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# Decision

Matter of: PlanetSpace, Inc.

**File:** B-401016; B-401016.2

**Date:** April 22, 2009

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## DIGEST

1. Protest is denied in procurement for commercial resupply services for International Space Station where source selection authority reasonably determined that outstanding and very good past performance of protester's proposed subcontractors did not warrant an overall significant strength where protester itself lacked significant relevant past performance and technical expertise, leaving subcontractors responsible for technical performance and approximately [REDACTED]% of overall contract effort.

2. Protest is denied in procurement for commercial resupply services for International Space Station where agency reasonably ascertained significant financial risk to the government from protester's proposal under fixed-price prime contract to subcontract technical performance and approximately [REDACTED]% of overall contract effort; significant development and integration work, the risk and cost of which was underestimated, was to be performed by subcontracting on a cost basis; protester's business case, although reflecting additional unrealistically optimistic assumptions, nevertheless assumed that cost of performing would exceed contract payments until last year of contract; protester had limited contract management resources; and protester, a recently organized entity, proposed to finance performance using only minimal internal financial resources, depending instead on debt financing and obtaining additional investment for nearly all of performance costs.

## DECISION

PlanetSpace, Inc. protests the National Aeronautics and Space Administration's (NASA) award of a contract to Orbital Sciences Corporation (OSC) under request for proposals (RFP) No. NNJ08ZBG001R, for commercial resupply services for the International Space Station (ISS). PlanetSpace challenges the evaluation of proposals and resulting source selection.

We deny the protest.

The solicitation, issued as a commercial acquisition under Federal Acquisition Regulation (FAR) part 12, contemplated the award of one or more indefinite-delivery/indefinite-quantity (IDIQ), fixed-price, 7-year contracts, to deliver cargo from NASA to the ISS (including both pressurized upmass--cargo transported to the ISS-and unpressurized upmass cargo), dispose of unneeded cargo from the ISS and/or return cargo from the ISS to NASA, and furnish various additional services. The contracts are intended to satisfy NASA's obligation under international agreements to provide critical cargo resupply services to the ISS (such as air, water, food, medicine, spare parts, and scientific experiments) from the scheduled end of the Space Shuttle Program in 2010 to the scheduled end of the ISS Program in 2015. The guaranteed minimum under each contract was the negotiated value of 20 metric tons of cargo upmass, with an additional potential guaranteed minimum value of 3 metric tons return cargo downmass--cargo returned from the ISS--(if that contract line item (CLIN) was accepted), while the total maximum value for each contract was \$3.1 billion. RFP § 1.A.3. NASA's overall cargo requirement is for approximately 40 metric tons over a 5-year period. Hearing Transcript (Tr.) at 23-24.

Award was to be made using the tradeoff process set forth at FAR § 15.101-1 and based on the evaluation of proposals under two criteria--mission suitability and price--with mission suitability more important than price. Proposals were to be scored for mission suitability using a 1,000-point scale under three factors: (1) technical approach (550 points), with subfactors for system capabilities/ summary of performance, ISS integration/demonstration, ISS resupply mission performance plan, and risks; (2) management approach (400 points), with subfactors for company information, performance milestones, and safety/mission assurance; and (3) small business utilization (50 points).

Of significance here, past performance was not included as a separate evaluation factor, but instead was to be evaluated as part of each mission suitability subfactor. The past performance evaluation was to include consideration of information to be supplied by offerors concerning their own relevant contracts and the relevant contracts of proposed significant subcontractors (defined as having subcontracts likely to exceed \$10 million) and teaming partners. RFP §§ VII.A.4, amend. 3, exh. 2.

The RFP provided for evaluation of pricing under three CLINs: CLIN 1--Standard Resupply Services, CLIN 2--Non-Standard Services, and CLIN 3--Special Task Assignments, with the CLIN 1 prices substantially more important than the CLIN 2 and CLIN 3 prices. Offerors were required to complete pricing templates, which entailed entering under CLIN 1 fully burdened prices per kilogram of pressurized upmass cargo, unpressurized upmass cargo, return downmass cargo, and disposal downmass cargo. RFP § VI.A.21.P2. The RFP further provided that offerors also were to furnish mission pricing that "reflect[s] the offeror unique mission configurations proposed," RFP amend. 6, RFP §§ VI.A.19, VI.A.21.P2, and that "[a]s part of the evaluation, a weighted average fixed price per kilogram" of cargo would be developed. RFP § VII.C.P2.

NASA received proposals from PlanetSpace, OSC and SpaceX. After conducting written and oral discussions, NASA requested final proposal revisions (FPR). The Source Evaluation Board (SEB) evaluated the FPRs as follows:

	PlanetSpace	OSC	SpaceX
MISSION SUITABILITY			
Technical	473 very good	413 very good	495 very good
Management	312 very good	348 very good	340 very good
Small Business	42 very good	35 good	42 very good
OVERALL MISSION SUITABILITY	827 very good	796 very good	877 very good
PRICE (Weighted Average)			
Pressurized Upmass <sup>1</sup>	\$[REDACTED]	\$[REDACTED] <sup>2</sup>	\$[REDACTED]
Unpressurized Upmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]
Return Downmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]
Disposal Downmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]
Special Tasks	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]

<sup>&</sup>lt;sup>1</sup> \$thousands per kilogram (kg).

