAA officials responded to our draft report by a memorandum with a summary and detailed responses to selected findings. The detailed responses to selected audit issues, along with an OIG analysis of each response, is presented in Appendix I. NOAA's complete response to the draft audit report is presented as Appendix II. In the summary, NOAA stated that the OIG audit process resulted in a reexamination of the NOAA procurement process. We welcome the NOAA effort and expect that the competitive award process will be strengthened and contract cost increases will be avoided. NOAA also defended award decisions as proper exercises of contracting authority. We do not challenge the authority of the contracting officer and other NOAA officials to assess contract proposals and award contracts. We *do* question whether contract decisions were soundly based and proper under the circumstances. In our opinion, the cost increases reflect the poor judgments of the officials involved in the award process.

NOAA pointed out that the total contract costs never exceeded that proposed by the next lowest competitor. In our judgment, this comparison between the actual costs and the next lowest bid is irrelevant as a justification for the award decision. First, as we have stated in the report, TRW's bid was based on an ambiguous RFP. Had the officials involved in the award properly conducted the award process, they would have released an RFP with sufficient information upon which to base realistic bids. It is reasonable to have expected the contracting officer to have discussed the bids with the offerors, including TRW, to assure that the winning offeror fully understood the RFP and could perform the needed tasks within the proposed costs. Finally, NWS program officials would have been able to limit actual costs to those proposed in the bid had they soundly administered the ensuing contract.

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INTRODUCTION

The National Oceanic and Atmospheric Administration is implementing its strategic plan to modernize and restructure the National Weather Service by deploying proven observation, information processing, and communication technologies in cost-effective ways. These technologies include the Next Generation Weather Radar system (NEXRAD), an automated surface observing system (ASOS), and an advanced weather interactive processing system (AWIPS). The strategic plan also proposes consolidation of existing weather offices into 116 weather forecast offices.

In 1983, NOAA awarded a contract to TRW, Inc. to provide engineering, technical, and program support services. The weather service required this support for its major systems development and implementation programs, ASOS and AWIPS, and in changing from existing to new technology. On May 29, 1987, a second five-year contract for similar services was awarded to TRW in the amount of \$14.9 million. This report covers the management problems affecting the award and administration of the 1987 contract (No. 50-DGNW-7-00077), which expired on May 29, 1992.

The contract was a cost-plus-fixed-fee type with a level of effort specified in terms of direct productive labor hours. The contract consisted of a base year and four option years. NOAA's original cost estimate increased by \$6.6 million over the five years of the contract. This represents a 44 percent increase over the original contract award of \$14.9 million. Under the contract, TRW would earn an annual fixed fee if it provided at least 90 percent of the specified direct productive labor hours annually. The contract also provided a formula for reducing the fixed fee if TRW failed to meet the 90-percent specification. On September 30, 1992, we issued a report on the payment of fixed fees under the contract ("NWS Should Recover Fees Paid to TRW," NOA-4646-2-0001).

Purpose and Scope of Audit

The audit objectives were to assess how effectively the contract was awarded and managed. Specifically, we addressed (1) the causes of the increase in total estimated costs from \$14.9 million to \$21.5 million and (2) the adequacy of program and contract management controls over the award process and costs.

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The scope of our audit spans the entire contract period from the release of the RFP in August 1986 through completion on May 29, 1992. As part of the audit we assessed the technical and business committee evaluations and the actions taken by the Source Selection Advisory Board.

Our fieldwork for the draft audit report was performed from November 1991 through January 1993. We conducted additional fieldwork during April and May 1993 to analyze information provided by NOAA in its response to the draft report. Audit work was performed in Silver Spring and Germantown, Maryland. We interviewed NOAA procurement officials; TRW management, including past and present program managers; NWS officials; and department officials. We reviewed appropriate contract-related documents applicable to the award and administration of the contract.

We performed certain tests of compliance with applicable regulations relevant to the audit objectives, including testing to determine compliance with the Federal Acquisition Regulation and NOAA directives. We found instances of noncompliance which are discussed in the report.

Our internal control review concentrated on the policies, procedures, practices, and controls applicable to the award and administration of the contract. We also selectively tested internal controls over the payment of vouchers. We found administrative weaknesses in the award of the contract and in the review and payment of vouchers submitted by TRW for services rendered. The latter were reported to NOAA officials, who took corrective action.

Some of the information presented in our report relies significantly upon cost data generated by NOAA's computerized systems. We have not evaluated the reliability of such data and must qualify our report accordingly. With that exception, our work was conducted in accordance with generally accepted government auditing standards. The audit was performed under the authority of the Inspector General Act of 1978, as amended, and Department Organization Order 10-13, dated May 22, 1980, as amended.

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FINDING AND RECOMMENDATION

NOAA AND NWS DECISIONS COMPROMISED PROCUREMENT INTEGRITY AND RESULTED IN HIGHER COSTS

NOAA entered into a long-term, multimillion-dollar contract for NWS modernization support based on a questionable proposal submitted by TRW in response to an ambiguous RFP. Decisions by NOAA and NWS employees compromised the integrity of the competitive procurement process related to this contract. Weather service officials subsequently allowed hourly labor costs for TRW's services to rise significantly above those initially proposed by TRW and those proposed by the unsuccessful offerors.

NOAA and NWS officials, particularly the contracting officer, failed to follow proper source selection procedures. The RFP did not meet FAR requirements to provide contractors with all information necessary to properly prepare proposals. Even after amendment, the RFP failed to include a profile of the labor skill mix needed to complete the tasks required for modernization support.

Moreover, NOAA and NWS officials accepted TRW's proposal without reviewing its underlying assumptions or conducting meaningful discussions with other offerors. TRW based its proposal on employing less skilled and less expensive personnel than TRW had used in implementing the 1983 contract and than had been proposed by other offerors. Hence, TRW's proposed labor rates were much lower than the rates proposed by other offerors, as well as those billed by TRW under the 1983 contract. Although the contracting officer's technical representative and the Source Selection Advisory Board knew of this discrepancy, we found no evidence that they sought to ensure that TRW's proposed labor skill mix and costs were realistic and would meet NWS's needs. We also found no evidence that the contracting officer conducted meaningful discussions with competing offerors, as required under the FAR.

After the contract award, when TRW officials planned to employ a greater percentage of less skilled engineers, NWS program officials refused out of concern for performance quality. Instead, NWS officials approved TRW's use of more highly skilled--and more highly paid--labor than TRW had proposed. NWS's decision not to use the labor mix that TRW had proposed resulted in significantly higher hourly labor costs during the five-year period of the contract than those originally proposed by either TRW or the other offerors.

NOAA and NWS Decisions Compromised
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**Request for Proposal Did Not
Include All Necessary Information**

We found that the RFP's sample task orders, which were used to assess offerors' proposals, did not include all information necessary to enable the prospective offerors to prepare proposals properly, as required by Part 15.402 of the FAR. The sample task orders were neither representative of the work required in the 1983 contract nor the anticipated future workload or specific labor skill mix needed to accomplish the goals of the modernization program.

RFP Used Sample Task Orders to Assess Proposals

After release of the RFP in August 1986, NWS asked 33 firms for their proposals, three of which submitted proposals. The RFP contained nine sample task orders prepared by an evaluation committee of NWS officials, including the COTR.

According to the COTR, sample tasks orders are included in an RFP so that agency officials can determine whether offerors have the detailed skills and manpower needed to complete program requirements. Under this system, offerors bid on the basis of the perceived future workload as indicated by the government in the sample tasks. Offerors propose a mix of labor skills -- and corresponding costs -- in their response to the sample tasks. Offerors include a work plan for each task order.

**Sample and Actual Task Orders Did Not
Include Workload Profile or Labor Skill Mix**

Part 15.402 of the FAR states, "Solicitations shall contain the information necessary to enable prospective contractors to prepare proposals or quotations properly." The RFP did not meet that requirement because it specified only a range of skills; it did not specify a profile of the mix of labor skills that the modernization work required. The COTR suggested adding such a profile to the RFP, but the contracting officer refused.

The COTR, the director of the Office of Systems Development, and the Source Selection Advisory Board chairman knew that NWS had not provided sufficient information regarding its

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long-term requirements to offerors.¹ The COTR realized that the nine sample tasks in the RFP did not reflect the workloads of the labor categories required. According to the director of the Office of Systems Development, the sample task orders were *not* designed to indicate the level of effort or labor skill mix required for the five years of the contract. The director admitted to us that, "The solicitation did not provide sufficient information in a form which required the contractor to offer a cost proposal which realistically estimated costs for all tasks and all option years. Such information was available at the time of the solicitation."

In an attempt to remedy the problem, the COTR and contracting officer distributed an amendment to the RFP in September 1986 with actual task orders from the 1983 contract to all offerors.² However, according to the COTR, the actual task orders included only technical information, and did not describe the anticipated workload or labor skill mix required. Instead of distributing additional technical information, the contracting officer should have amended the RFP to include a workload profile and labor skill mix.

**Ambiguous NWS Requirements Led to
Different Proposed Labor Rates by Offerors**

NWS's requirements for modernization support were ambiguously described in the sample and actual task orders. This led to extreme disparities in the labor skill mix and the labor rates proposed by the offerors.

TRW's proposal included a significantly different mix of personnel compared with the mix used in the 1983 contract and the mix proposed by the other offerors. During the 1983 contract, TRW used its most experienced senior engineers, at correspondingly high labor rates. In contrast, TRW's proposal for the 1987 contract relied mainly upon junior engineers and other technical personnel. For instance, TRW proposed to use senior engineers for 4.8 percent of the

¹ At the time, the chairman reported to the director of the Office of Systems Development in NWS. The chairman is now the NWS Deputy Assistant Administrator for Modernization. The Source Selection Advisory Board recommended a selection to the selection official from among offerors' bids.

² The contracting officer initially told us that he was unaware of the release of the actual task orders and would have disapproved the release of the actual task orders. However, he signed the amendment to the RFP that included the actual task orders and accepted responsibility when questioned further.

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total hours in the first year of the contract, compared with competing offerors' proposed use of senior engineers for 15.2 percent and 18.2 percent, respectively, of the total hours. TRW proposed to use junior engineers and general and technical support for 55.2 percent of the total hours worked in the first year, compared with competing offerors' proposed use of such personnel for 36.9 percent and 30.5 percent, respectively, of the total hours.

These disparities resulted in sharp differences in labor rates, with TRW proposing much lower rates than either the other offerors or those billed under TRW's 1983 contract. TRW proposed an average hourly rate of \$28 per hour, with eight different professional labor categories; the other offerors proposed \$39 and \$38 per hour. During the last year of the 1983 contract, TRW had billed its services at an average hourly rate of \$55 per hour.

**Award Approved Without Ensuring That TRW's Proposal
Would Meet the Government's Needs**

NWS program officials failed to ensure that the labor skill mix and costs in TRW's proposal could realistically meet NWS's long-term needs. From a comparison of the proposal's costs and knowledge of TRW's prior contract terms, the COTR and the Source Selection Advisory Board chairman knew that TRW's proposed labor skills and rates differed significantly from the mix and rates used on the 1983 contract and those proposed by the other offerors. In fact, the COTR advised the Source Selection Advisory Board chairman that the proposed billing rates differed from those in the 1983 contract. The chairman of the Source Selection Advisory Board knew, based on an internal NWS memorandum prepared in May 1987, that NWS anticipated long-term needs in excess of NWS's original estimates and those released to TRW and the other offerors. We found no evidence that either the COTR or the chairman attempted to reconcile the differences among TRW's proposed labor rates, the actual rates from the 1983 contract, and the rates proposed by other offerors, to ascertain whether the labor mix proposed by TRW would meet the government's needs over the life of the contract.

Although the Source Selection Advisory Board recommended TRW's selection, at the same time the board noted as a "Special Area of Concern" that "TRW average labor rates proposed are less than those actually experienced on the existing NWS support contract." The board further indicated that NOAA's own estimated costs of \$27.9 million to complete the contractual work were almost *double* the total costs proposed by TRW. But it provided no additional details and offered no plan of action to resolve the disparities, and the selection official approved the award of the contract to TRW without evidence of further inquiry. We found no evidence that the COTR, the board, or the selection official attempted to address the "Special Area of Concern"

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noted above or to reconcile NWS' estimated costs with the significantly smaller amount proposed by TRW. We consider their failure to deal with these problems an abrogation of their duties.

The selection was based on the Advisory Board's ranking of the three offerors' technical and cost proposals. Because TRW's proposal received a technical ranking virtually identical to that of another offeror, the proposed costs were the deciding factor. Yet FAR Part 15.605(d) cautions contract officials to avoid this situation, stating,

"In awarding a cost-reimbursement contract, the cost proposal should not be controlling, since advance estimates of cost may not be valid indicators of final actual costs...The award of cost-reimbursement contracts primarily on the basis of estimated costs may encourage the submission of unrealistically low estimates and increase the likelihood of cost overruns. The primary consideration should be which offeror can perform the contract in a manner most advantageous to the Government..."

Considering the crucial importance of the cost proposals, the COTR and the Source Selection Advisory Board should have reviewed the offerors' bases for their proposed costs before recommending TRW for the selection. The selection official should have ensured that such a review took place before he awarded the contract to TRW and should have determined whether the proposed costs reflected a skills mix that was capable of meeting NWS's needs.

No Evidence of Discussions with Other Offerors

The outcome of this procurement might have been different if, before the final selection, the contracting officer had conducted meaningful discussions with all offerors, as required by Part 15.610 of the FAR. According to FAR Part 15.610, contracting officers should use discussions to resolve any uncertainties concerning an offeror's technical proposal or the terms and conditions of its proposal. The offeror might then take action, including lowering its proposed costs, to satisfy the government's requirements. The contracting officer told us that he had conducted such discussions but had forgotten to document them. However, the contract file does not indicate that the contracting officer made any effort to conduct meaningful discussions, but accepted an evaluation that the three offers were acceptable. The head of the regional contracting office approved the award despite the absence of written evidence that the contracting officer had conducted such discussions. Because the technical evaluations concluded that TRW and another offeror were virtually equal in technical ability, the other offeror might have been awarded the contract if discussions with the offeror had resulted in a decrease in its proposed

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costs. Additionally, the contracting officer might have realized the deficiencies in TRW's proposal prior to the award if he had discussed it in detail with TRW.

The NOAA Solicitation/Contract Review Board independently reviews contract actions of \$100,000 or more to ensure compliance with law and established policies and procedures. In its review of the TRW contract before the final selection decision, the board criticized the contracting officer in the following statement:

"12. The contract file does not adequately demonstrate meaningful negotiations were conducted with the unsuccessful offerors.

Note: No apparent analysis of the proposed cost variances and the reasons thereof. (The basis of selection was ultimately cost). FAR Section 15.610(b) states "a contracting officer shall conduct discussions with offerors in the competitive range, which discussions shall include (advising) the offeror of deficiencies so that the offeror is given an opportunity to satisfy the Government's requirements". *Based on our review, one of the two unsuccessful offerors had scored higher technically than the proposed successful offeror, yet no evidence is in the file to indicate any attempts to negotiate downward, proposed estimated costs.* FAR 15.605(d), states "There is no requirement that cost reimbursement contracts be awarded based on lowest proposed cost...award of cost-reimbursement contracts primarily on the basis of estimated costs may encourage the submission of unrealistically low estimates and increase the likelihood of cost overruns". The S/CRB is not questioning the decisions of the technical evaluation committee, nor of the procurement officials, we are merely pointing out that the file does not provide a trail toward the decision that TRW should be awarded this contract." (Emphasis added.)

The head of the contracting office approved the award despite the contracting officer's failure to submit a written response to the criticism by the board. Approval should have been delayed until the contracting officer provided written evidence of discussions. We could not determine why the head of the contracting office approved the award without evidence of such discussions. We have reviewed the contract files and, like the board, concluded that no written evidence of the required discussions exists. Absent such evidence, the head of the contracting office should not have approved the award.

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In its response to our draft report, NOAA asserted that evidence of meaningful discussions can be found in a "cost realism study" conducted by an evaluation committee, written questions submitted to the offerors, and a short statement in the contract file that oral discussions were held. We reviewed each item cited for evidence of meaningful discussions.

The "cost realism study" referred to by NOAA was prepared by a business evaluation committee of NOAA officials which evaluated the acceptability of the hours proposed by the offerors to perform the required work. Yet the evaluation was conducted by the committee without contact with TRW; therefore, it cannot be considered "discussions" under FAR Part 15.601, which are defined as "oral or written communications *between the Government and an offeror.*" (Emphasis added.)

Furthermore, the committee's report cannot be considered a true cost realism analysis under applicable procurement regulations because it only charted each offeror's mix of labor hours. While the Federal Acquisition Regulation does not specifically address "cost realism," the Defense Federal Acquisition Regulation (DFARS) Part 52.15.805-70 states that cost realism analysis is supposed to "determine if the overall costs proposed are realistic for the work to be performed" and "verify the offeror's understanding of the requirements...and assess the degree to which the cost included in the...proposal accurately represents the work effort included in the technical proposal." The committee failed to provide any analysis of the impact of the labor mix on the ability of each offeror to perform the work requirements.

The contracting officer submitted technical and cost questions to the offerors in writing on December 5, 1986. There is one notation on the Negotiation Summary that a telephone communication was held with TRW, but there is no indication of what was discussed, no documentation of problems discussed, and it resulted in no change in the proposal. Neither do notations exist which reflect communications with either of the other offerors. We therefore cannot agree with NOAA's characterization of the questions as evidence of discussions as required by the FAR.

In our opinion, none of the items cited by NOAA constitute sufficient evidence of truly meaningful discussions. NOAA's response states that the purpose of these discussions "was to clarify the proposals, correct deficiencies, and afford an opportunity to provide a better technical and cost proposal." Yet NOAA presented no factual evidence during the audit or in its response that proposals were clarified or deficiencies in the proposals were corrected.

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**NWS Officials Approved Use of
Highly Skilled Engineers After Award**

After the new contract was awarded, TRW did not significantly decrease its reliance upon highly skilled, more expensive engineers, as it proposed. The director of the Office of Systems Development initially sought to hold TRW to the labor skill mix included in the contract specifications, but eventually approved the use of the senior engineers.

TRW officials told us that they informed NWS officials immediately after the contract was awarded that TRW could either perform the tasks using the less expensive labor skill mix in their proposal or use highly skilled labor and charge NWS more for highly skilled labor. According to the TRW program manager, TRW proposed to provide the labor mix that NWS approved in the contract and eliminate the higher skilled engineers in favor of the lower skilled engineers wherever technically feasible. According to the TRW program manager and his superior, NWS program managers objected to replacing the highly skilled engineers out of concern for performance quality. Several NWS employees whom we interviewed agreed with the TRW program manager's version of events.

The director of the Office of Systems Development told us that NWS and TRW took steps to use the most economical labor mix. However, our comparison of the actual hours worked during the first two years of contract performance with TRW's proposal showed that TRW, with the approval of NWS officials, continued to use more expensive labor than it had proposed.

Use of More Expensive Labor Resulted in Higher Costs

Hourly labor costs for TRW's services rose significantly above the rates proposed by TRW or the other offerors. We found that the actual average billing rate for the five years of the contract was \$42 per hour, a substantial increase over the rate of \$28 per hour included in TRW's proposal and higher even than the other offerors' proposed rates of \$39 and \$38 per hour.

The rise in labor costs forced NOAA and NWS officials to modify the contract several times to provide \$1,518,058 in additional funds to TRW during the first two years of performance and to provide an additional \$5,100,314 to TRW during the last three years of performance. The last modification also increased the allowable fixed fee to be paid to TRW by \$301,310.

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Conclusion

NOAA and NWS officials compromised the integrity of the procurement process by (1) knowingly releasing an RFP with an insufficient description of program requirements, (2) accepting a proposal that differed significantly from past experience and those proposed by other offerors without confirming the adequacy of the proposal, and (3) failing to conduct meaningful discussions with TRW and the other offerors. After the contract award, NWS officials approved the use of higher paid engineers than proposed in TRW's original plan, with significantly higher labor costs as a result.

RECOMMENDATION

We recommend that the Under Secretary and Administrator for Oceans and Atmosphere take administrative action against officials who made improper procurement decisions in the award of TRW Contract No. 50-DGNW-7-00077.

NOAA Comments and OIG Response

Due to the length of NOAA's response, we have presented the details of their comments and our analysis of each response as Appendix I. NOAA's response is presented in its entirety as Appendix II.

**NOAA'S DETAILED RESPONSES TO THE
DRAFT AUDIT REPORT AND OIG ANALYSIS**

NOAA's detailed responses to selected audit issues and the recommendation are presented without changes. Initial page references in NOAA's responses are to page numbers in the *draft* report, so we have added references in each item to the page number of the *final* report when necessary. Each NOAA response is followed by an OIG analysis. A copy of NOAA's response is presented in its entirety as Appendix II.

A. OIG FINDING: TRW's ACTUAL COSTS WERE HIGHER THAN OTHER OFFERORS

1. Page i, second paragraph, second sentence, as reads:

"Those decisions also resulted in higher average hourly labor costs during the contract than those initially approved or those proposed by other offerors."

NOAA Response: Concur. A performance audit verified that the SETSS Contract experienced higher average hourly labor costs during the contract than those initially proposed by TRW.

OIG Analysis: NOAA concurred with our statement. However, because the labor mix was not explicitly contained in the contract, we did change the phrase "approved in the contract" to "proposed by TRW" in this and other sections of the report.

2. Page 1, third paragraph, third sentence, as reads:

"NOAA's original cost estimate increased by \$6.6 million over the five years of the contract. This represents a 44 percent increase over the original contract award of \$14.9 million."

NOAA Response: Non-concur.

Because this is an Indefinite Delivery Indefinite Quantity (IDIQ) type contract, the auditor misidentifies the 44% increase over the contract original amount as a cost increase. This is irrelevant in IDIQ cost-type contracts in view of the fact that, by definition, cost-type contracts represent uncertainties, such as we have in this program which, when first cast in the 1980's technological changes occurred due to advancements in program technologies.

APPENDIX I

What is a matter of record is the \$9 million difference between the successful offeror and the next low offer eligible for award. NOAA's 5 year actual costs of \$21.4 million, although \$6.4 million over the initial estimates for the contract, were still \$2.6 million dollars less than the proposed price for the next lowest offer eligible for award. Due to the uncertainties associated with this effort, had the required changes been necessary to the next highest offeror eligible for award, the cost growth would have been even greater since the changes would have been applied to a base which was \$9 million greater than TRW's.

OIG Analysis: NOAA paid \$21.5 million for services originally proposed by the contractor to cost \$14.9 million. The change in costs from the original estimate during the contract can be properly characterized as a "cost increase," regardless of the contract type. NOAA's protest at our characterization is puzzling considering its response also characterizes the change in costs during the contract as a "44% increase" and "cost growth."

NOAA also pointed out that the total contract costs never exceeded that proposed by the next lowest competitor. In our judgment, NOAA's comparison between the actual costs and the next lowest bid is irrelevant as a justification for the award decision. First, as we stated in the report, TRW's bid was based on an ambiguous RFP and NOAA officials did not meaningfully discuss the basis for the bid with TRW and the other offerors. As discussed further below, had the officials involved in the award properly conducted the award process, they would have released an RFP with sufficient information upon which to base realistic bids. One or more of the offerors may have submitted a bid lower than the actual costs. The contracting officer would have discussed the bids with the offerors to assure that the winning offeror fully understood the RFP and could perform the needed tasks within the proposed costs. Finally, NWS program officials may have been able to limit actual costs to those proposed in the bid had they insisted upon the winning offerors employing the proposed labor mix at the proposed labor rates.

Second, no difference in the bid amounts justifies the appearance that the competitive procurement process was compromised due to the award decisions, as discussed in the report. By accepting TRW's assumptions without sufficient discussions, NWS officials may have harmed the other offerors who expended great effort to prepare competitive and realistic offers.

3. Page 3, first paragraph, third sentence, as reads:

"Weather service officials subsequently allowed hourly labor costs for TRW's services to rise significantly above those initially proposed by TRW and those proposed by the unsuccessful offerors."

APPENDIX I

NOAA Response: Non-concur.

NOAA officials did subsequently allow hourly labor costs for TRW's services to rise significantly above those initially proposed by TRW. This was in response to programmatic demands for more senior personnel to be assigned to specific and critical task orders.

OIG Analysis: NOAA's response is puzzling for two reasons. First, NOAA characterizes its response as "non-concur," which is inconsistent with its response in Item 1. Yet NOAA provides no rationale for the change in its positions from Item 1 to Item 3 even though the statements are virtually identical. Second, NOAA fails to provide any facts to support its own position or to refute our statement highlighted above.

It is a fact that the hourly labor costs eventually rose above the rate contained in the three offerors' proposals. It is our conclusion, based on our determination of the decisions made by NWS officials with respect to TRW's use of labor during the contract, that weather service officials "allowed" TRW to employ a more expensive labor skill mix. We reiterate that conclusion.

4. Page 3, fourth paragraph, third sentence, as reads:

"NWS's decision not to use the labor mix approved in the contract resulted in significantly higher hourly labor costs during the five-year period of the contract than those originally proposed by either TRW or the other offerors."

NOAA Response: Non-Concur.

As this is an IDIQ type contract, such issue of labor mix requirements stated in the report, are irrelevant. Upon examination of this question, it was found the Contracting Officer operated within the parameters of his discretion and business judgement. The audit report states **"Hourly labor costs for TRW's services rose significantly above the rates approved in the contract"**. It is significant to note that for this type of contract, approved labor mix nor approved rates are neither required nor were they incorporated into the document. The labor mix requirements were never intended to be controlling in view of the nature of the contractual vehicle employed. As such, higher costs, as represented by the above audit comments, simply have no meaning. See also Response to Item 5 below.

OIG Analysis: NOAA relied upon the contractors' proposed costs in its deliberations before awarding the contract. As discussed in the report and repeated by NOAA below, the offerors' proposed costs were a key criterion for the award decision. Yet NOAA's response suggests that offerors' proposed costs became irrelevant once the

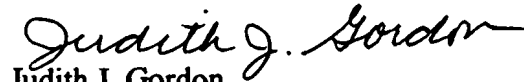
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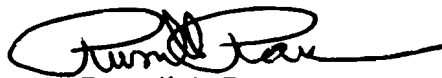


MEMORANDUM FOR:

Robert S. Winokur
Acting System Program Director
NPOESS Integrated Program Office

FROM:


Judith J. Gordon
Assistant Inspector General for Systems Evaluation
Office of Inspector General
Department of Commerce



Russell A. Rau
Assistant Inspector General for Auditing
Office of Inspector General
National Aeronautics and Space Administration

SUBJECT:

Inspection Report, *Proposed NPOESS Preparatory Project
Reduces Operational Risk, But Excludes Demonstration of Critical
Ozone Suite* (DOC OSE-11103/NASA IG-99-012)

The Offices of Inspector General of the Department of Commerce and National Aeronautics and Space Administration (NASA) conducted a joint inspection of the risks and costs associated with technology transfer to the National Polar-orbiting Operational Environmental Satellite System (NPOESS). This inspection report identifies a risk reduction issue concerning a proposed joint NPOESS Integrated Program Office (IPO)/NASA NPOESS Preparatory Project (NPP) mission that warrants your immediate attention.

We found that preliminary planning assumptions for the proposed NPP do not include evaluating the feasibility of demonstrating the Ozone Mapper Profiler Suite (OMPS), one of IPO's critical sensors. Exclusion of OMPS from flight demonstration will significantly increase the risk of a disruption in vital ozone data continuity. We recommend that IPO (1) request NASA to include OMPS as a payload alternative in its NPP feasibility study, (2) defer the decision to include or exclude OMPS for flight demonstration until mission costs are fully analyzed and a cost sharing arrangement is negotiated, and (3) assess the operational risk of not demonstrating OMPS.

Your response indicates general concurrence with the recommendations and that implementing actions have been taken or planned. We have included on page 7 a synopsis of your general comments on the report findings, and a synopsis of your response to each recommendation followed by an OIG discussion. Your response in its entirety is included as Appendix A.

We appreciate the cooperation of IPO and agency staff during this inspection.

BACKGROUND

The Department of Commerce, Department of Defense, and NASA are developing NPOESS in accordance with a 1994 Presidential Decision Directive. The Directive calls for NPOESS to combine the separate DOD Defense Meteorological Satellite Program (DMSP) and the Commerce/NASA-supported, Polar-orbiting Operational Environmental Satellite (POES) programs into a single, jointly operated satellite system. An Executive Committee (EXCOM), consisting of the Under Secretary of Commerce for Oceans and Atmosphere, Under Secretary of Defense for Acquisition and Technology, and NASA Deputy Administrator is responsible for policy guidance. Program implementation is the responsibility of IPO, under the direction of a Commerce system program director.

The acquisition strategy developed in 1996 includes early development of five critical sensors, which are characterized by significant technological challenge: (1) Visible/Infrared Imager Radiometer Suite (VIIRS), (2) Conical Microwave Imager Suite (CMIS), (3) Cross-track Infrared Sounder (CrIS), (4) Ozone Mapper Profiler Suite (OMPS), and (5) Global Positioning System Occultation Sensor (GPSOS).

Until 1998, critical sensor risk reduction activities included a flight demonstration of CrIS, OMPS, and GPSOS by adding these sensors to POES-N Prime, NOAA's last polar-orbiting operational satellite before convergence with NPOESS. However, an increase in the estimated cost, IPO budget cuts, and concern about NASA's Earth Observing System (EOS) mission continuity prompted IPO and NASA to develop an alternative mission. The alternative—NPP—would combine demonstration of NPOESS critical sensors with a developmental payload in support of NASA's Earth Science Program/EOS. NASA formally initiated an NPP feasibility study in September 1998 and is preparing a mission development plan. The plan will be completed in March 1999, and will define technical content, agency roles, budget, and cost sharing. EXCOM endorsed the NPP feasibility study at its December 18, 1998, meeting and is scheduled to consider the study results when it meets in April 1999.

PURPOSE AND SCOPE OF INSPECTION

The purpose of our review was to assess the level of sensor technology being transferred from NASA and other sources to NPOESS to minimize risk and cost. Although we are continuing our work in this area, this report is being submitted at this point because of the immediate need for IPO to deal with our observations and recommendations. The observations and recommendations contained in this report focus specifically on the risk and cost effects that changes in the methodology for demonstrating selected critical sensors may have on the mission success of NPOESS technology.

