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Project ZigBee Alliance

Title **ZigBee Green Power: Draft Protocol Implementation Conformance (PICS) Proforma**

Document **105850r18**

Date Submitted **July 5, 2012**

Source **Bozena Erdmann** (Technical Editor) Voice: +31 621 29 22 08
Philips bozena.erdmann@philips.com

Re: ZigBee PICS for the ZigBee Green Power feature

Abstract As a part of formal conformance testing, manufacturers will be asked to submit a statement of protocol conformance with respect to the appropriate ZigBee devices required by the application profile under test. This document is intended to provide the form of that statement of conformance for the ZigBee Green Power feature.

Purpose This document, after review by the relevant working groups, should provide a form whereby developers can proffer a statement of protocol conformance to be tested under profile testing.

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ZigBee Alliance, Inc.
2694 Bishop Drive, Suite 275
San Ramon, CA 94583

References

The following standards contain provisions, which, through reference in this document, constitute provisions of this standard. All the standards listed are normative references. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

1.1 ZigBee Alliance documents

- [R1] ZigBee document 053474r19: ZigBee Specification 2007
- [R2] ZigBee document 08006r03: ZigBee 2007 Layer PICS and Stack Profiles
- [R3] ZigBee document 075123r02, ZigBee Cluster Library Specification
- [R4] ZigBee document 095499r22: ZigBee Green Power Specification
- [R5] ZigBee document 105521r19: ZigBee Green Power test specification
- [R6] ZigBee document 064113r08: ZigBee Cluster Library PICS

1.2 IEEE documents

- [R7] IEEE Standard for Part 15.4: Wireless Medium Access Control (MAC) and Physical Layer (PHY) specifications for Low Rate Wireless Personal Area Networks (LR-WPANs), 2003.

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Change history

The following table shows the change history for this specification.

Table 1 – Revision change history for revision 1

Revision	Version	Description
00	0.0	Draft – according to 095499r09.
01	0.0	Corrections to the draft, according to ZGP spec 095499r10 work in progress
02	0.0	Corrections to the draft, according to ZGP spec 095499r10 work in progress and ZGP test spec 105521r06 work in progress; Started linking the PICS items with the test items
03	0.7	Adding LPED
04	0.7	Redlined 0.7 version for CSG and ZARC review in .docx format
05	0.7	Clean 0.7 version for CSG and ZARC review in .pdf format
06	0.9	Implementing the comments from the CSG LB1 (ZigBee document 106106), the Frame Type comment as discussed during the joint meetings with ZARC and CSG in Dublin, the comments from the Dublin test event (ZigBee document 106132) and the ZigBee core stack r19 errata.
07	0.9	Implementing the comments from the CSG rLB1 (ZigBee document 11144, 11191). Splitting the PICS into ZigBee stack profile errata, GreenPower cluster PICS and ZGPD PICS.
08	0.9	Clean .pdf version of r07.
09	0.9	Incorporating the comments from the CSG rLB2 (ZigBee document 115377). The major change is making the support of ZGP feature optional for all devices.
10	0.9	Clean specification version after CSG v0.7/v0.9 approval. All changes accepted and all change-related footnotes removed.
11	0.95	Implementing clarifications from Eindhoven test event (ZigBee document docs-11-5578) and Hull test event (ZigBee document docs-11-5603). Used as baseline for Barcelona certification event.
12	0.95	Implementing clarifications from Barcelona certification event (ZigBee document docs-11-5717).
13	0.95	Implementing clarifications from March 2012 test event (ZigBee document docs-12-0195).
14	1.0 candidate	Implementing clarifications from June2012 certification event (ZigBee document docs-12-0275). Documenting the features certified during the June2012 certification event.
15	1.0 candidate	Cross-references with ZGP specification updated/completed. Clean version (changes approved; editorial footnotes removed).
16	1.0 candidate	List of NOT certified ZGP functionalities added.
17	1.0 candidate	Redlined version; editorial bugs fixed.
18	1.0 candidate	Clean version of r17 (changes approved; editorial footnotes removed).

2 Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given standard. Such a statement is called a protocol implementation conformance statement (PICS).

2.1 Scope

This document provides the protocol implementation conformance statement (PICS) proforma for the ZigBee specifications cited in Reference [R4] in compliance with the relevant requirements.

This document addresses the ZigBee Green Power core stack feature, together with the necessary cluster-level components.

2.2 Purpose

The supplier of a protocol implementation claiming to conform to the ZigBee Green Power feature shall complete the following PICS proforma and accompany it with the information necessary to identify fully both the supplier and the implementation.

The PICS is in the form of answers to a set of questions in the PICS proforma. The questions in a proforma consist of a systematic list of protocol capabilities and options as well as their implementation requirements. The implementation requirement indicates whether implementation of a capability is mandatory, optional, or conditional depending on options selected. When a protocol implementer answers questions in a PICS proforma, they would indicate whether an item is implemented or not, and provide explanations if an item is not implemented.

3 Green Power certification status

The current status of the certification and golden unit availability for GreenPower functionality is listed in the tables below.

3.1 Not certified ZGP functionality

Table 2 – Not certified ZGP functionality

Item number	Item description	Reference
GPPCSF6 GPPCCF6	Lightweight unicast communication feature	[R4] A.3.2.8
GPPCSF20 GPPCCF20	ZGPD IEEE address feature	[R4] A.3.2.8
GPCF12B GPCF13B	TC-LK encryption of the ZGPD key exchanged during commissioning	[R4] A.3.9, A.1.5.9
ZGPD0 ZGPS1A	ZGP Simple Generic 1-state Switch	[R4] A.4.3
ZGPD1 ZGPS1B	ZGP Simple Generic 2-state Switch	[R4] A.4.3
ZGPD3 ZGPS3	ZGP Level Control Switch	[R4] A.4.3
ZGPD4 ZGPS4	ZGP Simple Sensor	[R4] A.4.3
ZGPD5 ZGPS14A	ZGP Advanced Generic 1-state Switch	[R4] A.4.3
ZGPD6 ZGPS14B	ZGP Advanced Generic 2-state Switch	[R4] A.4.3
ZGPD10 ZGPS5	ZGP Color Dimmer Switch	[R4] A.4.3
ZGPD11 ZGPS6	ZGP Light Sensor	[R4] A.4.3
ZGPD12 ZGPS7	ZGP Occupancy Sensor	[R4] A.4.3
ZGPD20 ZGPS8	ZGP Door Lock Controller	[R4] A.4.3
ZGPD30 ZGPS9	ZGP Temperature Sensor	[R4] A.4.3
ZGPD31 ZGPS10	ZGP Pressure Sensor	[R4] A.4.3
ZGPD32 ZGPS11	ZGP Flow Sensor	[R4] A.4.3
ZGPD33 ZGPS12, ZGPS13, ZGPS9, ZGPS6	ZGP Indoor Environment Sensor	[R4] A.4.3

3.2 Certified ZGP functionality

Table 3 – To-date certified device types

Item number	Item description	Reference
GPDT0	ZigBee Green Power Device (ZGPD) functionality	[R4] A.1.6, A.1.7
GPDT2f	ZGP proxy functionality of ZigBee Green Power Proxy (ZGPP) device	[R4] A.3.2.3
GPDT2c	ZGP proxy functionality of ZigBee Green Power Combo (ZGPC) device	[R4] A.3.2.4
GPDT3t+	ZGP sink functionality of ZigBee Green Power Target+ (ZGPT+) device	[R4] A.3.2.2
GPDT3c	ZGP sink functionality of ZigBee Green Power Combo (ZGPC) device	[R4] A.3.2.4
GPDT3cm	ZGP sink functionality of ZigBee Green Power Combo minimum (ZGPCm) device	[R4] A.3.2.7

Table 4 – To-date certified ZGP functionality

Item number	Item description	Reference
GPPCSF1 GPPCCF1	ZGP feature	[R4] A.3.2.8
GPPCSF2 GPPCCF2 GPF4A	Direct communication (via ZGP stub) feature	[R4] A.3.2.8
GPPCSF3 GPPCCF3	Derived groupcast communication feature	[R4] A.3.2.8
GPPCSF4 GPPCCF4	Pre-commissioned groupcast communication feature	[R4] A.3.2.8
GPPCSF5 GPPCCF5	Unicast communication feature	[R4] A.3.2.8
GPPCSF7 GPPCCF7 GPF9A GPF100 GPF102 GPF108	Single-hop (in sink's range) bidirectional operation feature	[R4] A.3.2.8
GPPCSF8 GPPCCF8 GPF9A GPF100 GPF102 GPF108	Multi-hop (Proxy-based) bidirectional operation feature	[R4] A.3.2.8
GPPCSF9 GPPCCF9	Proxy Table maintenance (active and passive) feature	[R4] A.3.2.8
GPPCSF10 GPPCCF10 GPCF1 GPCF2 GPCF4 GPCF10 GPCF11 GPCF12A GPCF13A	Single-hop (in sink's range) commissioning (unidirectional and bidirectional) feature	[R4] A.3.2.8

Item number	Item description	Reference
GPPCSF11 GPPCCF11 GPCF1 GPCF2 GPCF4 GPCF10 GPCF11 GPCF12A GPCF13A	Multi-hop (Proxy-based) commissioning (unidirectional and bidirectional) feature	[R4] A.3.2.8
GPPCSF12 GPPCCF12 GPCF1 GPCF2 GPCF4 GPCF10 GPCF11 GPCF12A GPCF13A	CT-based commissioning feature	[R4] A.3.2.8
GPPCSF13 GPPCCF13 GPF9A GPF100 GPCF7	Maintenance of ZGPD (deliver channel/key during operation) feature	[R4] A.3.2.8
GPPCSF14 GPPCCF14 GPF8	zgpSecurityLevel = 0b00 feature	[R4] A.3.2.8
GPPCSF15 GPPCCF15 GPF7	zgpSecurityLevel = 0b01 feature	[R4] A.3.2.8
GPPCSF16 GPPCCF16 GPF6	zgpSecurityLevel = 0b10 feature	[R4] A.3.2.8
GPPCSF17 GPPCCF17 GPF5	zgpSecurityLevel = 0b11 feature	[R4] A.3.2.8
GPPCSF18	Sink Table-based groupcast forwarding feature	[R4] A.3.2.8
GPPCSF19	Translation Table feature	[R4] A.3.2.8
ZGPD2 ZGPS2	ZGP On/Off switch functionality	[R4] A.4

4 Abbreviations and special symbols

Notations for requirement status:

M	Mandatory
O	Optional
O.n	Optional, but support of at least one or only one (as indicated in the footnote to the O.n label) of the group of options labeled O.n is required. (Clarification - the number 'n' is a label for the group, not a count of the number of options within the group, or the ordinal number of the option within the group. All options in the group are indicated identically as O.n)
N/A	Not applicable
X	Prohibited
Item label: Status	Status is conditional on support of the item with the given item label.

Examples

1/ If items labeled A and B are both marked "O.n" this indicates that the status is optional for both A and B, but at least one of the two features described by items A and B is required to be implemented.

2/ If m items are each marked A: O.n, this indicates that, if item A is implemented, the status is optional for all of them, but at least one of the m features described by the items is required to be implemented.

5 Instructions for completing the PICS proforma

If a given implementation is claimed to conform to this standard, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma in this annex, and shall preserve the numbering and naming and the ordering of the PICS proforma.

A PICS which conforms to this document shall be a conforming PICS proforma completed in accordance with the instructions for completion given in this annex.

The main part of the PICS is a fixed-format questionnaire, divided into five tables. Answers to the questionnaire are to be provided in the rightmost column, either by simply marking an answer to indicate a restricted choice (such as Yes or No), or by entering a value, set, or range of values.

