T10/02-044r0

Resolving ambiguity in sense data information field for sequential buffered mode

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SSC-2 has recently completed a letter ballot. In the comment resolution session of 2002jan14, Exabyte comment 15 was discussed. The intent of this comment was to disambiguate the calculation of the INFORMATION field in SENSE data under certain circumstances. This comment was accepted in principle. It was noted that SPC-3 would benefit from the same change. I was subsequently tasked with the action item of providing suggested text, and bringing this proposal to the CAP WG.

Relative to spc3r03.pdf:

Section 7.24.2 - Sense data format

Paragraph 10 speaks of the value contained in the INFORMATION field, to wit:

"The contents of the INFORMATION field is device-type or command specific and is defined within the appropriate standard for the device type or command of interest. Device servers shall implement the INFORMATION field. Unless specified otherwise, this field contains:
...
"d) for sequential-access devices operating in buffered modes 1h or 2h that detect an unrecoverable write error when unwritten data blocks, filemarks, or setmarks remain in the buffer, the value of the INFORMATION field for all commands shall be:
-- "a) the total number of data blocks, filemarks, and setmarks in the buffer if the device is in fixed block mode (i.e., BLOCK LENGTH field of the MODE SENSE block descriptor is non-zero and the FIXED bit of the WRITE command is one); or
-- "b) the number of bytes in the buffer, including filemarks and setmarks, if the device is in variable mode (i.e., the FIXED bit of the WRITE command is zero)."

It is herein proposed that:

"SPC-3, section 7.24.2 (sense data format), item d) subitem b), be changed to "the number of data bytes in the buffer, plus the number of filemarks in the buffer, plus the number of setmarks in the buffer, if the device is in variable mode (i.e., the FIXED bit of the WRITE command is zero)."