

eCall Development Server - Remote API

OECON Products & Services GmbH

Version 1.15

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1. Change History

Date	Author	Version	Status	Changes
22.10.2019	LM	1.0	initial	
07.08.2020	LM	1.1		Added filter parameters to /calls
21.01.2021	LM	1.2		Added alAckValue parameter to /calls/inbandRequestMsd
23.06.2021	LM	1.3		Added /calls/downloadAudio
25.02.2022	MS	1.4		Added /phones/savePhone and phones/deletePhone Added attribute allowOutgoingCalls to Phone model
01.03.2022	MS	1.4		Added /sms Added Sms model
14.03.2022	MS	1.5		Added callEnd timestamp to CallState model
25.03.2022	MS	1.6		Added CallEventSmsReceived
31.03.2022	LM	1.7		Only valid test parameters can be changed in IVS Test Server Added /version
23.02.2023	MS	1.8		Added endpoints to send sms Added missing parameters to TestParameterIvs
11.08.2023	MS	1.9		Added callId as return value of makeCall
07.11.2023	LM	1.10		Added phoneNumber and testCaseId to /makeCall
29.02.2024	LM	1.11		Added externalSubscriberMode, calledSubscriber, incoming, tag to CallState TestParametersIvs.ngAckValue changed from Boolean to String Added ngSendDataResponse to TestParametersPsap Added CallEventMsdSent
25.06.2024	LM	1.12		Added rejectCallMode to TestParameters Added alAckHandling to TestParametersIvs
07.10.2024	LM	1.13		Added fromTime and toTime parameters to GET /calls Added coreVersion to Version
23.06.2025	LM	1.14		Added /calls/dropCall Added none to test parameter ngAckValue
19.09.2025	LM	1.15		Added ringingDuration to TestParameters

2. Introduction

This document describes an API to control the eCall Development Server (**ECDS**) with an external

system (**ES**).

The API comes in two parts: a REST interface and a WebSocket interface which are described in the next two chapters.

In order to be used the remote API feature must be enabled in the ECDS license. Additionally the remote API feature must be enabled for the user's user group that is accessing the API.

Likewise, for the conformance test features to be accessible, they need to be enabled in the ECDS license. Additionally, these features should be activated for the user's user group interacting with the API.

An active user account is required to access the API. The REST interface authentication uses the same credentials that are used to login to the web interface of ECDS. Additionally the user's roles and permission can further restrict which API functions may be accessed.

Users with access level `ROLE_ADMIN` or `ROLE_GROUP_ADMIN` are not allowed to use the API.

3. References

[1] eCall Development Server - User Manual

4. REST Interface

The REST interface uses standard HTTP GET and POST requests.

Every request sent by the ES must be authenticated in order to be processed by the ECDS. ECDS uses Basic Authentication for this purpose (see RFC 7617).

The base URL for the REST interface is: **http(s)://<host>/api/v1**

The paths listed in the following sections must be appended to the base URL to create the valid request URL.

GET request parameters must be transmitted using URL parameters. In POST requests simple parameters (Number, Booleans, etc.) must be transmitted as `application/x-www-form-urlencoded` and complex types must be transmitted as JSON in the request body.

All non-empty response bodies are in JSON format. HTTP code 200 signals success. All functions may return common error codes such as 400, if parameters are missing or invalid, 404, if an object could not be found or 403 if access to the function or object is denied.

4.1. GET /version

Retrieve current version.

Parameter	Type	Remarks
No parameters		

Responses:

Code	Body	Description
200	Version	Success

4.2. GET /phones

List all phones.

Parameter	Type	Remarks
No parameters		

Responses:

Code	Body	Description
200	Array< Phone >	Success

4.3. GET /phones?phoneId={phoneId}

Retrieve a specific phone.

