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United States Government Accountability Office
Washington, DC 20548

July 12, 2011

The Honorable Kay Bailey Hutchison
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Ralph M. Hall
Chairman
The Honorable Eddie Bernice Johnson
Ranking Member
Committee on Science, Space, and Technology
House of Representatives

The Honorable Bill Nelson
Chairman
Subcommittee on Science and Space
Committee on Commerce, Science, and Transportation
United States Senate

Subject: *NASA Needs to Better Assess Contract Termination Liability Risks and Ensure Consistency in Its Practices*

The National Aeronautics and Space Administration (NASA) procures most of its goods and services through contracts, and it terminates very few of them. In fiscal year 2010, for example, NASA's procurements, ranging from small contracts for human resources consulting services to multimillion dollar contracts to build and operate spacecraft, totaled approximately \$17.4 billion, representing about 83.4 percent of the agency's obligations that year.¹ That same year, it terminated 28 of 16,343 active contracts and orders²—a termination rate of about .17 percent. This rate is about the same—less than 0.2 percent—for each of the past 5 fiscal years.

¹ Total NASA obligations include salaries, benefits and travel of NASA employees, as well as credit card purchases.

² A contract is a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. An order means a task or delivery order for services or supplies, respectively, placed against an established contract or with government sources. FAR § 2.101

NASA contract terminations—the complete or partial cancellation of work under a contract before the contract’s period of performance ends—are rare but could become more common in the future. The federal government is facing real fiscal limitations and will have to make difficult choices about upcoming priorities. This reality makes it more important than ever that NASA manage its projects as efficiently and effectively as possible and within its budget. This is a struggle for NASA. Our work has shown that NASA’s large-scale projects tend to cost more and take longer to develop than planned.³ In this time of calls for greater fiscal austerity, NASA recognizes that it has to operate within its budget and that its projects must be affordable and sustainable over the long term. If NASA cannot address some of the issues that have led to cost and schedule growth for its projects in the past, tough decisions may need to be made about whether or not to start new projects or which projects to terminate, as additional funding could be scarce.

As demonstrated by the proposed cancellation of NASA’s Constellation program, a program that we have reported to be at risk of not meeting cost and schedule goals, the cancellation of a project can have potentially significant financial impacts.⁴ After the President proposed canceling the Constellation program in his fiscal year 2011 budget request, NASA reported that the agency’s costs associated with terminating the various Constellation program contracts could reach close to \$1 billion. As we reported previously, responsibility for these potential costs became an issue between NASA and its Constellation contractors.⁵ The questions about responsibility for potential termination liability costs, coupled with the Constellation program’s constrained budget profile, led to disruption in work activities at some contractors.⁶

Because of these questions regarding responsibility for potential termination liability costs and the impact they could have on NASA’s ability to execute its projects effectively, you asked us to assess NASA’s policies and practices pertaining to the management and funding of contract termination liability, as well as interactions between the agency and its contractors related to termination liability.⁷

To evaluate how NASA manages termination liability, we identified all NASA projects that were in the development phase and had active contracts. Since such projects were still in development, they could represent potential termination costs to NASA in the event that they are terminated. Specifically, we identified and selected 13 projects from NASA’s Science Mission Directorate because this directorate has the largest number of projects in development. We eliminated all projects that were managed by the Jet Propulsion Laboratory because it is a federally funded research and development facility managed for NASA by the

³ GAO, *NASA: Assessments of Selected Large-Scale Projects*, GAO-11-239SP (Washington, D.C.: Mar. 3, 2011)

⁴ The primary objective of the Constellation program was to develop capabilities to transport humans to Earth orbit, to the Moon, and to establish a stepping stone for eventual human space flight to Mars and other destinations. GAO, *NASA: Constellation Program Cost and Schedule Will Remain Uncertain Until a Sound Business Case Is Established*. GAO-09-844 (Washington, D.C.: Aug. 26, 2009)

⁵ GAO, *National Aeronautics and Space Administration – Constellation Program and Appropriations Restrictions*, Part II, B-320091, July 23, 2010. We take no position regarding whether NASA ever promised the Constellation contractors, explicitly or implicitly, that NASA would reimburse contract termination costs even if they exceeded the total amount allotted to the contract.

⁶ Potential termination liability refers to an estimate of the costs incident to stopping work on the contract in the event of termination at a given point in time.