6 Identification of the implementation

Implementation under test (IUT) identification

IUT name: **GreenPeak ZGPD prototype platform**

IUT version: **1.0**

System under test (SUT) identification

SUT name: **GreenPeak ZGPD prototype platform**

Software Version: **1.0**

Hardware Version: **GP01262 R2.01 B**

Operating system (optional): **N/A**

ZigBee stack revision and profile (should be PRO r20 or later): **N/A**

Product supplier

Name: **GreenPeak Technologies BV**

Address: **Vinkenburgstraat 2A
3512AB Utrecht
The Netherlands**

Telephone number:

Facsimile number:

Email address:

Additional information:

Client

Name:

Address:

Telephone number:

Facsimile number:

Email address:

Additional information:

PICS contact person

Name: ***BOEYKENS Steven***

Address: ***Lindestraat 19
9240 Zele
Belgium***

Telephone number: ***+32 52 45 87 34***

Facsimile number:

Email address: ***steven.boeykens@greenpeak.com***

Additional information:

PICS/System conformance statement

7 Identification of the protocol

This PICS proforma applies to the ZigBee Green Power feature, cited in Reference [R4].

8 Global statement of conformance

The implementation described in this PICS proforma meets all of the mandatory requirements of the referenced standards:

ZigBee Green Power – 095499r22ZB

Yes

No

Note -- Answering 'No' indicates non-conformance to the specified protocol standard. Non-supported mandatory capabilities are to be identified in the following tables, with an explanation by the implementer explaining why the implementation is non-conforming.

The supplier will have fully complied with the requirements for a statement of conformance by completing the statement contained in this subclause. That means, by clicking the above, the statement of conformance is complete.

9 ZigBee stack profile [R2] errata: ZGP stub and ZGPPm

9.1 Add new chapter 8.7 “ZigBee Green Power PICS” to the 08006r03 spec

9.2 Add new chapter 8.7.1 “ZigBee Green Power roles”

Item number	Item description	Reference	ZigBee Status	Feature set Support	Additional Constraints	Platform Support
GPDT0	Does the product support ZGPD functionality?	[R4] A.1.6, A.1.7		ZigBee	FDT1: X FDT2: X FDT3: X	Y
				ZigBee	FDT1: X FDT2: X FDT3: X	Y
GPDT1	Does the product support the functionality of ZGP infrastructure device?	[R4] A.3.2		ZigBee	FDT1: O FDT2: O FDT3: O	N
				ZigBee	FDT1: O FDT2: O FDT3: O	N
GPDT2	Does the product support ZGP proxy functionality?	[R4] A.3.2.8		ZigBee	X	
				ZigBee	FDT1&GPDT1: O.1 ¹ FDT2&GPDT1: O.1 FDT3&GPDT1: O.1	N
GPDT2m	Is the product programmed as a ZGPPm?	[R4] A.3.2.6		ZigBee	X	
				ZigBee	FDT1&GPDT2: O.2 FDT2&GPDT2: O.2 FDT3&GPDT2: O.2 ²	N
GPDT2f	Is the product programmed as a ZGPP?	[R4] A.3.2.3		ZigBee	X	
				ZigBee-PRO	FDT1: O.2 FDT2: O.2 FDT3&GPDT2: O.2	N
GPDT2c	Is the product programmed as a ZGPC?	[R4] A.3.2.4		ZigBee-PRO	X	
				ZigBee-PRO	FDT1: O.2 FDT2: O.2 FDT3&GPDT2: O.2	N
GPDT3	Does the product support ZGPS functionality?	[R4] A.3.2.8		ZigBee	X	
				ZigBee	FDT & GPDT1: O.1 FDT2&GPDT1: O.1 FDT3&GPDT1: O.1	N
GPDT3t	Is the product programmed as a ZGPT?	[R4] A.3.2.1		ZigBee	X	

¹ O.1: DUT shall support at least one of these options.

² O.2: DUT shall support at least one of these options.

				ZigBee-PRO	FDT1&GPDT3: O.3 ³ FDT2&GPDT3: O.3 FDT3&GPDT3: O.3		N
GPDT3t+	Is the product programmed as a ZGPT+?	[R4] A.3.2.2		ZigBee-PRO	X		
				ZigBee-2006	FDT1&GPDT3: O.3 FDT2&GPDT3: O.3 FDT3&GPDT3: O.3		N
GPDT3c	Is the product programmed as a ZGPC?	[R4] A.3.2.4		ZigBee-2006	X		
				ZigBee-2007	FDT1&GPDT3: O.3 FDT2&GPDT3: O.3 FDT3&GPDT3: O.3		N
GPDT3cm	Is the product programmed as a ZGPCm?	[R4] A.3.2.7		ZigBee-PRO	X		
				ZigBee-2006	FDT1&GPDT3: O.3 FDT2&GPDT3: O.3 FDT3&GPDT3: O.3		N
GPDT4	Does the product support ZGP commissioning tool functionality?	[R4] A.3.2.5		ZigBee-PRO	O		
				ZigBee-2006	FDT1&GPDT1: O.1 FDT2&GPDT1: O.1 FDT3&GPDT1: O.1		N
GPDT4ct	Is the product programmed as a ZGP Commissioning Tool?	[R4] A.3.2.5		ZigBee-2007	O		
				ZigBee-2006	FDT1&GPDT4: O FDT2&GPDT4: O FDT3&GPDT4: O		N

³ O.3: DUT shall support only one of these options.

9.3 Add new chapter 8.7.2 “ZigBee Green Power stub capabilities of ZGP infrastructure devices”

This PICS table applies to ZGP infrastructure devices GPDT1, GPDT2, GPDT3 and GPDT4.

All PICS items applicable for all the generic ZGP device types, use the generic item label: GPDT1 if applicable to all devices, or GPDT2, GPDT3, and GPDT4, if applicable in general to ZGPP, ZGPS or ZGPCT functionality, respectively.

The sub-type specific item labels (GPDT2f, GPDT2m, GPDT2c, GPDT3t, GPDT3t+, GPDT3c, GPDT3cm) are used for sub-type specific requirements.

Since GPDT0 are not ZigBee-PRO devices, their features are not discussed here. Please see ZCL PICS for GPDT0 compliance requirements.

Item number	Item description	Reference	ZigBee Status	Feature set Support	Additional Constraints	Platform Support
GPF1	Does the device implement cZGP stub?	[R4] A.1		ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPF2	Does the device implement dZGP stub?	[R4] A.1		ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPF3	Does the device support the general ZigBee Green Power frame format?	[R4] A.1.4		ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPF4A	Does the device support receiving GPDF frame format with ApplicationID sub-field of the Extended NWK Frame Control field set to 0b000?	[R4] A.1.4		ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPF4B	Does the device support receiving GPDF frame format with ApplicationID sub-field of the Extended NWK Frame Control field set to 0b010?			ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2: O GPDT3: O GPDT4: M	N/A
GPF5	Does the device's dZGP stub support GPDF SecurityLevel=0b11?	[R4] A.1.5.4; A.3.7.2		ZigBee	GPDT4: M	N/A
				ZigBee-PRO	GPDT2m: O GPDT2f: M GPDT2c: M GPDT3t: X GPDT3t+: O.4 ⁴ GPDT3c: M GPDT3cm: O.4 GPDT4: M	N/A

⁴ O.4: DUT shall support at least one of those options.

GPF6	Does the device's dZGP stub support GPDF SecurityLevel=0b10?	[R4] A.1.5.4; A.3.7.2		ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: O.4 GPDT3c: M GPDT3cm: O.4 GPDT4: M		N/A
GPF7	Does the device's dZGP stub support GPDF SecurityLevel=0b01?	[R4] A.1.5.4; A.3.7.2		ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2m: O GPDT2f: M GPDT2c: M GPDT3t: X GPDT3t+: O.4 GPDT3c: M GPDT3cm: O.4 GPDT4: M		N/A
GPF8	Does the device's dZGP stub support GPDF SecurityLevel=0b00?	[R4] A.1.5.4; A.3.7.2		ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2m: M GPDT2f: M GPDT2c: M GPDT3t: X GPDT3t+: O.4 GPDT3c: M MGPD3cm: O.4 GPDT4: M		N/A
GPF9A	Does the device support transmitting GPDF frame format with ApplicationID sub-field of the Extended NWK Frame Control field set to 0b000?	[R4] A.1		ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2m: O GPDT2f: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M		N/A
GPF9B	Does the device support transmitting GPDF frame format with ApplicationID sub-field of the Extended NWK Frame Control field set to 0b010?			ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2: O GPDT3: O GPDT4: M		N/A
GPSF1	Does the device support zgpTxQueue?	[R4] A.1		ZigBee	GPDT4: M		N/A
				ZigBee-PRO	GPDT2m: O GPDT2f: M GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M		N/A

9.4 Add new chapter 8.7.3 “ ZigBee Green Power: Support of minimal proxy functionality”

This PICS table applies to ZGP infrastructure devices GPDT1, GPDT2, GPDT3 and GPDT4.

All PICS items applicable for all the generic ZGP device types, use the generic item label: GPDT1 if applicable to all devices, or GPDT2, GPDT3, and GPDT4, if applicable in general to ZGPP, ZGPS or ZGPCT functionality, respectively.

The sub-type specific item labels (GPDT2f, GPDT2m, GPDT2c, GPDT3t, GPDT3t+, GPDT3c, GPDT3cm) are used for sub-type specific requirements.

Since GPDT0 are not ZigBee-PRO devices, their features are not discussed here. Please see ZCL PICS for GPDT0 compliance requirements.

Item number	Item description	Reference	ZigBee Status	Feature set Support	Additional Constraints	Platform Support
GPPC0	Does the device support minimum ZGP proxy functionality?	[R4] A.3.2.6		ZigBee	X	
				ZigBee-PRO	FDT1: O FDT2: O FDT3: O	
GPPC1	Is the GreenPower cluster supported?	[R4] A.3		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPC0: M	
GPPC2	Does the device support EPP?	[R4] A.3.1		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPC0: M	
GPPC3	Does the device support EPP duplicate filtering?	[R4] A.3.6.1		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPC0: M	
GPPCC1	Is the GreenPower cluster supported as a client?	[R4] A.3.4		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPC0: O.5 ⁵ GPPC0&GPDT2m: M	
GPPCC2	Is the zgppMaxProxyTableEntries attribute supported?	[R4] A.3.4.2.1		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPCC1: M	
GPPCC3A	Is the Proxy Table attribute supported?	[R4]A.3.4.2.2		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPCC1: M	
GPPCC3B	Is the minimum number of 10 entries in the Proxy Table attribute supported?	[R4]A.3.4.2.2		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPCC1: M	
GPPCC8	Is the zgppFeatures attribute supported?	[R4]A.3.4.2.7		ZigBee	GPDT2m: X GPDT3cm: X	
				ZigBee-PRO	GPPCC1: M	
GPPCC9	Is the zgppActiveFeatures	[R4]A.3		ZigBee	GPDT2m: X	

⁵ O.5: DUT shall support at least one of those options.