Parameter	Type	Remarks
phoneId	Number	

Responses:

Code	Body	Description
200	Phone	Success

4.4. POST /phones/savePhone

Modify a phone by including the ID of an existing phone. Save a new phone by omitting the phone ID or setting it to 0. The phone mode (IVS or PSAP) is restricted by the rights of the usergroup the current user is in. Violations will be overwritten with the allowed mode, i.e. if a user tries to create an IVS phone while his usergroup is only allowed to create PSAPs, the resulting phone will be created with mode PSAP. The phone number can only be changed if there are no calls associated with this phone.

Parameter	Type	Remarks
Phone	Phone	Must be included in JSON format in request body

Responses:

Code	Body	Description
------	------	-------------

200	Phone	Success
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4.5. POST /phones/deletePhone

Delete an existing phone. A phone can only be deleted when it is not associated with any calls, sms or tcp connections.

Parameter	Type	Remarks
phoneId	Number	

Responses:

Code	Body	Description
200		Success

4.6. POST /phones/assignTestCase

Assign a test case to a phone.

Parameter	Type	Remarks
phoneId	Number	
testCaseId	Number	

Responses:

Code	Body	Description
200		Success

4.7. POST /phones/assignTestCaseGroup

Assign a test case group to a phone.

Parameter	Type	Remarks
phoneId	Number	
testCaseGroupId	Number	

Responses:

Code	Body	Description
200		Success

4.8. GET /calls

List all calls.

Parameter	Type	Remarks
phoneId	Number	Optional. Results will only contain calls from or to this phone.
sortDir	String	Optional. Use "asc" or "desc" for ascending or descending order of results. Default is "asc".
max	Number	Optional. Limits the maximum number of results.
fromTime	DateTime	Optional. Restrict results to calls made at or after this time. Time zone must be specified. Examples: 2024-01-01T00:00:00Z 2024-01-01T02:00:00+02:00
toTime	DateTime	Optional. Restricts results to calls made at or before this time. Time zone must be specified. Examples: 2024-12-31T23:59:59Z 2024-12-31T21:59:59-02:00

Responses:

Code	Body	Description
200	Array< PhoneCall >	Success

4.9. GET /calls?callId={callId}

Retrieve a specific call.

Parameter	Type	Remarks
callId	Number	

Responses:

Code	Body	Description
200	PhoneCall	Success

4.10. GET /calls/downloadAudio?callId={callId}

Retrieve audio recordings for a specific call.

Parameter	Type	Remarks
callId	Number	

Responses:

Code	Body	Description
200	Zip file	The zip file will contain two wav files, one file name ending in out.wav and one ending in in.wav. For incoming calls in.wav contains the external audio channel and out.wav contains the internal audio channel. For outgoing calls the order is reversed.

4.11. POST /calls/makeCall

Make a call to a phone or phone number. If a phone number is given and a phone with that phone number does not exist, the phone will automatically be generated and the user group's default test case will be assigned. The generated phone's mode will be IVS if the user group's mode is set to PSAP simulation exclusively, otherwise it will be PSAP.

If a test case ID is given then the corresponding test case will only be used for this one call. If no test case ID is given then the phone's assigned test case will be used for the call.

Returns the call ID of the call that was initiated.

Parameter	Type	Remarks
phoneId	Number	Mandatory if phoneNumber is not given
phoneNumber	String	Mandatory if phoneId is not given
testCaseId	Number	Optional.

Responses:

Code	Body	Description
200		Success

4.12. POST /calls/hangUp

Hang up a call.

Parameter	Type	Remarks
callId	Number	

Responses:

Code	Body	Description
200		Success

4.13. POST /calls/dropCall

Drops a call without sending a SIP BYE.

Parameter	Type	Remarks
callId	Number	

Responses:

Code	Body	Description
200		Success

4.14. POST /calls/inbandRequestMsd

Request an inband MSD transmission. The call must be active.

Parameter	Type	Remarks
callId	Number	
alAckValue	Number	Optional. Allowed range is between 0 and 15. Set this to 2 to send an AL clear down.