⁷ This work is part of a broader effort underway to examine NASA’s management and oversight of its contractors. After the events surrounding the President’s proposed cancellation of the Constellation program, we were asked to separately examine and report on termination liability.

California Institute of Technology. We excluded major projects in the Exploration Systems Mission Directorate because we had previously reported on the contracts associated with Constellation program. For the 13 projects that met our criteria, we collected and analyzed 14 associated contracts and their Contractor Financial Management reports and funding modifications for fiscal year 2010 (see table 1).

Table 1: NASA Projects and Contracts Reviewed

| NASA project | Primary contractor | Contract purpose | Contract type |
|--|---|---|-----------------------------------|
| Gravity and Extreme Magnetism Small Explorer | Orbital Sciences Corporation | Spacecraft and mission operations | Cost reimbursement |
| Glory | Orbital Sciences Corporation | Spacecraft and mission operations | Cost reimbursement |
| Global Precipitation Measurement | Ball Aerospace and Technologies Corporation | Microwave imager instrument, instrument integration on spacecraft, launch and post-launch support | Cost reimbursement |
| Interface Region Imaging Spectrograph | Lockheed Martin Space Systems Company | Construction, integration and testing of spacecraft | Cost reimbursement |
| James Webb Space Telescope | Northrop Grumman Aerospace Systems | System integration | Cost reimbursement |
| Landsat Data Continuity Mission | Orbital Sciences Corporation | Spacecraft | Fixed price, incrementally funded |
| | Ball Aerospace and Technologies Corporation | Instrument (operational land imager) | Cost reimbursement |
| Mars Atmosphere and Volatile Evolution Mission | Lockheed Martin Space Systems Company | Spacecraft and mission operations | Cost reimbursement |
| Magnetospheric Multiscale | Southwest Research Institute | Phase A investigation on instrument suite | Cost reimbursement |
| NPOESS Preparatory Project | Ball Aerospace and Technologies Corporation | Spacecraft and instrument integration | Fixed price, incrementally funded |
| Radiation Belt Storm Probes | Johns Hopkins University Applied Physics Laboratory | Spacecraft and mission operations | Cost reimbursement |
| Space Environment Testbeds | Arizona State University | Development of space-based test platform | Fixed price, fully funded |
| Stratospheric Observatory for | L-3 Communications | Engineering expertise and certification | Cost reimbursement |

| NASA project | Primary contractor | Contract purpose | Contract type |
|--------------------|---|----------------------------------|--------------------|
| Infrared Astronomy | Integrated Systems | support | |
| Solar Probe Plus | Johns Hopkins University Applied Physics Laboratory | Spacecraft design and production | Cost reimbursement |

Source: GAO presentation of NASA and contractor data.

We also analyzed e-mails and correspondence between NASA and its contractors regarding potential termination liability. We interviewed NASA contracting officers and representatives from contractors for each of the contracts selected and also interviewed NASA termination contracting officers, financial managers, resource analysts, and other procurement officials. We also relied on interviews conducted during our previous work on the proposed termination for the Constellation program. We reviewed the Federal Acquisition Regulation (FAR), NASA's FAR supplement, and a variety of NASA and contractor documents. We used the Federal Procurement Data System-Next Generation to determine how many contracts and orders were terminated within each fiscal year from fiscal year 2006 to 2010. (See encl. I for additional information on our scope and methodology).

We conducted this performance audit from July 2010 to July 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

NASA's policy on management and funding of contract termination liability is to rely on the FAR's limitation of funds or limitation of cost clauses, which act as a mechanism to limit the government's liability in the event of a contract termination to the amount of funds currently allotted to a contract.⁸ We found that NASA's acquisition professionals generally do not monitor or track the potential termination liability costs of its contractors nor does the FAR require them to do so. The agency has not issued detailed instructions or provided guidance to direct contracting officers and others on how to monitor or track termination liability and to supplement the reliance on the relevant FAR provisions. As a result, resource analysts and financial managers inconsistently monitor and fund potential termination liability across the projects we reviewed. According to NASA acquisition professionals, contractors are ultimately responsible for tracking their potential termination liability and ensuring that they reserve sufficient funds to cover any potential termination liability out of funds that NASA allots to the contract. Several contractors reported that their potential termination liability was covered in their allotted funds, while other contractors reported that NASA did not provide sufficient funds to cover potential termination costs. In some cases, NASA contractors said they did not view insufficient potential termination liability funding as a risk because NASA's past practice on contract terminations was to provide additional funding to the contract to cover the agreed-upon termination settlement costs and they assumed this would be the continuing NASA practice. While allowed under the FAR, NASA's inconsistent practices for funding potential termination liability costs can still have negative consequences for NASA's long-term relationships with its contractors, especially if the

⁸ Funds allotted refers to the obligation that NASA must record for the entire amount that is allotted to the contract, which represents NASA's legal liability, in order to comply with various fiscal statutes.

agency decides to terminate a major project. Moreover, as the federal government deals with its fiscal limitations, NASA's contractors may perceive contract termination as a greater risk in the future and may be less willing to continue contract performance without full funding of their potential termination liability.

