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FROM: Peter Johansson
 TO: T10 SBP-2 *ad hoc* Working Group
 DATE: July 22, 1997
 RE: SBP-2 Management ORB Time-outs

This memorandum proposes a change to the definition of the MANAGEMENT_AGENT register that removes the requirement for time-outs on any of the SBP-2 management requests. As defined below, the initiator may poll the contents of the register to determine whether or not a particular request is in progress.

6.3 MANAGEMENT_AGENT register

The MANAGEMENT_AGENT register permits the initiator to signal the address of a management ORB to the target. This register shall support 8-byte block read and block write requests whose *destination_offset* is equal to the address of the MANAGEMENT_AGENT register and shall reject quadlet write requests and all other block read and block write requests. The format of this register is illustrated below.

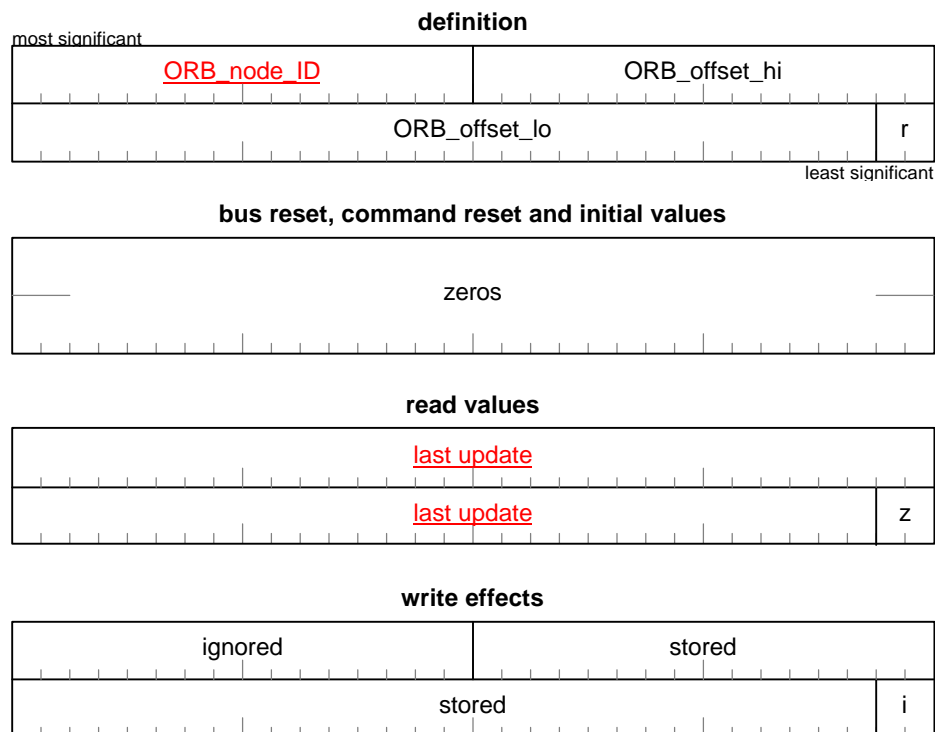


Figure 1 – MANAGEMENT_AGENT format

When the target is busy with a management request, the ORB node ID field shall contain the 16 most significant bits of the Serial Bus address used in the fetch of the management ORB. The target shall update this field from the source ID field of a successful block write addressed to the MANAGEMENT_AGENT register.

The ORB_offset_hi and ORB_offset_lo fields together form an ORB_offset field from which a Serial Bus address is derived ~~when in order to fetch~~ the management ORB ~~is fetched~~. The Serial Bus address shall be formed from the concatenation of ORB node ID~~the 16-bit node ID of the initiator (available to the target as the source_ID field of the block write request that updated the register)~~, the ORB_offset field and two least significant bits of zero.

An initiator may signal a request by means of an 8-byte block write transaction that specifies the address of the request. If the management agent is busy with another request, the block write shall be rejected with a response of resp_conflict_error. If the write transaction is successful, the management agent shall fetch the request specified by ORB_offset and execute it. While the target is busy with a management request the MANAGEMENT_AGENT register shall contain the Serial Bus address of the management ORB. When the target is able to accept a management request the value of the MANAGEMENT_AGENT register shall be zero. Unsuccessful write transactions shall not affect the execution of any request(s) in progress.

Because IEEE Std 1394-1995 reserves a portion of initial units space for bus-dependent use, the MANAGEMENT_AGENT register shall be located at address FFFF F001 0000₁₆ or above within the node's 48-bit address range. The address of the management agent is specified by the csr_offset field in the Management_Agent entry in configuration ROM (see **Error! Reference source not found.**).