

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
GEORGE C. MARSHALL SPACE FLIGHT CENTER

LIMITED SOURCE JUSTIFICATION

I recommend that NASA, George C. Marshall Space Flight Center (MSFC), negotiate with The Boeing Company only for a feasibility study of the Delta Cryogenic Second Stage (DCSS) and its potential application to the Space Launch System (SLS) as an Interim Cryogenic Propulsion Stage (ICPS). This action will be performed under MSFC Blanket Purchase Agreement NNM06AA03Z, which was awarded under General Services Administration (GSA) Federal Supply Schedule (FSS) Contract GS-23F-0183K.

The total time and material price of this effort will not exceed \$3,000,000 for a 10 month period of performance.

The effort to be undertaken by Boeing includes an assessment of the DCSS: 1) against SLS load factors and environments; 2) against the requirements of NPR 8705.2B, Human Rating for Space Systems; and 3) for impacts on support equipment and its concept of operations resulting from any needed flight hardware modification, the current SLS concept of operations, or utilizing the SLS launch vehicle adapter.

This recommendation is made pursuant to FAR 8.405-6(a)(1)(i)(B) for the acquisition of supplies or services from limited sources under the GSA FSS when only one source is capable of responding due to the unique or specialized nature of the work. Competition among FSS holders is impractical for the following reasons:

1. Boeing designed and developed the DCSS. Boeing retains proprietary rights to the DCSS-related data and information including drawings and specifications, and the proprietary information is not releasable to another contractor.
2. The DCSS was selected by the SLS Program for this feasibility study after an extensive search for in-space propulsion capabilities (with performance data) to support the initial flights of the SLS.

Market research was conducted to evaluate in-space propulsion systems (with performance data) capable of performing the function of the ICPS for the initial flights of the SLS. Internal research was conducted by the SLS Program on known sources for this capability. This internal research was followed up in January 2012 with a sources sought synopsis on the NASA Internet Acquisition Service (NAIS) and FedBizOpps.

The evaluation of the responses received from the sources sought synopsis validated the findings of the internal SLS research – that the DCSS appears to be the only solution mature enough to meet the requirements of the Government within the timeframe needed to support the Government's need date for initial delivery. Given the need to assess in more detail the DCSS's potential use as an ICPS, no other source possesses the necessary data and insight to conduct the feasibility study sought by the Government.

Pursuant to FAR 8.404(a), “BPAs or orders placed against a MAS, using the procedures in this subpart, are considered to be issued using full and open competition (see 6.102(d)(3)). Therefore, when establishing a BPA (as authorized by 13.303-2(c)(3)), or placing orders under Federal Supply Schedule contracts using the procedures of 8.405, ordering activities shall not seek competition outside of the Federal Supply Schedules or synopsise the requirement.”

Pursuant to FAR 8.404 (d), “GSA has already determined the prices of supplies and fixed-price services, and rates for services offered at hourly rates, under schedule contracts to be fair and reasonable. Therefore, ordering activities are not required to make a separate determination of fair and reasonable pricing, except for a price evaluation as required by 8.405-2(d),” which states, “The ordering activity is responsible for considering the level of effort and the mix of labor proposed to perform a specific task being ordered, and for determining that the total price is reasonable.”

Pursuant to FAR 8.405-6, a notice will be published in accordance with FAR 5.301, and this justification will be posted in Federal Business Opportunities (FedBizOpps) and on the NASA Acquisition Internet Service (NAIS).

Due to the specialized nature of this requirement, there are no known actions which the agency may take to remove or overcome barriers to competition before award of this acquisition for the services required. Therefore, purchase of this effort from The Boeing Company is the only practical approach.

I hereby certify the facts in this justification and any supporting data used for this justification are accurate and complete to the best of my knowledge.

  
David Beaman  
Manager  
Spacecraft and Payload Integration Office

2/21/12  
Date

I hereby certify that the above justification is complete and accurate to the best of my knowledge and belief. In addition, I hereby determine that the anticipated cost to the Government will be fair and reasonable.

  
G. Earl Pendley  
Office Manager  
Space Transportation Support Office

2/21/12  
Date

Concurrence:

  
Procurement Officer

2/21/2012  
Date

Approval:

  
Center Competition Advocate

2/21/2012  
Date