OpenADR 2.0b
Protocol Implementation
Conformance Statement (PICS)

Version 1.1.0
Valid for Certification as of February 22, 2016

Manufacturer:	ENERNET
Product Type:	VEN
Product Name:	IENER_ADR
Firmware Revision:	
Tested OpenADR 2.0b Profile Spec version:	1.1

Disclaimer:
The information provided in this document can be made available to the general public in order to identify the tested versions, features and options.

By signing this document, the manufacturer confirms that all information provided in this document is correct and the applicable features have been tested.

Manufacturer Name: _____ENERNET_____

Representative Name and Title: _____

Signature: _____

Date: _____Dec.04.2017._____

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Revisions:

Version	Changes	Date/Editor
1.0.0	• Released Version	06/28/13
1.0.1	• Added additional optional test case conditions	07/28/13
1.0.2	• Added test case A_E1_0285 and A_E0_0285 to optional list	08/15/13
1.0.4	• Added test case A_E3_0680 to optional list	08/20/13
1.0.5	• Added the following test cases to optional list. A_E2_0435, A_E3_0435, A_E2_0685, A_E3_0685, R1_3070_TH_VTN_1, R0_8070_TH_VTN_1, R1_3080_TH_VTN_1, R0_8080_TH_VTN_1, R1_3090_TH_VTN_1,R0_8090_TH_VTN_1, R1_3100_TH_VTN_1, R0_8100_TH_VTN_1, R1_3120_TH_VTN_1, R0_8120_TH_VTN, R1_3050_TH_VEN, R0_8050_TH_VEN_1, R1_3060_TH_VEN, R0_8060_TH_VEN, R1_3120_TH_VTN_1and R0_8120_TH_VTN.	09/09/13
1.0.6	• Corrected typo. • Removed test case A_E0_0295. • Mentioned G0_9005.	2/11/2014 EP, BD
1.0.7	• Corrections	11/7/2015 JZ

Table of Contents

Introduction

The purpose of this PICS document is to provide a mechanism whereby a supplier of an implementation based on the following requirements may provide information about the implementation in a standardized manner.

These requirements are drawn from the OASIS Energy Interoperation standard and related schemas. With the exception of OpenADR Alliance schema extensions, payloads generated by OpenADR 2.0b implementations should validate against the Energy Interop schemas.

Information provided by the supplier will be used to assess the implementation's compliance to the requirements, as well as to configure the certification tests performed on the implementation.

References

- OpenADR 2.0b Profile Specification 1.1
- OpenADR 2.0b Test Spec V1.0.7
- OpenADR 2.0b Schema

Abbreviations and Conventions
The PICS information comprises information in a tabular format as follows:

- **Item Column** – A number which identifies the item in the table
- **Capability Column** – A brief description of the requirement
- **Reference Column or Section Header** – A reference to a specific requirement in the specification
- **Status Column** – Contains notations regarding the requirements
  - M – Mandatory
  - **O** – Optional
  - **N/A** – Not applicable
  - **X** – Prohibited
  - **O-i** – Qualified Optional (mutually exclusive or selectable options from a set identified with the same "I" value)
  - **C-i** –Conditional (status dependent on support of other optional requirements , identified in footnotes at bottom of table with "i" being a reference integer for the footnote(s))
- **Support Column** – Yes or No answer is required. If feature is not applicable, answer No.
- **Values Allowed Column** – Optional column representing set of values allowed.
- **Values Supported Column** – Optional column where supplier can indicate a set of values supported by the implementation.

Note that all requirement references in the tables on the following pages are with respect to the OpenADR 2.0b Profile Specification, Version 1.1.

Instructions for Completing the PICS

The first part of the PICS document, System Identification, is to be completed as indicated with the information necessary to fully identify both the supplier and the implementation.

The main part of the PICS document is a fixed format questionnaire. Answers to questionnaire items are to be provided in the rightmost column by simply marking an answer to indicate a choice, typically Yes or No.

If an implementation fails to support a mandatory item, or supports a prohibited item, the supplier should provide supplementary information with the PICS document explaining the rationale for the exception.

