LAS Validation Suite

Request for Proposal

> WARNING – Do not submit any confidential or proprietary information in response to this Request for Proposal. Any and all information submitted, including pricing, may be made publically available.

1   Introduction

The American Society for Photogrammetry and Remote Sensing (ASPRS), through its LIDAR Division, intends to contract for the development of software that will be used for validating the integrity and completeness of LAS point cloud files. This set of software will comprise one or more executable programs and will be referred to as the LAS Validation Suite (LVS).

The technical requirements are contained in the separate document, "LAS Validation Suite, Requirements Specification – R2."

The ASPRS reserves the right to reject all offers. There is no guarantee that an award will be made as a result of this RFP.

2   Registration

You <u>must</u> indicate your intent to submit an offer to this RFP by sending an email to LIDARdivision@asprs.org. Submissions of proposals from offerers who have not registered their intent to bid prior to the submission deadline will be rejected. Obviously you will not receive proposal material until you have registered.

3 Offer Structure

Your offer must be submitted in PDF format (do not compress this file) by email submission to:

LIDARdivision@asprs.org

with the subject line: **LVS Proposal**

Offers must be received by 30 April 2013, 5 PM, Eastern Daylight Time.

Technical and Cost proposals must be submitted as a single volume, not to exceed 10 pages with font no smaller than 11 point.

Only Firm Fixed Price (FFP) offers will be accepted. The offerer must submit a single price that covers all elements of the three phases of deliverables as detailed in the requirements document of this RFP. No cost justification (build up, etc.) is desired.

Offers which do not follow the outline of these instructions will be rejected.

4 Proposal Outline

The proposal shall contain three sections:

4.1 Cost
The cost section should contain a single sentence stating the Firm Fixed Price. No elaboration of pricing is desired and will not be considered in evaluating your offer.

4.2 Technical
The offerer must explain their technical approach to the project. The use of existing LAS open source software that meets the licensing requirements of this effort is strongly encouraged.

4.3 References
Offerers must supply three references. These references must have interacted with you at a software development level. References must reside in the United States of America, Canada or Mexico. We will only attempt to contact references via email. We will ask your references to respond to a Question/Answer (Q & A) form. Please ensure that any references that you supply have agreed to complete our Q & A within 5 business days of receipt. We will not supply this Q&A prior to the close of the submission period.

5   Questions

Potential Offerers may ask questions by email. Send questions to:

LIDARdivision@asprs.org

with the subject line: **LVS RFP Question**

If we elect to answer a question, the question and answer will be provided to all offerers. Please note that we will not attempt to obfuscate the identity of offerers when addressing questions. Note that we may not answer all questions.

6   Evaluation Criteria

6.1   Cost

We have a budget (which we will not disclose) for this project. Offers above our budget will be rejected. Thus cost is a "go/no-go" criteria. If your offer is within our budget, cost will not be considered when weighting your offer against other proposals.

6.2   References

References will be weighted 40% in our evaluation of your offer.

6.3   Technical

Technical will be weighted 60% in our evaluation of your offer. Technical criteria will include:

- Evidence of knowledge of the LAS Specification
- Evidence that you understand the EPSG and WKT encoding of Coordinate Reference Systems
- Breadth of coverage of the LAS format testing
- Attention to robustness. For example, we expect you to explain how you will address error conditions such as two instances of LVS simultaneously running on the same data set

- Knowledge of writing simple, clean xml
- Attention to simplicity. We are interested in very straight-forward implementation with a minimum of unnecessary complexity. We are not big fans of deep class hierarchies.
- Extensibility. This is living code that must accommodate the addition of future versions of the LAS specification. Additionally, we eventually want to "add the /f" option for repairing those detected issues, where possible.
- Professionalism. We are interested in hearing how you undertake change control during the project, your ability to write very clear English language explanations and your approach to general problem solving.

6.4   Contract Award

The ASPRS reserves the right to reject all offers. Should an offer be accepted, the ASPRS will negotiate a simple "work for hire" contract with the offerer. Should we fail to come to an agreement with the selected offerer, we will either cancel the project or select a different offerer.

Payments will be at the completion of each of the three phases:

End of Phase I – 25%

End of Phase II – 50%

End of Phase III – 25%

It is our intention to make a decision within 70 days following the close date of this RFP. We do reserve the option to extend this period or to reject all offers.

GLOSSARY

Acronym	Meaning	Notes
ASPRS	American Society for Photogrammetry and Remote Sensing	
CLA	Command Line Argument	
CRS	Coordinate Reference System	
EPSG	European Petroleum Survey Group	An encoding format for CRS
EVLR	Extended Variable Length Record	
FFP	Firm Fixed Price	
FTP	File Transfer Protocol	
LAS	*not an acronym*	The ASPRS point cloud file format specification. Also commonly used as the LAS file extension.
LGPL	Lesser General Public License	
LVE	LAS Validation Executable	The primary executable program of the LAS Validation Suite
LVS	LAS Validation Suite	
MIT	Massachusetts Institute of Technology	Used in MIT license
PDRF	Point Data Record Format	
RFP	Request for proposal	This document
VLR	Variable Length Record	