The scope of our work included evaluating the technology transfer roles and responsibilities of IPO and NASA, IPO planning and coordination with NASA, and management controls. We interviewed IPO technology transition and critical sensor engineers and project managers and representatives from NASA's Earth Science Program with responsibility for EOS satellites. We also interviewed NASA and Commerce research and operations scientists.

Our work was performed in accordance with the Inspector General Act of 1978, as amended, and the *Quality Standards for Inspections*, March 1993, issued by the President's Council on Integrity and Efficiency.

OBSERVATIONS AND CONCLUSIONS

Proposed NPP Reduces Operational Risk, But Excludes Critical Ozone Suite

We endorse the concept of converging NPOESS risk reduction demonstrations with a NASA mission. Under the proposed NPP, the flight demonstration of NPOESS critical sensors would no longer be tied to the POES-N Prime satellite, lowering the risk of operational failure due to the satellite modifications that would be required to add NPOESS sensors. However, one of IPO's critical sensors planned for demonstration on POES-N Prime, OMPS, is excluded in the preliminary NPP flight planning assumptions due to actual and anticipated budget cuts. Without flight demonstration of OMPS, the risk is significantly increased that sufficient ozone data may not be available to support federal government decision-making on actions to reduce ozone depletion.

High Risk Ozone Sensor Suite Not Considered for Feasibility/Cost Study

The NPP mission initial planning assumptions outlined in NASA's Associate Administrator for Earth Science memorandum of September 17, 1998, do not include OMPS. NASA's subsequent Mission Concept and Development Plan for its study of the NPP mission feasibility and system concept does not include OMPS as a primary alternative, but rather a possible consideration along with a NASA research sensor, meaning that its life-cycle costs will not be analyzed. OMPS should be included as a primary alternative due to its development risk and the potential for a gap in high quality ozone data.

OMPS was chosen for flight demonstration on POES-N Prime to mitigate its potential high development risk and to provide users with better ozone data prior to the first NPOESS. OMPS is a high risk sensor because it combines functions previously performed by two sensors and significantly advances the technology. It will perform the functions of both Commerce's Solar Backscatter Ultraviolet Spectral Radiometer (SBUV), flown on POES satellites, and NASA's Total Ozone Mapper Sensor (TOMS), flown on the Earth Probe satellite. OMPS will also

advance the SBUV and TOMS 1970s technology and obtain significantly better data to increase the usefulness of ozone monitoring products.

According to IPO's Cost Analysis Requirements Description (which establishes size, weight and power margins [risk factors] for the five critical sensors), VIIRS, CrIS, and OMPS carry the highest degree of development uncertainty. A flight demonstration would provide for early evaluation of sensor and algorithm capabilities and corrective modifications if needed before the first NPOESS launch. VIIRS and CrIS are proposed for demonstration on the NPP mission based on the inherent risks of flying new, complex technology for the first time.

Flight demonstration of OMPS was justified in the IPO budget beginning in fiscal year 1998. The justification cited the need for new technology to meet ozone data user requirements. According to IPO's Single Acquisition Management Plan, OMPS is critical in determining high resolution ozone profiles and related trace gases, which are vital to monitoring changes in the composition of the atmosphere and deducing the effects of these changes on the global climate. According to Commerce and NASA ozone scientists, to be highly effective, ozone instruments must accurately measure a vertical profile and be able to map a horizontal column within the stratosphere and troposphere. Current ozone sensors do not provide the high resolution data sets that are needed in profiling and mapping to examine small scale ozone phenomenon and improve data models and products. Demonstration of OMPS prior to the first NPOESS would provide a phased introduction of NPOESS-like capabilities to meet the users' highest priority needs while mitigating NPOESS development risk.

*Commerce and NASA Are Required to Monitor and Report on the
Extent and Effect of Ozone Depletion*

Eliminating flight demonstration of OMPS may jeopardize the ability of the federal government to meet public safety and international agreement responsibilities. Commerce and NASA are mandated to monitor ozone levels, conduct research, and report on the levels of ozone depletion. Under the Clean Air Act of 1990, Public Law 101-549, Commerce's National Oceanic and Atmospheric Administration and NASA are responsible for monitoring and reporting on the condition of the earth's ozone because of the adverse effects that have been linked to ozone depletion. Health hazards that have been associated with ozone depletion include skin cancers, suppression of the immune system, gene mutations, eye disorders including cataracts, as well as adverse effects on crops, animals and marine life.

Under the National Aeronautics and Space Administration Authorization Act, Public Law 94-39, NASA is responsible for conducting scientific research of the upper atmosphere, including assessing long-term environmental change. Both Commerce and NASA are required to report to Congress on the status of ozone depletion. Congress and the President need reliable information

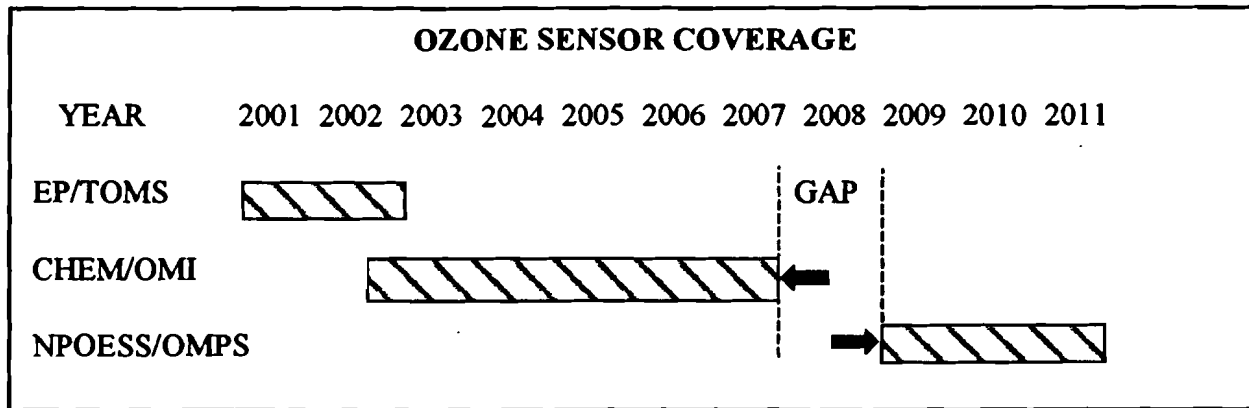
on ozone status, changes, and causes to make policy decisions on actions to reduce ozone depletion. Ozone information is also needed to ensure compliance with the Montreal Protocol, an international agreement to eliminate ozone-depleting substances. Should OMPS high quality ozone data not be available, Commerce and NASA may not be able to effectively support federal government policy decision-making.

Eliminating OMPS Demonstration Testing Will Significantly Increase Risk of a Disruption in Vital Ozone Data Continuity

Excluding a flight demonstration of OMPS increases the risk of a disruption in high quality ozone data in two ways. First, the risk is increased by the possibility of an OMPS failure on the first NPOESS. OMPS was planned for flight demonstration on POES-N Prime in 2008, with nearly a four-year satellite life expectancy. If OMPS were demonstrated on NPP instead, it would launch in mid-2005 with a five-year life. Without demonstration on either platform, the first flight will be on NPOESS in early 2009. If OMPS fails on NPOESS, the satellite will not be replaced. According to IPO, an on-orbit satellite will be replaced only if specific weather data gathering sensors—not including OMPS—fail. Since the next NPOESS is not scheduled to launch until 2011, an early OMPS failure on the first NPOESS would result in Commerce and NASA not having critical ozone data for two years.

Second, the risk is increased due to the expected termination of NASA missions and the potential for a delay in launching the first NPOESS. The TOMS mission is expected to end in 2003. NASA's Ozone Mapping Instrument (OMI) is scheduled to launch on NASA's EOS CHEM-1 satellite in 2002. This sensor is to provide high quality ozone data to NASA and Commerce and to continue NASA's ozone data gathering until OMPS is available. However, the OMI design life is five years, resulting in expected mission termination in 2007. This may result in a gap in coverage for more than a year until the first NPOESS is operational in 2009. The gap could be larger if the first NPOESS launch date slips. The first launch has already been delayed from 2004 to 2009, primarily due to DMSP and POES satellites lasting longer than expected, and could be further delayed (see Table 1 on page 6).

Table 1. Potential Gap in Ozone Coverage



Uncertainties Require Further Alternatives and Cost Analysis

According to IPO, POES-N Prime sensor demonstrations will not be performed because its budget will no longer support the required satellite modifications. IPO decided also that its budget will not support flight of OMPS at the time of the NPP mission. IPO based its budget for the demonstration of CrIS, OMPS, and GPSOS aboard POES-N Prime on a one-month limited scope accommodation study it tasked NASA to perform in 1996; however, design assumptions about CrIS significantly changed since the study was completed. A detailed, 10-month NASA study using more current information was completed August 17, 1998. The second study showed that the flight demonstration would cost \$148 million, more than double the \$65 million 1996 estimate used for NPOESS budgeting.

IPO and NASA formally discussed an alternative flight demonstration—NPP—on August 27, 1998. However, OMPS was excluded based on IPO priorities and resource assumptions. OMPS was considered less important to Commerce than sensors that support weather forecasting, and the NPOESS faced a Congressional \$14.7 million Commerce fiscal year 1999 budget cut and another \$15.5 million OMB fiscal year 2000 cut. According to IPO, these budget cuts force a slowdown in OMPS delivery from mid-2002 to early 2005—too late for inclusion on the NPP mission. The IPO estimated that it would cost about \$14 million to maintain the 2002 delivery date to support inclusion in NPP.

The IPO decision that it lacked sufficient funding to fly OMPS may be premature. Because Congress reduced the Commerce fiscal year 1999 appropriation, it appeared likely that the Defense appropriation would also be reduced due to its joint funding arrangement with Commerce. However, IPO learned in December 1998 that it may receive \$14.7 million

unanticipated funding from Defense. The \$14.7 million would be enough to resume the 2002 OMPS delivery schedule.

The decision to exclude OMPS is also premature because it was made before IPO knew its cost share of the mission. IPO could not provide support for the cost projections used in its decision to exclude OMPS from the NPP mission. NASA's Associate Administrator for Earth Science directed full life-cycle cost analysis of alternatives to be included in the NPP Mission Concept and Development Plan study, including cost sharing. Only if OMPS is included in the study will the complete budget implications of including OMPS be known, allowing an informed decision to be made. Considering the high risk that quality ozone data may not be available to meet national needs without a flight demonstration, OMPS should be given further consideration.

IPO General Comments on Findings and OIG Discussion

IPO expressed concern about language in the report suggesting that the NPOESS program should be responsible for ensuring continuity of global ozone mapping data, and commented that it is currently a NASA responsibility. We found that Public Law 101-549 makes Commerce and NASA equally responsible for monitoring and reporting on the condition of the earth's ozone.

We reported that IPO was receiving \$14.7 million unanticipated funding from Defense and that this amount would be enough to resume the 2002 OMPS delivery schedule. IPO responded that the statement was not accurate because the \$14.7 million was originally anticipated as a critical part of full funding for NPOESS in fiscal year 1999 (and thus, not unanticipated), and was already earmarked for other activities. The issue is not the meaning of "unanticipated funding," but whether IPO should use the \$14.7 million from Defense for OMPS or the other activities. IPO should decide how best to use its resources for the NPOESS mission. The intent of this report is to encourage IPO to fully analyze risks and costs as a means of establishing priorities.

RECOMMENDATIONS

We recommend that the Acting System Program Director:

1. Request NASA to include OMPS as a payload alternative in the NPOESS Preparatory Project Mission Concept and Development Plan study.

Synopsis of IPO's Response

IPO accepts this recommendation. The Assistant Administrator for Satellite and Information Services (also the IPO Acting System Program Director) and the NASA Associate Administrator for Earth Science, have directed the joint IPO/NASA NPP

planning team to include OMPS as a fourth payload alternative in the NPP mission concept and development plan study. NASA recently released a Request for Information (RFI) to solicit proposals from industry to implement a spacecraft for the proposed NPP mission. The RFI includes mass, power, and data rate specifications for a fourth, instrument-of-opportunity payload on NPP. The planning team will conduct a complete assessment to determine if a fourth payload, such as OMPS, can be accommodated on NPP within agency cost constraints.

OIG Discussion

IPO's actions are responsive to the recommendation.

2. Defer the decision to include or exclude OMPS for the NPP flight demonstration until mission costs are fully analyzed and a cost sharing arrangement is negotiated.

Synopsis of IPO's Response

IPO accepts this recommendation. A decision on whether a fourth payload can be accommodated on NPP at an affordable program cost, and if so, the selected payload, will be deferred until NPP mission costs are fully analyzed, IPO and NASA program priorities for NPP are approved by EXCOM and NASA Headquarters respectively, and an equitable cost sharing arrangement between IPO and NASA has been negotiated. IPO expects to brief EXCOM on the NPP study status in the spring of 1999.

Adding a fourth sensor, such as OMPS, to NPP will increase the mass, power, attitude control, command and control, and data transmission requirements placed on the proposed spacecraft. The potential risk is that the NPP mission may not be affordable even with joint IPO/NASA funding if the spacecraft must be sized and configured to carry four payloads. If a decision is made to carry OMPS as a fourth payload on NPP, then additional funding in the FY 2001 – FY 2004 NOAA budget for NPOESS will be required to accelerate the OMPS instrument fabrication schedule to meet an earlier delivery date for NPP spacecraft integration.

OIG Discussion

IPO's actions are responsive to the recommendation. However, it is too early to determine whether additional funding will be needed. When the NPP concept and development plan is completed, IPO will be in a better position to prioritize an OMPS demonstration in relation to other NPOESS mission activities based on mission risks and costs and a cost sharing arrangement with NASA.

3. Assess the operational risk of not demonstrating OMPS.

Synopsis of IPO's Response

IPO accepts this recommendation. Based on a preliminary assessment of information and documentation received from contractors, IPO believes that instrument designs are mature enough to be able to accept the potential risk of not conducting a space-based test of the specific OMPS instrument prior to the first operational NPOESS launch, if OMPS cannot be accommodated on the NPP mission.

The global ozone mapping component of OMPS will be derived from the TOMS instrument, a proven space-based, remote sensing technology, as well as the improved technologies that will be demonstrated by NASA's OMI on the CHEM-1 mission beginning in 2002. The OMPS will also include a limb sensor to improve the vertical resolution in atmospheric ozone profile measurements, rather than a nadir-pointing sensor as used on the POES SBUV. Although this specific sensor has not yet flown operationally, research ozone limb sensors will be demonstrated by NASA over the next several years. These missions will provide valuable risk reduction information to IPO and its contractors.

To ensure that a gap in global ozone mapping does not occur, IPO believes that NASA, NOAA and their international partners should periodically assess the status of space-based ozone measurements and determine methods to maintain a long-term ozone data record. IPO will provide a more complete assessment of the potential operational risks of not demonstrating OMPS to the OIGs in May 1999, after it has completed source selection and awarded a single contract for development and fabrication of OMPS.

OIG Discussion

IPO's actions are responsive to the recommendation.

IPO's full response is included as Appendix A.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER

MAR 16 1999

MEMORANDUM FOR: Johnnie Frazier
Acting Inspector General

FROM: Paul F. Roberts *Paul F. Roberts*

SUBJECT: OIG Draft Inspection Report: Proposed NPOESS
Preparatory Project Reduces Operational Risk,
But Excludes Demonstration of Critical Ozone
Suite (DOC OSE-1103/NASA P&A-98-008)

Thank you for the opportunity to review and comment on the draft inspection report on risk reduction efforts for technology associated with the National Polar-orbiting Operational Environmental Satellite System (NPOESS). The NPOESS Preparatory Project (NPP), a joint project of the Integrated Program Office (IPO) of the National Environmental Satellite, Data, and Information Service and the National Aeronautics and Space Administration (NASA), is a major part of those efforts.