	attribute supported?	4.2.8			GPDT3cm: X		
				ZigBee-PRO	GPPCC1: M		N/A
GPPCS1	Is the GreenPower cluster supported as a server?	[R4]A.3.3		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPC0: O.5 GPPC0&GPDT3cm: M		N/A
GPPCS2	Is the zgppMaxSinkTableEntries attribute supported?	[R4]A.3.3.2.1		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCS1: M		N/A
GPPCS3A	Is the Sink Table attribute supported?	[R4]A.3.3.2.2		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCS1: M		N/A
GPPCS3B	Is the minimum number of 5 entries in the Sink Table attribute supported?	[R4]A.3.3.2.2		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCS1: M		N/A
GPPCS8	Is the zgpsFeatures attribute supported?	[R4]A.3.3.2.7		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCS1: M		N/A
GPPCS9	Is the zgpsActiveFeatures attribute supported?	[R4]A.3.3.2.8		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCS1: M		N/A
GPPC101	Is the zgppSharedSecurityKeyType attribute supported?	[R4]A.3.3.3.1		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPC0: M		N/A
GPPC102	Is the zgppSharedSecurityKey attribute supported?	[R4]A.3.3.3.2		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPC0: M		N/A
GPPC103	Is the zgppLinkKey attribute supported?	[R4]A.3.3.3.3		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPC0: M		N/A
GPPCC102	Is transmission of the ZGP Notification command in derived groupcast supported?	[R4]A.3.3.4.1		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPDT2m: M GPDT3cm: O		N/A
GPPCC103	Is transmission of the ZGP Notification command in commissioned groupcast supported?	[R4]A.3.3.4.1		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPDT2m: M GPDT3cm: M		N/A
GPPCC110	Is reception of the ZGP Pairing command supported?	[R4]A.3.3.5.2		ZigBee	GPDT2m: X GPDT3cm: X		
				ZigBee-PRO	GPPCC1: M		N/A
GPPCS110	Is reception of the ZGP Pairing	[R4]		ZigBee-PRO	GPDT2m: X		

	Configuration command supported?	A.3.3.4. 7		ZigBee	GPDT3cm: X		
				-PRO	GPPCS1: M		N/A

9.5 Modify the Table in “8.6.3.1.5 ZigBee Device Objects functions”, p.89, of 08006r03

9.5.1 After AZD18, add

AZD19	Does the device support conflict checking with its own short address, on reception of Device_amnce with IEEE address 0xffffffffffffffff?	[R4] A.2	M	N/A
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9.6 Modify the Table in “8.4.2.2 Network layer frames” to include alias usage for Tx and Rx, p.47,

9.6.1 after NDF4, add

NDF5	Does the device support reception of ZigBee NWK frames with non-incremental sequence number in the NWK header Sequence Number field?	ZigBee	GPDT4: M	N/A
		ZigBee-PRO	M	N/A
NDF6	Does the device support transmission of ZigBee NWK frames with AliasSrcAddr and AliasSeqNumb, as supplied by next higher layer?	ZigBee	GPDT4: O	N/A
		ZigBee-PRO	GPDT2: M GPDT3t: X GPDT3t+: X GPDT3c: X GPDT3cm: M GPDT4: M	N/A

10 ZCL PICS [R6] errata: Add new chapter 7.1.1 GreenPower cluster

The following tables are composed of the detailed questions to be answered, which make up the PICS proforma.

10.1 Add new chapter 7.1.1.1 “GreenPower Device Types”

Table 5 – ZGP device types

Item number	Item description	Reference	Status	Support
GPDT0	Does the product support ZGPD functionality?	[R4] A.1.6, A.1.7	O.6 ⁶	Y
GPDT1	Does the product support the functionality of ZGP infrastructure device?	[R4] A.3.2	O.6	N
GPDT2	Does the product support ZGPP functionality?	[R4] A.3.2.3	GPDT1: O.7 ⁷	N
GPDT2f	Is the product programmed as a ZGPP?	[R4] A.3.2.3	GPDT2: O.8 ⁸	N
GPDT2m	Is the product programmed as a ZGPPm?	[R4] A.3.2.6	GPDT2: O.8	N
GPDT2c ⁹	Is the product programmed as a ZGPC?	[R4] A.3.2.4	GPDT2: O.8	N
GPDT3	Does the product support ZGPS functionality?	[R4] A.3.2	GPDT1: O.7	N
GPDT3t	Is the product programmed as a ZGPT?	[R4] A.3.2.1	GPDT3: O.10 ¹⁰	N
GPDT3t+	Is the product programmed as a ZGPT+?	[R4] A.3.2.2	GPDT3: O.10	N
GPDT3c	Is the product programmed as a ZGPC?	[R4] A.3.2.4	GPDT3: O.10	N
GPDT3cm	Is the product programmed as a ZGPCm?	[R4] A.3.2.7	GPDT3: O.10	N
GPDT4	Does the product support ZGP commissioning tool functionality	[R4] A.3.2.5	GPDT1: O.7	N
GPDT4ct	Is the product programmed as a ZGP Commissioning Tool?	[R4] A.3.2.5	GPDT1: O	N

Please note: all PICS items applicable for all the ZGPP and ZGPS subtypes, use the generic item label: GPDT2 or GPDT3, respectively.

The sub-type specific item labels (GPDT2f, GPDT2m, GPDT2c, GPDT3t, GPDT3t+, GPDT3c, GPDT3cm) are used for sub-type specific requirements.

10.2 Add new chapter 7.1.1.2 “GreenPower cluster compliance”

10.3 Add new chapter 7.1.1.2.1 “Features of GreenPower cluster”

The GPPCCF\$ items refer ONLY to the PROXY functionality of the DUT. Analogously, the GPPCSF\$ items refer ONLY to the SINK functionality of the DUT.

Thus, for a ZGPC, each item set covers only a part of ZGPC’s functionality. Therefore, for the two

⁶ O.6 - Device under test shall select only one of these options.

⁷ O.7 - Device under test shall select at least one of these options.

⁸ O.8 - Device under test shall select only one of these options.

⁹ Note: this item covers only the client side, i.e. proxy functionality of the ZGPC.

¹⁰ O.10 – Device under test shall select only one of these options.

functional parts of the ZGPC, both PICS items sets have to be checked independently.

Table 6 – GreenPower cluster feature support

Item number	Item description	Reference	Status	Support
GPPCSF1	Is ZGP feature supported as a server? (ZGP feature sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3: M GPDT4: M	N/A
GPPCSF2	Is Direct communication (via ZGP stub) supported as a server? (Direct communication sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: X GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPPCSF3	Is Derived groupcast communication supported as a server? (Derived groupcast communication sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O.11 ¹¹ GPDT3t+: O.11 GPDT3c: O.11 GPDT3cm: M GPDT4: O	N/A
GPPCSF4	Is Pre-commissioned groupcast communication supported as a server? (Pre-commissioned groupcast communication sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O.11 GPDT3t+: O.11 GPDT3c: O.11 GPDT3cm: M (GPDT3 & GPPCSF3: M) GPDT4: O	N/A
GPPCSF5	Is Unicast communication supported as a server? (Unicast communication sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O.11 GPDT3t+: O.11 GPDT3c: O.11 GPDT3cm: X GPDT4: O	N/A
GPPCSF6	Is Lightweight unicast communication supported as a server? (Lightweight unicast communication sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O.11 GPDT3t+: O.11 GPDT3c: O.11 GPDT3cm: X GPDT4: O	N/A
GPPCSF7	Is Single-hop (in sink's range) bidirectional operation supported as a server? (Single-hop bidirectional operation sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: X GPDT3t+: O GPDT3c: O GPDT3cm: O GPDT4: O	N/A
GPPCSF8	Is Multi-hop (Proxy-based) bidirectional operation supported as a server? (Multi-hop bidirectional operation sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O GPDT3t+: O GPDT3c: O GPDT3cm: O GPDT4: O	N/A
GPPCSF9	Is Proxy Table maintenance (active and passive) supported as a server? (Proxy Table maintenance sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: M GPDT3t+: M GPDT3c: M GPDT3cm: O GPDT4: O	N/A

¹¹ O.11: DUT shall support at least one of those options.

Item number	Item description	Reference	Status	Support
GPPCSF10	Is Single-hop (in sink's range) commissioning (unidirectional and bidirectional) supported as a server? (Single-hop commissioning sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: N/A GPDT3t+: M GPDT3c: M GPDT3cm: M GPDT4: M	N/A
GPPCSF11	Is Multi-hop (Proxy-based) commissioning (unidirectional and bidirectional) supported as a server? (Multi-hop commissioning sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: M GPDT3t+: O GPDT3c: O GPDT3cm: O GPDT4: O	N/A
GPPCSF12	Is CT-based commissioning supported as a server? (CT-based commissioning sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3t: O GPDT3t+: O GPDT3c: O GPDT3cm: M GPDT4: M	N/A
GPPCSF13	Is Maintenance of ZGPD (deliver channel/key during operation) supported as a server? (Maintenance of ZGPD sub-field of the zgpsFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3: O GPDT4: O	N/A
GPPCSF14	Is zgpdSecurityLevel = 0b00 supported as a server? (zgpdSecurityLevel = 0b00 sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O.12 ¹² GPDT4: O	N/A
GPPCSF15	Is zgpdSecurityLevel = 0b01 supported as a server? (zgpdSecurityLevel = 0b01 sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O.12 GPDT4: O	N/A
GPPCSF16	Is zgpdSecurityLevel = 0b10 supported as a server? (zgpdSecurityLevel = 0b10 sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O.12 GPDT4: O	N/A
GPPCSF17	Is zgpdSecurityLevel = 0b11 supported as a server? (zgpdSecurityLevel = 0b11 sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O.12 GPDT4: O	N/A
GPPCSF18	Is SinkTable-based groupcast forwarding supported as a server? (SinkTable-based groupcast forwarding sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3t: O GPDT3t+: O GPDT3c: O GPDT3cm: M GPDT4: O	N/A
GPPCSF19	Is Translation Table feature supported as a server? (Translation Table sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O GPDT4: O	N/A
GPPCSF20	Is ZGPD IEEE address feature supported as a server? (ZGPD IEEE address sub-field of the zgpsFeatures attribute set?)		GPDT2: N/A GPDT3: O GPDT4: M	N/A
GPPCCF1	Is ZGP feature supported as a client? (ZGP feature sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: M GPDT3: N/A GPDT4: O	N/A
GPPCCF2	Is Direct communication (via ZGP stub) supported as a client? (Direct communication sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: M GPDT3: N/A GPDT4: O	N/A
GPPCCF3	Is Derived groupcast communication supported as a client? (Derived groupcast communication sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: M GPDT3t: N/A GPDT3t+: N/A GPDT3c: N/A GPDT3cm: M GPDT4: O	N/A

¹² O.12: DUT shall implement at least one of those options.

