T13 Ad Hoc Teleconference Minutes
September 10, 2007
1:00pm – 4:00pm Pacific Time

Attendees:

Jim Hatfield	Patrick Hery	Yoni Schternhell
Frank Shu	John Geldman	Joe Scanlon
Bill Martin	Steve Livaccari	Curtis Stevens
Dan Colegrove	Wayne Bellamy	

Frank Shu began by highlighting some of the changes in the latest draft of e07154r2. The new draft added the persistence attribute and added importancy (sic) and an attributes clear bit.

The new restriction that LBA ranges start and end on physical sector boundaries for devices with multiple LBA's per physical sector was discussed. The group decided that the restriction did not add value and that it should be removed.

The no one objected to the new DCO bit definition in section 5.3.

The group then discussed the concept of persistent and non-persistent attributes. Persistent attributes would be preserved over power cycles. There was a long discussion of whether or not a trim type attribute would be considered persistent or not. One view was that it was not persistent as the information would be immediately used by the device internally mark the trimmed sector and that was not persistent. The other view was that the trim was persistent as the trim behavior is preserved over power cycles. The trim attribute would be persistent even if the attribute was not marked persistent as the trim only goes away on a write, not a power cycle.

The question of how many lba ranges and attributes should be kept was discussed. Some people argued for no set limit and no way to detect. Others thought that would not be testable and wanted the device to state how many ranges could be kept.

A number of questions about the proposal were discussed without conclusions:

- How many ranges should the device support?
- Should the device report how many ranges and how should it report?
- What rules apply to discarding important or persistent ranges?
- Should there be a way to determine what ranges are outstanding (kept by the drive)?
- Should there be a clear attributes method?
- Is there a special interaction with NV Cache?
- How can the function be tested?
- Is there modeling or testing evidence that the attributes can be used to improve performance?
- Can the requirements be made more concrete?

The discussion ended with a recommendation that the features other than the Trim function be split off into a new proposal so that the Trim function can be completed more quickly. The future comprehensive attribute proposal could take additional time.