In general, we agree with the findings in the draft report regarding the proposed risk reduction, early flight of opportunity demonstration program that the IPO and NASA's Office of Earth Science (OES) is jointly pursuing. NOAA is particularly pleased that the Office of Inspector General (OIG) has endorsed and independently validated the concept of the NPP mission. We believe that this joint mission will provide an early flight of opportunity demonstration to reduce risk to the critical NPOESS sensors that will be flown operationally beginning in late 2008, as well as allow NASA to ensure continuity of selected earth science data sets between the anticipated end of NASA's Earth Observing System (EOS) AM and PM missions in 2005-2006 and the start of the NPOESS mission in 2008.

We agree with the recommendations made in the report concerning the Ozone Mapping and Profiler Suite (OMPS) and we have already taken action on the recommendations to include the OMPS as a payload alternative in the NPP feasibility study and to defer the decision to include or exclude OMPS on NPP until



the mission costs are analyzed completely and a cost sharing agreement between the IPO and NASA has been negotiated. In addition, we are in agreement with the OIG about ensuring continuity of global ozone mapping data during the transition (2007-2008) from the NASA ozone mapping research missions to the operational NPOESS mission. Those issues are addressed in our general comments on findings.

We have made a preliminary evaluation of the potential operational risks of not demonstrating OMPS prior to the first NPOESS launch, but will defer a more complete assessment until May 1999, after the IPO has completed source selection and has awarded a single contract for development and fabrication of the OMPS.

Again, NOAA appreciates the opportunity to and comment on the draft inspection report. Our specific response to each finding and recommendation is attached.

Attachment

**Comments on Findings and Responses to Recommendations:
OIG Draft Inspection Report
"Proposed NPOESS Preparatory Project Reduces Operational
Risk, But Excludes Demonstration of Critical Ozone Suite"**

Section I: General Comments on Findings

We are pleased that the OIG has endorsed and independently validated the concept of converging NPOESS risk reduction, early flight demonstrations with a NASA mission. We believe that this joint mission will provide an important opportunity to reduce risk to the critical NPOESS sensors that will be flown operationally beginning in late 2008, as well as allow NASA to ensure continuity of selected earth science data sets between the anticipated end of NASA's Earth Observing System (EOS) AM and PM missions in 2005-2007 and the start of the NPOESS mission in 2008.

The OIG review of the proposed NPP mission identified that the Ozone Mapping and Profiler Suite (OMPS) that is planned for NPOESS was not specifically included as a payload alternative in the initial planning assumptions for the NPP mission. As a result, the OIG concluded that, "Exclusion of OMPS from flight demonstration will significantly increase the risk of a disruption in vital ozone data continuity." Although we understand the OIG's interest in ensuring continuity of global ozone mapping data to support federal government policy decision-making, we are concerned about the suggestion that the OIG has made that the NPOESS program should be responsible for ensuring continuity of global ozone mapping data during the transition (2007-2008) from the NASA ozone mapping research missions to the operational NPOESS mission.

Global ozone mapping is currently a NASA responsibility that is accomplished through their Total Ozone Mapping Spectrometer (TOMS) research mission. Beginning in late 2002 and extending into 2007, NASA will continue its long-term ozone mapping research when an Ozone Monitoring Instrument (OMI) is launched on the EOS Chemistry (CHEM) mission. Complementary atmospheric ozone profile data will be acquired from the nadir-pointing Solar Backscatter Ultraviolet Radiometer/2 (SBUV/2) on the National Oceanic and Atmospheric Administration's (NOAA) Polar-orbiting Operational Environmental Satellites (POES) during this same time period. We are prepared to assume full operational responsibility for global ozone mapping and profiling using the OMPS, when the first NPOESS spacecraft is launched in late 2008. To ensure that a gap in global ozone mapping does not occur in 2007-2008, as the OIG suggests, we believe that NASA, NOAA, and

other international partners should periodically assess the status of space-based ozone measurements and determine methods to maintain the long-term ozone data record utilizing both space-based and in situ observations. This approach will be especially important if the OMPS cannot be accommodated on the NPP mission because of cost considerations and agency priorities.

Finding I: Proposed NPP Reduces Operational Risk, But Excludes Critical Ozone Suite

The IPO agrees with the comments in the draft report concerning the NPOESS Preparatory Project. The NPP mission concept has been developed jointly with NASA to provide the IPO with a demonstration and validation for three (3) of the four (4) critical NPOESS instruments and to provide NASA with continuation of selected, calibrated, validated, and geo-located global imaging and sounding observations after the EOS AM and PM missions and prior to the NPOESS mission.

A: High Risk Ozone Sensor Suite Not Considered for Feasibility/Cost Study

The NPOESS Optimized Convergence Plan initiated in FY 1997 included a risk reduction component to demonstrate selected instruments on an early flight of opportunity. Those instruments included the critical Cross-track Infrared Sounder (CrIS), as well as the Global Positioning System Occultation Sensor (GPSOS) and the OMPS, which are high priority NPOESS sensors. At the time that the Optimized Convergence Plan was formulated, the only spacecraft that was expected to be available for an early flight demonstration was POES-N', the last operational satellite in the POES series. Because of the existing constraints of POES-N', the only planned NPOESS instruments that could possibly be accommodated on the spacecraft were CrIS, GPSOS, and OMPS. The IPO proceeded with feasibility studies for this risk reduction demonstration, even though it would require modifications to an operational satellite and would potentially increase the risk of operational failure of POES-N'. If the opportunity to use a separate, unencumbered, non-operational satellite for an early flight demonstration had been apparent in FY 1997, the IPO would have planned to demonstrate the four critical NPOESS instruments: Visible/Infrared Imager Radiometer Suite (VIIRS); Cross-track Infrared Sounder (CrIS); an advanced cross-track microwave sounder (currently the Advanced Technology Microwave Sounder [ATMS] being developed by NASA for NPOESS); and the Conical-scanning Microwave Imager/Sounder (CMIS). We have been able to leverage other satellite programs to reduce potential development and operational risks for the CMIS

sensor. Through a separate joint program with the Department of Defense (DOD), the IPO has been supporting the WindSat/Coriolis mission that, beginning in late 2001, will provide a space-based demonstration of the passive microwave radiometric measurement technologies that will be incorporated into CMIS.

As the OIG report correctly states on page 6, a detailed NASA study of the modifications to the POES-N' spacecraft that would be required to accommodate CrIS, GPSOS, and OMPS was completed in mid-August 1998 and showed that the costs (\$148 million) would be more than double the original estimate (\$65 million) used for NPOESS current and out-year budgeting. The higher costs for the POES-N' modifications could not be supported by the approved NPOESS out-year budget.

In late August 1998, the IPO and NASA began discussions of an alternative bridging mission, the NPOESS Preparatory Project, to demonstrate early NPOESS operational capabilities and to meet the science needs of NASA's Earth Science Enterprise. In September 1998, the IPO System Program Director and the NASA Associate Administrator for Earth Science directed a joint IPO/NASA team to begin a feasibility study of the NPP mission. Initial planning assumptions included VIIRS, CrIS, and ATMS as the critical three payloads on NPP. However, this did not preclude the NPP team from considering additional payloads. If mass and power margins allow, the IPO/NASA NPP planning team will consider adding a fourth payload to the spacecraft, provided that the program remains affordable and agreements to fund the mission jointly can be negotiated. Potential candidates for this fourth, to-be-determined payload include NASA's Clouds and Earth Radiant Energy System (CERES - also to be flown on NPOESS) and the OMPS.

B: Uncertainties Require Further Alternatives and Cost Analysis

On pages 6 and 7 of the draft inspection report, the OIG states: "The IPO decision that it lacked sufficient funding to fly OMPS may be premature ... [the] IPO learned in December 1998 that it may receive \$14.7 million unanticipated funding from Defense. The \$14.7 million would be enough to resume the 2002 OMPS delivery schedule." This statement is not accurate.

In FY 1999, the Congressional appropriations for the Department of Commerce reduced NPOESS funding by \$14.7 million. The FY 1999 Congressional appropriations for the Department of Defense sustained the request for the NPOESS program at \$64.7 million. Because of the \$14.7 million

reduction to DOC funding for NPOESS, the IPO had to reduce the projected FY 1999 budget, thereby impacting parts of the program. With the approval of the NPOESS Executive Committee (EXCOM), the IPO eliminated FY 1999 funding for the POES-N' modifications, reduced funding for the Internal Government Studies (IGS) efforts, and reduced funding and stretched out the Phase II production schedules for CrIS, GPSOS, and OMPS instruments. The OMPS delivery schedule was stretched out from 2002 to 2005, when the instrument will be required for integration onto the first NPOESS satellite.

Because the NPOESS program is funded equally by DOC and DOD, it was anticipated that DOD, through the U.S. Air Force, would withhold \$14.7 million in FY 1999 and reprogram these funds for other purposes. This withhold did not occur. However, the \$14.7 million that was finally released by the U.S. Air Force in early January 1999 was not "unanticipated funding from Defense." The \$14.7 million was always a critical part of full funding for NPOESS in FY 1999 to allow the IPO to conduct its budgeted program. If the U.S. Air Force had withheld and reprogrammed the \$14.7 million, there would have been further, more serious impacts to the NPOESS program. This additional reduction would have: (1) eliminated the planned upgrades for the Defense Meteorological Satellite Program (DMSP) Multi-spectral Operational Linescan System (MOLS); (2) reduced funding for the Advanced Technology Support Program (ATSP) efforts; and (3) further reduced funding for IGS activities.

Section II: Response to Recommendations

Recommendation 1: Request NASA to include the Ozone Mapper Profiler Suite as a payload alternative in the NPOESS Preparatory Project Mission Concept and Development Plan study.

Response: The Integrated Program Office accepts this recommendation. The Assistant Administrator for Satellite and Information Services, the IPO Acting System Program Director, the NASA Associate Administrator for Earth Science, have directed the joint IPO/NASA NPP planning team to include OMPS as a fourth payload alternative in the NPP mission concept and development plan study. NASA recently released a Request for Information (RFI) to solicit proposals from industry to implement a spacecraft for the proposed NPP mission. The RFI includes mass, power, and data rate specifications for a fourth, instrument-of-opportunity payload on NPP. The planning team will conduct a complete assessment to determine

if a fourth payload, such as OMPS, can be accommodated on NPP within affordable agency cost constraints.

Recommendation 2: Defer the decision to include or exclude OMPS for the NPP flight demonstration until mission costs are fully analyzed and a cost sharing arrangement is negotiated.

Response: The Integrated Program Office accepts this recommendation. A decision on whether a fourth payload can be accommodated on NPP at an affordable program cost, and if so, what that payload will be, will be deferred until NPP mission costs are fully analyzed, IPO and NASA program priorities for NPP are approved by the EXCOM and NASA Headquarters respectively, and an equitable cost sharing arrangement between the IPO and NASA has been negotiated. We expect the NPP study status to be briefed to the EXCOM in the spring of 1999.

Adding a fourth sensor, such as OMPS, to NPP will increase the mass, power, attitude control, command and control, and data transmission requirements that will be placed on the proposed spacecraft. The potential risk is that the NPP mission may not be affordable even with joint IPO/NASA funding, if the spacecraft must be sized and configured to carry four payloads. If a decision is made to carry OMPS as a fourth payload on NPP, then additional funding in the FY 2001 - FY 2004 NOAA budget for NPOESS will be required to accelerate the OMPS instrument fabrication schedule to meet an earlier delivery date for NPP spacecraft integration.

Recommendation 3: Assess the operational risk of not demonstrating OMPS.

Response: The Integrated Program Office accepts this recommendation. Based on a preliminary assessment of information and documentation received from contractors at the recent (January - February 1999) OMPS Preliminary Design Reviews (PDR) in preparation for the Call For Improvement (CFI) proposals, the IPO believes that the contractors' instrument designs are mature enough to be able to accept the potential risk of not conducting a space-based test of the specific OMPS instrument prior to the first operational NPOESS launch, if OMPS cannot be accommodated on the NPP mission. The global ozone mapping component of OMPS will be derived from the TOMS instrument, a proven space-based, remote sensing technology, as well as the improved technologies that will be demonstrated by the Ozone Monitoring Instrument on NASA's CHEM mission beginning in late 2002. The OMPS will also include a limb sensor, rather than a nadir-pointing sensor (e.g., SBUV/2), to improve the vertical resolution in atmospheric

ozone profile measurements. Although this specific sensor has not yet flown operationally, ozone limb sensors have been demonstrated in space in a research mode as early as 1978 on Nimbus-7. Research limb sounders scheduled for flight by NASA over the next several years include: the Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) on the Thermosphere, Ionosphere, Mesosphere Energetics and Dynamics (TIMED) mission in May 2000; and the High Resolution Dynamics Limb Sounder (HIRDLS) on the CHEM mission. These missions will provide valuable risk reduction information to the IPO and its contractors. We will provide a more complete assessment of the potential operational risks of not demonstrating OMPS to the OIG in May 1999, after the IPO has completed source selection and has awarded a single contract for development and fabrication of the OMPS.

We share the OIG's concern about a potential gap in U.S. space-based global ozone mapping capabilities in the 2007 to 2008 time frame, prior to NPOESS. However, this gap may not occur if NASA's CHEM mission is delayed, or if the CHEM mission and the OMI sensor last longer than the planned five year design life. In addition, other ozone mapping sensors (e.g., the Global Ozone Monitoring Experiment [GOME] on the European Organisation for the Exploitation of Meteorological Satellites [EUMETSAT] Meteorological Observation Satellite Series [METOP]) will be available to help maintain the space-based global ozone mapping mission in that time period.

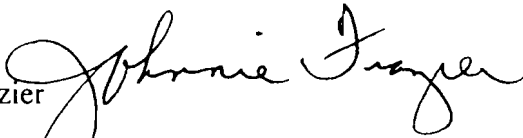
To ensure that a gap in global ozone mapping does not occur in 2007-2008, as the OIG suggests, we believe that NASA, NOAA, and other international partners, such as EUMETSAT, should periodically assess the status of space-based ozone measurements and determine methods to maintain the long-term ozone data record utilizing both space-based and *in situ* observations. This approach will be especially important if the OMPS cannot be accommodated on the NPP mission because of cost considerations and agency priorities.



UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, D.C. 20230

FEB 9 2000

MEMORANDUM FOR: Kenneth Prewitt
Director
Bureau of the Census

FROM: Johnnie E. Frazier 

SUBJECT: Final Inspection Report: *Year 2000 Preparations Were Effective, but Business Continuity and Contingency Planning Needed Improvement* (OSE-12200)

As a follow-up to our December 7, 1999 draft report, this is our final report on our review of the Census Bureau's year 2000 (Y2K) readiness. We found that, in general, the bureau had successfully replaced and tested its systems in preparation for Y2K and had made progress in developing a business continuity and contingency plan (BCCP). However, in reviewing the bureau's September 1999 draft BCCP, we found that existing contingency plans for critical systems and business processes needed to be further developed, test plans developed, and BCCP tests executed to better prepare the bureau for continued operation in the event of Y2K problems. Based on a suggestion we made during our fieldwork, the bureau added three critical decennial systems to its November draft BCCP. Detailed contingency plans and test plans needed to be developed and BCCP tests executed for these systems.