<sup>&</sup>lt;sup>2</sup> Price for basic engine/price for enhanced future engine.

Final Selection Briefing at 114, 125-26; FPR Pricing Report at 19, 23.

PlanetSpace's and OSC's proposals received the same adjectival scoring under the technical and management factors, as well as under the mission suitability criterion overall, although PlanetSpace's received a higher total numeric score. The mission suitability scoring for PlanetSpace reflected the SEB's finding of three significant strengths, four strengths, and three weaknesses under the technical approach factor, and three significant strengths, four strengths, and five weaknesses under the management factor. The SEB assigned OSC's proposal one significant strength, five strengths, and four weaknesses under the technical factor, and three significant strengths, and one weakness under the management factor.

As relevant here, three of the PlanetSpace's significant strengths (as well as several of its weaknesses) as assessed by the SEB were directly related to its proposed teaming approach. In this regard, PlanetSpace proposed to subcontract approximately [REDACTED]% of the overall contract to (1) Lockheed Martin (LM), which in turn was to subcontract part of its effort to Boeing, and (2) Alliant Techsystems, Inc. (ATK), leaving only approximately [REDACTED]% of the contract to be performed by PlanetSpace. PlanetSpace Executive Summary, Oct. 8, 2008, at 4; Preaward Survey at 4, 7; Preaward Survey Briefing at 5. PlanetSpace's proposal assigned itself primary responsibility for prime contract execution, contract administration, financial management, and business operations; assigned LM responsibility for program management, systems integration, the orbital transfer vehicle, integration and test, the avionic propulsion module, cargo return capsule, and mission operations; assigned Boeing responsibility for ISS integration, cargo carriers and cargo processing; and assigned ATK responsibility for launch vehicle development and launch site operations. SEB FPR Report at 7.2-53; PlanetSpace FPR Mission Suitability Proposal at M-19. Although the contract to be awarded was to be on a fixed-price basis, PlanetSpace proposed that it would (1) subcontract with LM and ATK on a cost-plus-fixed fee/cost-plus-incentive fee basis for development, first unit assembly, integration, qualification and build, and for first unit mission integration and operations, with LM and ATK in turn subcontracting approximately [REDACTED]% to [REDACTED]% of the development phase to third tier vendors on a fixed-price basis for heritage (existing) hardware, and (2) then transition to the procurement of first mission launch services and subsequent missions on a fixed-price basis. SEB FPR Report at 7.2-80; PlanetSpace FPR Mission Suitability Proposal at M-18 to M-21.

The SEB assigned PlanetSpace's proposal a significant strength under the system capabilities/summary of performance subfactor based on the generally outstanding (with some very good ratings) past performance of its subcontractors on numerous highly relevant contracts for launch and orbital vehicle development, ISS mission and cargo integration, and flight product development; the SEB expected that this past performance would greatly enhance the likelihood of successful performance of the commercial resupply services contract. Likewise, the SEB assigned

PlanetSpace's proposal a significant strength under the company information subfactor of the management factor based on the past performance of the PlanetSpace management team's key personnel and subcontractors, including a long history of accomplishments and successes by the subcontractors on highly relevant contracts, such as launch vehicle components and manned spacecraft development, sustaining, processing, and operations. In addition, the SEB assessed PlanetSpace's proposal a significant strength under the same subfactor based on its evaluated highly sound and realistic management approach, with very suitable team members and teaming arrangements, clear systems engineering and integration responsibilities, and a comprehensive work breakdown structure.

The source selection authority (SSA) indicated in the source selection decision (SSD) that he "agreed with all findings the SEB made regarding any of the offerors," but stated that he nevertheless "did not always agree with the significance the SEB placed on a particular finding or with the impacts the SEB identified in regards to a finding." SSD at 8. Specifically, regarding the significant strength the SEB assigned PlanetSpace's proposal under the system capabilities/summary of performance subfactor due to the team's past performance, the SSA stated that he

disagreed with the SEB assessment that this finding was a significant strength. I determined the significance of this finding was offset by PlanetSpace's lack of experience in development, production and operation of large, complex space systems and, therefore, concluded this finding was not relevant for purposes of selection.

SSD at 11. Likewise, regarding PlanetSpace's significant strengths under the company information subfactor of the management factor based on the past performance of the PlanetSpace management team's subcontractors' key personnel and subcontractors, and PlanetSpace's highly sound and realistic management approach, the SSA concluded that these strengths

were offset as being discriminators for selection because of the absence of a corresponding strength regarding the prime contractor's abilities to perform the contract. It can be a significant strength to have strong subcontractors; however, I did not believe these findings should be discriminators for selection when almost all of the technical expertise appeared to reside at the subcontractor level.

