SMEX 10/11: AO 03-OSS-02
ELV Launch Services Information Summary

The information in this document is applicable only to proposals submitted in response to AO 03-OSS-02: Announcement of Opportunity for the Explorer Program: Small Explorers and Missions of Opportunity.

**Domestic ELV Launch Services Groundrules/Policy**

Any domestic Expendable Launch Vehicles (ELV) proposed for this AO will be procured and managed by NASA/KSC; acquisition of domestic launch services directly by the PI/Proposed team is not allowable for this AO.

Under the provisions of the KSC Launch Services Contracts, the launch service includes the launch vehicle (LV) and associated standard services, non-standard services (mission unique options), all engineering and analysis, and minimum performance standards. NASA/KSC also provides technical management of the launch service, technical insight into the LV production/test, coordinates and approves mission-specific integration activities, provides payload-processing accommodations, and manages the launch campaign/countdown. Upon mission selection, NASA/KSC will competitively select a launch service provider for the mission, based on customer requirements.

All NASA-procured launch services are to be consistent with NASA Policy Directive (NPD) 8610.7, NASA Launch Services Risk Mitigation Policy. Expendable launch services acquired from NASA will be managed in accordance with NPD 8610.23, Technical Oversight of Expendable Launch Vehicle (ELV) Launch Services. These NPD’s can be accessed through the URLs:


**Foreign Launch Vehicles**

See ground rules for foreign LV’s in the AO, Section 4.2.1, Expendable Launch Vehicle Options

**Launch Vehicle Information/Configuration/Performance**

NASA/KSC/ELV Launch Services Directorate has developed an on-line payload planner’s guide for NASA missions. This web site contains information relevant to NASA-procured launch services. The information provided includes all SELVS-KSC LV configurations, standard/non-standard services that are available, as well as payload fairing envelopes and environments. This planning tool can be found at the following web address: http://elvppg.ksc.nasa.gov. Access to this site requires a self-determined password, which
is activated by the site administrator. A user can request access/password activation by going to the site and following the directions provided on the log-in screen as well as providing the required information. Access to this web site can typically be activated within 24-48 hours during the week. For questions, contact NASA/KSC/ELV. This web site contains no information on foreign LV’s.

The Offerors should select the minimum ELV configuration(s) that meets their requirements including adequate performance margins. As a reference tool, the NASA ELV Launch Services group has developed an on-line tool to assist in determining LV performance. This tool is publicly accessible at the following web address: http://elvperf.ksc.nasa.gov. The Pegasus XL and Taurus performance information contained on this site reflects current best estimate (CBE) figures. All of these figures reflect separated Spacecraft mass, and each have associated groundrules/assumptions (including the adapter-type). For variations from that which is found on-line, contact NASA/KSC/ELV for an assessment. The Offeror should specifically state in the proposal the ELV configuration(s) meet their requirements for this mission. This web site contains no information on foreign LV’s.

**Launch Service Costs**

Tables 1a and 1b provide Launch Service cost figures for each of the given Launch Vehicle families for launches in February 2007 and 2008, respectively. Based on the Offeror’s selection of the individual ELV configuration(s) that meet their technical requirements, the Offeror should use the respective Launch Vehicle dollar figures in the overall mission cost. Funding estimates are stated in real-year dollars for the respective launch month/year. For cost estimates for launches in month/years other than those noted in Tables 1a and 1b, please contact NASA/KSC/ELV for a different estimate. The funding profiles provide for the launch service, nominal allocation for mission unique launch vehicle modifications/services, mission integration, launch site payload processing, and telemetry support.

**Evaluation Criteria**

Attachment 1 shows the Evaluation checklist that will be used as a guide for the evaluators during the proposal evaluation phase. This checklist should give the offerors an indication of the types of information that are expected to be contained in the proposals.

**NASA ELV Launch Services Point of Contact for Additional Information**

Additional information including, but not limited to, availability of smaller or larger launch vehicles, performance quotes, mission integration inquiries and costs may be obtained from:
Table 1a
Launch Service Costs Summary ($ in Millions) – February 2007 Launch

<table>
<thead>
<tr>
<th>LAUNCH SERVICE</th>
<th>FY’04</th>
<th>FY’05</th>
<th>FY ’06</th>
<th>FY ’07</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELVS-KSC Pegasus (VAFB)</td>
<td>1</td>
<td>13</td>
<td>6</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>SELVS-KSC Pegasus (East Coast)</td>
<td>1</td>
<td>14</td>
<td>6</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>SELVS-KSC Pegasus (Equatorial)</td>
<td>1</td>
<td>15</td>
<td>6</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>SELVS-KSC Taurus (VAFB)</td>
<td>1</td>
<td>22</td>
<td>9</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>SELVS-KSC Taurus (CCAS)</td>
<td>1</td>
<td>22</td>
<td>9</td>
<td>15</td>
<td>47</td>
</tr>
</tbody>
</table>

Table 1b
Launch Service Costs Summary ($ in Millions) – February 2008 Launch

<table>
<thead>
<tr>
<th>LAUNCH SERVICE</th>
<th>FY’05</th>
<th>FY’06</th>
<th>FY ’07</th>
<th>FY ’08</th>
<th>TOTAL COST</th>
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<td>11</td>
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<td>6</td>
<td>12</td>
<td>34</td>
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<tr>
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<td>9</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>SELVS-KSC Taurus (CCAS)</td>
<td>1</td>
<td>22</td>
<td>9</td>
<td>16</td>
<td>48</td>
</tr>
</tbody>
</table>
Proposal Name: __________________________________________________________
Proposal #: __________________________________________________________
Evaluator POC: __________________________________________________________
Phone: _________________________________________________________________
Email: _________________________________________________________________

**Technical Evaluation:**

**Overall Assessment** – given the groundrules in the AO, is the proposed LV concept feasible for this application?

- [ ] Yes
- [ ] No
- [ ] Yes with comments – see details below

**LV Performance:**

- [ ] Area of Concern

Proposed LV configuration: ____________________________________________

Proposed Mass-to-Orbit Requirements:

- Mass: [ ] kg
- Apogee: [ ] km
- Perigee: [ ] km
- Incl: [ ] deg

Does the proposed LV configuration have adequate performance capability? [ ] Yes  [ ] No

If yes, how much performance margin is available? [ ] kg  [ ] %

Comments/Issues/Concerns:

- [ ] Area of Concern

**LV-to-SC Interfaces:**

- [ ] Area of Concern

Payload Fairing Envelope – adequate envelope for proposed SC?

- Yes  No  Unclear

Proposed Mechanical Interface (LV/SC Adapter)?

- Standard Interface  Custom Adapter Req’d  Unclear

Mission Unique Modifications Required?

- Yes  No  Unclear
Comments/Issues/Concerns:

LV Cost Assessment: □ Area of Concern
Is LV cost profile consistent to that given in the AO LV Appendix?
Yes □ No □ Unclear
If mission unique mods have been identified, have they been properly accounted for in cost profile?
Yes □ No □ Unclear

Comments/Issues/Concerns:

□ Area of Concern
Comments/Issues/Concerns – general in nature and/or with other sections of the proposal: