



Enabler Validation Plan for SUPL

Candidate Version 2.0 – 18 Aug 2009

Open Mobile Alliance
OMA-EVP-SUPL-V2_0-20090818-C

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1. Scope

This document details the Validation plan for the SUPL 2.0 Enabler Release. The successful accomplishment of the validation activities will be required for the Enabler to be considered for Approved status.

The validation plan for the 2.0 Enabler Release specifications is based on testing expectations in the Enabler Test Requirements (ETR). While the specific test activities to be performed are described in the Enabler Test Specification (ETS) the test environment is described in this plan. This test environment details infrastructure, operational and participation requirements identified for the needed testing activities.

1.1 Assumptions

None

1.2 Exclusions

None

2. References

2.1 Normative References

- [ENABLERSPEC] “Enabler Release Package for SUPL”, Version 1.0, Open Mobile Alliance™, OMA-ERP-SUPL-V1_0, URL:<http://www.openmobilealliance.org/>
- [IOPEICS] “Client Enabler Implementation Conformance Statement for SUPL”, Version 2.0, Open Mobile Alliance™, OMA-EICS-SUPL-Client-V2_0, URL:<http://www.openmobilealliance.org/> and “Server Enabler Implementation Conformance Statement for SUPL”, Version 2.0, Open Mobile Alliance™, OMA-EICS-SUPL-Server-V2_0, URL:<http://www.openmobilealliance.org/>
- [IOPETR] “Enabler Test Requirements for SUPL”, Version 2.0, Open Mobile Alliance™, OMA-ETR-SUPL-V2_0, URL:<http://www.openmobilealliance.org/>
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URL:<http://www.ietf.org/rfc/rfc2446.txt>
- [WAP] “Wireless Application Protocol”, Version 2.0, Open Mobile Alliance™, Aug 2002, URL: <http://www.openmobilealliance.org/>
- [WAP PAP] “WAP Push Access Protocol”, Open Mobile Alliance™, Apr 2001, URL: <http://www.openmobilealliance.org/>
- [WAP POTAP] “WAP Push Over The Air Protocol”, Open Mobile Alliance™, Apr 2001
URL: <http://www.openmobilealliance.org/>
- [WAP PUSH] “WAP Push Message”, Open Mobile Alliance™, Mar 2001, URL: <http://www.openmobilealliance.org/>
- [GBA] 3GPP TS 33.220 v6.2.0 “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Generic Authentication Architecture (GAA); Generic bootstrapping architecture (Release 6) “3GPP TS 33.220 v6.2.0. URL: <http://www.3gpp.org/ftp/Specs/html-info/33220.htm>
- [GAA] 3GPP TS 33.222 v6.1.0 “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Generic Authentication Function; Access to Network Application Functions using Hypertext Transfer Protocol over Transport Layer Security (HTTPS); (Release 6)”. URL: <http://www.3gpp.org/ftp/Specs/html-info/33222.htm>
- [TLS-AES] “Advanced Encryption Standard (AES) Ciphersuites for Transport Layer Security (TLS)”, IETF RFC 3268, June 2002. URL: <http://www.ietf.org/rfc/rfc3268.txt>

[OMA-ULP] “UserPlane for Location Protocol”, Version 2.0, Open Mobile Alliance™, OMA-TS-ULP-V2_0,
URL:<http://www.openmobilealliance.org/>

[OMA-ILP] “Internal Location Protocol”, Version 2.0, Open Mobile Alliance™, OMA-TS-ILP-V2_0,
URL:<http://www.openmobilealliance.org/>

2.2 Informative References

[OMADICT] “Dictionary for OMA Specifications”, Version 2.7, Open Mobile Alliance™,
OMA-ORG-Dictionary-V2_7, URL:<http://www.openmobilealliance.org/>

3. Terminology and Conventions

3.1 Conventions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except “Scope”, are normative, unless they are explicitly indicated to be informative.