We are recommending that the NASA Administrator review the agency's current practices regarding termination liability and, as appropriate, establish guidance to ensure consistency among NASA's projects.

Background

The federal government can stop a contractor's performance under a government contract before the full period of performance ends by terminating the contract. Depending on the circumstances, the government can completely or partially terminate the contract for the convenience of the government or for default. For example, when the government's requirements change, rendering continued performance unnecessary, the government may choose to terminate the contract for convenience. On the other hand, when a contractor fails to perform its contractual obligations, the government may terminate the contract for default. Generally, when a decision is made to terminate a contract for the convenience of the government, the contracting officer will notify the contractor to stop work under the terminated portion of the contract and begin assessing its termination costs and developing a termination settlement proposal for those costs, among other things. For a termination for convenience, termination costs generally include the expenses associated with ending a contract, such as preparing a settlement proposal, negotiating with subcontractors, and disposing of inventory. The FAR delineates which contract termination costs are generally allowable.^{9,10} Under the FAR, the contractor has 1 year to submit to the government a settlement proposal, consisting of the contractor's incurred costs up to the point of termination, award or fee, as appropriate, and termination costs.

The FAR's "limitation of funds" and "limitation of cost" clauses limit the government's liability by establishing a ceiling amount that the contractor may not exceed (except at its own risk) without instruction from a contracting officer during contract performance.¹¹ The limitation of funds clause applies to cost reimbursement contracts that are incrementally funded where funds are obligated only to cover the amount currently allotted to the contract and any corresponding increment or fee. The limitation of funds clause limits the government's liability at the not-to-exceed amount that has been allotted to the contract. The limitation of cost clause is for fully funded cost reimbursement contracts where funds are obligated to cover the estimated cost and any fee and the clause limits the not-to-exceed amount to the total estimated cost of the contract.

⁹ The allowable costs for a termination for default would differ from those of a termination for convenience. For example, in a termination for default the government would not be liable for the contractor's costs on undelivered work and is entitled to repayment of advance and progress payments, if applicable, and certain allowable costs, such as contractor costs for preparing the settlement proposal would not be included in the settlement. (See FAR Subpart 49.4 for additional information on terminating contracts for default).

¹⁰ FAR Subpart 31.2.

¹¹ Throughout this report we refer to both limitation of funds and limitation of cost clauses as limitation of funds, because the limitation of funds clause was the one most commonly included in the contracts we reviewed.

Eleven of the 14 contracts we reviewed were incrementally funded cost reimbursement contracts, and, in general, cost-type contracts require the government to reimburse the contractor for allowable costs incurred in performing the contract, to the extent prescribed in the contract. Under the limitation of funds clause, when the contractor expects that the costs it will incur in the next 60 days of performance will exceed 75 percent of the total amount currently allotted to the contract, the contractor must notify the contracting officer.¹² Additionally, under the clause, 60 days before the end of the period specified in the contract, the contractor must also notify the contracting officer of the estimated amount needed to continue performance under the contract or for any further period specified in the contract's schedule or otherwise agreed upon. At that time, the contracting officer can instruct the contractor to stop work and wait for further instruction, allot additional funds to continue performance, or terminate the contract. If the contractor continues to incur costs without instruction from the contracting officer, then it is doing so at its own risk; in accordance with the limitation of funds clause the government is generally not obligated to reimburse the contractor for any costs in excess of the total amount allotted by the government to the contract. The contractor's estimated costs over a specified time, therefore, should include its estimated potential termination liability in addition to the costs the contractor expects to incur for performance. If the estimated potential termination liability is not tracked by the contractor and those costs exceed the total contract funding allotment, then the contractor risks those costs not being reimbursed in the event of termination, in accordance with the limitation of funds clause. The government may still choose to pay the contractor the agreed-upon termination settlement costs, however, even if the costs are in excess of the total amount allotted to the contract as long as sufficient funds are available. When the total funding allotment is being used to reimburse contractor performance costs without any part of the allotment being reserved by the contractor for potential termination costs, then the government is receiving more contractor performance under a particular funding allotment.