Responses:

Code	Body	Description
200		Success

4.15. POST /calls/ngRequestMsd

Request a next generation MSD transmission by sending a SIP INFO request. The call must be active.

Parameter	Type	Remarks
callId	Number	

Responses:

Code	Body	Description
200		Success

4.16. GET /sms

List all/some SMS. An array of SMS is returned. If the SMS body contains a valid MSD, it is decoded including it's OSD and stored with the SMS.

Parameter	Type	Remarks
sortDir	String	Optional. Use "asc" or "desc" for ascending or descending order of results.
max	Number	Optional. Limits the maximum number of results.

Responses:

Code	Body	Description
200	Array<Sms>	Success

4.17. GET /sms?smsId={smsId}

Retrieve a specific sms.

Parameter	Type	Remarks
smsId	Number	

Responses:

Code	Body	Description
200	Sms	Success

4.18. POST /sms/requestCall

Request a callback from IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	
activation	String	Set to either MANUAL or AUTOMATIC

Responses:

Code	Body	Description
200	Sms	Success

4.19. POST /sms/requestMsd

Request a MSD from IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	
mid	Number	Number between 0 and 255

transport	String	One of “any”, “sms”, “tcp/ip”, “voice”
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Responses:

Code	Body	Description
200	Sms	Success

4.20. POST /sms/requestAccel

Request acceleration info from IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	

Responses:

Code	Body	Description
200	Sms	Success

4.21. POST /sms/requestTrack

Request track info from IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	

Responses:

Code	Body	Description
200	Sms	Success

4.22. POST /sms/requestConfig

Request or set configuration parameters from/in the IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	
actionCode	String	Either “get” or “set”
parameter	String	One of the parameter names found in the GUI, i.e. EGTS_SIM_PIN
parameterValue	String	The value to set the given parameter to. Will be ignored (and can be omitted) for “get” action.

Responses:

Code	Body	Description
200	Sms	Success

4.23. POST /sms/requestTestMode

Request to switch testmode on or off in IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	
mode	String	Set to either “start” or “stop”

Responses:

Code	Body	Description
200	Sms	Success

4.24. POST /sms/requestDeregistration

Request deregistration of IVS via SMS. Returns the id of the SMS just sent or an error message.

Parameter	Type	Remarks
ivsPhoneId	String	

Responses:

Code	Body	Description
200	Sms	Success

4.25. GET /tests

List all test cases and / or test case groups.

Parameter	Type	Remarks
onlyTestCases	Boolean	If true, only include test cases in the response. Default: false
onlyTestCaseGroups	Boolean	If true, only include test case groups in the response. Default: false

Responses:

Code	Body	Description
------	------	-------------

200	Array< TestCase TestCaseGroup >	Success
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4.26. GET /tests?testCaseId={testCaseId}

List a specific test case.

Parameter	Type	Remarks
testCaseId	Number	

Responses:

Code	Body	Description
200	TestCase	Success

4.27. GET /tests?testCaseGroupId={testCaseGroupId}

List a specific test case.

Parameter	Type	Remarks
testCaseGroupId	Number	

Responses:

Code	Body	Description
200	TestCaseGroup	Success

4.28. POST /tests/saveTestCase

Modify an existing test case by including the ID of an existing test case. Save a new test case by omitting the test case ID. Only valid test parameters can be changed in IVS Test Server mode.

Parameter	Type	Remarks
TestCase	TestCase	Must be included in JSON format in request body

Responses:

Code	Body	Description
200	TestCase	Success

4.29. POST /tests/deleteTestCase

Delete an existing test case. A test case can only be deleted when it is not assigned to any phones and it can't be the default test case of a user group.

Parameter	Type	Remarks
testCaseId	Number	

Responses:

Code	Body	Description
200		Success

4.30. POST /tests/saveTestCaseGroup

Modify an existing test case group by including the ID of an existing test case group. Save a new test case group by omitting the test case group ID.