We discussed our observations and recommendations with the Deputy Director and Chief Operating Officer of the Bureau of the Census during an exit briefing on November 10, 1999. We received a written response to our draft report from the Director of the Census Bureau and the Under Secretary for Economic Affairs on February 2, 2000. The oral and written responses to our findings were positive, indicating that all operations are functioning successfully. The written response is summarized on page 8 and included in its entirety as Appendix A.

We appreciate the cooperation of Census Bureau staff during the review.

BACKGROUND

The Census Bureau's mission is to be the preeminent collector and provider of timely, relevant, and quality data about the people and economy of the nation. Achieving this mission depends on the systems, people, and infrastructure that make up the bureau's information technology environment. The bureau's largest and most recognizable program is the 2000 Decennial Census. The decennial will provide the country with comprehensive data about how many people reside in the United States, where they reside, and their demographic characteristics.

The bureau developed several new systems specifically for the decennial, including the Pre-Appointment Management System/Automated Decennial Administrative Management System (PAMS/ADAMS), used to process personnel and payroll actions, and the Decennial Applicant Name Check (DANC) system, used to screen job applicants. The bureau also relies heavily on existing renovated or replaced systems to help prepare for the decennial and to process decennial data. One of these systems is the Geographic Support System (GSS), which generates maps and addresses for conducting censuses.

The bureau's systems must be Y2K compliant to avoid disruption to critical processes. Accordingly, the bureau established a Y2K program for repairing and testing existing mission-critical systems and preparing a BCCP. A bureau inventory of all systems found 58 to be mission critical. For these 58 systems, the bureau determined which were already compliant, which would be replaced or retired, and which would be repaired. By February 1999, the bureau revised the number of mission-critical systems to 56 and reported that repairs to all systems had been implemented. Nine of these mission-critical systems were included in the bureau's BCCP because they were identified for early January 2000 production. Many systems were excluded from the BCCP because they are used for cyclical surveys and censuses and will not be in production until later in 2000.

Even after an agency has undertaken a large-scale effort to make its systems Y2K compliant, there remains a risk that one or more mission-critical systems will fail and severely hamper its ability to deliver critical services. Because of this risk, each agency must have a BCCP. The BCCP process focuses on reducing the risk of Y2K-induced failures. It safeguards an agency's ability to produce a minimum acceptable level of outputs and services in the event of failures of internal or external mission-critical information systems and services. It also links risk management and mitigation efforts to the agency's Y2K program and helps to identify alternative resources and processes needed to operate the agency's core business processes.

The General Accounting Office (GAO) published guidelines to aid federal agencies in preparing for the year 2000 century change. According to GAO, a well-structured BCCP program includes the following four phases and supporting key processes:

- **Initiating a BCCP** - Establish a business project work group, and develop a high-level business continuity planning strategy. Develop a master schedule and milestones, and obtain executive support.
- **Analyzing Business Impacts** - Assess the potential impact of mission-critical system failures on the agency's core business processes. Define Y2K failure scenarios, and perform risk and impact analyses of each core business process. Assess infrastructure risk, and define the minimum acceptable levels of outputs for each core business process.

- **Contingency Planning** - Identify and document contingency plans and implementation modes. Define triggers for activating contingency plans, and establish a business resumption team for each core business process.
- **Testing** - Validate the agency's business continuity strategy. Develop and document contingency test plans. Prepare and execute tests. Update disaster recovery plans and procedures.

The Census Bureau developed an agency-level BCCP that identifies broad areas of risk and general mitigation strategies and contingencies. The bureau defines its programs and activities as four "business lines" that support the decennial and non-decennial activities:

- Data that define legislative representation and federal funding.
- Data that shape policy and business decisions.
- Data that show current and suggest future economic and social conditions.
- Tools and technology that produce better information.

PURPOSE AND SCOPE OF INSPECTION

The purpose of our review was to reduce the risk of business interruption due to the year 2000 century change by assessing actions taken by the Census Bureau and recommending practical risk mitigation and contingency planning activities.

The scope of our review included a limited assessment of actions taken to replace or renovate selected systems to make them Y2K compliant, including system testing. We also reviewed the bureau's BCCP and the process used to prepare it, including initiation of planning, management involvement in support of Y2K preparedness, business impact analyses, detailed contingency and disaster recovery planning, and business process testing.

We reviewed documentation describing the bureau's systems architecture, information technology plans, and Y2K test results for PAMS/ADAMS, DANC, and GSS; evaluated the September 1999 and November 1999 draft versions of the bureau's BCCP; interviewed the Y2K program director within the bureau's Office of the Associate Director for Information Technology and interviewed staff in the Office of the Associate Director for Decennial Census; and at the conclusion of our fieldwork, briefed the bureau's Deputy Director and Y2K staff on the results of our review.

Our evaluation criteria were derived from GAO guidelines written specifically for the Y2K computing crisis, and best business practices. The GAO guidance has been accepted by the Office of Management and Budget, the Chief Information Officers Council, and the Department.

Our fieldwork was conducted at the Census Bureau headquarters in Suitland, Maryland, and at the Bowie, Maryland, Computer Center primarily during September and October 1999. This inspection was performed in accordance with the Inspector General Act of 1978, as amended, and the *Quality Standards for Inspections*, March 1993, issued by the President's Council on Integrity and Efficiency.

OBSERVATIONS AND CONCLUSIONS

At the time of our fieldwork, the Census Bureau had successfully replaced and tested its systems in preparation for Y2K and had made progress in developing a BCCP. The bureau established Y2K test environments for its systems and hired contractors to perform independent Y2K testing on selected mission-critical and decennial systems. The bureau reported that all mission-critical systems were Y2K compliant.

However, the bureau needed to further develop existing contingency plans and develop BCCP test plans and execute BCCP tests for the nine critical business processes and systems that were included in its September 1999 draft BCCP. Based on our suggestion during fieldwork, the bureau added three critical systems, PAMS/ADAMS, DANC, and GSS to the November 1999 draft of its BCCP. Because of the recent addition of these systems to the BCCP, detailed contingency plans and test plans had not been developed for them. Consequently, tests had not been executed to validate that contingency plans would ensure business continuity in the event of Y2K-related systems failures.

I. Replacement and Testing of Critical Systems Have Been Completed

The Census Bureau reported that all mission-critical systems were Y2K compliant as of March 1999. All other systems were scheduled to be compliant by November 30, 1999. In addition to the existing systems that were renovated or replaced for Y2K compliance, the bureau has been developing new systems, with 4-digit dates, to support the decennial. Some of these systems are already in production and others will begin operation later this year.

Separate Y2K testing environments were established at the bureau's Bowie Computer Center and the Decennial Beta Test Site. The beta site provides a facility to test decennial software on computer systems that are identical to production systems, and enabled Y2K clock-forward testing, in which the system date was set to a date later than December 31, 1999, so that software was tested as though it were operating in the next century. All decennial systems in operation at the turn of the century were independently tested.

The bureau risk mitigation efforts also included hiring two contractors to perform independent Y2K compliance testing on 22 non-decennial mission-critical systems. The bureau also inventoried its incoming and outgoing data exchanges and identified 18 data exchanges related to

13 mission-critical systems. According to the bureau, all data exchange issues were resolved.

II. Contingency Plans Needed Further Development, Test Plans and Tests Were Needed for Critical Systems in September BCCP

Our review of the bureau's September 1999 draft BCCP revealed that contingency plans needed to be further developed, test plans established, and BCCP tests executed to ensure that the plan provides the level of contingency necessary to mitigate risk and ensure continuity of critical business processes in the event of Y2K-related systems failures.

More detailed contingency plans were needed

The bureau had not developed detailed contingency plans, and therefore its BCCP could not be used to ensure the continued delivery of minimum acceptable levels of outputs and services during potential Y2K failures. The BCCP makes reference to "alternative services," "preemptive strategies," and "event response actions" for the outputs/deliverables from each core business process. But the BCCP did not include the detailed business process workarounds needed to implement these services, strategies, and actions in the event that the BCCP had to be used.

The BCCP also documents fault tolerances/recovery times, defined as the amount of time the bureau could operate without the outputs/deliverables from each core business process. But without detailed contingency plans, the strategy for meeting the minimum acceptable output and service levels was undefined.

The bureau's minimum acceptable levels of outputs and services are represented by very tight fault tolerances. The BCCP identified 38 deliverables with due dates that occur between December 31, 1999, and March 1, 2000, and 31 of them have fault tolerances that are 5 working days or less. Twenty-six of the 31 deliverables are outputs from the core business process, "Data that show current and suggest future economic and social conditions." Examples of these deliverables are the Monthly and Annual Retail Trade and Wholesale Trade Reports, which are used by the Department's Bureau of Economic Analysis in calculating quarterly estimates of the gross domestic product. To mitigate the risk, the bureau needed detailed contingency plans explaining how these fault tolerances will be met.

Test plans needed to be developed and tests executed

Test plans needed to be developed, test teams established, business resumption teams rehearsed, and tests executed to validate contingency plans. The bureau's BCCP included only a high-level description of testing that was too broad to link to specific core business processes. The plan did not document that any tests had been conducted or scheduled.

The objective of testing was to evaluate whether contingencies provided the desired level of service to customers and could be implemented within a specified time. Without defined procedures that identify specific test tasks, conditions, and standards, it would have been difficult to conduct effective, consistent BCCP tests. Because no test teams had been established to validate contingency plans, the bureau could not evaluate the BCCP's capability to meet minimum acceptable levels of outputs and services. Also, without plans to rehearse the business resumption teams, it would have been difficult to assure bureau managers that the teams were capable of implementing the BCCP.

Based on the lack of detail about contingency plans and business process testing, the BCCP did not provide for continuity of business operations in the absence of existing mission-critical computer systems due to Y2K-related problems. The BCCP asserted that the failure of one or more systems in January 2000 would have minimal impact. We agree that many cyclical business processes could be delayed, sometimes for extended periods, without serious impact. However, the bureau identified relatively short time periods (5 days or less) for being without most of its critical deliverables, and did not identify how these time frames would be met if systems used to generate the deliverables were not available. A key function of a BCCP is to facilitate the restoration of normal service at the earliest possible time in the most cost effective manner, and a fully developed and tested BCCP would provide the bureau with important assurances. For example, it would demonstrate how the bureau would generate important economic indicators, such as the Monthly Wholesale Trade Report, or statistics on housing starts or sales that have zero tolerance for delays.

The Department requested all bureaus to follow GAO's BCCP guidance, which instructed agencies to develop potential Y2K failure scenarios and "assume the loss of all mission-critical information systems due to post-implementation failures or delays in renovation and testing." The guidance also suggested that BCCPs include strategies for meeting minimum acceptable output and service level requirements for each core business process.

III. Contingency Plans, Test Plans, and Tests Needed for November Additions to BCCP

The bureau initially excluded all decennial systems from its BCCP because most will not begin production until March 2000 or later. But PAMS/ADAMS, DANC, and GSS were operating in 1999 in preparation for the decennial and will be used extensively during the decennial. Based on a suggestion we made to the bureau's Y2K coordinator during our fieldwork, the bureau added these three mission-critical systems to the November 1999 draft of its BCCP. Because these systems were added so recently, they were not supported by detailed contingency or test plans. It was important that detailed contingency plans and BCCP test plans were developed and tests executed for these business processes/systems.

PAMS/ADAMS, one of the principal components of the decennial field infrastructure, was designed as an automated system to support the hiring of employees, processing of personnel actions, processing of a weekly payroll, provision of reports and data outputs, and maintenance of historical data. To perform early field operations, the system provides decennial administrative management for approximately 4,000 employees and pre-appointment management of about 400,000 job applicants needed to maintain staffing levels. The system is expected to handle more than 3 million recruits for decennial census jobs and to support as many as 860,000 temporary positions. PAMS/ADAMS electronically sends job applicant data through DANC to be formatted and transmitted to the FBI to identify applicants who are eligible to be hired as quickly as possible. DANC must be able to process 100,000 applications per day during the peak decennial period.

GSS, a comprehensive integrated computer-based system used to establish and maintain accurate geographic boundaries and addresses, supports most of the bureau's censuses and surveys, including the decennial. It provides the basic maps, reference files, and associated processing systems needed to meet the geographic requirements of all bureau programs. GSS helps the bureau provide essential statistical data for the apportionment of congressional seats among the states, redistricting by state legislatures for congressional and state legislative representation and governmental or administrative subdivision, distribution of federal and state funds for formula grant programs, and economic and demographic analysis by private, academic, and government sectors.

In response to our suggestion, the November 1999 draft BCCP listed the three systems, but without any elaboration. As a result, the bureau had not exposed these critical systems and business processes to the degree of business impact analysis, contingency planning, and testing that was necessary for Y2K preparedness. Business impact analyses determine the effect system failures will have on the business processes that these systems perform and define failure scenarios, assess infrastructure risks, and determine the minimum acceptable levels of outputs for each core business process. The results of impact analyses are used to develop contingency plans that document implementation modes, define when plans should be activated, and establish business resumption teams for each core business process. Testing validates that contingency plans will provide the desired level of service and provides a mechanism for updating disaster recovery plans if necessary.

Even though the bureau had extensively prepared its systems for Y2K, there remained a risk that one or more mission-critical systems would fail and severely hamper the bureau's ability to deliver accurate, timely data products. Because of this risk, the bureau needed detailed contingency plans that consider the effects of losing the systems. For example, a detailed contingency plan would demonstrate how the bureau would process the weekly payroll for hundreds of thousands of temporary employees if PAMS/ADAMS were unavailable for an extended period. Tests of the contingency plan would demonstrate to bureau management that

the contingency could be successfully implemented in the case of a Y2K-related system failure.

RECOMMENDATIONS

To ensure the continuity of core business processes in the event of system failures, we recommended that the Director, Bureau of the Census, take the following actions.

1. For systems reported as critical in the draft September 1999 BCCP:
 - a. Develop more detailed contingency plans for core business processes, particularly, "Data that show current and suggest future economic and social conditions."
 - b. Develop test plans, establish test teams, conduct business resumption team rehearsals, and execute BCCP tests to validate contingency plans.
2. For the three decennial systems added to the November draft BCCP-PAMS/ADAMS, DANC, and GSS:
 - a. Develop contingency plans for core business processes.
 - b. Develop test plans, establish test teams, conduct business resumption team rehearsals, and execute BCCP tests to validate contingency plans.

Synopsis of the Census Bureau's Response

The bureau responded to our draft inspection report after the century rollover. The brief response stated that all Census systems were tested, including PAMS/ADAMS, DANC, and GSS, that no Y2K errors were found during testing conducted before and after the century rollover, and that all operations are functioning successfully. The bureau's full response is included as Appendix A.



UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
Washington, DC 20233-0001
OFFICE OF THE DIRECTOR

FEB 2 2000

MEMORANDUM FOR Judith J. Gordon
Assistant Inspector General
for Systems Evaluation

Through: Robert J. Shapiro *RJS*
Under Secretary for Economic Affairs

From: Kenneth Prewitt *Will Prewitt*
Director

Subject: *Year 2000 Preparations Are Effective, but Business
Continuity and Contingency Planning Needs Improvement*
Draft Audit Report No. OSE-12200

This is in response to your memorandum dated December 7, 1999, transmitting the above referenced draft audit report, which included the following recommendations:

1. *For systems reported as critical in the draft September 1999 BCCP:*
 - a. *Develop more detailed contingency plans for core business processes, particularly, "Data that show current and suggest future economic and social conditions."*
 - b. *Develop test plans, establish test teams, conduct business resumption team rehearsals, and execute BCCP tests to validate contingency plans.*
2. *For the three decennial systems added to the November draft BCCP—PAMS/ADAMS, DANC, and GSS:*
 - a. *Develop contingency plans for core business processes.*
 - b. *Develop test plans, establish test teams, conduct business resumption team rehearsals, and execute BCCP tests to validate contingency plans.*

The U.S. Census Bureau considers these recommendations resolved:

The Census Bureau appreciates the very helpful contributions from the Office of Inspector General, which were included in our testing programs and helped ensure that our systems were prepared for any complications relating to the arrival of January 1, 2000. All Census 2000 systems, including PAMS/ADAMS, DANC, and GSS, underwent rigorous pretesting in the months preceding January 1, 2000, and each has been tested since the beginning of the New Year. All operations are functioning successfully, and no Year 2000 errors have been found. Documentation of this testing is available upon request.

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EXECUTIVE SUMMARY

Since 1994, the Department of Commerce, the Department of Defense (DOD), and the National Aeronautics and Space Administration (NASA) have been working to create the nation's first polar-orbiting satellite system that will meet both civilian and defense environmental data needs. This National Polar-orbiting Operational Environmental Satellite System (NPOESS) is a National Performance Review initiative for Commerce and DOD. NPOESS is expected to save the taxpayers \$1.3 billion over 10 years by reducing the number of U.S.-owned operational satellites from four to two, increasing the useful life span of each satellite from 42 to 84 months, and combining the support functions. To manage the acquisition, the three agencies formed an Integrated Program Office (IPO), which reports to an Executive Committee composed of Commerce, DOD, and NASA senior management.

In 1996, program managers and agency decision-makers recognized that the program could be restructured to reduce overall program cost and risk. The new program, entitled "optimized convergence," delayed the date that the first NPOESS satellite would be needed from 2004 to 2007. A key aspect of the new program is early risk reduction for critical payload sensors and algorithms. As part of the risk reduction effort, in July 1997, IPO awarded multiple contracts for competitive design of the sensors and algorithms.

This report presents a preliminary evaluation of IPO's acquisition process and an in-depth evaluation of the NPOESS life-cycle cost estimates. We found that the requirements process, acquisition strategy, and satellite availability planning are well defined and, if followed, should reduce program risk. (See page 9.)

However, NPOESS life-cycle cost estimates for critical sensors and algorithms are overstated. IPO awarded the contracts for preliminary design and risk reduction of the sensors and algorithms for about 43 percent less than its budgeted cost. To account for most of the difference, IPO explained that its budget estimates include a 36-percent contingency for size, weight and power margins, and risk based on the relative uncertainty inherent in developing new technology. We believe the large difference between IPO estimates and contract award amounts suggests that the assumptions made about the size, weight, power parameters, or other factors were overstated and that the funding profile for the later phases of engineering and manufacturing development, and production may also be overstated. Under these circumstances, acquisition and budget guidelines suggest revising life-cycle costs to ensure that cost projections are realistic, current, and accurate. IPO has neither corrected the overestimate by reporting a new baseline nor revised its life-cycle cost methodology and assumptions to develop more accurate long-term estimates. (See page 12.)

We believe that the difference between estimated costs and contract award points to the need to reassess NPOESS cost estimating assumptions. We recommend that the Department's Under

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Secretary for Oceans and Atmosphere begin working with the Executive Committee and IPO as soon as possible to:

- (1) Examine risk, complexity, margins, and other relevant assumptions used in estimating Phase I critical sensor and algorithm funding profiles and report on how and where the 43 percent difference occurred.
- (2) Change any incorrect assumptions about risk, complexity, and margin and revise the life-cycle cost documentation to reflect a reduced contingency profile for the critical sensors and algorithms.
- (3) Reevaluate risk and complexity assumptions used for the rest of the program and make any needed changes to the assumptions and related life-cycle cost estimates.
- (4) Examine the reporting process of alerting the departments and Executive Committee representatives of significant cost differentials.
- (5) Produce an *Acquisition Decision Memorandum* to formally endorse the new baseline.

Based on NOAA's concerns regarding our draft report, we worked closely with the Administrator and Deputy Administrator of NESDIS, the NOAA audit liaison office, and the NPOESS Integrated Program Office (IPO) Executive Director to clarify issues, including NOAA's overriding concern that we did not adequately describe the detailed process used to create the initial NPOESS life-cycle cost estimate. Where appropriate, our final report incorporates these clarifications. Based on these discussions, we believed that NOAA had agreed to accept all but the last of the report's five recommendations. However, NOAA's written response disagrees with the first two, agrees with the third and fourth, and does not fully agree with the last of our recommendations.

Summary of NOAA's Response and Our Comments

NOAA does not agree with our first two recommendations to reevaluate its cost estimating assumptions or change its life-cycle cost estimates to reflect a reduced budgetary profile. NOAA's position is based on its assertion that a very comprehensive assessment of risk, complexity, and margins for critical sensors and algorithms was performed prior to development of the initial life-cycle cost estimates. However, IPO states that in reviewing these initial estimates prior to releasing the request for proposals, it made a "conscious decision" to reexamine cost estimating assumptions, concluded that near-term estimates were flawed, and reduced them by 36 percent. IPO discounts this overestimate because it does not believe that the difficulty in estimating earlier life-cycle costs relates to the accuracy of future life-cycle cost estimates.

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We disagree. As we explained to IPO, we are not questioning the estimating process, but rather the need to reevaluate NPOESS life-cycle cost estimates for critical sensors and algorithms. IPO's corrective action before issuing the request for proposals reveals--at a minimum--the need to reexamine its life-cycle cost estimates. Based on IPO's decision to examine assumptions and lower cost estimates before releasing the request for proposals, it was able to save \$115 million from a total budget of \$264 million, about a 43 percent reduction. With about \$1 billion slated for critical sensors in Phase II, (Engineering and Manufacturing Development, Production and Operational Support), further examination could reveal significant future savings.

NOAA states that it accepts our third and fourth recommendations to conduct a detailed reevaluation of assumptions for all work breakdown structure elements and examine the reporting process to decision-makers. However, NOAA intends to wait 15 months to start the review of its cost estimating assumptions and does not propose any implementation actions for examining the reporting process of alerting the Department and Executive Committee representatives of significant cost differentials. We believe that the reevaluation actions should be done without delay. Our analysis of IPO's explanation of its cost estimating process for a portion of the critical sensor and algorithm efforts revealed a 60 to 80 percent overestimate in some engineering level-of-effort estimates. To the extent engineering level-of-effort estimates are used to justify all future NPOESS expenditures, these estimates require reexamination. Also, by waiting 15 months to begin, NOAA will miss the opportunity to update its 2000 and 2001 fiscal year budgets. NOAA also states that it keeps decision-makers informed. However, in an August 1997 memorandum to NOAA, the Department stated that it needed better information in order to understand and participate in Executive Committee budget decisions. NOAA needs to conduct detailed examinations of NPOESS cost estimates and implement more timely reporting practices without delay.

NOAA does not fully agree with our final recommendation to issue an *Acquisition Decision Memorandum* to formally endorse a new program baseline. NOAA believes that the May 1997 *Acquisition Decision Memorandum* is adequate and that a new memorandum is not warranted based on the changes to the program. However, we found that the May 1997 memorandum does not reflect IPO's corrective action to reduce its life-cycle cost estimate before issuing the request for proposals. Consequently, the new life-cycle cost estimate was not reported to decision-makers until October 1997, seven months after the decision was made. A new life-cycle cost estimate has yet to be formally endorsed by decision-makers through an *Acquisition Decision Memorandum*, which needs to be prepared as soon as possible.

A synopsis of the NOAA response to each of our recommendations and our discussion begins on page 17. These synopses and discussions include NOAA's general comments on the findings as well as recommendations. Clarifications were made in the report as necessary. NOAA's complete response is included as Appendix III.

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INTRODUCTION

Polar satellites orbit the North and South Poles 14 times daily at a distance of about 870 kilometers (540 miles) and transmit remotely sensed data to receiving stations as they pass over. The U.S. government operates two environmental polar satellite programs: the Department of Commerce operates the Polar-orbiting Operational Environmental Satellite (POES) system, and the Department of Defense (DOD) operates the Defense Meteorological Satellite Program (DMSP). POES and DMSP have distinct but similar capabilities for gathering data on weather and climate.

In September 1993, the Vice President recommended converging POES and DMSP into one system in his National Performance Review report, *Creating A Government That Works Better & Costs Less*. By May 1994, a Presidential directive was issued calling for the convergence of the two systems into the National Polar-orbiting Operational Environmental Satellite System (NPOESS). The purpose of convergence is to reduce overall life-cycle costs by combining civilian and defense missions, thereby reducing the number of U.S. operational polar-orbiting satellites from four to two.

Figure 1. NPOESS Constellation

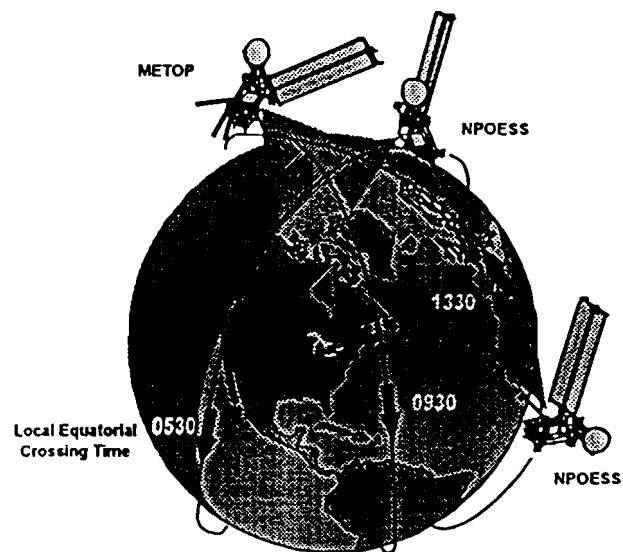


Figure 1 represents the converged on-orbit satellite constellation of two U.S. satellites and one European

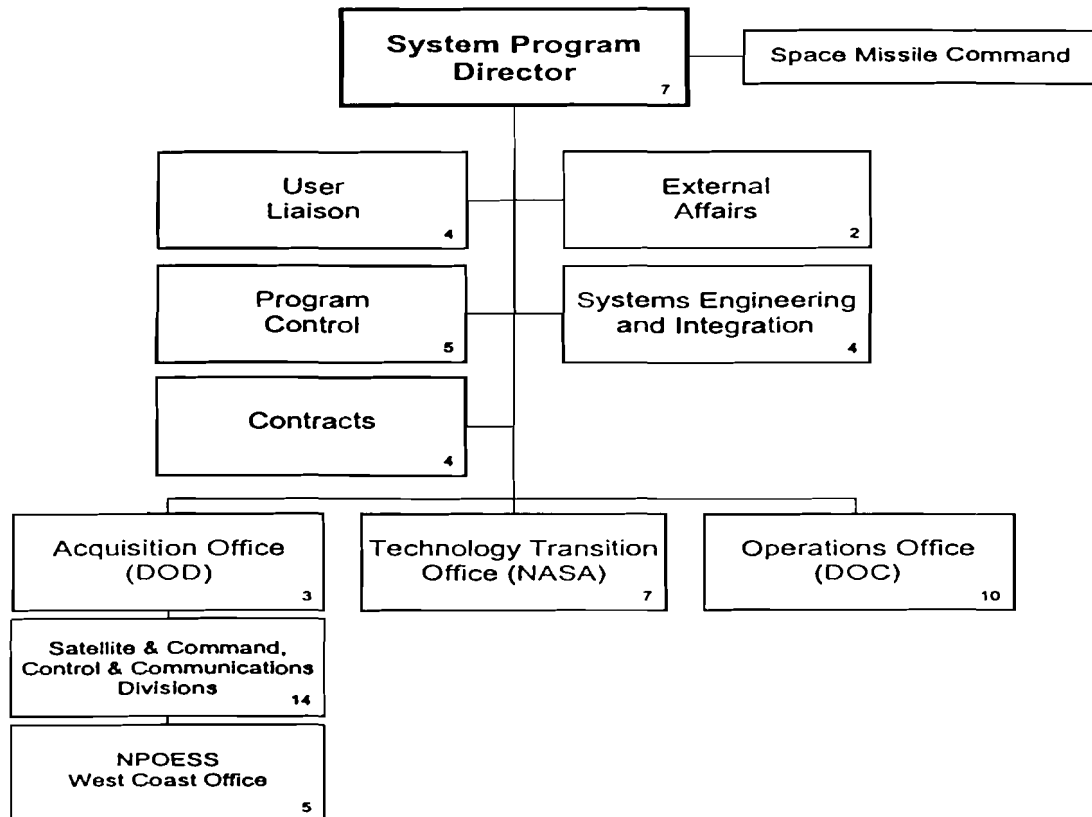
Meteorological Operational (METOP) program satellite that will carry some instruments furnished by the U.S. government. The new system design will increase the operational life span of each satellite from 42 months for POES and DMSP to 84 months for NPOESS. In 1996, initial life-cycle program costs were projected at \$7.8 billion, a savings of \$1.3 billion from the estimated \$9.1 billion projected for acquiring and operating separate civilian and defense polar-orbiting satellite systems. Later in 1996, the program was restructured and the life-cycle cost estimate was reduced to \$6.7 billion. Estimated NPOESS life-cycle costs include acquisition and operation of the five satellites that will meet civil and defense operational requirements through 2018.

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Figure 2. Integrated Program Office Organizational Structure (May 1997)



NPOESS is being managed by an Integrated Program Office (IPO). Established within Commerce in October 1994, IPO reports to the Executive Committee (EXCOM) composed of the Under Secretary of Commerce for Oceans and Atmosphere, the Under Secretary of Defense for Acquisition and Technology, and the Deputy Administrator of the National Aeronautics and Space Administration (NASA). Administratively, IPO reports to the National Oceanic and Atmospheric Administration's National Environmental Satellite, Data, and Information Service. IPO currently has 65 staff, 40 from DOD (mostly the Air Force), 20 from NOAA, and 5 from NASA. Figure 2 outlines IPO's organizational structure by program area and number of staff.

The IPO system program director, who is responsible for day-to-day management, reports to EXCOM. EXCOM provides policy guidance and ensures sustained agency support of NPOESS. Functional areas of responsibility are clearly defined according to the expertise of contributing agencies: DOD, acquisition; Commerce, operations; and NASA, technology. DOD is primarily

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responsible for acquiring the converged satellites, and Commerce for operating them. NASA's role is to foster the transfer of technology to NPOESS from its Mission to Planet Earth/Earth Observing System, Earth System Science Pathfinder, and New Millennium programs (advanced research polar-orbiting satellites), and other government and commercial satellite efforts.

In accordance with the Presidential directive, NPOESS acquisition, development, and program management are being administered using DOD 5000 series acquisition policies and directives. These directives describe a disciplined management approach for acquiring systems. IPO receives contract administration support from DOD's Space Missile Command. In addition, three contractors are conducting architecture studies and providing technical support during the risk reduction effort. IPO anticipates that one of these contractors will eventually become the system integration contractor.

