INTERPRETATION IC 135-2012-2 OF ANSI/ASHRAE STANDARD 135-2012 BACnet® -A Data Communication Protocol for Building Automation and Control Networks

Approval Date: June 22, 2013

Request from: Frank Schubert (<u>Frank.schubert@mbs-software.de</u>), SSPC 135 Member, Römerstr. 15, D-47809 Krefeld, Germany, Krefeld, 47809.

Reference: This request for interpretation refers to ANSI/ASHRAE Standard 135-2012, Clause 19, regarding the Command Prioritization.

Background: The highest command priorities 1 and 2 (Manual and Automatic Life Safety) may be used for specific security-relevant applications like emergency switches or complex safety functions like smoke extraction control. In those cases writing/commanding to these two high priorities may be restricted by the vendor.

Hardware may be logically connected to one the two highest priorities so that local override may be applied to these priorities and no other process may be allowed to write/command one of these two priorities (including time-scheduling or similar processes).

From the standard we think it's up to the vendor to restrict usage of manual and automatic life-safety (see Clause 19.2.2):

19.2.2 Application Priority Assignments

Commanding entities are assigned one of the 16 possible priority levels. The assignment of most priorities is site dependent and represents the objectives of the site management. Table 19-1 contains the standard priorities. Other applications that need prioritization include Temperature Override, Demand Limiting, Optimum Start/Stop, Duty Cycling, and Scheduling. The relative priorities of these applications may vary from site to site and are not standardized. For interoperability at any particular site, the only requirement is that all devices implement the same priority scheme. The positions marked Available are open for assignment to DDC programs, EMS programs, etc. The interpretation of what conditions constitute Manual-Life Safety or Automatic-Life Safety decisions is a local matter.

The BTL test-package though requires all priorities to be commandable to pass the prioritization tests and no restriction is allowed by the current test specification, except priority 6 which is already restricted by the standard (Minimum-On/Off times).

Providing BTL testing services we identified a lot of existing implementations restricting write access to certain priorities by issuing an error WRITE_ACCESS_DENIED as a response to an attempt to write to priority 1 or 2.

<u>Interpretation</u>: In Clause 19.2.2 the standard allows the interpretation of priorities 1 and 2 as being a local matter, so restricting access by responding with an error-message to a write attempt to either of these two priorities is allowed by the standard.

Question: Is this interpretation correct?

Answer: No

<u>Comments:</u> "Local Matter" in Clause 19.2.2 means a site specific local matter and not an implementation specific local matter. Therefore the product must be configurable to accept writes to all priorities except priority 6.