### SSD at 12.

In addition, the SSA concluded that six of the weaknesses in PlanetSpace's proposal identified by the SEB should be considered significant discriminators in the source selection. In this regard, PlanetSpace proposed use of an alternate, larger launch vehicle (the Atlas V rocket) to provide initial cargo delivery capability in December 2011, prior to the readiness of its proposed new launch vehicle (Athena III), which was under development. The SEB found this to be a weakness

under the technical approach factor because even with the proposed use of the alternate launch vehicle, PlanetSpace would not meet the cargo resupply requirements in 2010 or most of 2011. The SSA also determined that use of the alternate launch vehicle was a "significant discriminator" for selection purposes because PlanetSpace was the only offeror that proposed a configuration requiring verification and integration of its orbital vehicle with two launch vehicles, which potentially increased the technical and schedule risk to NASA. Further, while the SEB only identified as a weakness in PlanetSpace's technical approach the fact that heritage components would need to be regualified to meet the vibro-acoustic environment of the new launch vehicle, the SSA concluded that regualification posed a "significant technical challenge" due to the performance characteristics of the [REDACTED] in the new launch vehicle. The SEB noted as a further weakness under the technical approach PlanetSpace's proposal of a margin (distance) between the static payload envelope and the outside diameter of the payload fairing or shroud that was smaller than any fairing margin in current worldwide industry experience, which the SEB concluded represented a potential risk to the promised upmass delivery capability. The SSA believed that resolution of the fairing issue would be a "significant technical challenge" to PlanetSpace because changes in fairing design can drive changes to schedule and cargo environments and reduce upmass capacity. SSD at 12.

Under the management approach factor, the SEB assigned a weakness based on PlanetSpace's proposed use of cost-plus subcontracts up until first flight, with the subcontractors responsible for the majority of the work. The SSD indicated that, while PlanetSpace's response to NASA's discussion question in this regard--PlanetSpace indicating that it would manage this risk through incentives and cost controls--convinced the SEB to reduce the initial assessment of a significant weakness to a weakness, the SSA concluded as follows:

[I] believed the subcontracting structure still represented a significant risk to the successful performance of the program. I believed it was extremely risky for PlanetSpace to have a fixed-price contract with NASA when most of the effort in the early stages of the contract would be performed under cost type subcontracts. Moreover, I questioned whether PlanetSpace could successfully manage much larger subcontractors responsible for the majority of the performance under the contract. Furthermore, although one was not required by the solicitation, I was concerned that the proposal did not contain a backup plan in the event one of the major subcontractors was unable to perform given the sizable amount of responsibilities PlanetSpace proposed to place at the subcontractor level.

SSD at 12. The SEB assessed another weakness based on the "high financial risk to the Government" attending PlanetSpace's proposed early completion of and, therefore, payment for ISS integration; the SEB determined that PlanetSpace's

proposed ISS integration schedule, based on ISS integration approximately 9 months prior to the SEB's estimate, was unrealistic. SEB FPR Report at 7.2-84 to 85. While the SEB considered this to be only a weakness, and not a significant weakness, the SSA found that

the financial risk PlanetSpace proposed to assume was a discriminator for selection. PlanetSpace would be making a considerable investment in the program with two different launch vehicles, yet did not project it would reflect positive cumulative cash from operations until nearly the end of the contract. During the deliberations on selection, I was informed that NASA would not be required to order the early mission involving the proposed use of the alternate launch vehicle. While not ordering the alternate launch vehicle would reduce PlanetSpace's overall cost, this action also would cause the NASA payments to PlanetSpace to occur later, further threatening this business case.

SSD at 13. Finally, the SEB assessed a weakness based on the fact that, in addressing the issue of Federal Aviation Administration (FAA) licenses and permits PlanetSpace's proposal indicated a number of assumptions that appeared to indicate a lack of understanding of FAA licensing requirements for commercial launch and reentry operations, but did not classify the weakness as "significant," concluding that any lack of understanding could be corrected during performance. The SSA, however, viewed the weakness as yet another "discriminator because it demonstrated a lack of understanding about the basic requirements of the commercial nature of [commercial resupply services]." SSD at 13.

Having determined that SpaceX's proposal was the highest-rated, and thus was in line for the first award, the SSA compared OSC's and PlanetSpace's proposals. The SSA noted that, while OSC proposed to provide a full range of services in 2012, PlanetSpace proposed to provide a full range of services only by the end of 2013. Furthermore, consistent with the above concerns regarding PlanetSpace's proposal, the SSA considered PlanetSpace's management approach to be an even more important "key discriminator" than the schedule for commencement of services. The SSA noted as a particular concern the fact that much of the work would be performed on large cost-reimbursement subcontracts, while PlanetSpace, the prime contractor, would perform under a fixed-price contract, and the fact that PlanetSpace did not project it would recoup its sizable investment in the commercial resupply services program until near the end of the contract; the SSA concluded with respect to financial risk that