OBJECTIVES AND SCOPE

The NPOESS acquisition cycle takes about 10 years before delivery of the first operational satellite. We began reviewing the program on a limited basis in March 1997 and established comprehensive inspection objectives to be accomplished over several years as the program progresses. This is our first NPOESS inspection report. It presents a preliminary evaluation of the requirements process, acquisition strategy, and satellite availability planning, and provides a more thorough evaluation of the NPOESS life-cycle cost estimating methodology. We will issue other reports as circumstances warrant.

We conducted an initial evaluation of the requirements process and costs by reviewing IPO's *Integrated Operational Requirements Document* (IORD) and analyzing the process for defining critical data records (individual remote sensing parameters). We interviewed NOAA managers responsible for defining requirements and reviewed IPO's *Cost and Operational Benefits Requirements Analysis*, *Cost Analysis Requirements Description* (CARD), *Program Office Estimate*, and *Requirements Master Plan*. We interviewed officials from DOD's Office of Program Analysis & Evaluation to discuss NPOESS requirements and interviewed staff from IPO and the contractor that helped develop IPO's detailed cost estimates to understand the cost estimating process and the Cost As an Independent Variable (CAIV) approach IPO is following.¹ We did not evaluate the capability level of NPOESS.

¹The CAIV philosophy, as defined by DOD acquisition policy, requires acquisition managers to establish aggressive but realistic objectives for all programs and follow through by trading off cost against performance and schedule, beginning early in the program (when the majority of costs are determined). In practice, to achieve the objectives, managers often include funding profiles, along with schedules and requirements, in request for proposals to keep the contractor proposal within funding limits.

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We evaluated the IPO acquisition strategy of awarding multiple contracts for critical sensors and algorithm development activities, general support, and architecture studies. We reviewed the acquisition program documentation required by DOD Directive 5000.2. These documents included the *Implementation Plan*, the *Single Acquisition Management Plan*, EXCOM *Acquisition Decision Memoranda*, *Acquisition Program Baseline Agreements*, *Test and Evaluation Master Plan*, *Defense Acquisition Executive Summaries*, and the *Service Cost Position*.

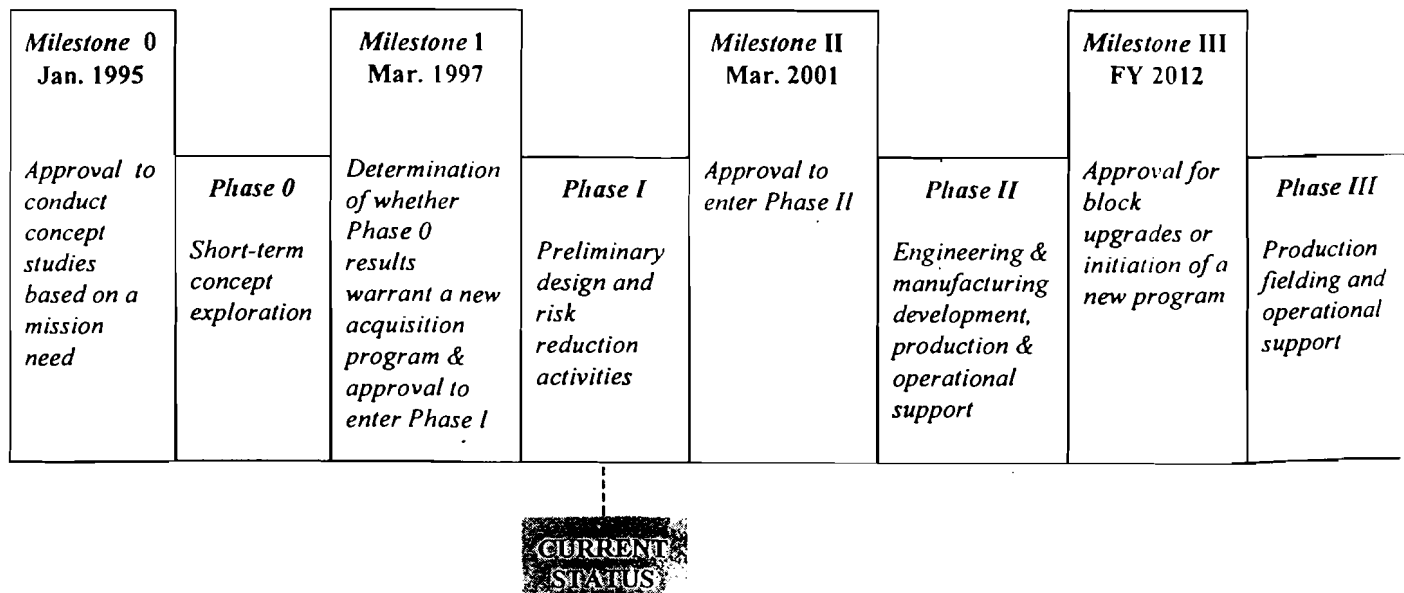
We also evaluated NOAA's Mission Planning Model, which is used to calculate the risk to operational success based on launch failure probabilities, system delivery dates, design life, mean mission duration for POES, and the need date for the first NPOESS.

This inspection was conducted in accordance with the Inspector General Act of 1978, as amended, and the *Quality Standards for Inspections*, March 1993, issued by the President's Council on Integrity and Efficiency.

BACKGROUND

The DOD acquisition and management process is highly structured in logical phases separated by major decision points called milestones. Milestone approvals from EXCOM are used to assess program performance before proceeding from one phase to the next. Figure 3 depicts the current status of the NPOESS effort in relationship to its phases and milestones.

Figure 3. Current NPOESS Status in the DOD Acquisition and Management Process



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In 1996, the NPOESS acquisition approach was changed. The projected date for when the first NPOESS satellite would be needed was extended from 2004 to 2007 because later POES satellites are lasting longer than earlier ones and there are enough DMSP satellites under contract. The new acquisition strategy, which was endorsed by EXCOM, is entitled "optimized convergence." The program life-cycle cost estimate was reduced from \$7.8 billion to \$6.7 billion at the same time.

The original acquisition strategy called for a single contractor to develop a complete satellite system, including all subcontracting for sensor and algorithm development.² The optimized convergence strategy involves modular contracting. Under this approach, the acquisition is broken down into smaller, more manageable modules in which complex requirements are addressed incrementally by competing contractors. Specifically, in July 1997, multiple contracts for competitive program definition and risk reduction of critical payload sensors and corresponding algorithms were awarded. IPO also plans to award a satellite integration contract in FY 2001. In addition, optimized convergence includes early flight of NPOESS sensors during FY 2003-2010 on the last DMSP and POES satellites to further reduce the risk of using new technology in an operational mission.

A key part of Phase 0 activities was the development of a life-cycle cost estimate that became the basis for evaluating alternatives. Because of the importance of sound cost estimates, the DOD process for cost estimating consists of several stages. To start the process, IPO developed the CARD. The CARD defines and provides quantitative descriptions of systems characteristics used to estimate costs and becomes the common focal point for independent teams that prepare three estimates: the *Program Office Estimate*, *Independent Cost Estimate*, and *Component Cost Analysis*. IPO was responsible for developing the *Program Office Estimate*, and the Office of the Secretary of Defense's Cost Analysis Improvement Group (CAIG) prepared the *Independent Cost Estimate*. The *Component Cost Analysis* was prepared by the Air Force Cost Analysis Agency.

The Air Force Cost Analysis Agency's *Component Cost Analysis* was prepared using its own independent estimates for work breakdown structure³ elements that it judged as high risk and/or high cost. Included in these items were all of the critical sensors and algorithm development. IPO provided Air Force Cost Analysis Agency with a description of its assumptions, methodologies, and estimates for the remaining work breakdown structure elements for review and approval. The *Service Cost Position* was established through an extensive reconciliation

²Sensors are the components of meteorological satellite instruments that convert input signals into quantitative information. Algorithms are computational procedures used to process quantitative information obtained from sensors.

³A work breakdown structure describes the various elements, including hardware, software, services, and data, that make up a system.

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process involving analysts from IPO and the Air Force Component Cost Agency. The Office of the Secretary of Defense's CAIG assessed the *Service Cost Position* by comparing it to its *Independent Cost Estimate*. The CAIG concluded that its Independent Cost Estimate was 4 percent higher than the *Service Cost Position*, and that the difference was statistically insignificant. The approved Air Force *Service Cost Position* became the NPOESS baseline life-cycle cost estimate.

The *Service Cost Position*, completed in February 1997, reflects a consensus funding profile associated with all the tasks required to meet NPOESS requirements. It provides a detailed estimate of life-cycle costs through 2018 according to the NPOESS work breakdown structure. The major work breakdown structure elements and associated costs are presented in Table 1. Most of the early funding, from FY 1997 through FY 2000, is for payload (sensor and algorithm) competitive design, system engineering and program management, system test and evaluation, government program office, and modification of POES and DMSP satellites.

Table 1. *Service Cost Position* Work Breakdown Structure (WBS) Segments and Life-cycle Costs FY 1997 - FY 2018 (Then-Year Dollars, Millions [TY\$M])⁴

WBS #	WBS Element	Costs[TY\$M]
1.1	Launch (5 Delta II Launch Vehicles)	\$ 319.8
1.2	Space Segment	2615.9
1.2.1	Satellite Integration & Test	143.7
1.2.2	Space (Spacecraft Bus)	721.3
1.2.3	Payload (Sensors & Algorithms)	1751
1.3	Command, Control, & Communications Segment	110.3
1.4	Interface Data Processing Software	367.6
1.5	System Engineering & Program Management	933.1
1.6	System Test & Evaluation	119.3
1.7	Systems Training	35.6
1.8	Peculiar Support Equipment	35.1
1.9	Common Support Equipment	0
1.10	Flight Support Operations (For Launches)	68.6
1.11	Storage	6.2
1.12	Reserved for Facilities	0
1.13	Initial Spares & Repairs	4.9
1.14	Operations & Support	1474.2
1.15	Government Program Office	399.9
1.16	Modifications (to DMSP & POES)	251.3
Total Life-cycle costs		\$6,741.6*

*Does Not Add Exactly Because of Rounding

⁴TY\$M is defined as the life-cycle cost estimates provided in budgetary base-year funding adjusted for future inflation. DOD requires programs to estimate life-cycle costs using base year dollars and TY\$M.

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IPO held a Milestone I decision meeting with EXCOM on March 10, 1997. As a result of the meeting, EXCOM issued an *Acquisition Decision Memorandum* on March 17, 1997, approving the acquisition strategy, acquisition program baseline, *Test and Evaluation Master Plan*, and *Single Acquisition Master Plan*. EXCOM also authorized IPO to move into Phase I, preliminary design and risk reduction activities. In addition, EXCOM directed the NOAA Chief Financial Officer and the DOD Comptroller for Program Budget to work with IPO and OMB to identify an appropriate funding approach. In May 1997, EXCOM approved the NPOESS revised budget and a 50/50 Commerce-DOD funding arrangement for FY 1995-2018, as shown in Table 2. This funding profile is slightly higher than the baselined *Service Cost Position* shown in Table 1 because it includes costs incurred before FY 1997.

Table 2. NPOESS Revised Budget and Agency Contributions, FY 1995-2018 TY\$M

	FY 1997 & Before	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
Commerce	\$ 55.5	\$ 51.5	\$ 109.4	\$ 125.3	\$ 184.4	\$ 266.8	\$ 293.2	\$ 2,317.8	\$3,403.9
DOD	55.5	51.5	109.4	125.3	184.4	266.8	293.2	2,317.8	3,403.9
TOTAL	\$ 111.0	\$ 103.0	\$ 218.8	\$ 250.6	\$ 368.8	\$ 533.6	\$ 586.4	\$ 4,635.6	\$6,807.8

Phase I activities were initiated with a full and open competitive request for proposals (RFP) for preliminary sensor and algorithm design in March 1997. IPO awarded six contracts for the five critical sensors and algorithm development, as shown in Table 3. The Visible/Infrared Imager Radiometer Suite (VIIRS) and the Conical Microwave Imaging Sounder (CMIS), two of the most complex and expensive of the five sensors, will satisfy the vast majority of the data requirements. VIIRS will collect visible and infrared radiometric data of the Earth's atmosphere. CMIS will collect global microwave radiometry and sounding data to produce microwave imagery and other meteorological and oceanographic data. The remaining requirements will be satisfied by the Cross Track Infrared Sounder (CrIS), which will measure the Earth's radiation to determine the vertical distribution of temperature, moisture, and pressure in the atmosphere; the Ozone Mapper and Profiler Suite (OMPS), which will collect data to permit the calculation of the vertical and horizontal distribution of ozone in the Earth's atmosphere; and the Global Positioning System (GPS) Occultation Sensor (GPSOS), which will measure the refraction of radio wave signals from GPS and Russia's Global Navigation Satellite System to characterize the ionosphere. GPSOS will also be used for spacecraft navigation.

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**Table 3. NPOESS Critical Payload Sensor and Algorithm Phase I
Contractors and Associated Costs**

Critical Sensor	Contractor	Cost (\$M)
VIIRS	ITT Aerospace/Communications Division	\$ 26.6
	Hughes Santa Barbara Remote Sensing	27.4
CMIS	Ball Aerospace & Technologies Corporation	30.6
	Hughes Space & Communications Company	32.1
CrIS	ITT Aerospace/Communications Division	9.1
	Hughes Santa Barbara Remote Sensing	9.3
OMPS	Ball Aerospace & Technologies Corporation	5
	Orbital Science Corporation	4.9
GPSOS	SAAB Ericsson Space AB	3.9
Total		\$148.9

Design contracts for VIIRS, CMIS, CrIS, and OMPS were awarded to competing contractors on a competitive cost-plus-fixed-fee basis. The contractors' designs will be evaluated separately through preliminary design reviews, after which IPO will solicit design improvements. The contractors' proposal responses will contain the final sensor and algorithm design and associated pricing for Phase II engineering and manufacturing development, and production. IPO will select one contractor for each sensor and will proceed to critical design review. Design of GPSOS was awarded to a single contractor on a fixed-price basis. The contractor will follow the same design and pricing process as the other design contractors. The schedules for preliminary design review and contractor selection vary for each sensor, with dates ranging from October 1998 to August 2000 for preliminary design review, and December 1998 to October 2000 for contractor selection.

In order to proceed into Milestone II, EXCOM must agree that the following Phase I exit criteria have been met: (1) completing preliminary design reviews for the VIIRS, CMIS, and CrIS payload sensors; (2) developing detailed risk reduction/mitigation plans for those sensors; (3) identifying and developing risk reduction/mitigation plans for other critical system areas; and (4) updating the major program documents, including requirements, cost benefit analysis, test plan, acquisition plan, and life-cycle cost estimates.

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Milestone II is scheduled for March 2001. Phase II activities commence with the selection of a contractor for total system integration. Five satellites will be procured through this contract. Phase III, which will follow EXCOM's approval of Milestone III, is scheduled to begin in the first quarter of FY 2012. This phase is reserved for the procurement of an additional block of satellites or the initiation of a new program and related operational support. Satellites are projected to be launched and operated during phases II and III.

OBSERVATIONS AND CONCLUSIONS

The NPOESS acquisition process is well planned. However, NPOESS life-cycle cost estimates for critical sensors and algorithms are overstated because IPO failed to reduce its funding profile for Phase II to reflect lower than estimated Phase I contract awards.