Item number	Item description	Reference	Status	Support
GPPCCF4	Is Pre-commissioned groupcast communication supported as a client? (Pre-commissioned groupcast communication sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: M GPDT3t: N/A GPDT3t+: N/A GPDT3c: N/A GPDT3cm: M GPDT4: O	N/A
GPPCCF5	Is Unicast communication supported as a client? (Unicast communication sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2c: M GPDT2f: M GPDT2m: O GPDT3: N/A GPDT4: O	N/A
GPPCCF6	Is Lightweight unicast communication supported as a client? (Lightweight unicast communication sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: O GPDT3: N/A GPDT4: O	N/A
GPPCCF7	Is Single-hop (in sink's range) bidirectional operation supported as a client? (Single-hop bidirectional operation sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3: N/A GPDT4: O	N/A
GPPCCF8	Is Multi-hop (Proxy-based) bidirectional operation supported as a client? (Multi-hop bidirectional operation sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2c: O GPDT2f: O GPDT2m: O GPDT3: N/A GPDT4: O	N/A
GPPCCF9	Is Proxy Table maintenance (active and passive) supported as a client? (Proxy Table maintenance sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2c: M GPDT2f: M GPDT2m: O GPDT3: N/A GPDT4: O	N/A
GPPCCF10	Is Single-hop (in sink's range) commissioning (unidirectional and bidirectional) supported as a client? (Single-hop commissioning sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2: N/A GPDT3: N/A GPDT4: O	N/A
GPPCCF11	Is Multi-hop (Proxy-based) commissioning (unidirectional and bidirectional) supported as a client? (Multi-hop commissioning sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2f: M GPDT2m: O GPDT2c: M GPDT3: N/A GPDT4: O	N/A
GPPCCF12	Is CT-based commissioning supported as a client? (CT-based commissioning sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2c: M GPDT2f: M GPDT2m: O GPDT3: N/A GPDT4: O	N/A
GPPCCF13	Is Maintenance of ZGPD (deliver channel/key during operation) supported as a client? (Maintenance of ZGPD sub-field of the zgppFeatures attribute set?)	[R4] A.3.2.8	GPDT2f: M GPDT2m: O GPDT2c: M GPDT3: N/A GPDT4: O	N/A
GPPCCF14	Is zgpdSecurityLevel = 0b00 supported as a client? (zgpdSecurityLevel = 0b00 sub-field of the zgppFeatures attribute set?)		GPDT2f: M GPDT2m: M GPDT2c: M GPDT3: N/A GPDT4: O	N/A
GPPCCF15	Is zgpdSecurityLevel = 0b01 supported as a client? (zgpdSecurityLevel = 0b01 sub-field of the zgppFeatures attribute set?)		GPDT2f: M GPDT2m: O GPDT2c: M GPDT3: N/A GPDT4: O	N/A
GPPCCF16	Is zgpdSecurityLevel = 0b10 supported as a client? (zgpdSecurityLevel = 0b10 sub-field of the zgppFeatures attribute set?)		GPDT2f: M GPDT2m: M GPDT2c: M GPDT3: N/A GPDT4: O	N/A

Item number	Item description	Reference	Status	Support
GPPCCF17	Is zgpdSecurityLevel = 0b11 supported as a client? (zgpdSecurityLevel = 0b11 sub-field of the zgppFeatures attribute set?)		GPDT2f: M GPDT2m: O GPDT2c: M GPDT3: N/A GPDT4: O	N/A
GPPCCF18	Is SinkTable-based groupcast forwarding supported as a client? (SinkTable-based groupcast forwarding sub-field of the zgppFeatures attribute set?)		GPDT2: N/A GPDT3: N/A GPDT4: N/A	N/A
GPPCCF19	Is Translation Table feature supported as a client? (Translation Table sub-field of the zgppFeatures attribute set?)		GPDT2: N/A GPDT3: N/A GPDT4: N/A	N/A
GPPCCF20	Is ZGPD IEEE address feature supported as a client? (ZGPD IEEE address sub-field of the zgppFeatures attribute set?)		GPDT2: O GPDT3: N/A GPDT4: N/A	N/A

10.3.1 Add new chapter 7.1.1.2.2 “GreenPower cluster: items common to client and server”

Table 7 – GreenPower cluster items common to client and server

Item number	Item description	Reference	Status	Support
GPPC1	Is the GreenPower cluster supported?	[R4] A.3	GPDT1: M	N/A
GPPC2	Does the device support EPP?	[R4] A.3.1	GPDT1: M	N/A
GPPC3	Does the device support EPP duplicate filtering?	[R4] A.3.6.1.2	GPDT1: M	N/A
GPPC3r	Does the device support random MAC sequence number for ZGPD commands' duplicate filtering?	[R4] A.3.6.1.2	GPDT1&& GPF8: M	N/A
GPPC3i	Does the device support incremental MAC sequence number for ZGPD commands' duplicate filtering?	[R4] A.3.6.1.2	GPDT1&& GPF8: M	N/A
GPPC3s	Does the device support ZGPD security frame counter for ZGPD commands' duplicate filtering?	[R4] A.3.6.1.2	GPDT1&& (GPF5 GPF6 GPF7): M	N/A
GPPC4	Does the device support transmission of Device_annce for the alias?	[R4] A.3.6.3.3, A.3.6.3.4	GPDT1: M	N/A
GPPC5	Does the device support conflict checking for the alias on reception of Device_annce?	[R4] A.3.6.3.3, A.3.6.3.4	GPDT1: M	N/A
GPPC101	Is the <i>zgpSharedSecurityKeyType</i> attribute supported?	[R4] A.3.3.3.1	GPDT1&& (GPF5 GPF6 GPF7): M	N/A
GPPC102	Is the <i>zgpSharedSecurityKey</i> attribute supported?	[R4] A.3.3.3.2	GPDT1&& (GPF5 GPF6 GPF7): M	N/A
GPPC103	Is the <i>zgpLinkKey</i> attribute supported?	[R4] A.3.3.3.3	GPDT1&& (GPF5 GPF6 GPF7): M	N/A

10.3.2 Add new chapter 7.1.1.2.3 “Server side”

Table 8 – GreenPower cluster server capabilities

Item number	Item description	Reference	Status	Support
GPPCS1	Is the GreenPower cluster supported as a server?	[R4] A.3.3	GPDT2: O GPDT3: M GPDT4: M GPPCSF1: M	N/A

Item number	Item description	Reference	Status	Support
GPPCS2	Is the <i>zgpsMaxSinkTableEntries</i> attribute supported?	[R4] A.3.3.2.1	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS3A	Is the Sink Table attribute supported?	[R4] A.3.3.2.2	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS3B	Is the required minimum number of entries in the Sink Table attribute supported? ¹³	[R4] A.3.3.2.2	GPDT3: 5	N/A
GPPCS4	Is the <i>zgpsCommunication</i> mode attribute supported?	[R4] A.3.3.2.3	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS5	Is the <i>zgpsCommissioningExitMode</i> attribute supported?	[R4] A.3.3.2.4	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS6	Is the <i>zgpsCommissioningWindow</i> attribute supported?	[R4] A.3.3.2.5	GPDT2: X GPDT3: O GPDT4: O	N/A
GPPCS7	Is the <i>zgpsSecurityLevel</i> attribute supported?	[R4] A.3.3.2.6	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS8	Is the <i>zgpsFeatures</i> attribute supported?	[R4] A.3.3.2.7	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS9	Is the <i>zgpsActiveFeatures</i> attribute supported?	[R4] A.3.3.2.8	GPDT2: X GPDT3: M GPDT4: O	N/A
GPPCS99	Is Translation Table supported?	[R4] A.3.5.2.2	GPDT2: X GPDT3: O GPDT4: O GPPCSF19: M	N/A
GPPCS100	Is reception of the ZGP Notification command supported?	[R4] A.3.2.10 [R4] A.3.3.3	GPDT2c: M GPDT2f: M GPDT2m: O GPDT3: M GPDT4: O	N/A
GPPCS101	Is reception of the ZGP Notification command in unicast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2: X GPDT3t GPDT3t+ GPDT3c: O.14 ¹⁴ GPDT3cm: X GPPCSF5 GPPCSF6: M GPDT4: O	N/A
GPPCS102	Is reception of the ZGP Notification command in derived groupcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2& (GPPCCF8 GPPCCF9 GPPCCF13) : M GPDT3cm: O GPDT3t GPDT3t+ GPDT3c: O.14 GPDT4: O	N/A
GPPCS103	Is reception of the ZGP Notification command in commissioned groupcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2& (GPPCCF8 GPPCCF9 GPPCCF13): M GPDT3cm: M GPDT3t GPDT3t+ GPDT3c: O.14 GPPCS102: M GPDT4: O	N/A
GPPCS104	Is reception of the ZGP Notification command in broadcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1 [R4] A.5.2.1	GPDT2: O GPPCCF9: M GPDT3: O GPPCSF9: M	N/A

¹³ 5 is the default minimum number of entries defined by the ZGP Proxy cluster [R4]. A particular profiles adopting the cluster may mandate different value.

¹⁴ O.14: The device under test shall implement at least one of those options; only one is enabled at any given time.

Item number	Item description	Reference	Status	Support
			GPDT4: O	
GPPCS105	Is reception of the ZGP Pairing Search command supported?	[R4] A.3.2.10 [R4] A.3.3.4.2	GPDT2: O GPPCCF9: O GPDT3cm: O GPDT3t, GPDT3t+, GPDT3c: M GPDT4: O GPPCSF9: M	N/A
GPPCS106	Is reception of the ZGP Tunneling Stop command supported?	[R4] A.3.2.10 [R4] A.3.4.4.1	GPDT2m: O GPPCCF5: M GPDT2f: M GPDT2c: M GPDT3: X GPDT4: O	N/A
GPPCS107	Is reception of the ZGP Commissioning Notification command supported?	[R4] A.3.2.10 [R4] A.3.3.4.4	GPDT2m: O (GPPCCF11: M) GPDT2f GPDT2c: M GPDT3t: M GPDT3t+ GPDT3c GPDT3cm: O (GPPCSF11: M) GPDT4: O	N/A
GPPCS108	Is reception of the ZGP Translation Table Update command supported?	[R4] A.3.2.10 [R4] A.3.3.4.6	GPDT2: X GPDT3: O GPDT4: O GPPCSF19: M	N/A
GPPCS109	Is reception of the ZGP Translation Table Request command supported?	[R4] A.3.2.10 [R4] A.3.3.4.5	GPDT2: X GPDT3: O GPDT4: O GPPCSF19: M	N/A
GPPCS110	Is reception of the ZGP Pairing Configuration command supported?	[R4] A.3.2.10 [R4] A.3.3.4.7	GPDT2: X GPDT3cm: M GPDT3t GPDT3t+ GPDT3c: O GPDT4: O GPPCSF4 GPPCSF12 GPPCSF18: M	N/A
GPPCS150	Is transmission of the ZGP Notification Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.1	GPDT2: X GPDT3cm: X GPDT3t GPDT3t+ GPDT3c: O GPDT4: O GPPCSF5 GPPCSF6: M	N/A
GPPCS151	Is transmission of the ZGP Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.4	GPDT2: X GPDT3: O GPDT4: O GPPCSF8 GPPCSF11 GPPCSF13: M	N/A
GPPCS152	Is transmission of the ZGP Pairing command supported?	[R4] A.3.2.10 [R4] A.3.3.5.2	GPDT2: X GPDT3: M GPDT4: M	N/A
GPPCS153	Is generation of the ZGP Pairing command with RemoveZGPD sub-field set to 0b1 supported?	[R4] A.3.2.10 [R4] A.3.3.5.2	GPDT2: X GPDT3: O GPDT4: M	N/A
GPPCS154	Is transmission of the ZGP Proxy Commissioning Mode command supported?	[R4] A.3.2.10 [R4] A.3.3.5.3	GPDT2: X GPDT3t: M GPDT3t+ GPDT3c GPDT3cm: O GPDT4: M GPPCSF11: M	N/A
GPPCS155	Is transmission of the ZGP Translation Table Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.5	GPDT2: X GPDT3: O GPDT3&&GPPCS109:M GPDT4: O GPPCSF19: M	N/A
GPPCS201	Is persistent storage of Sink Table supported?	[R4] A.3.2.10 [R4] A.3.3.2.2	GPDT2: X GPDT3: M	N/A