[t]hese risks made me believe it was highly unlikely PlanetSpace would have the ability needed to address technical challenges in its proposal such as the re-qualification of heritage components to new launch vehicle environments and the potential changes to fairing size to accommodate unpressurized cargo. SSD at 16. The SSA also considered that PlanetSpace's subcontractors were responsible for most of the technical aspects of the proposal and that PlanetSpace itself had no relevant experience managing a contract with this level of complexity in a fixed-price environment, while OSC's proposal was assigned a significant strength because of its utilization of existing processes and tools to manage fixed-price spacecraft development, operations and repetitive production contracts, OSC's subcontracting team had a much smaller role in contract performance, and OSC had extensive in-house expertise in specific areas of the CRS requirements. The SSA concluded that, accordingly, he "had much higher confidence" in OSC's ability to provide resupply services on a fixed-price basis, id., and that OSC's proposal "was superior due to the serious Management risks inherent in the PlanetSpace proposal." SSD at 17. Indeed, while recognizing PlanetSpace's lower price, the SSA stated that he "could not conduct [a] 'typical' trade-off analysis since I believed there was a low likelihood PlanetSpace could successfully perform the contract." Id. The SSA concluded that SpaceX's and OSC's proposals represented the best value to the government.

Upon learning of the resulting awards to SpaceX and OSC, PlanetSpace filed this protest with our Office challenging both awards. Subsequently, PlanetSpace abandoned its challenge to SpaceX's award.

In reviewing protests of alleged improper evaluations and source selection decisions, it is not our role to reevaluate submissions; rather, we will examine the record to determine whether the agency's judgment was reasonable and in accord with the stated evaluation criteria and applicable procurement laws and regulations. <u>Panacea Consulting, Inc.</u>, B 299307.4, B 299308.4, July 27, 2007, 2007 CPD ¶ 141 at 3. Here, based on our review of all of PlanetSpace's timely arguments, we find no basis for questioning the award to OSC. We discuss PlanetSpace's principal arguments below.

#### TEAMING APPROACH

#### Subcontractor Performance

PlanetSpace asserts that the evaluation of its teaming approach was unreasonable and/or otherwise improper. As an initial matter, the protester contends that the consideration given to past performance in the SSD was inconsistent with the RFP, which provided that offerors without a record of relevant past performance or for which information on past performance is not available "will not be evaluated favorably or unfavorably on past performance." RFP amend. 3, § VII. PlanetSpace asserts that, notwithstanding this provision, the agency evaluated its proposal unfavorably based on a finding that it lacked relevant past performance.

The record does not support PlanetSpace's assertion. As discussed above, in considering the SEB's assessment of significant strengths based on the past performance of PlanetSpace's subcontractors/team members, the SSA simply

disagreed with the SEB's finding of a significant strength. Again, the SSA concluded that the finding was "offset by PlanetSpace's lack of experience in development, production and operation of large, complex space systems," and that the subcontractors' past performance should not be "discriminators for selection when almost all of the technical expertise appeared to reside at the subcontractor level." SSD at 11-12.<sup>3</sup> Thus, the SSA determined only that the protester's record of past performance should not be considered as a discriminator; he did not downgrade the proposal overall under the past performance factor.

#### Financial Risk

As discussed above, PlanetSpace's reliance on cost-based subcontracting for risky development work in conjunction with its expected negative cash flow under the contract was evaluated as posing a high risk to the government. PlanetSpace asserts that the agency's consideration of the financial risk to the government posed by the firm's teaming approach was unfounded and improper.

Again, PlanetSpace proposed to subcontract approximately [REDACTED]% of the overall contract to LM (which in turn would subcontract part of its effort to Boeing) and ATK, leaving only approximately [REDACTED]% of the contract--including such generally non-technical areas as overall responsibility for prime contract execution, contract administration, financial management, and business operations--to be performed by PlanetSpace. In addition, although its contract with NASA was required to be on a fixed-price basis, PlanetSpace proposed that it would subcontract with LM and ATK on a cost-plus-fixed fee/cost-plus-incentive fee basis for development, first unit assembly, integration, qualification and build, and for first unit mission integration and operations, with LM and ATK in turn subcontracting approximately [REDACTED]% to [REDACTED]% of the development phase to third tier vendors on a fixed-price basis for heritage hardware. PlanetSpace FPR Executive

<sup>&</sup>lt;sup>3</sup> PlanetSpace asserts that the SSD mischaracterizes the extent of PlanetSpace's own past performance, failing to account for the fact that it entered into an unfunded Space Act agreement with NASA in 2007 for development of a commercial resupply system. PlanetSpace's initial, January 13, 2009, protest indicated its understanding (presumably on the basis of a January 9 debriefing) that the SEB had discounted the agreement in the evaluation (finding that performance had been limited). Protest at 18. Nevertheless, PlanetSpace challenged NASA's treatment of the agreement for the first time in its March 2 comments on the agency report, more than 10 days after learning the basis for the argument. Accordingly, the argument is untimely. 4 C.F.R § 21.2(a)(2) (2008). In any case, we think the agency could reasonably determine that PlanetSpace's limited performance under this single, unfunded agreement, using a different management team than that proposed in its FPR, did not demonstrate significant, relevant past performance. See SEB FPR Report at 7.2-51; Tr. at 226, 625, 644-47, 657, 681-95.