Note: The burden of interoperability falls to the VTN implementation. Therefore any certified VTN must support the 2.0A profile and the 2.0B profile including the applicable schemas.

Documents required for final certification

- This PICS document
- Manufacturers Declaration of Conformity
- Completed Test Report from appointed test house
- Product marketing description for website (50 words)
- Product picture or logo if applicable
- Web link to product

If you would like to postpone posting your product on the OpenADR Alliance website for a period of time (maximum 3 months), please fill out the following section.

_____ENERNET_____ (Manufacturer) herewith requests that the submitted product shall not be posted on the OpenADR Alliance product web page until ___ max 3 months____ (date, max 3 months from submittal).

Name: _____Jongkwan Seo _____

Signature: _____

Implementation and Supplier Information

Date of Statement	Dec.04.2017.
Product Name	IENER_ADR
Product Model Number	
Version Number(s)	V1.0
Non-Default Hardware Configuration	
Non-Default Software Configuration	
Supplier Name, Address, Phone, Email	Name: ENERNET Address: 1007 B dong Hyundai knowledge industry center, 70 Dusan-ro, Geumcheon-Gu, Seoul, Korea Phone: +82-70-7204-9713 Email: jkseo@iener.net
Contact name, email, phone for questions	Jongkwan Seo jkseo@iener.net +82-70-7204-9713

Global Statement of Conformance

Requirement	Support
Are all mandatory capabilities supported for the indicated roles supported by this implementation?	[●]Yes [ ]No

Roles

Item	Role	Status	Support
1	VEN - Full Function	O-1	[●]Yes [ ]No
3	VEN - Energy Reporting Only	O-1	[ ]Yes [●]No
3	VTN	O-1	[ ]Yes [ ]No

0-1) Must answer Yes to one Role. Note that if an implementation supports both VEN and VTN functionality, two separate PICS documents should be submitted, one for each role.

Profile Support

Requirements Reference: Conformance rule 506

Item	Role	Profile	Status	Support
1	VEN/VTN	"A" Profile	C -1	[ ]Yes [●]No
2	VEN/VTN	"B" Profile	M	[●]Yes [ ]No

C-1) VTNs must support the A and B Profile
C-1) VENs may support ONLY the B profile

Transports /Exchange Pattern Support

Requirements Reference: Figure 1, OpenADR 2.0 Certification Levels and conformance rule 37

Item	Role	Transport	Status	Support
1	VEN/VTN	SimpleHTTP - Pull	C-1	[●]Yes [ ]No
2	VEN/VTN	SimpleHTTP - Push	C-1	[ ]Yes [●]No
3	VEN/VTN	XMPP - Push	C-1	[ ]Yes [●]No

C-1) VTNs must support all transports and exchange patterns.
C-1) VENs must support at least one item from the list. If SimpleHTTP items are selected this must include the "SimpleHTTP-Pull" option from the list.

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Service Support

Requirements Reference: Section 7.2.2 and conformance rules 501 and 507

Item	Role	Service	Status	Support
1	VEN/VTN	EiEvent	C-1	[●]Yes [ ]No
2	VEN/VTN	EiOpt	C-1	[●]Yes [ ]No
3	VEN/VTN	EiReport	M	[●]Yes [ ]No
4	VEN/VTN	RiRegisterParty	M	[●]Yes [ ]No
5	VEN/VTN	OadrPoll	C-2	[●]Yes [ ]No

C-1) VTNs and Full Function VENs must support these Services, but are not supported by Report Only VENs.
C-2) VTNs must support; VENs must support if simpleHTTP transport is supported.

Security Support

Requirements Reference: Conformance rules 67, 68, and 514

Item	Role	Security	Status	Support
1	VEN	SHA2 Security -TLS 1.2 -Client and server x.509 certs with SHA2 -Alliance RSA **or** ECC SHA2 Ciphers -SASL_EXTERNAL (XMPP Only)	M	[●]Yes [ ]No
2	VTN	SHA2 Security -TLS 1.2 -Client and server x.509 certs with SHA2 -Alliance RSA **and** ECC SHA2 Ciphers -SASL_EXTERNAL (XMPP Only if supported)	M	[ ]Yes [●]No
3	VEN/VTN	XML Signatures	O	[ ]Yes [ ]No

Payload Schema Conformance

For each payload generated by a VEN or VTN, indicate if it conforms to the OpenADR B Profile schema. Note that the Status is relative to the Role listed.