Item number	Item description	Reference	Status	Support
			GPDT4: O	

10.3.3 Add new chapter 7.1.1.2.4 “Client side”

Table 9 – GreenPower cluster client capabilities

Item number	Item description	Reference	Status	Support
GPPCC1	Is the GreenPower cluster supported as a client?	[R4] A.3.4	GPDT2: M GPDT3: O GPDT4: O	N/A
GPPCC2	Is the <i>zgppMaxProxyTableEntries</i> attribute supported?	[R4] A.3.4.2.1	GPDT2: M GPDT3: X GPDT4: O	N/A
GPPCC3A	Is the Proxy Table attribute supported?	[R4] A.3.4.2.2	GPDT2: M GPDT3: X GPDT4: O	N/A
GPPCC3B	Is the required minimal number of entries in the Proxy Table attribute supported? ¹⁵	[R4] A.3.4.2.2	GPDT2: 10	N/A
GPPCC3C	Is the required minimal number of entries in the <i>Sink address list</i> per Proxy Table entry supported?	[R4] A.3.4.2.2	GPDT2 && GPPCSF5: 2	N/A
GPPCC3D	Is the required minimal number of entries in the <i>Sink group list</i> per Proxy Table entry supported?	[R4] A.3.4.2.2	GPDT2 && GPPCSF4: 2	N/A
GPPCC3E	Is the required minimal number of simultaneously used entries in the <i>Sink address list</i> and in the <i>Sink group list</i> per Proxy Table entry supported?	[R4] A.3.4.2.2	GPDT2 && GPPCSF5 && GPPCSF5: 1+1	N/A
GPPCC4	Is the <i>zgppNotificationRetryNumber</i> attribute supported?	[R4] A.3.4.2.3	GPDT2 GPDT2c: M GPDT2m: O (GPPCCF5 GPPCCF6: M) GPDT3: X GPDT4: O	N/A
GPPCC5	Is the <i>zgppNotificationRetryTimer</i> attribute supported?	[R4] A.3.4.2.4	GPDT2 GPDT2c: M GPDT2m: O (GPPCCF5 GPPCCF6: M) GPDT3: X GPDT4: O	N/A
GPPCC6	Is the <i>zgppMaxSearchCounter</i> attribute supported?	[R4] A.3.4.2.5	GPDT2: O (GPPCCF9: M) GPDT3: X GPDT4: O	N/A
GPPCC7	Is the <i>zgppBlockedSrcID</i> attribute supported?	[R4] A.3.4.2.6	GPDT2: O (GPPCCF9: M) GPDT3: X GPDT4: O	N/A
GPPCC8	Is the <i>zgppFeatures</i> attribute supported?	[R4] A.3.4.2.7	GPDT2: M GPDT3: X GPDT4: O	N/A
GPPCC9	Is the <i>zgppActiveFeatures</i> attribute supported?	[R4] A.3.4.2.8	GPDT2: M GPDT3: X GPDT4: O	N/A
GPPCC100	Is transmission of the ZGP Notification command supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2: M GPDT3cm: M GPDT3t GPDT3t+ GPDT3c: X GPDT4: O	N/A

¹⁵ 10 is the default minimum number of entries defined by the ZGP Proxy cluster [R4]. A particular profiles adopting the cluster may mandate different value.

GPPCC101	Is transmission of the ZGP Notification command in unicast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2f GPDPDF2c: M GPDT2m: O GPDT3: X GPPCCF5 GPPCCF6: M GPDT4: O	N/A
GPPCC102	Is transmission of the ZGP Notification command in derived groupcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2: M GPDT3cm: O GPDT4: O	N/A
GPPCC103	Is transmission of the ZGP Notification command in commissioned groupcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2: M GPDT3cm: M GPDT4: O	N/A
GPPCC104	Is transmission of the ZGP Notification command in broadcast supported?	[R4] A.3.2.10 [R4] A.3.3.4.1	GPDT2 GPDT3cm: O GPPCCF9:M GPDT4: O	N/A
GPPCC105	Is transmission of the ZGP Notification command in multiple communication modes supported?	[R4] A.3.2.10 [R4] A.3.5.2.1	GPDT2c GPDT2f: M GPDT2m GPDT3cm: O GPPCCF5 GPPCCF6: M GPDT4: O	N/A
GPPCC106	Is transmission of the ZGP Pairing Search command supported?	[R4] A.3.2.10 [R4] A.3.4.2	GPDT2 GPDT3cm: O GPPCCF9: M GPDT3t GPDT3t+ GPDT3c: X GPDT4: M	N/A
GPPCC107	Is transmission of the ZGP Tunneling Stop command supported?	[R4] A.3.2.10 [R4] A.3.4.4.1	GPDT2c GPDT2f: M GPDT2m: O GPPCCF5 GPPCCF6: M GPDT3: X GPDT4: O	N/A
GPPCC108	Is transmission of the ZGP Commissioning Notification command supported?	[R4] A.3.2.10 [R4] A.3.3.4.4	GPDT2c GPDT2f: M GPDT2m GPDT3cm: O GPPCCF11: M GPDT3t GPDT3t+ GPDT3c: X GPDT4: O	N/A
GPPCC108	Is transmission of the ZGP Translation Table Update command supported?	[R4] A.3.2.10 [R4] A.3.3.4.5 [R4] A.3.2.5	GPDT2: X GPDT3: O GPDT4: M	N/A
GPPCC109	Is transmission of the ZGP Translation Table Request command supported?	[R4] A.3.2.10 [R4] A.3.3.4.6 [R4] A.3.2.5	GPDT2: X GPDT3: O GPDT4: M	N/A
GPPCC110	Is transmission of the ZGP Pairing Configuration command supported?	[R4] A.3.2.10 [R4] A.3.3.4.7 [R4] A.3.2.5	GPDT2: X GPDT3cm: M GPDT3t GPDT3t+ GPDT3c: O GPDT4: M GPPCSF4 GPPCSF18: M	N/A
GPPCC150	Is reception of the ZGP Notification Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.1	GPDT2c GPDT2f: M GPDT2m: O GPPCCF5 GPPCCF6: M GPDT3: X GPDT4: O	N/A
GPPCC151	Is reception of the ZGP Pairing command supported?	[R4] A.3.2.10 [R4] A.3.3.5.2	GPDT2: M GPDT3: X GPDT4: M	N/A
GPPCC152	Is reception of the ZGP Pairing command with <i>RemoveZGPD</i> sub-field set to 0b1 supported?	[R4] A.3.2.10 [R4] A.3.3.5.2	GPDT2: M GPDT3: X GPDT4: M	N/A
GPPCC153	Is reception of the ZGP Proxy Commissioning Mode command supported?	[R4] A.3.2.10 [R4] A.3.3.5.3	GPDT2c GPDT2f: M GPDT2m: O GPPCCF11: M GPDT3: O GPDT4: M	N/A

GPPCC154	Is reception of the ZGP Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.4	GPDT2c ZGPDT2f: M GPDT2m GPDT3cm: O GPPCCF8 GPPCCF11 GPPCCF13:M GPDT3t GPDT3t+ GPDT3c: X GPDT4: O	N/A
GPPCC155	Is reception of the ZGP Translation Table Response command supported?	[R4] A.3.2.10 [R4] A.3.3.5.5 [R4] A.3.2.5	GPDT2: X GPDT3: O (GPDT3&&GPPCC109:M) GPDT4: M	N/A
GPPCC200	Is persistent storage of Proxy Table supported?	[R4] A.3.4.2.2	GPPCC3A: M	N/A
GPPCC201	Is handling of Proxy Table entries with status other than active and valid supported?	[R4] A.3.5.2.2	GPDT2: O GPDT3: X GPDT4: O GPPCCF9: M	N/A
GPPCC202	Is passive discovery supported?	[R4] A.3.5.2.2.3	GPDT2: O GPDT3: X GPDT4: O GPPCCF9: M	N/A
GPPCC2034	Is active discovery supported?	[R4] A.3.5.2.2.4	GPDT2: O GPDT3: X GPDT4: O GPPCCF9: M	N/A
GPPCC204	Is active re-discovery supported?	[R4] A.3.5.2.2.5	GPDT2: O GPDT3: X GPDT4: O GPPCCF9: M	N/A
GPPCC205	Is limiting the number of the transmitted GreenPower cluster messages supported?	[R4] A.3.6.3.1, A.3.6.3.3	GPDT2: M GPDT3: O GPDT4: O	N/A
GPPCC205A	Is distance-based zgppTunnelingDelay supported?	[R4] A.3.6.3.1 [R4] A.3.2.8, [R4] A.3.2.9	GPDT2c GPDT2f: M GPDT2m GPDT3cm: O GPPCCF5 GPPCCF8 GPPCCF11 GPPCCF13: M GPDT3 GPDT3t+ GPDT3c: X GPDT4: O	N/A
GPPCC205B	Is dropping the scheduled GreenPower cluster message on reception of equivalent message supported?	[R4] A.3.6.3.1 [R4] A.3.2.8, [R4] A.3.2.9	GPDT2c GPDT2f: M GPDT2m GPDT3cm: O GPPCCF5 GPPCCF8 GPPCCF11 GPPCCF13: M GPDT3: O GPDT4: O	N/A
GPPCC205C	Is transmission of GreenPower cluster commands with alias supported?	[R4] A.3.6.3.3 [R4] A.3.2.8, [R4] A.3.2.9	GPDT2: M GPDT3cm: M GPPCCF5 GPPCCF8 GPPCCF11 GPPCCF13: M GPDT3t GPDT3t+ GPDT3c: O GPDT4: O	N/A
GPPCC206	Is updating <i>TargetList</i> field of the <i>ProxyTable</i> attribute on reception of Device_annce supported?	[R4] A.3.5.2.1	GPDT2c GPDT2f: M GPDT2m: O GPPCC3A&&(GPPCCF5 GPPCCF6): M GPDT3: N/A GPDT4: O	N/A

10.3.4 Add new chapter 7.1.1.2.5 “Support of features”

10.3.4.1 Add new chapter 7.1.1.2.5.1 “Bidirectional operation”

Table 10 – Support for GreenPower bidirectional operation

Item number	Item description	Reference	Status	Support
GPF101	Is transmission of ZGPD Read Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.9 ¹⁶ GPPCSF7 GPPCSF8: O	N/A
GPF102	Is reception of ZGPD Read Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: X	N/A
GPF103	Is transmission of ZGPD Read Attributes Response supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: X	N/A
GPF104	Is reception of ZGPD Read Attributes Response command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 (GPPCSF7 GPPCSF8)&&GPF101: M	N/A
GPF105	Is transmission of ZGPD Request Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: X	N/A
GPF106	Is reception of ZGPD Request Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: M	N/A
GPF107	Is transmission of ZGPD Write Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: O	N/A
GPF108	Is reception of ZGPD Write Attributes command supported?	[R4] A.4.2.5 [R4] A.3.6.1.5	GPPCCF8: M.16 GPPCSF7 GPPCSF8: X	N/A

10.3.4.2 Add new chapter 7.1.1.2.5.2 “GreenPower Commissioning Support”

Table 11 – ZGP Commissioning Feature Support

Item number	Item description	Reference	Status	Support
GPCF1	Does the device support pairing with Data GPDF with Auto-Commissioning bit set to 0b1?	[R4] A.3.9	GPPCCF11: M GPDT3: O GPDT4: M	N/A
GPCF2	Does the device support pairing with Commissioning GPDF?	[R4] A.3.9	GPPCCF11: M GPDT3: M GPDT4: M	N/A
GPCF3A	Does the device support transmission of ZGPD Commissioning command?	[R4] A.4.2.1.1	GPDT2: X GPDT3: X	N/A
GPCF3B	Does the device support reception of ZGPD Commissioning command?	[R4] A.4.2.1.1	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF4	Does the device support bidirectional communication in commissioning mode?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF5A	Does the device support transmission of the ZGPD Channel Request command in commissioning mode?	[R4] A.3.9	GPDT1: X	N/A
GPCF5B	Does the device support reception of the ZGPD Channel Request command in commissioning mode?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M	N/A
GPCF6	Does the device support transmission of the ZGPD Channel Configuration command?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A

¹⁶ M.16: Note: the bidirectional operation is transparent to the proxy. It just needs to act add the command received in ZGP Response to its `zgpTxQueue` and send it upon reception of GPDF frame with `RxAfterTx` set; it doesn't care about the type of the command.