Summary at 4; PlanetSpace FPR Mission Suitability Proposal at M-18 to M-21; SEB FPR Report at 7.2-53, 80. Further, PlanetSpace estimated that the cost of performing the contract would exceed contract payments from NASA until [REDACTED], with PlanetSpace's cumulative debt under the contract peaking at \$[REDACTED] million in [REDACTED]. In this regard, PlanetSpace, organized in 2006, proposed to utilize only \$[REDACTED] million of shareholder equity in performing the contract. As explained in its management proposal, PlanetSpace proposed instead that, except for certain independent research and development expenditures on the part of its team members, from which it claimed to benefit, the remainder of the cost of performance would be financed through potential future debt and investment from third parties. PlanetSpace FPR Mission Suitability Proposal at M-2 to M-6.<sup>4</sup>

NASA determined that PlanetSpace's approach posed significant financial risk to the government based in part on the agency's determination that PlanetSpace's estimates were based on unrealistically optimistic assumptions. For example, PlanetSpace assumed that it could successfully demonstrate, and be paid for, ISS Integration [REDACTED] months prior to launch by satisfying 95% of the applicable requirements. However, the record indicates that ISS integration is a major readiness milestone involving completion of hardware and software, and that no orbital vehicle has ever demonstrated ISS integration so far in advance of launch. Moreover, the RFP made no provision for satisfying less than 100% of the ISS integration requirements, and NASA in fact anticipated 100% compliance. Rather than [REDACTED] months prior to launch, NASA estimated that the ISS integration milestone most likely could be satisfied no earlier than 4 months prior to launch, with the effect on PlanetSpace's assumed schedule being a delay in *[REDACTED]* million of payments under the contract, and an increase in the maximum cumulative debt under the contract. PlanetSpace FPR Management Proposal at M-44; Tr. at 792, 847, 852-53, 999-1005; SEB FPR Report § 7.2-85.

In addition, PlanetSpace's estimates reflected payment for an optional Atlas V mission early in contract year 2011, with more than [REDACTED] the capacity and at more than [REDACTED] the cost of the proposed Athena III missions (the launch vehicle under development) in contract year 2012 and later. While the option for early delivery of cargo was considered desirable, the agency viewed the necessity for PlanetSpace to verify and integrate two launch vehicles as increasing technical and cost risk. Moreover, the chairman of the management evaluation committee testified at the hearing held by our Office in this matter that it was unclear whether the ISS in

<sup>&</sup>lt;sup>4</sup> The December 2008 preaward survey concluded that PlanetSpace had failed to demonstrate that it had or had the ability to obtain financial resources adequate to perform the contract. Preaward Survey, Dec. 12, 2008, at 3-4, 7-10. However, the contracting officer did not make a determination regarding PlanetSpace's responsibility, and the survey was not provided to the SSA. Contracting Officer's Statement of Facts at 79.

fact would be in a position to accommodate and take advantage of the much higher capacity offered by PlanetSpace's proposed Atlas V mission. In this regard, PlanetSpace's proposed Atlas V mission had a capacity of [REDACTED] kg versus [REDACTED] kg for PlanetSpace's proposed Athena III missions at less than [REDACTED] the price, and 3,300 kg for SpaceX's missions at approximately [REDACTED] the price, which might lead NASA to order a much less expensive mission with only the capacity actually required. Tr. at 323-29, 1134-41. Finally, although the effect of the agency's not ordering the optional, significantly higher-priced Atlas V mission, or of any delay in the mission, could not be ascertained with precision, the agency found that PlanetSpace's own calculations appeared to indicate that an Athena-only contract effort, replacing the Atlas V with lesser-capacity, lower-priced missions using the under-development Athena III, would further increase PlanetSpace's maximum cumulative debt. PlanetSpace Preaward Survey Response, Dec. 10, 2008, at 3-4.

Further, while PlanetSpace claimed in its proposal that, based on its assessment of development phase cost risk, it had included in its business plan an estimated potential cost growth of \$[REDACTED] million, which it would fund through debt financing, NASA questioned whether PlanetSpace had fully costed the likely required development efforts. In this regard, NASA noted that PlanetSpace had assumed technology readiness levels of [REDACTED] (on a scale 1 to 9 with 9 representing an operational system), for more than half of listed subsystem components, which the agency viewed as unrealistically high. PlanetSpace FPR Management Proposal at M-20 to M-21; PlanetSpace FPR Technical Proposal at T-25 to T-26; Backup FPR Slides at 28,765; Tr. at 797-99.<sup>5</sup>

PlanetSpace's proposal acknowledged the potential high risk resulting from the use of cost-plus development subcontracts as follows:

Given that PlanetSpace is a small company with a [firm-fixed-price] NASA contract and with [cost-plus-fixed fee/incentive fee] development subcontracts awarded to Lockheed Martin and ATK it follows that lack of effective subcontract controls could result in significant schedule delays and cost overruns.

