# INTERPRETATION IC 135-2024-9 OF ANSI/ASHRAE STANDARD 135-2024 BACnet® -A Data Communication Protocol for Building Automation and Control Networks

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**Reference:** This request for interpretation refers to ANSI/ASHRAE Standard 135-2024 and pertains to the allowed reject reasons with the different enumerations.

### **Background:**

#### 18.9 Reject Reason

Only confirmed request PDUs can be rejected. The possible reasons for rejecting the PDU are enumerated in this clause.

**BUFFER OVERFLOW** - A buffer capacity has been exceeded.

**INCONSISTENT\_PARAMETERS** - Generated in response to a confirmed request APDU that omits a conditional service argument that should be present or contains a conditional service argument that should not be present. This condition could also elicit a Reject PDU with a Reject Reason of INVALID\_TAG.

**INVALID\_DATA\_ENCODING** - Generated in response to a confirmed request APDU that conveys a parameter whose encoding is not valid for the datatype of the parameter.

**INVALID\_PARAMETER\_DATA\_TYPE** - Generated in response to a confirmed request APDU in which the encoding of one or more of the service parameters does not follow the correct type specification. This condition could also elicit a Reject PDU with a Reject Reason of **INVALID\_TAG**.

INVALID\_TAG - While parsing a message, an invalid tag was encountered. Since an invalid tag could confuse the parsing logic, any of the following Reject Reasons may also be generated in response to a confirmed request containing an invalid tag: <a href="INCONSISTENT\_PARAMETERS">INVALID\_PARAMETER\_DATA\_TYPE</a>, <a href="MISSING\_REQUIRED\_PARAMETER">MISSING\_REQUIRED\_PARAMETER</a>, and TOO\_MANY\_ARGUMENTS.

MISSING\_REQUIRED\_PARAMETER - Generated in response to a confirmed request APDU that is missing at least one mandatory service argument. This condition could also elicit a Reject PDU with a Reject Reason of INVALID\_TAG.

**PARAMETER\_OUT\_OF\_RANGE** - Generated in response to a confirmed request APDU that conveys a parameter whose value is outside the range defined for this service.

**TOO\_MANY\_ARGUMENTS** - Generated in response to a confirmed request APDU in which the total number of service arguments is greater than specified for the service. This condition could also elicit a Reject PDU with a Reject Reason of INVALID TAG.

**UNDEFINED\_ENUMERATION** - Generated in response to a confirmed request APDU in which one or more of the service parameters is decoded as an enumeration that is not defined by the type specification of this parameter.

**UNRECOGNIZED\_SERVICE** - Generated in response to a confirmed request APDU in which the Service Choice field specifies an unknown or unsupported service.

**OTHER** - Generated in response to a confirmed request APDU that contains a syntax error for which an error code has not been explicitly defined.

## **Problem:**

A device that receives a message containing an INVALID\_PARAMETER\_DATA\_TYPE is allowed to return an INVALID\_TAG. Based on the definition of INVALID\_TAG, can the device alternatively return INCONSISTENT\_PARAMETERS, MISSING\_REQUIRED\_PARAMETER, or TOO MANY ARGUMENTS reject reasons?

## **Interpretation:**

A device that receives a message that contains an invalid tag, inconsistent parameters, an invalid data type, missing required parameters, or too many parameters is allowed to return a reject reason of INVALID\_TAG, INCONSISTENT\_PARAMETERS, INVALID\_PARAMETER\_DATA\_TYPE, MISSING\_REQUIRED\_PARAMETER, or TOO MANY ARGUMENTS.

**Question:** Is this Interpretation correct?

Answer: Yes.

<u>Comment:</u> A device that receives a message that contains an invalid tag, inconsistent parameters, an invalid data type, missing required parameters, or too many parameters is allowed to return any reject reason.