The following numbering scheme is used:

xxx-y.z-con-number where:

xxx	Name of enabler, e.g. MMS or Browsing
y.z	Version of enabler release, e.g. 1.2 or 1.2.1
'con'	Indicating this test is a conformance test case
number	Leap number for the test case

Or

xxx-y.z-int-number where:

xxx	Name of enabler, e.g. MMS or Browsing
y.z	Version of enabler release, e.g. 1.2 or 1.2.1
'int'	Indicating this test is a interoperability test case
number	Leap number for the test case

3.2 Definitions

MLS application	An application which requests and consumes the location information
Network Initiated SUPL Services	Network Initiated SUPL Services are services which originate from within the SUPL network as opposed to the SET. For these services, the SUPL Agent resides in the Network.
Non-Proxy Mode	The SPC system will have direct communication with the SET.
Proxy Mode	The SPC system will not have direct communication with the SET. In this environment the SLC system will act as a proxy between the SET and the SPC.
SET Initiated SUPL Services	SET Initiated SUPL Services are services which originate from the SET. For these services, the SUPL Agent resides within the SET.
SUPL Agent	Service access point which accesses the network resources to obtain location information.
SUPL Enabled Terminal (SET)	A device that is capable of communicating with a SUPL network. Examples of this could be a UE in UMTS, a MS in GSM or IS-95, or a PC over an IP-based transport.
SUPL Location Centre (SLC)	Coordinates the operations of SUPL in the network and interacts with the SUPL Enabled Terminal (SET) over User Plane bearer.
SUPL Location Platform (SLP)	Entity responsible for SUPL Service Management and Position Determination. SLP contains the SLC and SPC Functions.
SUPL Positioning Centre (SPC)	Entity in the SUPL network responsible for all messages and procedures required for position calculation and for the delivery of assistance data.

3.3 Abbreviations

ACA	Alternative Client authentication
AFLT	Advanced Forward Link Trilateration
A-GPS	Assisted GPS

CID	Cell ID
CI	Cell Identity (3GPP)
ECID	Enhanced Cell ID
EOTD	Enhanced Observed Time Difference
E-SLP	Emergency SLP
FFS	For Further Study
FQDN	Fully Qualified Domain Name
GANSS	Galileo and Additional Navigation Satellite Systems
GMLC	Gateway Mobile Location Centre
GMT	Greenwich Mean Time
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
H-SLP	Home SLP
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
LAC	Location Area Code (3GPP)
LCS	Location Services
MAC	Message Authentication Code
MCC	Mobile Country Code (3GPP)
MLC	Mobile Location Centre
MLP	Mobile Location Protocol
MLS	Mobile Location Services
MNC	Mobile Network Code (3GPP)
MNO	Mobile Network Operator
MSID	Mobile Station Identifier
NID	Network ID (C.S0022-A V1.0)
NMR	Network Measurement Report
OMA	Open Mobile Alliance
OTDOA	Observed Time Difference of Arrival
PAP	WAP Push Access Protocol
PPG	Push Proxy Gateway
QoP	Quality of Position
RLP	Roaming Location Protocol
RRC	Radio Resource Control
RRLP	Radio Resource LCS Protocol
R-SLP	Requesting SLP
RNC	Radio Network Controller
SET	SUPL Enabled Terminal
SIM	Subscriber Identity Module
SIP	Session Initiation Protocol

SLC	SUPL Location Centre
SLIA	Standard Location Immediate Answer
SLIR	Standard Location Immediate Request
SLP	SUPL Location Platform
SMLC	Serving Mobile Location Centre
SMS	Short Message Service
SMSC	Short Message Service Centre
SPC	SUPL Positioning Centre
SPCF	SUPL Position Calculation Function
SPF	SUPL Privacy Function
SRLIA	Standard Roaming Location Immediate Answer
SRLIR	Standard Roaming Location Immediate Request
SRRF	SUPL Reference Retrieval Function
SSF	SUPL Security Function
SSMF	SUPL Service Management Function
TBD	To Be Developed
TLS	Transport Layer Security
UE	User Equipment
ULP	Userplane Location Protocol
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
V-SLP	Visited SLP
V-SPC	Visited SPC
WAP	Wireless Application Protocol

4. Enabler Validation Description

It is intended that Test Fests will be the primary method of validation for OMA SUPL 2.0.