Item	Role	Payload	Status for Role	Validates Against B Schema
1	VEN-Pull	oadrPoll	C-1	[●]Yes []No
2	VEN	oadrRequestEvent	C-2	[●]Yes []No
3	VEN	oadrCreatedEvent	C-2	[●]Yes []No
4	VEN	oadrCreateOpt	C-2	[●]Yes []No
5	VEN	oadrCancelOpt	C-2	[●]Yes []No
6	VTN	oadrCanceledOpt	C-2	[●]Yes []No
7	VEN	oadrQueryRegistration	M	[●]Yes []No
8	VEN	oadrCreatePartyRegistration	M	[●]Yes []No
9	VEN/VTN	oadrResponse	M	[●]Yes []No
10	VEN/VTN	oadrCancelPartyRegistration	M	[●]Yes []No
11	VEN/VTN	oadrCanceledPartyRegistration	M	[●]Yes []No
12	VEN/VTN	oadrRegisterReport	M	[●]Yes []No
13	VEN/VTN	oadrRegisteredReport	M	[●]Yes []No
14	VEN/VTN	oadrCreateReport	C-3	[●]Yes []No
15	VEN/VTN	oadrCreatedReport	C-3	[●]Yes []No
16	VEN/VTN	oadrUpdateReport	C-4	[●]Yes []No
17	VEN/VTN	oadrUpdatedReport	C-4	[●]Yes []No
18	VEN/VTN	oadrCancelReport	C-3	[●]Yes []No
19	VEN/VTN	oadrCanceledReport	C-3	[●]Yes []No
20	VTN	oadrCreatedOpt	C-2	[]Yes []No
21	VTN	oadrDistributeEvent	C-2	[]Yes []No
22	VTN	oadrCreatedPartyRegistration	M	[]Yes []No
23	VTN	oadrRequestReregistration	M	[]Yes []No

C-1) VENs with SimpleHTTP push support must support oadrPoll, other implementations must not.

C-2) All implementations must support these options except for Report Only VENs.

C-3) VENs are not required to implement requesting reports from VTNs, so these payloads are not mandatory

C-4)VTNs are not required to offer reports, so delivering reports other that metadata is not mandatory

Operational Sequence Support

The table below demonstrates the operational sequences and the conditional behavior for each of the services. The push HTTP acknowledgement (empty payload) of oadrDistributeEvent is not shown in the table. Indicate if all of the behavior shown in each section is supported by the implementation. Brackets are used to indicate conditional behavior which must be supported. Requirements reference: All figures in the B profile specification with interaction diagrams

Item	Service	App Level Exchange Sequence	Status	Support
1	EiEvent	{VEN: RequestEvent {Reply Limit}} VTN: oadrDistributeEvent {Response Required, baseline} {VEN: oadrCreatedEvent {Opt State} VTN: oadrResponse }	C-1	[●]Yes [ ]No
2	EiOpt	VEN: oadrCreateOpt {Availability schedule} VTN: oadrCreatedOpt ---- VEN: oadrCancelOpt VTN: oadrCanceledOpt --- VEN: oadrCreateOpt - {Event Opt State} VTN: oadrCreatedOpt	C-1	[●]Yes [ ]No
3	EiRegisterParty	VEN: oadrQueryRegistration VTN: oadrCreatedPartyRegistration ---- VEN: oadrCreatePartyRegistration VTN: oadrCreatedPartyRegistration ---- VEN/VTN: oadrCancelPartyRegistration VTN/VEN: oadrCanceledPartyRegistration --- VTN: oadrRequestReregistration VEN: oadrResponse VEN: oadrCreatePartyRegistration VTN: oadrCreatedPartyRegistration	M	[●]Yes [ ]No
4	EiReport	VEN/VTN: oadrRegisterReport VTN/VEN: oadrRegisteredReport (Create Report *) ---- VEN/VTN: oadrCreateReport (Once or Periodic) VTN/VEN: oadrCreatedReport ---- VEN/VTN: oadrUpdateReport VTN/VEN: oadrUpdatedReport {Cancel Report *} ---- VEN/VTN: oadrCancelReport VTN/VEN: oadrCanceledReport {Report to Follow}	C-3	[●]Yes [ ]No
5	OadrPoll	VEN: oadrPoll VTN: Any payload sent by VTN	C-2	[●]Yes [ ]No

C-1) All implementations must support these options, except for Report Only VENs.

C-2) Required for SimpleHTTP Pull VENs only.

C-3)VENs and VTNs are not required to demonstrate initiating piggyback report requests and report cancellations (*), but must understand them and act upon them if received from the other party. As noted in the prior Payload Schema Conformance section, VENs are not required to demonstrate requesting reports from VTNs and VTNs are not required to deliver reports other than metadata..

Standard Event Signal Support

Indicate which of the following Alliance-defined standard signals are supported by the VEN or VTN .
Requirements Reference: Conformance rule 510

Item	Role	Signal Name	SignalType	Status	Support
1	VEN/VTN	SIMPLE		M	[●]Yes [ ]No
2	VEN/VTN	ELECTRICITY_PRICE	Price	M	[●]Yes [ ]No
3	VEN/VTN	LOAD_DISPATCH	setpoint	M	[●]Yes [ ]No

Standard Report Support

Indicate which of the following Alliance-defined standard reports are offered as part of report registration by the VEN or VTN. Requirements Reference: Conformance rule 510

Item	Role	Report Name	Status	Support
1	VEN	METADATA	M	[●]Yes [ ]No
2	VEN	TELEMETRY_UASGE	M	[●]Yes [ ]No
3	VEN	TELEMETRY_STATUS	M	[●]Yes [ ]No
4	VEN	HISTORY_USAGE	C-1	[●]Yes [ ]No
5	VTN	METADATA	M	[ ]Yes [ ]No

C-1) Optional for full function VENs; mandatory for Report Only VENs.

Alliance "B" Profile Detailed Requirements

In addition to the requirements defined by the schema, the OpenADR 2.0b Profile has a detailed set of conformance rules that define the expected behavior of VTN and VEN implementations. As these rules already reflect the testable requirements, there is no need to relist them here. Please refer to the OpenADR 2.0b Profile Specification while indicating which of the following conformance rules are supported by the implementation.

Item (Rule)	Role	Status	Support
1	VEN/VTN	C-1	[ ]Yes [ ]No
2	VTN	C-1	[ ]Yes [ ]No
3	VTN	C-1	[ ]Yes [ ]No
4	VTN	C-1	[ ]Yes [ ]No
5	VTN	C-1	[ ]Yes [ ]No
6	VEN	C-1	[●]Yes [ ]No
8	VTN	C-1	[ ]Yes [ ]No
9	VTN	C-1	[ ]Yes [ ]No
10	VTN	C-1	[ ]Yes [ ]No
12	VEN	C-1	[●]Yes [ ]No
13	VTN	C-1	[ ]Yes [ ]No
14	VTN	C-1	[ ]Yes [ ]No
15	VTN	C-1	[ ]Yes [ ]No
16	VTN	C-1	[ ]Yes [ ]No
17	VTN	C-1	[ ]Yes [ ]No
18	VEN/VTN	C-1	[●]Yes [ ]No
19	VEN	C-1	[●]Yes [ ]No
20	VTN	C-1	[ ]Yes [ ]No
21	VEN/VTN	C-1	[●]Yes [ ]No
22	VEN	C-1	[●]Yes [ ]No
23	VEN/VTN	C-1	[●]Yes [ ]No
25	VTN	C-1	[ ]Yes [ ]No
27	VTN	C-1	[ ]Yes [ ]No
29	VTN	C-1	[ ]Yes [ ]No
30	VEN	C-1	[●]Yes [ ]No
31	VEN	C-1	[●]Yes [ ]No
32	VEN/VTN	C-1	[●]Yes [ ]No
33	VEN/VTN	C-1	[●]Yes [ ]No
35	VEN	C-1	[●]Yes [ ]No
36	VEN	C-1	[●]Yes [ ]No
37	VEN	C-1	[●]Yes [ ]No
38	VTN	C-1	[ ]Yes [ ]No
40	VTN	C-1	[ ]Yes [ ]No
41	VTN	C-1	[ ]Yes [ ]No
42	VEN/VTN	C-1	[●]Yes [ ]No
43	VEN	C-1	[●]Yes [ ]No
45	VEN/VTN	C-1	[●]Yes [ ]No
46	VEN/VTN	C-1	[●]Yes [ ]No
47	VEN/VTN	C-1	[●]Yes [ ]No
48	VEN/VTN	C-1	[●]Yes [ ]No
50	VTN	C-1	[ ]Yes [ ]No
51	VEN/VTN	C-1	[●]Yes [ ]No
52	VTN	C-1	[ ]Yes [ ]No

