

# ASPRS LIDAR Division

## LAS Working Group – Operating Protocol

Updated By:

Lewis Graham

[LGRAHAM@GEOCUE.COM](mailto:LGRAHAM@GEOCUE.COM)

August, 2011

The LAS Working Group (LWG) is responsible for maintaining and updating the LAS point cloud data specification. The LAS Data Specification was conceived as a common format for vendors of kinematic laser scanners to transfer point cloud data to processing software. The primary focus of LAS today remains the vendors of kinematic laser scanning hardware. The entire process of revising the LAS specification is purposely designed to operate very quickly so as to accommodate new hardware features at their time of release. For this reason, it is a closed process prior to the public review period.

The LWG is guided by a Chairperson. The Chairperson is appointed by the Division Director, ASPRS LIDAR Division.

Members of the LWG are appointed by the Chairperson of the LWG. In general, a member must have a direct interest in the LAS format, meaning they are a commercial hardware and/or commercial (including Open Source) production software vendor. An LWG member must be a voting member of the ASPRS. The number of members is generally kept at 12 to 16 persons to make expeditious management of revisions possible.

It is usually a member of the LWG that drives a new revision of the specification (but of course outside requests are always collected up and circulated to the group when a new revision is in progress). For example, Leica drove the waveform addition that resulted in LAS 1.3 because they were adding this capability to their hardware and had to have file output support.

One or more LWG members authors a new revision draft. When the draft is to a reviewable state, it is circulated amongst the core group via email (with all members copied) with subsequent drafts authored until everyone within the LWG are in agreement. The group has not, to this point, had an issue sufficiently contentious or divisive to actually require a vote but this would be the final arbitration in such an event.

When the LWG has converged on a consensus draft, the draft gets sent up to the ASPRS Board of Directors. The Board of Directors then sends the draft out to the full ASPRS membership for a review period of 60 days. Comments are sent directly to the Chairperson, LWG.

Editorial comments that add clarity to the specification are generally accepted. Editorial comments that simply reflect differences of opinion of wording but make no material difference in the specification are generally rejected. Comments that are functional in nature will follow one of two paths: If the comment breaks the spirit of the revision (for example, the LWG is doing the change to support waveform but the comment deals with adding some totally new capability), the request is denied with a note back to the commenter that it will be added to consideration for the next revision cycle. If the functional comment is related to the current revision, it is circulated to the LWG for consideration (for example, someone wants to change the definition of mirror angle). The draft is revised accordingly. After the comment period, the final draft along with the adjudicated comments are sent to the ASPRS BOD for ratification. At this point, the new revision supersedes the prior revision.