5. TestFest Activities

5.1 Enabler Test Guidelines

5.1.1 Minimal Test Configuration

At a minimum a 2G network and GPRS shall be supported provided.

At a minimum testing shall be provided for A-GPS, Cell ID and ECID, therefore the relevant requirements from section 5.1 shall be provided.

It is expected that Servers attending the TestFest will support at least A-GPS (both SET assisted and SET based) and ECID and will also support both Network initiated and SET initiated settings. It is expected that Clients attending the TestFest will support at least A-GPS (both SET assisted and SET based) and Cell ID

If other positioning technologies, e.g. AFLT or E-OTD and other network configurations e.g. W-CDMA or CDMA can also be supported by the TestFest host, then this should be made known at the start of registration for the TestFest.

5.1.2 Minimal Participation Guidelines

There are a minimum of 3 SET clients from different vendors and 2 SLP servers from different vendors.

5.1.3 Test Case Priority Guidelines

This list represents the current highest priority test cases that the participants should attempt to perform at the event. In order to facilitate maximum test coverage of the functionality of the enabler over a number of TestFests, this list may be modified by the IOP WG between test events to reflect the latest priorities. Therefore the ETS Test Cases listed below represent a subset of all the Test Cases for the Enabler that it is thought can be executed in a single test session at an OMA TestFest. It is not intended to be the only tests executed at a TestFest, and teams are encouraged to execute more tests if they are able to do so in the time allowed.

The list includes:

Test Case Id	Special Conditions
SUPL-2.0-int-001 – SET-assisted A-GANSS	
SUPL-2.0-int-002 – SET-based A-GANSS	
SUPL-2.0-int-003 – Autonomous GANSS	
SUPL-2.0-int-004 - Emergency Services: Successful Case	
SUPL-2.0-int-005 - Emergency Services: Non-emergency request comes when there is ongoing Emergency session	
SUPL-2.0-int-006 - Emergency Services: Emergency request comes when there is ongoing non-emergency session	
SUPL-2.0-int-007 - Periodic Triggers (Real time reporting)	
SUPL-2.0-int-008 - Periodic Triggers (Quasi Real time reporting)	
SUPL-2.0-int-009 - Periodic Triggers (Batch reporting)	
SUPL-2.0-int-013 - Area Event Trigger	
SUPL-2.0-int-014 – Retrieval of Historical Positions	

Test Case Id	Special Conditions
SUPL-2.0-int-015 - Cancellation of Triggered Session by the Network	
SUPL-2.0-int-016 - Cancellation of Triggered Session by the SET	
SUPL-2.0-int-021 - Notification based on Location	
SUPL-2.0-int-100 - SET-assisted GANSS	
SUPL-2.0-int-101 - SET-based GANSS	
SUPL-2.0-int-102 - Autonomous GANSS	
SUPL-2.0-int-103- Transfer to third party	
SUPL-2.0-int-110 – Periodic Triggers	
SUPL-2.0-int-111 – Periodic transfer to third party	
SUPL-2.0-int-112 – Area Event Triggers	
SUPL-2.0-int-120 – Location of another SET	
SUPL-2.0-int-200 Cross version Compatibility: H-SLP V2.0 and SET V2.0	
SUPL-2.0-int-201 Cross version Compatibility: H-SLP V2.0 and SET V1.0	
SUPL-2.0-int-202 Cross version Compatibility: H-SLP V2.0 and V1.0 and SET V1.0	
SUPL-2.0-int-203 Cross version Compatibility: H-SLP V1.0 and SET V2.0	

5.2 Enabler Test Requirements

Testing requirements for SUPL 2.0 are specified in [IOPETR].

The testing assertions shall reflect possible high-level functionality of the mentioned areas in a normal flow.