Item (Rule)	Role	Status	Support
53	VEN/VTN	C-1	[●]Yes [ ]No
56	VEN	C-1	[●]Yes [ ]No
57	VEN/VTN	C-1	[●]Yes [ ]No
58	VEN	C-1	[●]Yes [ ]No
59	VEN	C-1	[●]Yes [ ]No
60	VEN	C-1	[●]Yes [ ]No
61	VEN	C-1	[●]Yes [ ]No
62	VEN	C-1	[●]Yes [ ]No
63	VTN	C-1	[ ]Yes [ ]No
65	VEN	C-1	[●]Yes [ ]No
66	VEN/VTN	C-1	[●]Yes [ ]No
67	VEN/VTN	C-1	[●]Yes [ ]No
68	VEN/VTN	C-1	[●]Yes [ ]No
70	VTN	C-1	[ ]Yes [ ]No
100	VTN	C-1	[ ]Yes [ ]No
101	VTN	C-1	[ ]Yes [ ]No
102	VTN	C-1	[ ]Yes [ ]No
103	VTN	C-1	[ ]Yes [ ]No
104	VTN	C-1	[ ]Yes [ ]No
105	VTN	C-1	[ ]Yes [ ]No
106	VTN	C-1	[ ]Yes [ ]No
107	VTN	C-1	[ ]Yes [ ]No
108	VTN	C-1	[ ]Yes [ ]No
109	VEN	C-1	[●]Yes [ ]No
110	VTN	C-1	[ ]Yes [ ]No
111	VEN/VTN	C-1	[●]Yes [ ]No
112	VEN	C-1	[●]Yes [ ]No
113	VTN	C-1	[ ]Yes [ ]No
114	VEN	C-1	[●]Yes [ ]No
115	VTN	C-1	[ ]Yes [ ]No
116	VEN/VTN	C-1	[●]Yes [ ]No
200	VEN/VTN	C-1	[●]Yes [ ]No
201	VEN/VTN	C-1	[●]Yes [ ]No
202	VEN	C-1	[●]Yes [ ]No
203	VTN	C-1	[ ]Yes [ ]No
204	VEN	C-1	[●]Yes [ ]No
205	VTN	C-1	[ ]Yes [ ]No
206	VEN/VTN	C-1	[●]Yes [ ]No
207	VEN/VTN	C-1	[●]Yes [ ]No
208	VEN	C-1	[●]Yes [ ]No
209	VEN/VTN	C-1	[●]Yes [ ]No
210	VEN/VTN	C-1	[●]Yes [ ]No
211	VEN/VTN	C-1	[●]Yes [ ]No
300	VEN/VTN	M	[●]Yes [ ]No
301	VEN/VTN	M	[●]Yes [ ]No
302	VEN/VTN	M	[●]Yes [ ]No
303	VEN/VTN	M	[●]Yes [ ]No
304	VEN/VTN	M	[●]Yes [ ]No
305	VEN/VTN	M	[●]Yes [ ]No
306	VEN/VTN	M	[●]Yes [ ]No
307	VEN/VTN	M	[●]Yes [ ]No
308	VEN/VTN	M	[●]Yes [ ]No
309	VEN/VTN	M	[●]Yes [ ]No