Item number	Item description	Reference	Status	Support
GPCF6A	Does the device support transmission of the ZGPD Channel Configuration command in commissioning mode?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF6B	Does the device support transmission of the ZGPD Channel Configuration command in operational mode?	[R4] A.3.9	GPPCCF8 GPPCCF13: M GPPCSF13: M GPDT4: O	N/A
GPCF7	Does the device support reception of the ZGPD Channel Configuration command?	[R4] A.3.9	GPDT1: X	N/A
GPCF8	Does the device support transmission of the ZGPD Commissioning Reply command?	[R4] A.4.2.1.2	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF8A	Does the device support transmission of the ZGPD Commissioning Reply command in commissioning mode?	[R4] A.4.2.1.2	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF8B	Does the device support transmission of the ZGPD Commissioning Reply command in operational mode?	[R4] A.4.2.1.2	GPPCCF8 GPPCCF13: M GPPCSF13: M GPDT4: O	N/A
GPCF9	Does the device support reception of the ZGPD Commissioning Reply command?	[R4] A.4.2.1.2	GPDT1: X	N/A
GPCF10	Is ZGPD removal via ZGPD Decommissioning command supported?	[R4] A.4.2.1.3	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF11	Does the device come with pre-configured ZGPD key?	[R4] A.3.9	GPDT1: X	N/A
GPCF12A	Does the device support ZGPD key exchange in ZGPD Commissioning command?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF12B	Does the device support exchange of encrypted ZGPD key in ZGPD Commissioning command?	[R4] A.3.9	GPPCCF11: O GPPCSF10 GPPCSF11: O GPDT4: O	N/A
GPCF13A	Does the device support ZGPD key exchange in ZGPD Commissioning Reply command?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF13B	Does the device support exchange of encrypted ZGPD key in ZGPD Commissioning Reply command?	[R4] A.3.9	GPPCCF11: O GPPCSF10 GPPCSF11: O GPDT4: O	N/A
GPCF14	Does the device support out-of-band ZGPD key configuration?	[R4] A.3.9	GPDT2: O GPDT3: O GPDT4: O	N/A
GPCF15A	Does the device support transmission of ZGPD Success command in commissioning mode?	[R4] A.3.9	GPDT1: X	N/A
GPCF15B	Does the device support reception of ZGPD Success command in commissioning mode?	[R4] A.3.9	GPPCCF11: M GPPCSF10 GPPCSF11: M GPDT4: M	N/A
GPCF16	Does the device support in-band configuration of PANId (via ZGPD Commissioning Reply command)?	[R4] A.3.9	GPDT1: O	N/A
GPCF100	Is writing into Sink Table attribute via generic ZCL command supported during commissioning mode?	[R4] A.3.3.2	GPPCCF12: N/A GPPCSF12: X GPDT4: X	N/A
GPCF101	Is writing into Sink Table attribute via generic ZCL command supported during operational mode?	[R4] A.3.3.2	GPPCCF12: N/A GPPCSF12: X GPDT4: X	N/A
GPCF102	Is writing into Proxy Table attribute via generic ZCL command supported during commissioning mode?	[R4] A.3.4.2	GPPCCF12: X GPPCSF12: N/A GPDT4: X	N/A
GPCF103	Is writing into Proxy Table attribute via generic	[R4]	GPPCCF12: X	N/A

Item number	Item description	Reference	Status	Support
	ZCL command supported during operational mode?	A.3.4.2	GPCCSF12: N/A GPDT4: X	

10.4 Add new chapter 7.1.1.3 “ZGPS application functionality”

10.4.1.1 Add new chapter 7.1.1.3.1 “ZGPS device description support”

In Table 12, device descriptions for the ZGPS (GPDT3, i.e. GPDT3t, GPDT3t+, GPDT3c and GPDT3cm) are given.

These PICS items are not applicable to the other ZGP device types (i.e. GPDT0: X, GPDT1: X, GPDT2: X, GPDT4: X).

Table 12 – ZGPS device description support

Item number	Item description	Reference	Status	Support
ZGPS1A	Is the product programmed with support for ZGP Simple generic 1-state switch functionality?	[R4] A.4.3	GPDT3: O.17 ¹⁷	N/A
ZGPS1B	Is the product programmed with support for ZGP Simple generic 2-state switch functionality?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS2	Is the product programmed with (ZGP-controllable) server-side On/Off cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS3	Is the product programmed with (ZGP-controllable) server-side Level Control cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS4	Is the product programmed with (ZGP-controllable) client-side Binary Input cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS5	Is the product programmed with (ZGP-controllable) server-side Color control cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS6	Is the product programmed with (ZGP-controllable) client-side Illuminance Measurement cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS7	Is the product programmed with (ZGP-controllable) client-side Occupancy Sensing cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS8	Is the product programmed with (ZGP-controllable) server-side Door Lock cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS9	Is the product programmed with (ZGP-controllable) client-side Temperature measurement cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS10	Is the product programmed with (ZGP-controllable) client-side Pressure Measurement cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS11	Is the product programmed with (ZGP-controllable) client-side Flow Measurement cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS12	Is the product programmed with (ZGP-controllable) client-side Relative Humidity Measurement cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS13	Is the product programmed with (ZGP-controllable) client-side CO2 cluster?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS14A	Is the product programmed with support for ZGP Advanced generic 1-state switch functionality?	[R4] A.4.3	GPDT3: O.17	N/A
ZGPS14B	Is the product programmed with support for ZGP Advanced generic 2-state switch functionality?	[R4] A.4.3	GPDT3: O.17	N/A

¹⁷ O.17: DUT shall implement at least one of those options.

10.4.2 Add new chapter 7.1.1.3.2 “ZGPD command support by ZGPS”

Note: all the commands below are transparent to ZGPP, thus GPDT2: X. For GPDT0: X.

Table 13 – ZGPD commands support - reception

Item number	Item description	Reference	Status	Support
ZGPDRX20	Is reception of ZGPD Off command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS2: O.20 ¹⁸	N/A
ZGPDRX21	Is reception of ZGPD On command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS2 && ZGPDRX21: M	N/A
ZGPDRX22	Is reception of ZGPD Toggle command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS2: O.20	N/A
ZGPDRX23	Is reception of ZGPD Release command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS2: M	N/A
ZGPDRX30	Is reception of ZGPD Move up command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21 ¹⁹	N/A
ZGPDRX31	Is reception of ZGPD Move Down command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3 && ZGPDRX30: M	N/A
ZGPDRX32	Is reception of ZGPD Step UP command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21	N/A
ZGPDRX33	Is reception of ZGPD Step Down command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3 && ZGPDRX32: M	N/A
ZGPDRX34	Is reception of ZGPD Stop command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS3 && (ZGPDRX30 ZGPDRX35): M	N/A
ZGPDRX35	Is reception of ZGPD Move Up (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21	N/A
ZGPDRX36	Is reception of ZGPD Move Down (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21 &&ZGPDRX35	N/A
ZGPDRX37	Is reception of ZGPD Step Up (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21	N/A
ZGPDRX38	Is reception of ZGPD Step Down (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPS3: O.21 &&ZGPDRX37	N/A
ZGPDRX40	Is reception of ZGPD Move Hue command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22 ²⁰	N/A
ZGPDRX41	Is reception of ZGPD Move Hue Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX42	Is reception of ZGPD Move Hue Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5 && ZGPDRX41	N/A
ZGPDRX43	Is reception of ZGPD Step Hue Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX44	Is reception of ZGPD Step Hue Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5 && ZGPDRX43	N/A
ZGPDRX45	Is reception of ZGPD Move Saturation command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX46	Is reception of ZGPD Move Saturation Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX47	Is reception of ZGPD Move Saturation Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5 && ZGPDRX46	N/A
ZGPDRX48	Is reception of ZGPD Step Saturation Up command supported?	[R4] A.4.3	ZGPS5: O.22	N/A

¹⁸ O.20: DUT shall implement exactly one of those options.

¹⁹ O.21: DUT shall implement at least one of those options.

²⁰ O.22: DUT shall implement at least one of those options.

Item number	Item description	Reference	Status	Support
		[R4] A.4.2.5		
ZGPDRX49	Is reception of ZGPD Step Saturation Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5 && ZGPDRX48	N/A
ZGPDRX4a	Is reception of ZGPD Move Color command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX4b	Is reception of ZGPD Step Color command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPS5: O.22	N/A
ZGPDRX50	Is reception of ZGPD Lock Door command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS8: M	N/A
ZGPDRX51	Is reception of ZGPD Unlock Door command supported?	[R4] A.4.3 [R4] A.4.1	ZGPS8: M	N/A
ZGPDRX60	Is reception of ZGPD Press 1 of 1 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1A: M ZGPS14A: M	N/A
ZGPDRX61	Is reception of ZGPD Release 1 of 1 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1A: M ZGPS14A: M	N/A
ZGPDRX62	Is reception of ZGPD Press 1 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1B: M ZGPS14B: M	N/A
ZGPDRX63	Is reception of ZGPD Release 1 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1B: M ZGPS14B: M	N/A
ZGPDRX64	Is reception of ZGPD Press 2 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1B: M ZGPS14B: M	N/A
ZGPDRX65	Is reception of ZGPD Release 2 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS1B: M ZGPS14B: M	N/A
ZGPDRX66	Is reception of ZGPD Short press 1 of 1 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS14A: M	N/A
ZGPDRX67	Is reception of ZGPD Short press 1 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS14B: M	N/A
ZGPDRX68	Is reception of ZGPD Short press 2 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPS14B: M	N/A
ZGPDRXA0	Is reception of ZGPD Attribute reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPS4, ZGPS6, ZGPS7, ZGPS12, ZGPS13, ZGPS14, ZGPS15 ZGPS16, ZGPS17, ZGPS18, ZGPS19, ZGPS20: M	N/A
ZGPDRXA1	Is reception of ZGPD Manufacturer-specific attribute reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPS4, ZGPS6, ZGPS7, ZGPS12, ZGPS13 ZGPS14, ZGPS15 ZGPS16, ZGPS17, ZGPS18,	N/A

Item number	Item description	Reference	Status	Support
			ZGPS19, ZGPS20: O	
ZGPDRXA2	Is reception of ZGPD Multi-cluster reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPS4, ZGPS6, ZGPS7, ZGPS12, ZGPS13, ZGPS14, ZGPS15 ZGPS16, ZGPS17, ZGPS18, ZGPS19, ZGPS20: O	N/A
ZGPDRXA3	Is reception of ZGPD manufacturer-specific multi-cluster reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPS4, ZGPS6, ZGPS7, ZGPS12, ZGPS13, ZGPS14, ZGPS15 ZGPS16, ZGPS17, ZGPS18, ZGPS19, ZGPS20: O	N/A

11 Add to ZCL PICS [R6] as 7.1.2: PICS proforma tables: ZGPD

The PICS items in section 11 are only applicable to the ZGPD (GPDT0). They are not applicable to the other ZGP device types (i.e. GPDT1: X, GPDT2: X, GPDT3: X, GPDT4: X).

11.1 Add new chapter 7.1.2.1 “ZGPD device description support”

In Table 14, device descriptions for the ZGPD (GPDT0) are given.