5.2.1 Test Infrastructure Requirements

SUPL 2.0 supports different air interface standards (GSM/GPRS/WCDMA, CDMA, UMB, HRPD, LTE, I-WLAN, WiMAX), positioning methods (A-GPS, A-GANSS, Autonomous-GPS, Autonomous-GANSS, AFLT, ECID, EOTD, and OTDOA) and network architectures (proxy, non-proxy). The use cases for SUPL 2.0 applications fall into four categories:

- SET Initiated
- Network Initiated
- Roaming
- Non-Roaming

The general test environment required to test all the different scenarios is shown in Figure 5-1 and consists of the following network elements:

- 2 SET's
- Home SLP (H-SLP)

- Visited SLP (V-SLP)
- Requesting SLP (R-SLP)
- MLP Application Server
- WAP PPG
- SMSC/MC
- 2 networks e.g. GSM and WCDMA networks
- Other elements specific to the positioning method (see section 5.1 for more details)

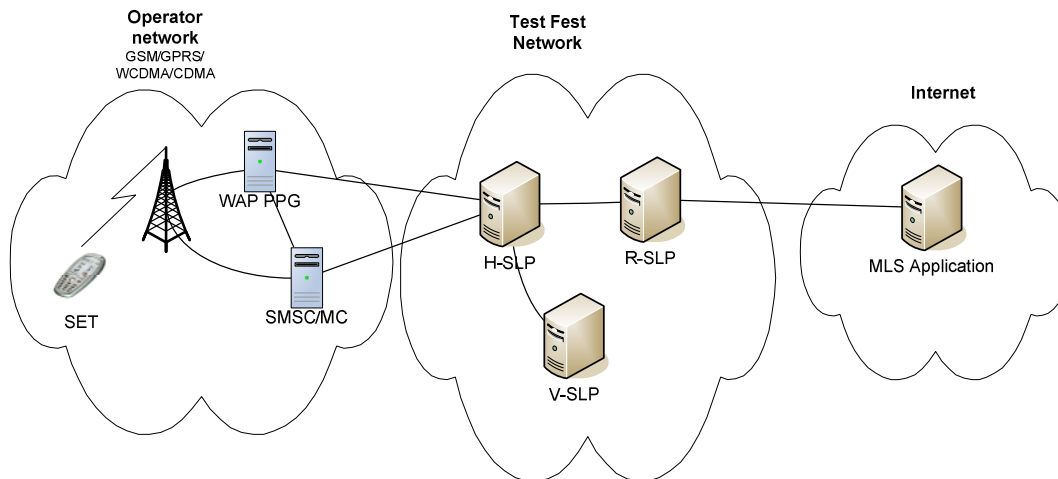


Figure 5-1 Overall Test Environment

In order to test certain SUPL 2.0 scenarios, not all network elements shown in Figure 5-1 are required. For instance, for non-roaming scenarios, no V-SLP is required. By the same token, SET Initiated applications do not require a WAP PPG (or an SMSC/MC).

5.2.2 Enabler Execution Flow

From an ULP call flow point of view, the different scenarios shown above can be collapsed into the following four call flow scenarios:

- Network Initiated – proxy mode
- Network Initiated – non-proxy mode
- SET Initiated – proxy mode
- SET Initiated – non-proxy mode

Roaming vs. non-roaming mode of operation only changes parameters within the ULP messages but does not change the call flow itself. Therefore for ULP testing, only the four call flow scenarios are relevant. The call flows are shown in Figure 5-2 to Figure 5-5.

Network Initiated, Proxy Mode:

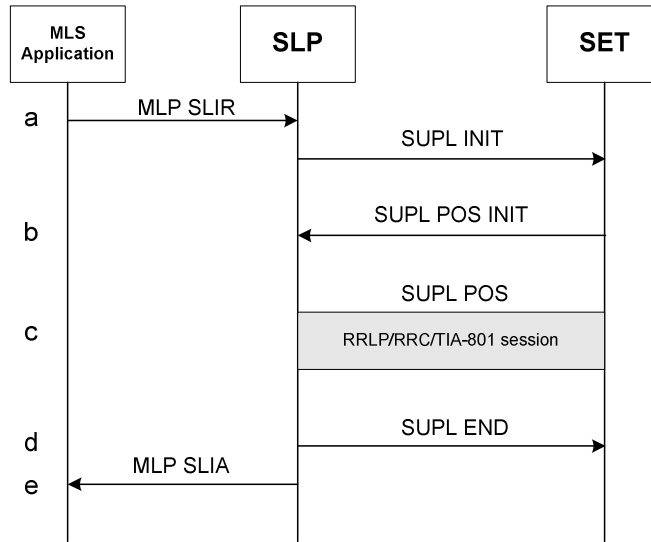


Figure 5-2 Network Initiated, Proxy Mode

Network Initiated, Non-Proxy Mode:

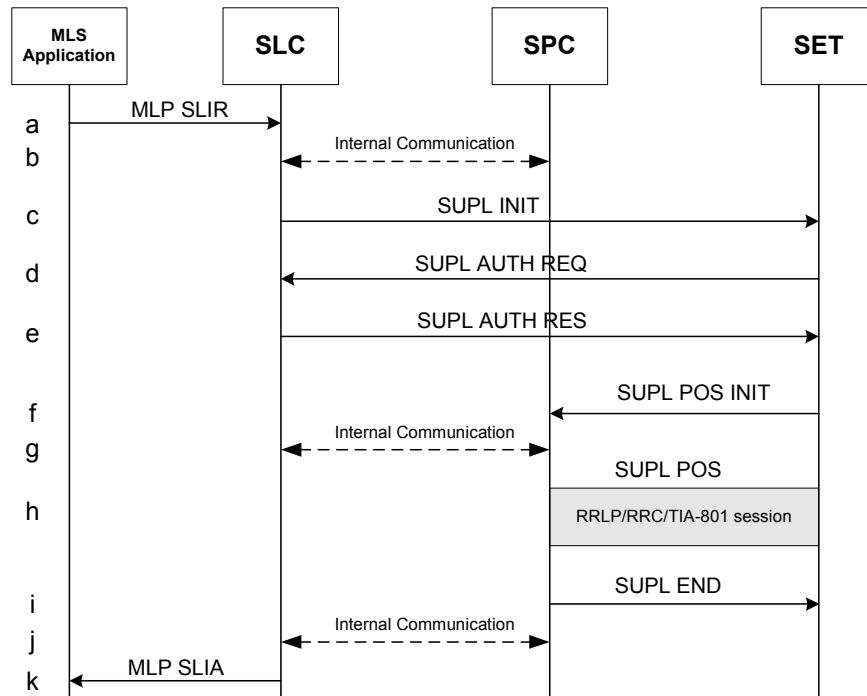


Figure 5-3 Network Initiated, Non-Proxy Mode

SET Initiated, Proxy Mode:

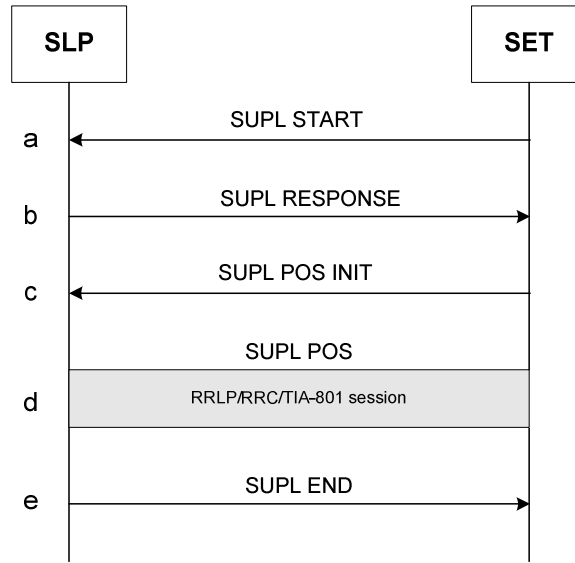


Figure 5-4 SET Initiated, Proxy Mode

SET Initiated, Non-Proxy Mode

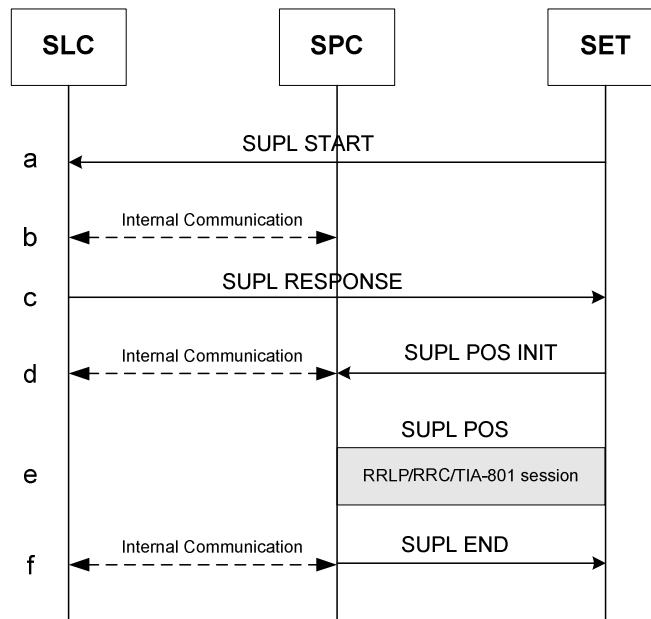


Figure 5-5 SET Initiated, Non-Proxy Mode

5.2.3 Test Content Requirements

5.2.4 Test Limitations

5.2.4.1 Physical

There are no physical testing limitations. Vendors may test onsite or remotely

5.2.4.2 Resources

There are no resource limitations.

5.2.5 Test Restrictions

In the event that an SLP and/or SET supporting the previous SUPL Release are not available for interoperability testing, the requirement for testing backwards compatibility may not be met.

Testing can only be performed in case enough registrations for a test fest are available as defined within the Test Fest Participants document.

Any test restriction identified during the test fest should be reported to the IOP MEC SWG either by an observation within the Enabler Test Report or by using the PR Tool (Problem Reporting Tool) which is available at the OMA Web page.

5.2.6 Test Tools

No conformance test tool requirement is available.

In the event that a test tool exists that meets the test tool requirements, as defined by the IOP MEC SWG, this could be utilized to perform SLP or SET emulation. The tool should be used as well to conduct conformance testing and to capture and analyze PDU's for error handling purpose.

For conformance testing, the use of a tool would facilitate efficient and repeatable testing.

5.2.6.1 Existing Tools to be Used

No OMA SUPL conformance test tool exists.

5.2.6.2 Test Tool Requirements

5.2.7 Resources Required

5.3 Tests to be Performed

The following sections describe the tests related to the formal TestFest validation activities.

5.3.1 Entry Criteria for TestFest

The following tests need to be performed and passed by implementations by members wishing to participate in the TestFest. This ensures minimal requisite capability of the implementations. The tests are defined in the ETS [IOPETS] and any special comments are noted.

Test Case Id	Special Conditions
SUPL-2.0-int-200 Cross version Compatibility: H-SLP V2.0 and SET V2.0	

Table 1: Listing of Tests for Entry Criteria for TestFest

Note that all other test cases cover optional features and are therefore not suitable for this purpose.

5.3.2 Testing to be Performed at TestFest

The following tests need to be performed to fully cover the range of capabilities of the enabler and defined protocols. These tests are to be covered in the TestFest. The tests are defined in the ETS [IOPETS] and any special comments are noted.

Test Case Id	Special Conditions
SUPL-2.0-int-001 – SET-assisted A-GANSS	
SUPL-2.0-int-002 – SET-based A-GANSS	
SUPL-2.0-int-003 – Autonomous GANSS	
SUPL-2.0-int-004 - Emergency Services: Successful Case	
SUPL-2.0-int-005 - Emergency Services: Non-emergency request comes when there is ongoing Emergency session	
SUPL-2.0-int-006 - Emergency Services: Emergency request comes when there is ongoing non-emergency session	
SUPL-2.0-int-007– Periodic Triggers (Real time reporting)	
SUPL-2.0-int-008 - Periodic Triggers (Quasi Real time reporting)	
SUPL-2.0-int-009– Periodic Triggers (Batch reporting)	
SUPL-2.0-int-013 - Area Event Trigger	
SUPL-2.0-int-014 – Retrieval of Historical Positions	
SUPL-2.0-int-015 - Cancellation of Triggered Session by the Network	
SUPL-2.0-int-016 - Cancellation of Triggered Session by the SET	
SUPL-2.0-int-017 – V-SLP to V-SLP handover	
SUPL-2.0-int-018 – Capabilities Change	
SUPL-2.0-int-020 - Session Info Query	
SUPL-2.0-int-021 - Notification based on Location	
SUPL-2.0-int-100 - SET-assisted GANSS	
SUPL-2.0-int-101 - SET-based GANSS	
SUPL-2.0-int-102 - Autonomous GANSS	
SUPL-2.0-int-103- Transfer to third party	
SUPL-2.0-int-110 – Periodic Triggers	
SUPL-2.0-int-111 – Periodic transfer to third party	
SUPL-2.0-int-112 – Area Event Triggers	
SUPL-2.0-int-120 – Location of another SET	
SUPL-2.0-int-200 Cross version Compatibility: H-SLP V2.0 and SET V2.0	
SUPL-2.0-int-201 Cross version Compatibility: H-SLP V2.0 and SET V1.0	