Item (Rule)	Role	Status	Support
311	VEN/VTN	M	[●]Yes [ ]No
312	VEN/VTN	M	[●]Yes [ ]No
313	VEN/VTN	M	[●]Yes [ ]No
314	VEN/VTN	M	[●]Yes [ ]No
315	VEN/VTN	M	[●]Yes [ ]No
316	VEN/VTN	M	[●]Yes [ ]No
317	VEN/VTN	M	[●]Yes [ ]No
318	VEN/VTN	M	[●]Yes [ ]No
319	VEN/VTN	M	[●]Yes [ ]No
321	VEN/VTN	M	[●]Yes [ ]No
322	VEN/VTN	M	[●]Yes [ ]No
324	VEN/VTN	M	[●]Yes [ ]No
325	VEN/VTN	M	[●]Yes [ ]No
327	VEN/VTN	M	[●]Yes [ ]No
328	VEN/VTN	M	[●]Yes [ ]No
329	VEN/VTN	M	[●]Yes [ ]No
330	VEN/VTN	M	[●]Yes [ ]No
331	VEN/VTN	M	[●]Yes [ ]No
333	VEN/VTN	M	[●]Yes [ ]No
334	VEN/VTN	M	[●]Yes [ ]No
335	VEN/VTN	M	[●]Yes [ ]No
336	VEN/VTN	M	[●]Yes [ ]No
337	VEN/VTN	M	[●]Yes [ ]No
338	VEN/VTN	M	[●]Yes [ ]No
339	VEN/VTN	M	[●]Yes [ ]No
340	VEN/VTN	M	[●]Yes [ ]No
341	VEN/VTN	M	[●]Yes [ ]No
342	VEN/VTN	M	[●]Yes [ ]No
343	VEN/VTN	M	[●]Yes [ ]No
344	VEN/VTN	O	[●]Yes [ ]No
345	VEN/VTN	M	[●]Yes [ ]No
346	VEN/VTN	M	[●]Yes [ ]No
400	VEN/VTN	M	[●]Yes [ ]No
401	VEN/VTN	M	[●]Yes [ ]No
402	VEN/VTN	M	[●]Yes [ ]No
403	VEN/VTN	M	[●]Yes [ ]No
404	VEN/VTN	M	[●]Yes [ ]No
405	VEN/VTN	M	[●]Yes [ ]No
406	VEN/VTN	M	[●]Yes [ ]No
407	VEN/VTN	M	[●]Yes [ ]No
500	VEN/VTN	C-2	[●]Yes [ ]No
501	VEN/VTN	C-2	[●]Yes [ ]No
502	VEN/VTN	C-2	[●]Yes [ ]No
506	VEN/VTN	M	[●]Yes [ ]No
507	VEN/VTN	M	[●]Yes [ ]No
508	VEN	M	[●]Yes [ ]No
509	VEN/VTN	M	[●]Yes [ ]No
510	VEN/VTN	M	[●]Yes [ ]No
511	VEN/VTN	M	[●]Yes [ ]No
512	VEN/VTN	M	[●]Yes [ ]No
514	VEN/VTN	O	[●]Yes [ ]No
515	VEN/VTN	M	[●]Yes [ ]No

C-1) Required for all but Report Only VENs.
C-2) All VTNs and Simple HTTP VENs must support this requirement.

Implementation Capabilities and Configuration

For each of the questions below, indicate if the implementation has the necessary functionality, configurability, and documentation to successfully complete the certification testing process.