<sup>&</sup>lt;sup>5</sup> While PlanetSpace claimed it had included in its business plan an estimated potential cost growth of \$[REDACTED] million, it is unclear whether the amount was reflected in its calculation of maximum cumulative debt (\$[REDACTED] million in 2013). In this regard, it is clear from PlanetSpace's proposal that the estimated maximum cumulative debt of \$[REDACTED] million did not include what PlanetSpace terms a "20% management reserve," the claimed effect of which would be to increase the maximum cumulative debt from \$[REDACTED] million to \$[REDACTED] million. PlanetSpace FPR Management Proposal at M-3.

PlanetSpace FPR Technical Proposal at T-128/129. PlanetSpace nevertheless assumed that it would overcome these challenging circumstances and control its costs of performance through effective cost controls. However, the record shows that the SSA was not convinced, finding that PlanetSpace's proposed use of cost-plus subcontracts "in the early stages of the contract," until first flight, was "extremely risky." SSD at 12. Given the limited cost margin available under PlanetSpace's proposed approach to accommodate potential cost overruns passed on by its subcontractors; the fact that Lockheed and Boeing, although capable contractors, were known by NASA to be "not as cost conscious as they could be"; PlanetSpace's unrealistic or incorrect assumptions, including those regarding the proposed ISS integration schedule and FAA requirements, that underlay its proposed approach; such evaluated "stressors" on cost and schedule as changing fairing size to accommodate unpressurized cargo and accomplishing verification and integration of its orbital vehicle with two launch vehicles; and the challenge for a fairly small management team to manage subcontractors performing over [REDACTED]% of the contract effort, the SSA concluded that the risks associated with PlanetSpace's contracting approach made it "highly unlikely" that PlanetSpace would successfully perform the contract and provide timely delivery of required cargo to the ISS. SSD at 16; Tr. at 26-27, 55-75.

PlanetSpace disagrees with the SSA's conclusion in this regard, but we find that it has not shown that conclusion to be unreasonable or otherwise improper. For example, PlanetSpace asserts that the agency's focus on financial risk and the resources available to PlanetSpace was improper because those matters concern offeror responsibility. See Federal Acquisition Regulation (FAR) § 9.104-1. However, an agency may use traditional responsibility factors in evaluating proposals where, as here, a comparative evaluation of those areas is to be performed. See Zolon Tech, Inc., B-299904.2, Sept. 18, 2007, 2007 CPD ¶ 183 at 8. Further, in evaluating proposals, an agency properly may take into account specific, albeit not expressly identified, matters that are logically encompassed by, or related to, the stated evaluation criteria. Independence Constr., Inc., B-292052, May 19, 2003, 2003 CPD ¶ 105 at 4. Here, the solicitation provided for evaluation, under the performance milestones subfactor, of "the overall risk that the payment schedule provides to NASA." RFP § VII.B. In our view, this solicitation language logically encompassed NASA's consideration of whether there was a significant risk to timely performance of the contract, in view of the substantial risk of cost overruns on the part of PlanetSpace's subcontractors (the cost of which PlanetSpace was required to bear under its fixed-price contract), the resources PlanetSpace proposed to commit to the contract, and the likely schedule of payments by the agency under the contract.

PlanetSpace asserts that the evaluated financial risk of its proposed approach fails to account for what it estimates to be the true, effective proportion of its overall

contract effort that is cost-based, that is, approximately [REDACTED]%.<sup>6</sup> As noted above, however, NASA's concerns extended beyond the proportion of the contract effort that was expected to be cost-based. In this regard, NASA evaluated the technology readiness levels assumed by PlanetSpace as unrealistically high, and found the assumed overall development costs to be inadequate in light of the significant effort that would be required to integrate multiple components for [REDACTED] different orbital vehicle configurations and a launch vehicle. Furthermore, it was NASA's experience that required integration efforts had been a basis for cost increases under prior NASA cost-plus contracts with LM and Boeing. Tr. at 353-54, 897-900. Indeed, the SSA questioned why LM and Boeing had not participated in the commercial resupply services effort on a fixed-price basis if in fact the likely cost of performance was reasonably understood and controllable. Tr. at 283-84.

PlanetSpace further questions the evaluated financial risk of its proposed approach by citing a brief excerpt from the SSA's day-long hearing testimony, during which he indicated that he had not been informed during his briefing by the evaluators that PlanetSpace had proposed to use "design to cost" and an earned value management system as part of its cost controls. Tr. at 362-63. This argument is without merit, because the SSA also testified that he had discussed with the SEB a page from its report that addressed both the risks associated with PlanetSpace's cost-plus subcontracting and specific cost control measures proposed by PlanetSpace, including, specifically, the proposed "design to cost" and earned value management system. SEB FPR Report at 7.2-80. Tr. at 355-56. Further, the record includes testimony from the chairman of the management committee, as well as the relevant briefing slide (different from the above excerpt from the SEB Report), which establishes that the SSA otherwise was briefed by the SEB about the inclusion of "design to cost" and an earned value management system as part of PlanetSpace's cost controls. Tr. at 1043-46, Backup Briefing Slides at Record 28,765. In any event, a contracting officer properly may base his or her independent judgment on reports and analyses prepared by others. <u>Comprehensive Health Servs.</u>, Inc., B--310553, Dec. 27, 2007, 2008 CPD ¶ 9 at 11; see University Research Co., LLC, B-294358 et al., Oct. 28, 2004, 2004 CPD ¶ 217 at 8. Here, the SEB specifically considered and discussed in its report PlanetSpace's proposed cost control measures, including its reference to "design to cost" and an earned value management system, and found them to be insufficient to overcome the cost risk associated with PlanetSpace's