I. NPOESS Acquisition Process Is Well Planned

The NPOESS initial requirements, acquisition, and satellite availability modeling processes are well planned. Initial requirements definition was well structured and provided a reasonable framework for collecting and consolidating Commerce and DOD user requirements. The acquisition strategy adopted under "optimized convergence" conforms to the latest federal guidance and promotes competition and risk reduction. NOAA's satellite availability planning model incorporates past performance and probability to determine NPOESS need dates to ensure continuous operational coverage.

A. Requirements Process Is Well Structured

We reviewed the structure IPO used to develop the *Integrated Operational Requirements Document*, but did not evaluate the reasonableness of the functional capability levels of the requirements. To manage the requirements process, IPO created a *Requirements Master Plan*. The plan defines the NPOESS requirements process, describes the approval process for the IORD, and outlines the roles, responsibilities, and relationships of the participating agencies.

Agency mission needs were defined by a Joint Agency Requirements Group composed of the primary users of operational polar-orbiting satellite data. The requirements group includes Commerce's National Environmental Satellite, Data, and Information Service, National Weather Service, National Ocean Service, Office of Oceanic and Atmospheric Research, and Office of Global Programs; DOD's Oceanographer of the Navy, Air Weather Service Director of Operational Requirements, Air Force Space Command Director of Current Operations, and Department of the Army Deputy Chief of Staff for Intelligence, Battlespace Surveillance Division; and NASA's Goddard Space Flight Center.

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A Senior Users Advisory Group serves as a central focus for operational requirements and approves the IORD developed by the requirements group. The advisory group is composed of the Air Force's Directors of Weather and Operations for Space Command; the Navy's Oceanographer; NOAA's Assistant Administrators for Weather Services, Satellite and Information Services, and Oceanic and Atmospheric Research; NASA's Science Division Director for the Office of Mission to Planet Earth; and, DOD's Joint Staff Director for Force Structure, Resources, and Assessments.

The Joint Agency Requirements Council, composed of DOD's Vice-Chairman for the Joint Chiefs of Staff, Commerce's Deputy Under Secretary for Oceans and Atmosphere, and NASA's Deputy Associate Administrator for the Office of the Mission to Planet Earth, adjudicates any requirements issues not resolved by the advisory group and provides final approval of the IORD. According to the NPOESS *Requirements Master Plan*, the IORD must be updated before each milestone.

IPO's requirements process follows DOD's acquisition policy, which requires cost-benefit trade-off analysis in meeting user needs. In order to start Phase I activities, IPO had to gather requirements and conduct cost-benefit analysis to assess the feasibility of meeting the requirements within predefined cost ceilings and need dates. As presented at Milestone I, the IORD contained 70 performance parameters identified by Commerce and DOD users as critical to meeting mission needs, of which six were "key." A key performance parameter is so significant that failure to meet the threshold level is cause for the system to be reevaluated or the program to be reassessed or terminated.⁵ The *Cost and Operational Benefits Requirements Analysis* report, completed before Milestone I, documents the steps taken to identify the NPOESS alternatives.

According to IPO, the alternative selected provided the best cost, benefit, and performance trade-off and met 61 of the 70 performance parameters. The nine parameters that were not met were deemed impractical to include at this time because of their size, weight, or complexity. Part of Phase I activities includes research and development contracts to explore industry's ability to meet these nine parameters for possible inclusion later. Research and development efforts focused on these parameters are important because these efforts provide essential information needed to improve NOAA and DOD mission needs.

DOD policy calls for requirements and associated alternatives to be reassessed for each milestone. The requirements analysis and preferred alternative presented for the Milestone II

⁵The DOD policy for identifying user requirements requires that they be specified in terms of minimum and maximum capability levels. The minimum level is called "threshold," and the maximum level, "objective."

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decision should be thoroughly evaluated, documented, and endorsed by the user community and should reflect the industry's and the government's ability to meet these requirements in a cost-effective manner. Thoroughly substantiated and documented requirements are important, especially for NOAA, since it did not have an approved requirements document before the NPOESS IORD. NOAA and DOD users should be primary players in creating an approved requirements document because DOD policy also requires IPO to actively involve the user community in the ongoing Phase I cost-benefit trade-off analysis preceding Milestone II.

Our future work will assess how effective IPO is in including the users in the process of making trade-offs that provide for acceptable levels of cost and risk. We will also determine to what extent requirements and benefits are reevaluated before Milestone II in March 2001.

B. Acquisition Strategy Follows Federal Guidance for Reducing Risk

IPO's acquisition strategy addresses the criteria established by OMB and the Federal Acquisition Regulation for mitigating procurement risk. IPO's acquisition strategy, outlined in the *Single Acquisition Management Plan*, was approved by EXCOM at Milestone I. The plan outlined steps to reduce risk including modular contracting, which involves breaking large acquisitions into smaller, more manageable modules that enhance the likelihood of achieving workable solutions. The plan also includes competitive prototyping, which entails selecting contractors to produce prototypes of their design so that the agency can select the most cost-effective design concept for further development or production. OMB's Circular A-11, *Capital Programming Guide*, identifies modular contracting and competitive prototyping as two of the tools that agencies should use to mitigate procurement risk. IPO's use of full and open competition for award of the critical sensor design contracts is also supported by the OMB guide as a risk reduction strategy.

The Federal Acquisition Regulation, Part 35, states that "projects having production requirements as a follow-on to research and development efforts normally progress from cost-reimbursement contracts to fixed-price contracts as designs become more firmly established, risks are reduced, and production tooling, equipment, and processes are developed and proven." IPO's *Single Acquisition Management Plan* generally follows this approach. After IPO's selection of the Phase II sensor contractors, the contracts awarded for the continued development and production of individual sensors will be cost-plus-award-fee. According to the plan, this contract type will remain in effect until the sensors for the first satellite are fully developed, tested, and delivered. The remaining sensors will be acquired on a fixed-price-incentive-fee contract basis. IPO's use of fixed-price contracting for a portion of the production effort, as the Federal Acquisition Regulation points out, seeks to balance cost and risk.

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C. *NOAA Model Aids in NPOESS Planning*

We believe that NOAA's mission planning model is a reasonable tool for assessing the need date for the first converged satellite. IPO relies on NOAA and DOD assessments of need to determine when the first NPOESS satellite should be available. Both agencies use models to assess satellite need dates and to assist in acquisition planning. NOAA recently started using the mission planning model developed by NASA. This model uses a probabilistic approach (Monte Carlo simulation) that analyzes 1,000 scenarios of satellite life spans based on assumptions provided by NOAA. These assumptions include probability of launch vehicle failure, time to end of design life, and past history of the life of operational polar satellites.

Before using the model, NOAA did not employ a scientific system for including all these factors into launch planning dates, and as a result, its assumptions for satellite life were overly conservative. For example, the original scheduled need date for the first NPOESS was 2004, which required the start of the acquisition in 1994. Using the model, NOAA now identifies a need date of 2007. Our evaluation of the use of the model and its results found that the model provided an improved method for determining satellite availability.

II. *Life-cycle Cost Estimates for Critical Sensors and Algorithms Are Overstated*

IPO awarded Phase I contracts for much less than it budgeted. IPO reduced its Phase I budget to reflect the contract award amounts. However, IPO did not adjust the engineering and manufacturing development and production Phase II cost estimating assumptions to reflect the cost reductions being realized in Phase I. Moreover, IPO does not plan to update the assumptions until Milestone II in 2001. As a result, we believe that NPOESS life-cycle costs for critical sensors and algorithms could be seriously overstated. Overstated cost may be due to an unnecessarily high contingency that resulted from IPO's cost estimating assumptions. IPO explained that the contingency is not high and is needed for uncertainty due to the complexity of the program. We believe that IPO's contingency amount is excessive and that Phase II cost estimates should be revised now to ensure the success of the Cost As an Independent Variable approach and the availability of up-to-date, accurate information for use by decision-makers.

A. *Short-Term Funding Profile Adjustments Do Not Address Cost Estimating Anomaly*

IPO reduced the NPOESS funding profile twice after agreeing to its new optimized convergence program at Milestone I and revised life-cycle costs. However, it did not adjust its life-cycle cost estimating assumptions to reflect these adjustments. Phase I yielded cost estimates that were approximately 43 percent higher than the contractors' estimates. But IPO did not reduce Phase II cost estimates to reflect the Phase I reductions. The cost projection as shown in the baseline *Service Cost Position* was \$264 million for Phase I critical sensors. As shown previously in

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Table 3, page 8, actual Phase I contracts were awarded in July 1997 for \$149 million, nearly \$115 million (or 43 percent) less than the amount presented in the *Service Cost Position*.

In November 1997, IPO presented EXCOM with its first revised baseline that reflected the sensor contract savings in fiscal years 1998 through 2000, reductions in management reserves and FY 1998 appropriations, and anticipated reductions in the FY 1999 OMB budget passback. This revised baseline shows that approximately \$114.6 million in reductions were taken in the short-term funding profile for critical sensor and algorithm costs, equaling the difference between the *Service Cost Position* and estimated contractor Phase I costs (see Table 4). IPO explained that EXCOM, in an October 1997 meeting, was concerned about eliminating all of the contract savings and management reserve and advised IPO to add back \$23.4 million for a management reserve, creating a net reduction of \$91.2 million. We were unable to track IPO's short-term reduction of \$91.2 million to actual work breakdown structure elements in the long-term funding profile, which shows a net reduction of only \$75.6 million (see Appendix II). IPO neither assessed why the sensor contractor's estimates differed from the *Service Cost Position* estimates nor projected these costs savings into the out years.

Table 4. Short-Term Funding Adjustment to NPOESS First Revised Baseline for Critical Sensors and Algorithms

Funding Adjustments	TY\$M
<i>Service Cost Position</i> (FY 97 - FY 00)	\$263.6
Less: Contractor Estimates (FY 97 - FY 00)	149
<i>Difference in Service Cost Position Versus Estimate</i>	114.6
Less: IPO Management Reserve	23.4
Funds Used for Budget Cuts	\$91.2

In January 1998, IPO revised the baseline again to meet a lower than anticipated funding profile issued in the FY 1999 OMB Passback. Changes to the program as a result of the revision include delaying the first satellite delivery by 6 months (January to July 2007), limiting modifications to DMSP and POES for early flight of NPOESS sensors, delaying the work breakdown structure command, control, and communications segment by 2½ years, and applying lower DOD inflation indices to each work breakdown structure element to arrive at the January 1998 *Service Cost Position* (TY\$M) bottom line. This second revised baseline also reduced the size of the management reserve from \$23.4 million to \$15.5 million. However, even though IPO changed

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the baseline, it neither determined specifically where its sensor contract costs were less than budgeted nor projected these savings into the out years.

The 43 percent difference between the *Service Cost Position* estimate and Phase I contractor cost signals a potentially significant overestimate in NPOESS Phase II critical sensor and algorithm life-cycle costs, which were estimated at almost a billion dollars. We believe the magnitude of the difference between the original Phase I cost estimate and the contract award amounts for the critical payload sensors and algorithms points to the need to reassess the assumptions used in establishing the NPOESS life-cycle cost estimate presented in the *Service Cost Position*. This is important because IPO used the same assumptions in estimating Phase I and II costs. When we questioned IPO officials about the assumptions used in life-cycle cost estimating processes, they explained that the difference between the budgeted cost and the award amount was a planned contingency for size, weight and power margins, and risk based on the relative uncertainty inherent in developing new technology, and was part of its overall acquisition strategy. Based on IPO's collective experience in estimating management reserves, requirements growth, CAIV needs, and potential budget cuts, IPO believes the amount of contingency is not unreasonable. However, we believe that the planned contingency is excessive due to inaccurate assumptions made about the size, weight, power parameters, or other factors.

To estimate life-cycle cost, IPO used a series of steps. First, as required by DOD 5000.2, it developed the *Cost Analysis and Requirements Description*, which defines and provides quantitative descriptions of payload size, weight, and power that are used to derive cost estimates. For the sensor payloads, IPO used notional designs for NPOESS instruments from studies performed by Phase 0 contractors. These designs formed the basis for making decisions about the amount of margin to add for uncertainty inherent in developing new technology. Next, IPO estimated the cost by adding margins to reflect the assumptions made about the amount of difficulty and related cost that industry may encounter. The designs for all of the critical sensors were considered essentially immature and therefore were assigned higher margins. For example, weight margins ranged from 30 to 50 percent. The cost estimate with margins was termed the point estimate.

To obtain the amount used for the budget estimate, IPO increased the point estimate by a risk factor. IPO used a probability distribution cost curve to create a risk factor that accounted for technical and cost estimating uncertainties and design heritage. According to IPO, the margins and risk assumptions created a 26 percent contingency for Phases I and II. However, when IPO provided the Phase I funding profiles in the RFP for the critical sensors and algorithms, the target it presented was 36 percent less than the amount budgeted. IPO explained that the 36 percent included an additional 10 percent in the event that the contractor's proposals came in higher than the RFP profile and to allow for expected development problems. However, instead of coming in higher than the RFP profile, the contractor estimates for meeting performance and schedule

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requirements came in lower than the profile. The total difference was 43 percent less than the amount budgeted.

IPO believes that the 26 percent Phase II contingency is needed to accommodate size, weight and power growth, and risk over the course of development. We question IPO's assumption that a 26 to 36 percent contingency is reasonable, especially since the contractors' proposals show that they can meet threshold requirements with even less funding in Phase I. The large difference between estimated life-cycle cost and contract award amounts points to the need to reassess NPOESS cost estimates.

B. Life-cycle Cost Estimates Should Be Adjusted Without Delay

According to IPO, as originally planned, the review of the life-cycle cost estimates for subsequent acquisition phases will begin 15 months before Milestone II, which is currently scheduled for March 2001. We believe, however, that Phase II cost estimates should be revised now to ensure that decision-makers have the most current, accurate information to make informed decisions about asset accountability. We believe there are significant advantages to revising life-cycle cost estimates now. First, presenting lower Phase II funding profiles complies with the intent of the DOD CAIV philosophy by showing limited but *realistic* budget profiles to help control costs. Second, presenting lower Phase II funding profiles complies with DOD and OMB policies that require decision-makers, such as EXCOM, to have current and accurate information to make budgetary decisions regarding asset accountability.

The CAIV strategy was established to reduce life-cycle costs. The strategy entails setting an aggressive, realistic cost objective for acquiring the system, and managing risks to obtain these objectives. According to DOD guidance, the CAIV process is twofold. First, it is essentially a planning activity establishing and adjusting program cost objectives through cost-performance analyses and tradeoffs. Second, CAIV involves executing a program in a way to meet or reduce stated cost objectives. For example, program managers are encouraged to include cost objectives in RFPs and contracts as an incentive for industry to meet or better them. DOD 5000.2-R also directs program managers to achieve a cost objective that is less than its approved budget profile.

IPO's implementation of the CAIV philosophy followed this strategy. However, IPO included a cost objective in the RFP for the five critical sensors that was 36 percent lower than its budget profile. As intended with the CAIV philosophy, IPO was able to award contracts that meet requirements at 43 percent less than budgeted. Since industry has indicated that it can meet IPO's requirements at a much lower cost than originally estimated, IPO needs to reevaluate its estimate.

OMB and DOD have specific criteria for establishing life-cycle costs and reporting them to decision-makers. The life-cycle cost estimating process for NPOESS and each of its work