Table 14 – ZGPD device description support

Item number	Item description	Reference	Status	Support
ZGPD0	Is the product programmed as a ZGP Simple Generic 1-state Switch?	[R4] A.4.3	GPDT1: O.23 ²¹	N
ZGPD1	Is the product programmed as a ZGP Simple Generic 2-state Switch?	[R4] A.4.3	GPDT1: O.23	N
ZGPD2	Is the product programmed as a ZGP On/Off Switch?	[R4] A.4.3	GPDT1: O.23	Y
ZGPD3	Is the product programmed as a ZGP Level Control Switch?	[R4] A.4.3	GPDT1: O.23	N
ZGPD4	Is the product programmed as a ZGP Simple Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD5	Is the product programmed as a ZGP Advanced Generic 1-state Switch?	[R4] A.4.3	GPDT1: O.23	N
ZGPD5B	What is the value of the short press time threshold?	[R4] A.4.2.2	Implementation-specific	N/A
ZGPD6	Is the product programmed as a ZGP Advanced Generic 2-state Switch?	[R4] A.4.3	GPDT1: O.23	N
ZGPD6B	What is the value of the short press time threshold?	[R4] A.4.2.2	Implementation-specific	N/A

²¹ O.23: DUT shall implement exactly one of those options.

Item number	Item description	Reference	Status	Support
ZGPD10	Is the product programmed as a ZGP Color Dimmer Switch?	[R4] A.4.3	GPDT1: O.23	N
ZGPD11	Is the product programmed as a ZGP Light Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD12	Is the product programmed as a ZGP Occupancy Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD20	Is the product programmed as a ZGP Door Lock Controller?	[R4] A.4.3	GPDT1: O.23	N
ZGPD30	Is the product programmed as a ZGP Temperature Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD31	Is the product programmed as a ZGP Pressure Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD32	Is the product programmed as a ZGP Flow Sensor?	[R4] A.4.3	GPDT1: O.23	N
ZGPD33	Is the product programmed as a ZGP Indoor Environment Sensor?	[R4] A.4.3	GPDT1: O.23	N

11.2 Add new chapter 7.1.2.2 “ZGPD features”

Table 15 –ZGPD features

Item number	Item description	Reference	Status	Support
GPSF1	Does the device implement cZGP stub?	[R4] A.1	GPDT0: X	N
GPSF2	Does the device implement dZGP stub?	[R4] A.1	GPDT0: X	N
GPPC1	Does the device support EPP?	[R4] A.3.1	GPDT0: X	N
GPF4A	Does the device support transmitting GPDF frame format with <i>ApplicationID</i> sub-field of the <i>Extended NWK Frame Control</i> field set to 0b000?	[R4] A.1.4.1.3	GPDT0: O.22 ²²	Y
GPF4B	Does the device support transmitting GPDF frame format with <i>ApplicationID</i> sub-field of the <i>Extended NWK Frame Control</i> field set to 0b010?	[R4] A.1.4.1.3	GPDT0: O.22	N
GPF5	Does the device support SecurityLevel=0b11?	[R4] A.1.5.4 [R4] A.3.7.2.1	GPDT0: O.24 ²³	Y
GPF6	Does the device support SecurityLevel=0b10?	[R4] A.1.5.4 [R4] A.3.7.2.1	GPDT0: O.24	Y
GPF7	Does the device support SecurityLevel=0b01?	[R4] A.1.5.4 [R4] A.3.7.2.1	GPDT0: O.24	Y
GPF8	Does the device support SecurityLevel=0b00?	[R4] A.1.5.4 [R4] A.3.7.2.1	GPDT0: O.24	Y
GPF9A	Does the device support receiving GPDF frame format with <i>ApplicationID</i> sub-field of the <i>Extended NWK Frame Control</i> field set to 0b000?	[R4] A.1.4.1.3	GPDT0&&GPF4A: O (GPF4B: X)	Y
GPF9B	Does the device support receiving GPDF frame format with <i>ApplicationID</i> sub-field of the <i>Extended NWK Frame Control</i> field set to 0b010?	[R4] A.1.4.1.3	GPDT0&&GPF4B: O (GPF4A: X)	N
GPDF1	Does the device support random MAC sequence number for ZGPD commands?	[R4] A.1.6, A.1.7	GPDT0 && GPF8: O.25 ²⁴	Y
GPDF2	Does the device support incremental MAC sequence number for ZGPD commands?	[R4] A.1.6, A.1.7	GPDT0 && GPF8: O.25	Y
GPDF3	Is the FixedLocation flag in the Commissioning ZGPD command set?	[R4] A.1.6, A.1.7	GPDT0: O	N

²² O.22: Device under test shall implement only one of those options

²³ O.24: Device under test shall implement at least one of those options.

²⁴ O.25: Device under test shall implement only one of those options.

11.2.1 Add new chapter 7.1.2.2.1 „ZGPD Bidirectional operation”

Table 16 – Support for GreenPower features

Item number	Item description	Reference	Status	Support
GPF100	Does the device support bidirectional communication in operational mode?	[R4] A.1.6.3 [R4] A.3.6.1.5	GPDT0: O	Y
GPF101	Is transmission of ZGPD Read Attributes command supported?	[R4] A.4.2.5	GPDT0: X	N
GPF102	Is reception of ZGPD Read Attributes command supported?	[R4] A.4.2.5	GPDT0&&GPF100: M	Y
GPF103	Is transmission of ZGPD Read Attributes Response supported?	[R4] A.4.2.5	GPDT0&&GPF100: M	Y
GPF104	Is reception of ZGPD Read Attributes Response command supported?	[R4] A.4.2.5	GPDT0: X	N
GPF105	Is transmission of ZGPD Request Attributes command supported?	[R4] A.4.2.5	GPDT0&&GPF100: O	Y
GPF106	Is reception of ZGPD Request Attributes command supported?	[R4] A.4.2.5	GPDT0: X	N
GPF107	Is transmission of ZGPD Write Attributes command supported?	[R4] A.4.2.5	GPDT0: X	N
GPF108	Is reception of ZGPD Write Attributes command supported?	[R4] A.4.2.5	GPDT0&&GPF100: O	Y

11.2.2 Add new chapter 7.1.2.2.2 “ZGPD commissioning support”

Table 17 – ZGP Commissioning Feature Support

Item number	Item description	Reference	Status	Support
GPCF1	Does the device support pairing with Data GPDF with Auto-Commissioning bit set to 0b1?	[R4] A.3.9 [R4] A.1.4, A.1.6	GPDT0: O.26 ²⁵	Y
GPCF2	Does the device support pairing with Commissioning GPDF?	[R4] A.3.9 [R4] A.4.2.1.1	GPDT0: O.26 GPDT0 && (ZGPD4 ZGPD11 ZGPD12 ZGPD30 ZGPD31 ZGPD32 ZGPD33): M	Y
GPCF3A	Does the device support transmission of ZGPD Commissioning command?	[R4] A.4.2.1.1	GPDT0&&GPCF2: M	Y
GPCF3B	Does the device support reception of ZGPD Commissioning command?	[R4] A.4.2.1.1	GPDT0: X	N
GPCF4	Does the device support bidirectional communication in commissioning mode?	[R4] A.3.9	GPDT0: O	Y
GPDF10	Does the device support configuration of operational channel when in commissioning mode?	[R4] A.3.9	GPDT0: O	Y
GPDF10A	Does the device support out-of-band configuration of operational channel?	[R4] A.3.9	GPDT0: O.27 ²⁶ (GPDT0 &&GPCF4: X)	Y

²⁵ O.26: DUT should implement exactly one of those methods. Hull test event comment #81 (ZigBee document docs-11-5603)

²⁶ O.27: device under test shall support at least one of the methods.

Item number	Item description	Reference	Status	Support
GPDF10B	Does the device support configuration of operational channel via channel toggling (ZGPD Commissioning command with RxAfterTx = 0b0)?	[R4] A.3.9	GPDT0: O.27 (GPDT0 &&GPCF4: X)	Y
GPDF10C	Does the device support in-band configuration of operational channel (via ZGPD Channel Request/Channel Configuration command)?	[R4] A.3.9	GPDT0: O.27 (GPDT0 &&GPCF4: M)	Y
GPDF10D	Does the device support the recommended channel set (11, 15, 20, 25)?	[R4] A.1.6, A.1.7	GPDT0&&GPCF16: M	Y
GPCF5A	Does the device support transmission of the ZGPD Channel Request command in commissioning mode?	[R4] A.3.9 [R4] A.4.2.1.4 [R4] A.1.4	GPDT0: O GPDT0 &&(GPCF4 GPDF10C): M	Y
GPCF5B	Does the device support reception of the ZGPD Channel Request command in commissioning mode?	[R4] A.3.9 [R4] A.4.2.1.4 [R4] A.1.4	GPDT0: X	N
GPCF6	Does the device support transmission of the ZGPD Channel Configuration command?	[R4] A.3.9 [R4] A.4.2.1.5 [R4] A.1.4	GPDT0: X	N
GPCF7	Does the device support reception of the ZGPD Channel Configuration command?	[R4] A.3.9 [R4] A.4.2.1.5 [R4] A.1.4	GPDT0: O	Y
GPCF7A	Does the device support reception of the ZGPD Channel Configuration command in commissioning mode?	[R4] A.3.9 [R4] A.4.2.1.5 [R4] A.1.4	GPDT0: O GPDT0 &&(GPCF4 GPDF10C): M	Y
GPCF7B	Does the device support reception of the ZGPD Channel Configuration command in operational mode?	[R4] A.6 [R4] A.4.2.1.5 [R4] A.1.4	GPDT0: O GPDT0 &&GPF9: O	Y
GPCF8	Does the device support transmission of the ZGPD Commissioning Reply command?	[R4] A.4.2.1.2	GPDT0: X	N
GPCF9	Does the device support reception of the ZGPD Commissioning Reply command?	[R4] A.4.2.1.2	GPDT0 && GPCF2: O	Y
GPCF9A	Does the device support reception of the ZGPD Commissioning Reply command in commissioning mode?	[R4] A.4.2.1.2	GPDT0 && GPCF4: M	Y
GPCF9B	Does the device support reception of the ZGPD Commissioning Reply command in operational mode?	[R4] A.6	GPDT0 && GPF9: O	N
GPCF10	Is ZGPD removal via ZGPD Decommissioning command supported?	[R4] A.4.2.1.3	GPDT0: O	Y
GPCF11	Does the device come with pre-configured ZGPD key?	[R4] A.3.9	GPDT0 && (GPF5 GPF6 GPF7): O.28 ²⁷	Y
GPCF12A	Does the device support ZGPD key exchange in ZGPD Commissioning command?	[R4] A.3.9	GPDT0 && GPCF2: O GPDT0 && GPCF11: M	Y
GPCF12B	Does the device support exchange of encrypted ZGPD key in ZGPD Commissioning command?	[R4] A.3.9 [R4] A.1.5	GPDT0 && GPCF11: O	N
GPCF13A	Does the device support ZGPD key exchange in ZGPD Commissioning Reply command?	[R4] A.3.9	GPDT0 && (GPF5 GPF6 GPF7): O.28 GPDT0 && GPCF9: O	Y
GPCF13B	Does the device support exchange of encrypted ZGPD key in ZGPD Commissioning Reply command?	[R4] A.3.9 [R4] A.1.5	GPDT0 && GPCF13A: O	N
GPCF14	Does the device support out-of-band ZGPD key configuration?	[R4] A.3.9	GPDT0 && (GPF5 GPF6 GPF7): O.28	Y
GPCF15A	Does the device support transmission of ZGPD Success command in commissioning mode?	[R4] A.3.9 [R4] A.4.1	GPDT0: O GPDT0 && GPCF4: M	Y

²⁷ O.28: DUT shall support at least one of those options.