Contractor estimates of termination liability may continually change as the contract progresses because the amount of potential termination liability costs depends, among other things, on the type of work being performed. For example, termination liability at a point in time would be higher if the contractor has an open order for an item or has contracts with several subcontractors. After termination, the contractor submits a termination settlement proposal to the contracting officer and negotiates a settlement amount with the contracting officer. The contracting officer may settle matters that cannot be agreed upon.¹³ The FAR also provides the contractor the right to appeal the termination settlement.¹⁴

Lack of Detailed Instructions, Guidance, and Training Have Contributed to Varying Termination Liability Practices within NASA

NASA's policy regarding termination liability is to rely on the FAR's limitation of funds clause, which provides that termination costs are subject to the limitation of funds amount in the contract, and in the event of a termination, the maximum amount NASA would be obligated to pay are the funds allotted to the contract. NASA's acquisition professionals do not generally track the contractor's potential termination liability nor are they required by the

¹² FAR § 52.232-22.

¹³ If the contractor and contracting officer cannot agree on a termination settlement, or if a settlement proposal is not submitted within the period required by the termination clause, the contracting officer will issue a determination of the amount due to the contractor consistent with the termination clause.

¹⁴ For additional information on termination costs and settlement amounts see GAO, *Defense Acquisitions: Termination Costs Are Generally Not a Compelling Reason to Continue Programs or Contracts That Otherwise Warrant Ending*, GAO-08-379 (Washington, D.C.: Mar 14, 2008).

FAR to do so. In a 1997 memorandum, its most recent on the subject, NASA reiterated its position that in accordance with the FAR, potential termination costs are subject to the limitation of funds amount in the contract. The agency, however, has not provided detailed instructions, guidance, or training to its acquisition professionals on how to put into practice the FAR's limitation of funds clause and its impact on the funding of a contractor's potential termination liability.¹⁵ As a result, agency acquisition professionals inconsistently monitor and fund potential termination liability across the projects we reviewed. For example, resource analysts and financial managers for some of the projects we reviewed reported varying practices for how and whether they fund potential termination liability on their contracts, based on funding available, contractor demand for it to be covered, and past practice. Comments from these acquisition professionals include the following:

- One told us that in her 20 years working on NASA projects, she has never seen potential termination liability funded.
- Another stated that NASA does work with the contractor to ensure that its termination liability is funded.
- A third told us that the contractor requested and did not receive funding for potential termination liability because the funds were not available. He noted that for the agency to ensure that termination liability funding is continuously available as a practice would result in millions of dollars unavailable for performance-related costs and would be unproductive and very unlikely to be done. The official said that while it is not a written policy at his NASA center, not funding potential termination liability might be an "informal" agency policy. In most cases, however, the official noted that project officials would have ample warning that a project could be terminated and could begin to identify the necessary funding to cover any potential termination liability as needed.

Among other responsibilities, resource analysts and financial managers review and track the NASA Contractor Financial Management Reports (NASA Forms 533M and 533Q)¹⁶ that may include information related to potential termination liability. The reports are required for all cost type, price redetermination, and fixed-price incentive contracts when certain dollar and period of performance criteria are met, and generally include information on the contractor's incurred and anticipated costs. For the contracts we reviewed, NASA does not require the contractors to report their potential termination liability on these reports. Though not required to do so by NASA, three of the contractors in our sample voluntarily report potential termination liability on these forms, but the resource analysts and financial managers we interviewed said they do not question the information on potential termination liability that is reported.

NASA contracting officers, who are charged with effectively managing their contracts and safeguarding the interests of the government, said they generally assumed that contractors accounted for their potential termination liability through the funding increments the agency allocates to contracts, and therefore the contracting officers do not regularly request or track the information. According to NASA officials, the FAR's limitations of funds clause places the responsibility on the contractors to track and manage their individual potential termination liability. Contractors are to keep NASA apprised of their funding needs through the

¹⁵ By "funding" termination liability, we are referring to reserving part of a contract's allotment of funds exclusively for potential termination costs instead of using the full allotment to reimburse performance costs.