Parameter	Type	Remarks
TestCaseGroup	TestCaseGroup	Must be included in JSON format in request body

Responses:

Code	Body	Description
200	TestCaseGroup	Success

4.31. POST /tests/deleteTestCaseGroup

Delete an existing test case group. A test case group can only be deleted when it is not assigned to any phones.

Parameter	Type	Remarks
testCaseGroupId	Number	

Responses:

Code	Body	Description
200		Success

4.32. GET /conformance/listTests

List all available conformance tests.

Parameter	Type	Remarks
No parameters		

Responses:

Code	Body	Description
------	------	-------------

200	Conformance Tests	Success
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4.33. POST /conformance/startTest

Start a conformance test.

Parameter	Type	Remarks
StartTestArguments	StartTestArguments	

Responses:

Code	Body	Description
200	{"conformanceTestId": <Number>}	Response body contains the ID of the conformance test that was just started.

4.34. POST /conformance/cancelTest

Cancel a running conformance test.

Parameter	Type	Remarks
conformanceTestId	Number	

Responses:

Code	Body	Description
200		Success

4.35. POST /conformance/userPromptResult

Transmit a user response to a question or request.

Parameter	Type	Remarks
conformanceTestId	Number	
yes	Boolean	True if user's response was positive, else false.

4.36. GET /conformance/listResults

List conformance test results.

Parameter	Type	Remarks
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phoneId	Number	Optional. Results will only contain test results where this phone was the system under test.
sortDir	String	Optional. Use "asc" or "desc" for ascending or descending order of results. Default is "asc".
max	Number	Optional. Limits the maximum number of results. Default is unlimited.
includeLogs	Boolean	Optional. Include logs for all test results. Default is unlimited.

Responses:

Code	Body	Description
200	Array<ConformanceTestResult>	Success

4.37. GET /conformance/result

Retrieve result of a single test.

Parameter	Type	Remarks
conformanceTestId	Number	ID of the conformance test.

Responses:

Code	Body	Description
200	ConformanceTestResult	Success

5. WebSocket Interface

The WebSocket interface uses STOMP version 1.2. STOMP is a publish/subscribe type of protocol which allows clients to only receive messages that they are interested in by subscribing to certain topics. See <http://jmesnil.net/stomp-websocket/doc/> for further information and available client libraries.

The endpoint to connect to: **ws(s)://<host>/api/v1**

The WebSocket interface allows the ES to receive events from the ECDS without delay as they are happening.

5.1. Authentication

The CONNECT message must include a login and passcode header containing the user's user name

and password.

5.2. Subscriptions

All messages sent by the server are being sent to destinations of the following format: `/calls/$externalSubscriberMode/$messageType/$externalSubscriberPhoneNumber`.

To receive incoming SMS, the destination starts with `sms:/sms/$externalSubscriberMode/event/$externalSubscriberPhoneNumber`

The destination part `$externalSubscriberMode` is either `ivs`, if external subscriber is an IVS or `psap`, if external subscriber is a PSAP.

The destination part `$messageType` is one of: `state`, `log`, or `event`. If the message type is `state`, then the message body will contain a message of type `CallState`. If the message type is `log`, then the message body will contain a message of type `CallLogs`. If the message type is `event`, then the message body will be of type `CallEventMsdReceived` or `CallEventMsdSent`. The SMS destination knows only one `messageType` event. All messages to this destination are of type `CallEventSmsReceived`. See chapter 5 for a description of these JSON models.

The destination part `$externalSubscriberPhoneNumber` is the phone number of the external subscriber.

Ant style wildcard patterns (<https://ant.apache.org/manual/dirtasks.html>) are allowed when subscribing to a destination.