Test Case Id	Special Conditions
SUPL-2.0-int-202 Cross version Compatibility: H-SLP V2.0 and V1.0 and SET V1.0	
SUPL-2.0-int-203 Cross version Compatibility: H-SLP V1.0 and SET V2.0	

Table 2: Listing of Tests to be Performed at TestFest

5.4 Enabler Test Reporting

5.4.1 Problem Reporting Requirements

Normal Reporting, no special reporting required

5.4.2 Enabler Test Requirements

Normal Reporting, no special reporting required.

6. Alternative Validation Activities

None.

7. Approval Criteria

The SUPL 2.0 Enabler can be put in the Approved state when:

- The Enabler has been tested successfully at 2 Test Fests or
- There has been at least 2 successful bi-lateral test sessions that have reported results and any issues to OMA.
- No open PRs exist.

7.1 Enabler Validation Test Cases

The following table should list the set of tests that are used for enabler validation.

Test Case Id	ETR Requirement Id	ETR status	Notes
SUPL-2.0-int-001 – SET-assisted A-GANSS	NB1	M	One of SUPL-2.0-int-001, SUPL-2.0-int-002 or SUPL-2.0-int-003 required. One GANSS required
SUPL-2.0-int-002 – SET-based A-GANSS	NB1	M	One of SUPL-2.0-int-001, SUPL-2.0-int-002 or SUPL-2.0-int-003 required. One GANSS required
SUPL-2.0-int-003 – Autonomous GANSS	NB1	M	One of SUPL-2.0-int-001, SUPL-2.0-int-002 or SUPL-2.0-int-003 required. One GANSS required
SUPL-2.0-int-004 - Emergency Services: Successful Case	ES1	M	
SUPL-2.0-int-005 - Emergency Services: Non-emergency request comes when there is ongoing Emergency session	ES1	M	
SUPL-2.0-int-006 - Emergency Services: Emergency request comes when there is ongoing non-emergency session	ES1	M	
SUPL-2.0-int-007 - Periodic Triggers (Real time reporting)	NPT1	O	
SUPL-2.0-int-008 - Periodic Triggers (Quasi Real time reporting)	NPT1	O	
SUPL-2.0-int-009 - Periodic Triggers (Batch reporting)	NPT1	O	
SUPL-2.0-int-013 - Area Event Trigger	NET1	O	
SUPL-2.0-int-014 – Retrieval of Historical Positions	HP	O	
SUPL-2.0-int-015 - Cancellation of Triggered Session by the Network	NCT	O	(Incorrectly indicated as Mandatory in ETR)
SUPL-2.0-int-016 - Cancellation of Triggered Session by the SET	SCT	O	(Incorrectly indicated as Mandatory in ETR)
SUPL-2.0-int-017 – V-SLP to V-SLP handover	HR1	O	
SUPL-2.0-int-018 – Capabilities Change	CAT	O	