¹⁶ NASA Procedural Requirement 9501.2D - *NASA Contractor Financial Management Reporting*.

notification mechanism established in the contract's limitation of funds clause. That is, when the contractor expects that the costs it will incur in the next 60 days of performance will exceed 75 percent of the total amount allotted to the contract, the contractor must notify the agency of the estimated amount of funds required to continue performance under the contract or for any further period specified in the contract's schedule. In some cases where the contractor requested additional funding, the NASA contracting officers reported that they assume the contractors are taking into account potential termination liability when estimating expected costs, but they are not actually aware of whether the contractors included potential termination liability in estimates.

According to an official in the agency's Office of Procurement, NASA prefers to avoid the perception that it has any role in managing or responsibility for separately funding termination liability costs. Agency officials told us that not only does the agency not provide instructions to its acquisition personnel, but it also does not provide guidance to contractors either to ensure that they have adequately estimated their potential termination liability costs or accounted for this contingency in their funding profile, limitation of funds notifications, or estimated cost figures. Accordingly, for our sampled contracts, we found no evidence that NASA contracting officers have given guidance, formal or informal, to its contractors on whether or how to manage potential termination liability. Since contract terminations occur infrequently—for less than 0.2 percent of the contracts for fiscal years 2006 to 2010—at NASA, termination liability has not generally been perceived as a large risk.

Contractors Continued to Perform Work Regardless of Whether Potential Termination Liability Was Funded

Several contractors interviewed for this report and Constellation program contractors interviewed for prior GAO work¹⁷ said that NASA's past practice when a contract was terminated was to pay agreed-upon termination settlement costs even if they exceeded the amount currently allotted to the contract under the limitation of funds clause. The contractors said they had expected this practice to continue. Some of the contractors asserted that NASA stated in various written and oral communications that the agency would reimburse such costs. The contractors further said that NASA's behavior during contract performance also indicated that NASA would reimburse such termination settlement costs. One contractor wrote in a 2010 letter to NASA that it "historically operated with the understanding that NASA, in the event of a termination of the (current)...program, would provide termination liability funding above and beyond those funds regularly provided to cover ongoing program activity...This understanding is consistent with the mutual approach employed on previous NASA programs..." Representatives of another contractor told us that the company sought reassurance from NASA in 2010 that it would be paid for potential termination costs in the event of termination, even if the funding had not been part of the most recent funding allotment, as it had been assured in a 2002 letter from NASA regarding a different contract. Due to past practice, they did not take steps to ensure that the funds that NASA allotted to the contract would be sufficient to reimburse any costs that may arise under the contract in the event of termination. Instead, both of these contractors reported that in the past, they would incur performance costs up to the amount that NASA had allotted to the contract, without leaving any of the allotted amounts available for potential termination liability.

¹⁷ B-320091, July 23, 2010.

For many of the contractors we interviewed, potential termination liability was not a major concern. For six contracts, the contractors reported that their termination liability estimates were either covered through their funding allotments from NASA, or were very low due to the advanced stage of the project. On two contracts, the contractor reported that it did not track potential termination liability. One contractor reported having the estimate covered initially and then not having it covered when NASA temporarily de-obligated contract funding. Another contractor reported that because of uncertainties surrounding the fiscal year 2011 appropriation, NASA at times has not been allotting sufficient funds to cover its potential termination liability.

In two cases where contractor representatives were concerned about potential termination liability funding, they indicated that they did not consider funding required for termination liability costs a significant enough risk to warrant stopping work on the contract. For the projects we examined, contractors did not stop work in order to account for potential termination costs, even in cases where it was clear that estimated termination liability was not covered in funding allotments. For example, in one case, the contractor explicitly reported its termination liability estimate to NASA in addition to its estimated contract performance cost. NASA, however, did not fund the estimated termination liability and said that all available funding was needed to complete work under the contract. The contractor continued to work, nonetheless. This contractor has requested a special termination clause that would ensure that any agreed-upon termination liability costs would be paid in the event of a termination. As of May 2011, NASA has not approved this request. Another contractor representative reported incurring costs in excess of 99 percent of the funding allotment when seeking the next funding allotment for an ongoing program, leaving a fraction of 1 percent of allotted funds to cover potential termination costs. According to a project resource analyst, the contractor informed NASA that it was unwilling to continue to work without sufficient funding for potential termination liability as it had on previous projects. As a result, NASA has taken steps to ensure that the funding allotments to this contractor are sufficient to cover the contractor's estimated termination liability.