Item number	Item description	Reference	Status	Support
GPCF15B	Does the device support reception of ZGPD Success command when in commissioning mode?	[R4] A.3.9 [R4] A.4.1	GPDT0: X	N
GPCF16	Does the device support in-band configuration of PANId (via ZGPD Commissioning Reply command)?	[R4] A.3.9 [R4] A.4.2.1.2	GPDT0 && GPCF4: O	N
GPCF100	Is writing into Sink Table attribute via generic ZCL command supported during commissioning mode?	[R4] A.3.3.2.2	GPDT0: X	N/A
GPCF101	Is writing into Sink Table attribute via generic ZCL command supported during operational mode?	[R4] A.3.3.2.2	GPDT0: X	N/A
GPCF102	Is writing into Proxy Table attribute via generic ZCL command supported during commissioning mode?	[R4] A.3.3.2.2	GPDT0: X	N/A
GPCF103	Is writing into Proxy Table attribute via generic ZCL command supported during operational mode?	[R4] A.3.3.2.2	GPDT0: X	N/A

11.3 Add new chapter 7.1.2.3 “ZGPD application functionality”

11.3.1 Add new chapter 7.1.2.3.1 “ZGPD command support by ZGPD”

Table 18 – ZGPD commands support - transmission

Item number	Item description	Reference	Status	Support
ZGPDTX20	Is transmission of ZGPD Off command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD2: O.29 ²⁸	N
ZGPDTX21	Is transmission of ZGPD On command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD2 && ZGPDTX20: M	N
ZGPDTX22	Is transmission of ZGPD Toggle command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD2: O.29	Y
ZGPDTX23	Is transmission of ZGPD Release command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD2: O	N
ZGPDTX30	Is transmission of ZGPD Move Up command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3: O.30 ²⁹	N
ZGPDTX31	Is transmission of ZGPD Move Down command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3 && ZGPDTX30: M	N
ZGPDTX32	Is transmission of ZGPD Step Up command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3: O.30	N
ZGPDTX33	Is transmission of ZGPD Step Down command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3 && ZGPDTX32: M	N
ZGPDTX34	Is transmission of ZGPD Stop command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD3 && (ZGPDTX30 ZGPDTX35): M	N
ZGPDTX35	Is transmission of ZGPD Move Up (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3: O.30	N
ZGPDTX36	Is transmission of ZGPD Move Down (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3&&ZGPDTX35: M	N
ZGPDTX37	Is transmission of ZGPD Step Up (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3: O.30	N
ZGPDTX38	Is transmission of ZGPD Step Down (with On/Off) command supported?	[R4] A.4.3 [R4] A.4.2.4	ZGPD3&&ZGPDTX37: M	N

²⁸ O.29: Device under test shall support only one of those options.

²⁹ O.30: Device under test has to implement exactly one of those commands

Item number	Item description	Reference	Status	Support
ZGPDTX40	Is transmission of ZGPD Move Hue command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31 ³⁰	N
ZGPDTX41	Is transmission of ZGPD Move Hue Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX42	Is transmission of ZGPD Move Hue Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10 && ZGPDTX41: M	N
ZGPDTX43	Is transmission of ZGPD Step Hue Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX44	Is transmission of ZGPD Step Hue Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10 && ZGPDTX43: M	N
ZGPDTX45	Is transmission of ZGPD Move Saturation command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX46	Is transmission of ZGPD Move Saturation Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX47	Is transmission of ZGPD Move Saturation Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10 && ZGPDTX46: M	N
ZGPDTX48	Is transmission of ZGPD Step Saturation Up command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX49	Is transmission of ZGPD Step Saturation Down command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10 && ZGPDTX48: M	N
ZGPDTX4a	Is transmission of ZGPD Move Color command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX4b	Is transmission of ZGPD Step Color command supported?	[R4] A.4.3 [R4] A.4.2.5	ZGPD10: O.31	N
ZGPDTX50	Is transmission of ZGPD Lock Door command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD20: M	N
ZGPDTX51	Is transmission of ZGPD Unlock Door command supported?	[R4] A.4.3 [R4] A.4.1	ZGPD20: M	N
ZGPDTX60	Is transmission of ZGPD Press 1 of 1 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD0: M ZGPD5: M	N
ZGPDTX61	Is transmission of ZGPD Release 1 of 1 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD0: M ZGPD5: M	N
ZGPDTX62	Is transmission of ZGPD Press 1 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD1: M ZGPD6: M	N
ZGPDTX63	Is transmission of ZGPD Release 1 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD1: M ZGPD6: M	N
ZGPDTX64	Is transmission of ZGPD Press 2 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD1: M ZGPD6: M	N
ZGPDTX65	Is transmission of ZGPD Release 2 of 2 command supported?	[R4] A.4.3 [R4] A.4.1 [R4] A.4.2.2	ZGPD1: M ZGPD6: M	N
ZGPDTX66	Is transmission of ZGPD Short press 1 of 1 command supported?	[R4] Table 43	ZGPD5: M	N
ZGPDTX67	Is transmission of ZGPD Short press 1 of 2 command supported?	[R4] Table 43	ZGPD6: M	N
ZGPDTX68	Is transmission of ZGPD Short press 2 of 2 command supported?	[R4] Table 43	ZGPD6: M	N
ZGPDTXA0	Is transmission of ZGPD Attribute reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPD4, ZGPD11,	Y

³⁰ O.31: Device under test has to implement exactly one of those commands

Item number	Item description	Reference	Status	Support
			ZGPD12, ZGPD30, ZGPD31, ZGPD32 ZGPD33: O.32 ³¹	
ZGPDTXA1	Is transmission of ZGPD Manufacturer-specific attribute reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPD4, ZGPD11, ZGPD12, ZGPD30, ZGPD31, ZGPD32 ZGPD33: O.32	N
ZGPDTXA2	Is transmission of ZGPD Multi-cluster reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPD11, ZGPD12, ZGPD30, ZGPD31, ZGPD32 ZGPD33: O.32	N
ZGPDTXA3	Is transmission of ZGPD manufacturer-specific multi-cluster reporting command supported?	[R4] A.4.3 [R4] A.4.2.3	ZGPD11, ZGPD12, ZGPD30, ZGPD31, ZGPD32 ZGPD33: O.32	N

Note: all the commands below are transparent to ZGPP, thus GPDT2: X. For GPDT1: X.

11.3.2 Add new chapter 7.1.2.3.2 “ZigBee attribute support by ZGPD sensor devices”

In Table 18 – Table 20, ZigBee attributes supported by the ZGPD devices are listed.

These PICS items are not applicable to the other ZGP device types.

Table 19 – Reported ZigBee attributes per ZGPD device

Item number	Item description	Reference	Status	Support
AREP1	Does the ZGPD support reporting of the 0x0055: PresentValue attribute from Binary Input Cluster?	[R4] A.4.3	ZGPD4: M	N
AREP2	Does the ZGPD support reporting of the 0x0000: MeasuredValue attribute from Illuminance Measurement Cluster?	[R4] A.4.3	ZGPD11: M ZGPD33: M	N
AREP3	Does the ZGPD support reporting of the 0x0000: Occupancy attribute from Occupancy Sensing Cluster?	[R4] A.4.3	ZGPD12: M	N
AREP4	Does the ZGPD support reporting of the 0x0000: MeasuredValue attribute from Temperature Measurement Cluster?	[R4] A.4.3	ZGPD30: M ZGPD33: M	Y
AREP5	Does the ZGPD support reporting of the 0x0000: MeasuredValue attribute from Pressure Measurement Cluster?	[R4] A.4.3	ZGPD31: M	N
AREP6	Does the ZGPD support reporting of the 0x0000: MeasuredValue attribute from Flow Measurement Cluster?	[R4] A.4.3	ZGPD32: M	N

³¹ O.32: Device under test shall implement at least one of those commands.

AREP7	Does the ZGPD support reporting of the 0x0000: MeasuredValue attribute from Relative Humidity Measurement Cluster?	[R4] A.4.3	ZGPD33: M	N
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Table 20 – Readable ZigBee attributes per ZGPD device

Item number	Item description	Reference	Status	Support
AREAD1	Does the ZGPD support reading of the 0x0051: OutOfService attribute from Binary Input Cluster?	[R4] A.4.3	ZGPD4 && GPF102: M	N
AREAD2	Does the ZGPD support reading of the 0x0055: PresentValue attribute from Binary Input Cluster?	[R4] A.4.3	ZGPD4 && GPF102: M	N
AREAD3	Does the ZGPD support reading of the 0x006F: StatusFlags attribute from Binary Input Cluster?	[R4] A.4.3	ZGPD4 && GPF102: M	N
AREAD4	Does the ZGPD support reading of the 0x0000: MeasuredValue attribute from Illuminance Measurement Cluster?	[R4] A.4.3	ZGPD11 && GPF102: M ZGPD33 && GPF102: M	N
AREAD5	Does the ZGPD support reading of the 0x0001: MinMeasuredValue attribute from Illuminance Measurement Cluster?	[R4] A.4.3	ZGPD11 && GPF102: M ZGPD33 && GPF102: M	N
AREAD6	Does the ZGPD support reading of the 0x0002: MaxMeasuredValue attribute from Illuminance Measurement Cluster?	[R4] A.4.3	ZGPD11 && GPF102: M ZGPD33 && GPF102: M	N
AREAD7	Does the ZGPD support reading of the 0x0000: Occupancy attribute from Occupancy Sensing Cluster?	[R4] A.4.3	ZGPD12 && GPF102: M	N
AREAD8	Does the ZGPD support reading of the 0x0000: Occupancy Sensor Type attribute from Occupancy Sensing Cluster?	[R4] A.4.3	ZGPD12 && GPF102: M	N
AREAD9	Does the ZGPD support reading of the 0x0000: MeasuredValue attribute from Temperature Measurement Cluster?	[R4] A.4.3	ZGPD30 && GPF102: M ZGPD33 && GPF102: M	N
AREAD10	Does the ZGPD support reading of the 0x0001: MinMeasuredValue attribute from Temperature Measurement Cluster?	[R4] A.4.3	ZGPD30 && GPF102: M ZGPD33 && GPF102: M	N
AREAD11	Does the ZGPD support reading of the 0x0002: MaxMeasuredValue attribute from Temperature Measurement Cluster?	[R4] A.4.3	ZGPD30 && GPF102: M ZGPD33 && GPF102: M	N
AREAD12	Does the ZGPD support reading of the 0x0000: MeasuredValue attribute from Pressure Measurement Cluster?	[R4] A.4.3	ZGPD31 && GPF102: M	N
AREAD13	Does the ZGPD support reading of the 0x0000: MeasuredValue attribute from Flow Measurement Cluster?	[R4] A.4.3	ZGPD32 && GPF102: M ZGPD33 && GPF102: M	N
AREAD14	Does the ZGPD support reading of the 0x0001: MinMeasuredValue attribute from Flow Measurement Cluster?	[R4] A.4.3	ZGPD32 && GPF102: M ZGPD33 && GPF102: M	N
AREAD15	Does the ZGPD support reading of the 0x0002: MaxMeasuredValue attribute from Flow Measurement Cluster?	[R4] A.4.3	ZGPD32 && GPF102: M ZGPD33 && GPF102: M	N
AREAD16	Does the ZGPD support reading of the 0x0000: MeasuredValue attribute from Relative Humidity Cluster?	[R4] A.4.3	ZGPD33 && GPF102: M	N
AREAD17	Does the ZGPD support reading of the 0x0001: MinMeasuredValue attribute from Relative Humidity Cluster?	[R4] A.4.3	ZGPD33 && GPF102: M	N
AREAD18	Does the ZGPD support reading of the 0x0002: MaxMeasuredValue attribute from Relative Humidity Cluster?	[R4] A.4.3	ZGPD33 && GPF102: M	N

Table 21 – Writable ZigBee attributes per ZGPD device

Item number	Item description	Reference	Status	Support
AWRITE1	Does the ZGPD support writing of the 0x0051: OutOfService attribute from Binary Input Cluster?	[R4] A.4.3	ZGPD4 && GPF100: M	N