<sup>&</sup>lt;sup>6</sup> PlanetSpace's estimate of [REDACTED]% as the true, effective proportion of its overall contract effort that would be cost-based, was calculated on the basis that a reported [REDACTED]% of the contract effort would be expended for development work under cost-based subcontracting with LM and ATK, which in turn would subcontract [REDACTED]% to [REDACTED]% of that effort to third tier vendors under fixed-price subcontracts. <u>See</u> Tr. at 897-99, 916-17, 1127-28.

contracting approach. SEB FPR Report at 7.2-80; Tr. at 901-05. PlanetSpace has not shown the agency's determination in this regard to be unreasonable.

PlanetSpace asserts that, even accepting the evaluated risks associated with its contracting approach, the agency's overall view of its proposal simply failed to account for the technical advantages offered by the participation of LM, Boeing, and ATK. In other words, PlanetSpace is essentially asking that we find that the agency was required to subordinate its serious concerns about the ability of PlanetSpace-the prime contractor-to perform, to the benefits of the subcontractors' participation in the contract effort, as evaluated by the SEB. There is no basis for us to make such a finding. As noted, we will review proposal evaluations only to determine whether the agency's conclusions were reasonable and consistent with applicable procurement laws and regulations. <u>Panacea Consulting, Inc., supra</u>. We think the SSA clearly acted reasonably in concluding that PlanetSpace's own lack of technical and management capability and significant, relevant past performance, the fact that PlanetSpace would be the prime contractor to the agency, and the high financial risk associated with PlanetSpace's proposal, were more significant considerations than, and thus offset, the favorable technical past performance of LM, Boeing and ATK.

#### **RUSSIAN ENGINES**

PlanetSpace asserts that NASA did not adequately account in the source selection for the risk associated with OSC's proposed use of Russian engines in the first stage of its launch vehicle. In this regard, OSC proposed to use the Taurus II medium-class launch vehicle, a vehicle under development by OSC, which would use Aerojet's AJ26-62 liquid-propellant engines, a modernized version of existing Russian NK-33 rocket engines manufactured in the late 1960s and early 1970s. Although the SEB initially determined that OSC's proposal to use 35-year-old engines represented a substantial or significant risk to the feasibility of OSC's production and delivery capability, the evaluators, based on information furnished in response to the agency's discussion question, ultimately reduced the assessed risk, finding OSC's approach to pose technical and schedule risks warranting only an ordinary, and not a significant, weakness. PlanetSpace asserts that a significant risk was warranted.

The evaluation in this regard was reasonable. In determining that OSC had alleviated most, but not all of the agency's initial concerns, the evaluators considered a number of mitigating factors. As an initial matter, the agency noted that not only did Aerojet have in its possession [REDACTED] NK-33 engines at its Sacramento, California plant, a sufficient number for the [REDACTED] flights (at [REDACTED] engines per flight) proposed in its model task order, but in addition, more than [REDACTED] additional NK-33 engines were at the engine manufacturer's facilities in Russia. Further, OSC reported that Aerojet, which had experience performing service life extension for the Titan II engines, had undertaken significant work [REDACTED]. Further, OSC reported that the NK-33 engines (including those in both the United States and Russia) had been stored in humidity-controlled conditions with no documented

stress corrosion cracking.<sup>7</sup> In addition, as evidence of the favorable condition of the engines, OSC reported that one of the NK-33 engines in Russia, originally manufactured in 1972, had been successfully test fired twice in September 2008. Finally, while final approval from Russia for use of the engines in OSC's Taurus II launch vehicle had not yet been obtained, the agency noted that OSC had completed all of the licensing steps and was only awaiting final approval; Russia had previously granted licenses for use of the engines on other vehicles; and testing could begin prior to approval for actual launch operations. In these circumstances, the agency determined that OSC's approach represented only an ordinary weakness. OSC FPR Mission Suitability Proposal at 10-12, 19, 32-36, 73-80; SEB FPR Report at 7.1-16 to 18; SSD at 9; Tr. at 397, 487-91, 717-26, 767, 1226-33. PlanetSpace has not shown that this determination was unreasonable.

#### COST

Noting that the SSD did not include a total evaluated price for any of the offerors, PlanetSpace asserts that NASA did not adequately consider price--in particular, PlanetSpace's price advantage--in the source selection.