One high-level NASA acquisition professional observed that contractors have little to gain from stopping work if potential termination liability is not covered. If it appeared that potential termination liability costs would not be covered to the extent a contractor estimated, NASA would cite the limitation of funds clause as the limitation of NASA's liability and it would be up to the contractor to decide how to proceed—whether to stop work so that funding allotted to the contract would be available in the event of a termination. According to the agency official, the contractors would be more likely to benefit by continuing to work. The agency official said contractors are not expected to provide precise termination liability cost estimates in each funding request. Instead, according to the agency official, contractors should make an assessment of the risk of termination, factor that into the estimate of termination liability, and build that into the contract funding request. As the risk of termination grows, contractors would likely reserve more of the contract's allotted funds to cover potential termination liability. If risk of termination is deemed very low by the contractor, then the amount of the allotted funds that the contractor reserves for termination liability may be very low. According to this official, trouble occurs when the contractor's assumptions about termination risk do not change as quickly as the government's, as was the case with the proposed cancellation of the Constellation program last year. In these situations, the contractor may find itself exposed to financial risk on the contract if there are sudden requirement changes by the government and potential estimated termination liability costs are not fully accounted for in the funds currently allotted to the contract. According to the agency official, such changes could make it difficult to do meaningful work on the contract and account for the potential termination liability at the same time.

Fiscal Limitations May Lead to Reductions in NASA's Project Portfolio

The federal government currently faces real fiscal limitations and will have to make difficult choices about upcoming priorities. This reality makes it more important than ever that NASA manage its programs and projects as efficiently and effectively as possible and within a budget that over recent years has remained relatively constant. NASA's future budgets are projected to remain flat, and this requires that NASA make tough decisions about which projects to fund among its science, aeronautics, and human space flight and exploration missions. Our work over the past 3 years has shown that NASA's major projects are frequently approved without evidence of a sound business case—ensuring a match between requirements and resources—and therefore often cost more and take longer to develop than planned. For example, our March 2011 assessment of NASA's major projects found that 13 projects we reviewed over the past 3 years that established baselines prior to 2009 experienced an average development cost growth of almost 55 percent, with a total increase in development costs of almost \$2.5 billion from their baselines established at their Confirmation Review.^{18,19} All but 4 of these 13 projects experienced significant cost growth of 15 percent or more. Additionally, we reported that development costs for the 16 projects currently in implementation had an average development cost growth of \$94.3 million—or 14.6 percent—and schedule growth of 8 months from their baselines. NASA has taken steps to improve its acquisition management through several initiatives aimed at cost estimating and management oversight and some newer projects are maintaining recently established cost and schedule baselines. If challenges persist as they have in the past, NASA may be forced to delay or cancel projects in its portfolio in order to fund higher-priority projects. As a result, more of NASA's contractors may perceive contract termination as a greater risk in the future and may be less willing to continue contract performance without full funding of their estimated potential termination liability.

Conclusions

NASA's lack of specific instructions and guidance for implementing FAR clauses that affect termination liability has contributed to inconsistent practices for funding and monitoring potential termination liability. In addition, NASA's contractors have different interpretations of their risks and financial responsibilities related to potential termination liability, which may be due in part to NASA's inconsistent practices. These differences could have negative consequences for NASA's long-term relationships with its contractors if the agency decides to terminate a major project. As the data we examined show, contract terminations at NASA have been rare, but it is not clear that this trend will continue given the nation's goal of cutting the federal deficit and reducing federal spending. NASA may need to reassess its portfolio and terminate more projects than it has historically in order to afford its more pressing priorities if cost and schedule growth for NASA's major projects persists. Reviewing its policies and practices concerning termination liability funding would allow the agency to better position itself to fulfill its mission by providing a better understanding of potential termination costs that could have a significant impact on its portfolio of projects.

¹⁸ GAO-11-239SP, 12-14.

¹⁹ The confirmation review, which generally refers to key decision point C in NASA's acquisition management process, is the point at which cost and schedule baselines are confirmed. Project progress is measured against these baselines.

Recommendation for Executive Action

We recommend that the NASA Administrator review how the agency's acquisition professionals monitor potential termination costs and establish guidance as appropriate to ensure consistency across the agency. The agency should ensure that the guidance it develops provides instructions to acquisition professionals on adequately addressing potential termination risks on their contracts, and on how potential termination costs would be funded in the event of a termination.