Item	Description	Support
1	Does the implementation being submitted for certification support the capabilities outlined in the DUT Implementation Limits section of the OpenADR 2.0b Test Specification documentation? Note that these limits do not imply minimum market needs for a "b" profile implementation.	[●]Yes [ ]No
2	Does the implementation being submitted for certification support methodologies necessary to trigger specific actions during test execution as outlined in the DUT Configuration Requirements section of the OpenADR 2.0b Test Specification documentation?	[●]Yes [ ]No
3	Have you attached documentation to this PICS statement regarding how to configure the implementation as outlined in Appendix A of the OpenADR Certification Test Harness User Guide?	[●]Yes [ ]No
4	Does the implementation being submitted for certification have pre-installed x.509 certificates from the OpenADR/NetworkFX portal?	[●]Yes [ ]No
5	Does the VEN's being submitted for certification must have host authentication of the X.509 client certificate CN field disabled in order to avoid complex reconfiguration of the test harness and Openfire server? Answer No if not testing a VEN	[●]Yes [ ]No
6	Does the VTN being submitted for certification have the XMPP Server per-configured for the user name of 111111111111 which the test harness uses to connect to the implementation's VTN XMPP server. Answer No if not testing a VTN or XMPP is not supported	[ ]Yes [ ]No
7)	Does the VTN being offer reports as part of its metadata report. If so, periodic reporting will be tested. Answer No if not testing a VTN or no reports are supported	[]Yes [ ]No

Optional Test Case Guidelines

Following test cases may be skipped if the criterion noted is met.

Item	Criteria
1	Implementations will support either a push and/or pull exchange model. XMPP is always push, whereas HTTP may be either push or pull. Test cases are listed within Eclipse in a tree with branches labels Push or Pull. Only test cases appropriate to the exchange models supported should be run on the implementation.
2	If the implementation supports multiple transport and exchange model combinations, the full test suite shall be run across at least one push and one pull configuration. If there is more than one push configuration, then at least 4 non-negative randomly selected test cases shall be run across each service, with execution of the G0_9005_TH_xxx/G0_9010_TH_xxx security test being mandatory as part of the test cases run.
3	The following test cases may be skipped if HISTORY_USAGE reporting is not supported by a full function VEN. However, Report Only VENs must pass these test cases. _R1_3130_TH_VTN _R0_8130_TH_VTN _R1_3140_TH_VTN _R0_8140_TH_VTN
4	If the implementation is a Report Only VEN, then all of the tests under the EiEvent and EiOpt service headings may be skipped as these services are not required.
5	If the answer to question 7 in the Implementation Capabilities and Configuration section is No and the implementation is a VTN, the following test cases may be skipped: R1_3080_TH_VEN R1_3090_TH_VEN R1_3100_TH_VEN R1_3120_TH_VEN R1_8080_TH_VEN R1_8090_TH_VEN R1_8100_TH_VEN R1_8120_TH_VEN
6	If the VTN cannot send an Empty oadrDisributeEvent skip test case E0_6010_TH_VEN
7	If the VTN cannot be configured to set oadrResponseRequired to never skip test cases A_E2_0468, A_E2_0480, A_E2_0498, A_E3_0468, A_E3_0480, and A_E3_0498

8	If VEN cannot be configure with multiple Market Context, skip test case A_E1_0285 and A_E0_0285

9	If the VTN cannot set a ramp up period skip test cases A_E2_0527 and A_E3_0527
10	If the VTN cannot configure multiple intervals in an event skip test case A_E2_0432 and A_E3_0432
11	If a VTN cannot set an event's priority skip test case A_E2_0510, A_E3_0510, A_E2_ 0520, and A_E3_0520
12	If the VTN does not support configuration of eiTarget subelements, skip test case A_E3_0435 and A_E2_0435.
13	If the VTN does not support configuration of randomization with a startafter element skip test cases A_E2_0685 and A_E3_0685.
14	If the VEN cannot be configured to request reports from VTN skip test case R1_3070_TH_VTN_1, R0_8070_TH_VTN_1, R1_3080_TH_VTN_1, R0_8080_TH_VTN_1, R1_3090_TH_VTN_1, R0_8090_TH_VTN_1, R1_3100_TH_VTN_1, R0_8100_TH_VTN_1, R1_3120_TH_VTN_1 and R0_8120_TH_VTN.
15	If the VTN or VEN cannot be configured to send piggy back report requests and report cancellation payloads skip test cases R1_3050_TH_VEN, R0_8050_TH_VEN_1, R1_3060_TH_VEN, R0_8060_TH_VEN, R1_3120_TH_VTN_1 and R0_8120_TH_VTN.
16	Test cases E1_1050_TH_VTN and E1_6050_TH_VTN may be skipped the VEN cannot configured to send an async oadrRequestEvent as required by this test case.