Agencies must consider cost to the government in evaluating proposals, 10 U.S.C. § 2305(a)(3)(A)(ii) (2006), and while it is up to the agency to decide upon some appropriate and reasonable method for evaluating offerors' prices, an agency may not use an evaluation method that produces a misleading result. <u>See Bristol--Myers Squibb Co.</u>, B--294944.2, Jan. 18, 2005, 2005 CPD ¶ 16 at 4; <u>AirTrak Travel et al.</u>, B-292101 <u>et al.</u>, June 30, 2003, 2003 CPD ¶ 117 at 22. The method chosen must include some reasonable basis for evaluating or comparing the relative costs of proposals, so as to establish whether one offeror's proposal would be more or less costly than another's. <u>Id.; see R&G Food Serv., Inc., d/b/a Port-A-Pit Catering Servs., LLC</u>, B-296435.4, B-296435.9, Sept. 15, 2005, 2005 CPD ¶ 194 at 4; <u>cf.</u> FAR § 15.405(b) (primary concern is the overall price the government will actually pay).

The record indicates that price was reasonably considered in the source selection. In this regard, offerors were required not only to furnish a fully burdened price per kilogram of pressurized upmass cargo, unpressurized upmass cargo, return downmass cargo and disposal downmass cargo, but also a total price for particular types of resupply missions using the offeror's unique mission configurations. RFP § VI.A.21.P2; Amend. 6, RFP §§ VI.A.19, VI.A.21.P2. Further, this pricing was reported in various detailed formats to the SSA. For example, a summary of one of many detailed pricing charts presented to the SSA indicated the relative weighted per kg price for cargo as follows:

<sup>&</sup>lt;sup>7</sup> Also, NASA personnel inspected the warehouse in the United States where the engines are stored. Tr. at 767, 1228.

	PlanetSpace	OSC	SpaceX
Pressurized Upmass <sup>8</sup>	\$[REDACTED]	\$[REDACTED] <sup>9</sup>	\$[REDACTED]
Unpressurized Upmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]
Return Downmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]
Disposal Downmass	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]

Final Source Selection Presentation at 126. Another of the pricing charts presented to the SSA indicated the overall mission price for a combined pressurized upmass and disposal downmass mission using the offeror's unique configuration as follows:

Overall Pressurized Upmass/Disposal Downmass Mission Price in \$ Millions						
	OSC Basic	OSC Enhanced	PlanetSpace	SpaceX		
Capacity	2000/2000 kg	2700/2700 kg	[REDACTED] kg	3310/3310 kg		
CY 2010	\$[REDACTED] (800/500 kg)	-	-	\$[REDACTED]		
CY 2011	\$[REDACTED] (1575/1775/2000 kg)		\$[REDACTED] (Atlas V[REDACTED] kg)	\$[REDACTED]		
CY 2012	\$[REDACTED]		\$[REDACTED]	\$[REDACTED]		
CY 2013	\$[REDACTED]	\$[REDACTED] (2500/2700 kg)	\$[REDACTED]	\$[REDACTED]		
CY 2014	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]		
CY 2015	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]		
CY 2016	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]	\$[REDACTED]		

Final Source Selection Presentation at 119.

<sup>&</sup>lt;sup>8</sup> \$thousand per kg.

<sup>&</sup>lt;sup>9</sup> Price for basic engine/price for enhanced future engine.

As is apparent from this information presented to the SSA, OSC's pricing exceeded PlanetSpace's, usually by a significant margin. Thus, the information presented to the SSA indicated that OSC's overall weighted price per kg of pressurized upmass cargo (\$[REDACTED] basic/\$[REDACTED] enhanced) was approximately [REDACTED] that of PlanetSpace (*\$*[REDACTED]), while OSC's overall price for a pressurized upmass cargo and disposal downmass cargo mission in CY 2016 (\$[REDACTED] million for a 2000/2000 kg basic mission or \$[REDACTED] million for an 2700/2700 kg enhanced engine mission) was significantly higher on either an overall mission or per kg basis than PlanetSpace's (\$[REDACTED] million for a [REDACTED] kg mission). Although agency evaluators did not calculate a total evaluated price for each offeror, the SSD stated that OSC's overall pricing (as well as its overall pricing for the "substantially more important" CLIN 1 for standard resupply services, RFP § VII.C), was the highest, with PlanetSpace's pricing being the next highest and SpaceX's being the lowest. SSD at 16-17. Further, the record indicates that the SSA recognized that OSC's proposal was "significantly more costly" than PlanetSpace's, estimating that OSC's overall price was "around [REDACTED] per kilogram" and PlanetSpace's was "probably [REDACTED] to [REDACTED] per kilogram in rough order of magnitude." Tr. at 159. Indeed, the record indicates that PlanetSpace's above price advantage as perceived by the SSA was even greater than that claimed by PlanetSpace--which calculated that OSC's proposal was [REDACTED]% to [REDACTED]% more expensive than PlanetSpace's--during this litigation. PlanetSpace Comments, Mar. 2, 2009, at 66-67. In these circumstances, we find no basis to conclude that the source selection was based on a failure by the agency to consider, or the agency's misunderstanding of, PlanetSpace's price advantage over OSC.

The protest is denied.

Gary L. Kepplinger General Counsel