INTERPRETATION IC 135-2012-13 OF ANSI/ASHRAE STANDARD 135-2012 BACnet® -A Data Communication Protocol for Building Automation and Control Networks

Approval Date: January 24, 2015

Request from: Horst Hannappel, MBS GmbH, Roemerstrasse 15, D-47809 Krefeld, Germany 47809.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2012, Clause 19.1.3.3, regarding file objects using record-access.

Background:

19.1.3.3 Restoring the Configuration Files

... Any files that already exist in the device, and differ in size from the image being written to them, will be truncated by writing 0 to the File_Size property of the File object before the contents are written to the file.

Problem:

Clause 19.1.3.3 seems to be written assuming file objects with stream access only. With record access the rules on file size do not really fit.

<u>Interpretation No.1</u>: For the decision whether the file object needs to be truncated in the case of record-access the number of records in the image is compared to the property Record_Count of the file object. In the case of stream access the number of bytes in the image is compared to the File_Size property

Question No.1: Is this interpretation correct?

Answer No.1: Yes

<u>Comments:</u> The language in 19.1.3.3 is ambiguous with respect to the meaning of "differ in size". To assure maximal interoperability we believe that implementations should make the decision that you have indicated.

<u>Interpretation No.2</u>: For truncating in the case of record-access 0 is written to the Record_Count property. In the case of stream-access 0 is written to the File_Size property.

Question No.2: Is this interpretation correct?

Answer No.2: No

<u>Comments:</u> In addition to the mandate in 19.1.3.3, the BIBB DM-BR-B clearly requires File_Size to be present and writable in all configuration objects. The description of the File_Size property in the clause 12.13.6 mandates writability for stream files but leaves writability for

record based files optional. The backup and restore procedure overrules that optionality for configuration files and requires it to be writable in both stream and record based files.