Test Case Id	ETR Requirement Id	ETR status	Notes
SUPL-2.0-int-020 - Session Info Query	SIQ	O	(Item still to be added to ETR)
SUPL-2.0-int-021 - Notification based on Location	N1	O	
SUPL-2.0-int-100 - SET-assisted GANSS	SB1	M	One of SUPL-2.0-int-100, SUPL-2.0-int-101 or SUPL-2.0-int-102 required. One GANSS required
SUPL-2.0-int-101 - SET-based GANSS	SB1	M	One of SUPL-2.0-int-100, SUPL-2.0-int-101 or SUPL-2.0-int-102 required. One GANSS required
SUPL-2.0-int-102 - Autonomous GANSS	SB1	M	One of SUPL-2.0-int-100, SUPL-2.0-int-101 or SUPL-2.0-int-102 required. One GANSS required
SUPL-2.0-int-103- Transfer to third party	STT	O	
SUPL-2.0-int-110 – Periodic Triggers	SPT1	O	
SUPL-2.0-int-111 – Periodic transfer to third party	STP1	O	
SUPL-2.0-int-112 – Area Event Triggers	SET1	O	
SUPL-2.0-int-120 – Location of another SET	SAS	O	
SUPL-2.0-int-200 Cross version Compatibility: H-SLP V2.0 and SET V2.0	Section 5.2	M	
SUPL-2.0-int-201 Cross version Compatibility: H-SLP V2.0 and SET V1.0	Section 5.2	M	
SUPL-2.0-int-202 Cross version Compatibility: H-SLP V2.0 and V1.0 and SET V1.0	Section 5.2	M	
SUPL-2.0-int-203 Cross version Compatibility: H-SLP V1.0 and SET V2.0	Section 5.2	M	

Table 3: Enabler Validation Test Cases

7.2 Non-Covered ETR Requirements

Any restrictions, limitations and/or infeasibility of testing of the ETR requirements should be stated in this section.

If new information about limitations and/or infeasibility of testing of any of the ETR requirements is discovered, this section should be updated accordingly.

CP	<M>	Tested inherently in all test cases
SID	<M>	Tested inherently in other test cases
KM1	<M>	Tested inherently in other test cases
KM2	<M>	Non-Proxy mode not tested
TLS	<M>	Tested inherently in other test cases
ACA	<M>	Tested in SUPL 1.0
SI1	<M>	Tested inherently in other test cases
SI2	<M>	Tested inherently in other test cases
KR	<M>	Non-Proxy mode not tested

CDI	<M>	Tested inherently in other test cases
NV	<M>	Tested in SUPL 1.0
NB2	<M>	Non-Proxy mode not tested
SB2	<M>	Non-Proxy mode not tested
NPP	<M>	Tested inherently in other test cases
ES2	<M>	Non-Proxy mode not tested
CPE	<M>	Error testing - not suitable for Interoperability testing
SAF	<M>	Error testing - not suitable for Interoperability testing
SPE	<M>	Error testing - not suitable for Interoperability testing
STE	<M>	Error testing - not suitable for Interoperability testing
PST	<M>	Error testing - not suitable for Interoperability testing
AE	<O>	Tested inherently in other test cases
N2	<O>	Non-Proxy mode not tested
QOP	<O>	Tested in SUPL 1.0
VEL	<O>	Tested in SUPL 1.0
ALT	<O>	Tested in SUPL 1.0
NPT2	<O>	Non-Proxy mode not tested
SPT2	<O>	Non-Proxy mode not tested
NET2	<O>	Non-Proxy mode not tested
SET2	<O>	Non-Proxy mode not tested
STP2	<O>	Non-Proxy mode not tested
HR2	<O>	Non-Proxy mode not tested

Table 4: Non-Covered ETR Requirements

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version –or- No previous version within OMA
OMA-xyyz-V1_0-20021001-A	01 Oct 2002	Initial document to address the basic starting point Ref TP Doc# OMA-TP-2002-1234-xyyzForApproval
OMA-xyyz-V1_1-20030405-A	05 Apr 2003	description of changed Ref TP Doc# OMA-TP-2003-0321-xyyzV1_1forApproval

A.2 Draft/Candidate Version 2.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-EVP-SUPL-V2_0	24 Mar 2009	all	No prior version
	23 Jul 2009	7, 9	Incorporated CR: OMA-IOP-MEC-2009-0120R01
Candidate Versions OMA-EVP-SUPL-V2_0	18 Aug 2009	n/a	TP approval : OMA-TP-2009-0348-INP_SUPL_2.0_EVP_for_Candidate_approval