Agency Comments

We provided a copy of the draft report to the NASA for comment and the agency agreed with our overall findings and concurred with our recommendation. In its comments, the agency stated that guidance should be offered to acquisition professionals on adequately addressing termination risks, including reminding them of the purpose for the Federal Acquisition Regulations (FAR) 52.232-22 Limitation of Funds clause in NASA contracts. NASA's written comments are reprinted in enclosure II. NASA also provided technical comments, which were incorporated as appropriate.

We are sending copies of this report to NASA and interested congressional committees. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you have any questions about this report, please contact me at (202) 512-4841 or chaplainc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff members who made key contributions to this report are listed in enclosure III.



Cristina T. Chaplain
Director, Acquisition and Sourcing Management

Enclosures - 3

Scope and Methodology

To assess the National Aeronautics and Space Administration’s (NASA) policies and practices pertaining to the management and funding of contract termination liability, we identified all NASA projects that were in the development phase and had active contracts. Since such projects were still in development, they represented potential termination costs to NASA. Specifically, we selected 13 projects from NASA’s Science Mission Directorate because this directorate has the largest number of projects in development. We eliminated all projects managed by the Jet Propulsion Laboratory because it is a federally funded research and development facility managed for NASA by the California Institute of Technology. We excluded major projects in the Exploration Systems Mission Directorate, such as Orion and Ares I, because we had previously reported on the contracts associated with Constellation program.¹⁸ For the remaining 13 projects, the majority of which are managed out of Goddard Space Flight Center, we collected and analyzed 14 primary contracts.¹⁹ We collected Contractor Financial Management Reports and funding modifications from fiscal year 2010. We obtained and analyzed a variety of documents, including e-mails and correspondence, regarding potential termination liability from NASA and the contractors for the selected contracts. Also, we interviewed NASA contracting officers and representatives for each of the contracts selected. We developed a standard set of questions for both contracting officers and contractors to identify the practices that NASA uses to manage termination liability, and if its policies and practices are implemented consistently across the selected contracts. We interviewed financial managers and resource analysts to determine how they assess a contractor’s potential termination costs when funding contracts. In addition, we interviewed NASA termination contracting officers at each of the NASA centers that have such a position to determine the center level perspective on practices concerning termination liability and contract terminations. We interviewed agency level procurement officials to obtain NASA headquarters’ views on the agency’s policies regarding termination liability. We also relied on interviews conducted in our previous work on the proposed termination of the Constellation program. In addition, we reviewed the FAR, NASA FAR supplement, and agency policies to identify the requirements for managing termination liability. We analyzed the primary contracts for the same 13 selected NASA projects to determine if the contracts included the appropriate FAR clauses, either the limitation of funds or the limitation of cost clauses, for the contract type. We also determined whether the selected contracts contained any special termination clauses.

To determine how many contracts NASA has terminated for default²⁰ or convenience, we extracted the data from the Federal Procurement Data System-Next Generation (FPDS-NG). We limited our data to fiscal years 2006 to 2010, because the data prior to this timeframe were incomplete within the FPDS-NG. We further limited the contracts examined to those with a value over \$25,000. From this universe, we determined how many contracts or orders were terminated by fiscal year and whether they were terminated for default or convenience, and the type of contract. If the contract or order was terminated, we tracked the contract number into future years in order to determine whether the contract was completely or partially terminated. We assessed the risks associated with NASA having more or fewer

¹⁸ B-320091, Jul 23, 2010.

¹⁹ The Landsat Data Continuity Mission project has two primary contracts.

²⁰ We used the term termination for default to describe both terminations for default or terminations for cause. Terminations for default generally refer to contracts for noncommercial items, and terminations for cause generally refer to contracts for commercial items terminated for performance-related reasons.

Enclosure I

terminations than those recorded in FPDS-NG and found that less than 1 percent of all contracts and orders are terminated within each fiscal year. Therefore, we determined that if there were several more or less terminations, it would have a negligible effect on our assessment that terminations at NASA are a rare occurrence. In addition, we corroborated the results of our data analysis by interviewing NASA contracting officers to determine if terminations were a common occurrence and were told that terminations were extremely rare. We found the FPDS-NG data to be sufficiently reliable for an overall trend analysis on contract terminations.

Our work was performed primarily at NASA headquarters in Washington, D.C., and at NASA's Goddard Space Flight Center in Greenbelt, Maryland, where the majority of our selected projects are managed. We also spoke with NASA officials at Marshall Space Flight center in Huntsville, Alabama; Dryden Flight Research Center at Edwards Air Force Base, California; Johnson Space Center in Houston, Texas; Langley Research Center in Hampton, Virginia; Kennedy Space Center in Florida; and the NASA Management Office in Pasadena, California.

