

Application Notes Affected: AN2005-005 revision 1.4
AN2005-006 revision 1.4

Bulletin Reference: **TB0043 Iss 4**

Bulletin Type: **Clarification / ~~Design Change~~**

Status: **~~Circulated for comment / Rejected~~ / Accepted**

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1 Overview

This Technical Bulletin is being used to collect clarification comments to the Application Notes, raised when implementers ask detailed questions about their understanding of the contents of the Notes:

1. Various IC records used to configure details of “points” show an entry called Point Type. Some of these entries have an explanation that refers to specific point types, others are more general and just state:

“All point type groups are valid”

This has been interpreted by an implementer as meaning all DNP3 point groups and thus he expected to be able to use the IC record to configure string points. This is not the case; the IC records are only intended to be used with the point types pertinent to WITS i.e. binary inputs, double-bit binary inputs, binary outputs, counters, analogue inputs and analogue outputs.

AN2005-006 needs clarification for IC records 1000, 1001 and 1009.

2. The WITS PSA Test Specification explains concisely the expected results when an “action inhibit” is applied or removed i.e. it states that persistence and hysteresis are not applied. The Application Note states that the response to an action inhibit being applied or removed is “immediate”. This implies that persistence and hysteresis will not be applied, but an implementer did not realise this implication.

AN2005-005 section 2.8 could be clarified to explicitly state that persistence and hysteresis are not applied.

3. The introductory section for the data sets Application Note explains the use of data set prototypes and includes an example that references the Health Check Data Set. In this example the UUID does not match the UUID in the formal definition of the Health Check Data Set. Although the example does state “e.g.” it should be consistent with other parts of the Application Notes.

AN2005-005 section 2.1 should be corrected to show the correct UUID.

NB. In section 2 onwards, text that is shown in **red** represents words to be removed from the application notes and text in **blue** represents words to be inserted into the notes.

2 Changes to the Application Notes

2.1 AN2005-006, Clarify “point type” in IC records 1000, 1001 and 1009

2.1.1 Change front page as shown:

Revision 1.45

July 2012 **September 2012**

2.1.2 Add to the “Change History” as shown:

Date	Revision	WITS-DNP3 Version	Details
July 2012	1.4	2.0	Correctly capitalise data set names. Clarification of number presentation in the IC examples.
September 2012	1.5	2.0	Added clarification about “Point Type” to IC records 1000, 1001 and 1009.

2.1.3 Point Type description following table 2-5 (IC record 1000)

Amend the description as shown:

Point Type (Element 3)

The point type is the type of point using standard DNP3 group types. **All point type groups are valid** Supported groups are 1, 3, 10, 20, 30 and 40.

2.1.4 Point Type description following table 2-6 (IC record 1001)

Amend the description as shown:

Point Type (Element 3)

The point type is the type of point using standard DNP3 group types. **All point type groups are valid** Supported groups are 1, 3, 10, 20, 30 and 40.

2.1.5 Point Type description following table 2-14 (IC record 1009)

Amend the description as shown:

Point Type (Element 3)

The point type is the type of point using standard DNP3 group types. **All point type groups are valid** Supported groups are 1, 3, 10, 20, 30 and 40.

2.2 AN2005-005

2.2.1 Change front page as shown:

Revision 1.45

July 2012 **September 2012**

2.2.2 Add to the “Change History” as shown:

Date	Revision	WITS-DNP3 Version	Details
July 2012	1.4	2.0	Correct the examples to use Little Endian formats. Correct the Counter Event Data Set examples to use UINT values and not FLOAT. Correct the words about the use of static data set instances in class 0 poll responses. Correctly capitalise data set names.
September 2012	1.5	2.0	Corrected UUID in example describing the use of data set prototypes. Added clarification to behaviour of action inhibit.

2.2.3 Table at the end of section 2.8

Correct the UUID in the table as shown:

3 rd	0x13	Descriptor element length	Reference to a Data Set Prototype
	0x06	Prototype descriptor code (PTYP)	
	0x00	No data type code (placeholder code)	
	0x00	Maximum data length	
	e.g. 0x15, 0x2b, 0x6a, 0x54, 0x93, 0x13, 0x47, 0xff, 0xbc, 0x75, 0x24, 0xf8, 0x4c, 0x76, 0x23, 0xdc 298C73B7 8B86 4B57 9F93 57261F82C9C9	Prototype UUID (optional name is not used)	

2.2.4 Text at the end of section 2.8

Add the paragraph as shown to the end of section 2.8:

Because the action must be performed immediately this means that the action is performed without applying persistence. For analogue points this also means that the action is performed without applying hysteresis.