We conducted this performance audit from July 2010 to July 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Comments from the National Aeronautics and Space Administration

National Aeronautics and Space Administration
Headquarters
Washington, DC 20546-0001



JUL - 5 2011

Reply to Attn of: Office of Procurement

Ms. Cristina Chaplain
Director
Acquisition and Sourcing Management
United States Government Accountability Office
Washington, DC 20548

Dear Ms. Chaplain:

The National Aeronautics and Space Administration (NASA) appreciates the opportunity to review and comment on the Government Accountability Office (GAO) draft report entitled, "NASA Needs to Better Assess Termination Liability Risks and Ensure Consistency in its Practices" (GAO-11-609R). NASA considers termination liability to be an important issue and greatly values the constructive information and insights shared by GAO during the course of this effort. We further appreciate the extreme professionalism demonstrated by your review team and the continued open communication maintained between GAO and NASA.

In the draft report, GAO addresses one recommendation to the NASA Administrator (see below). In addition to directly responding to the GAO recommendation, our office provided information and clarification on key points at the exit conference on May 25, 2011.

Recommendation: We recommend that the NASA Administrator review how the agency's acquisition professionals monitor potential termination costs and establish guidance as appropriate to ensure consistency across the agency. The agency should ensure that the guidance it develops provides instructions to acquisition professionals on adequately addressing potential termination risks on their contracts, and how potential termination costs would be funded in the event of a termination.

Management's Response: NASA concurs with the GAO's recommendation. We fully agree that guidance should be offered to acquisition professionals on adequately addressing termination risks. Specifically, NASA will remind acquisition professionals of the purpose for the Federal Acquisition Regulations (FAR) 52.232-22 Limitation of Funds clause in NASA contracts. The Limitation of Funds clause caps the Government's potential liability to that amount allotted to the contract by the Government. As the Government is not obligated to reimburse the contractor in any amount in excess of the funds on the contract, contractors should stop working when incurred costs plus the Government's termination liability reach the total amount funded.

FAR 52.232-22 Limitation of Funds (April 1984)

“f) Except as required by other provisions of this contract, specifically citing and stated to be an exception to this clause—

(2) The Contractor is not obligated to continue performance under this contract (including actions under the Termination clause of this contract) or otherwise incur costs in excess of—

(i) The amount then allotted to the contract by the Government

h) No notice, communication, or representation in any form other than that specified in paragraph (f)(2) of this clause, or from any person other than the Contracting Officer, shall affect the amount allotted by the Government to this contract. In the absence of the specified notice, the Government is not obligated to reimburse the Contractor for any costs in excess of the total amount allotted by the Government to this contract, whether incurred during the course of the contract or as a result of termination.”

Potential termination liabilities (PTL) will be addressed by continuing to ensure that PTL is factored into project Budget Authority profiles. Managing PTL does not increase the cost of a contract; if the contract terminates early, then there is some additional cost above the normal termination costs, but the overall cost will always be less than completing the contract. For contractors, however, management of PTL requires more budget authority allocated to the contract up front so that they can manage both the work content and the potential for termination. Thus, contractor management of PTL can change the budget authority profile (not the cost profile) marginally over the span of the project.

In addition to the above response to the recommendation outlined in the draft report, we have also provided technical comments to the draft report, including proposed revisions and/or corrections of factual inaccuracies, etc. Our technical comments to the draft report were provided to the GAO via e-mail on June 10, 2011, in order to facilitate the GAO's technical correction process.

Thank you for the opportunity to comment on this draft report. If you have any questions or require additional information, please contact Diane Thompson, Procurement Analyst, at (202) 358-0514.

Sincerely,



William P. McNally
Assistant Administrator for Procurement

Enclosure III

GAO Contact and Staff Acknowledgments

GAO Contact

Cristina T. Chaplain, (202) 512-4841 or chaplainc@gao.gov

Staff Acknowledgments

In addition to the contact named above, Shelby S. Oakley, Assistant Director; Noah B. Bleicher; Greg Campbell; Laura Greifner; Julia M. Kennon; Kenneth E. Patton; Erin Preston; Jose A. Ramos; Carrie Rogers; and Roxanna Sun made key contributions to this report.

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