Examples of subscriptions:

Destination	Description
<code>/calls/**</code>	The client subscribes to all messages from the server. Note that the user's role might restrict him to receive messages for which he doesn't own the permission, e.g. calls that belong to a different user group.
<code>/calls/ivs/**</code>	The client will receive all messages where the external subscriber is an IVS.
<code>/calls/psap/**</code>	The client will receive all messages where the external subscriber is a PSAP.
<code>/calls/*/state/*</code>	The client will receive all <code>CallState</code> messages from IVS and PSAPs.
<code>/calls/**/+491234567890</code>	The client will receive all messages that belong to calls from/to external subscriber with phone number <code>+491234567890</code> .
<code>/sms/*/event/*</code>	The client will receive all incoming SMS, from any phone in any mode.

All messages will be sent as soon as the corresponding event occurs. To receive information on recent calls send a message with empty body to destination `/app/api/calls`, e.g. directly after the connection has been established and the subscriptions have been made.

For conformance tests only one subscription is needed: `/conformance/**`.

This subscription will receive messages of types:

- `ConformanceTestUserPrompt`
- `ConformanceTestState`
- `ConformanceTestLog`

Messages of types `ConformanceTestState` and `ConformanceTestLog` inform the consumer about the state of a running conformance test. A message of type `ConformanceTestUserPrompt` requests information from the user which needs to be transmitted back to ECDS through the `/conformance/userPromptResult` REST call.

6. JSON Models

Types ending with a question mark may be null. Dates are represented as ISO-8601strings with millisecond resolution and time zone, e.g. "1970-01-01T23:59:59.999Z".

6.1. Version

Member	Type	Description
<code>applicationVersion</code>	String	e.g. "3.7.0"
<code>remoteApiVersion</code>	String	e.g. "1.7"
<code>coreVersion</code>	String	e.g. "4.0"

6.2. CallEventMsdReceived

Member	Type	Description
<code>type</code>	String	"event"
<code>eventType</code>	String	"msdReceived"
<code>msd</code>	Msd	

6.3. CallEventMsdSent

Member	Type	Description
<code>type</code>	String	"event"
<code>eventType</code>	String	"msdSent"
<code>msd</code>	Msd	

6.4. CallEventSmsReceived

Member	Type	Description
type	String	"event"
eventType	String	"smsReceived"
sms	Sms	

6.5. CallLog

Member	Type	Description
time	Date	Time of log message.
level	String	Level of log message.
text	String	Text of log message.

6.6. CallLogs

Member	Type	Description
type	String	"logs"
messages	Array< CallLog >	

6.7. CallState

Member	Type	Description
type	String	"state"
callId	Number	ID of the call.
callBegin	Date	Begin of the call.
callEnd	Date?	End of call or null if call is still in progress.
internalCallState	String	SETUP, ACTIVE, ENDED
externalCallState	String	SETUP, MSD_TRANSMISSION, ACTIVE, ENDING, ENDED
msdTransmissionState	String	WAITING, START_RECEIVED, NACK_RECEIVED, LL_ACK_RECEIVED, AL_ACK_RECEIVED, SEND_RECEIVED, MSD_RECEIVED, NACK_SENT, LL_ACK_SENT, AL_ACK_SENT
internalSubscriber	String	Phone number of internal subscriber.
externalSubscriber	String	Phone number of external subscriber.
externalSubscriberMode	String	Either "psap" or "ivs".
externalSubscriberTag	String	Tag of phone of external subscriber.

calledSubscriber	String	The called phone number of an incoming call. Empty if outgoing call.
incoming	Boolean	True if incoming call, false if outgoing call.

6.8. Phone

Member	Type	Description
phoneId	Number	ID of the phone.
phoneNumber	String	Phone number of the phone.
description	String	Description of the phone.
email1	String	Email 1
email1Active	Boolean	
email2	String	Email 2
email2Active	Boolean	
testCaseId	Number	ID of assigned test case.
testCaseGroupId	Number?	ID of assigned test case group. Null, if no test case group is assigned to phone.
egTerminalIdentifier	Number?	ERA-GLONASS terminal identifier, may be null.
mode	String	"ivs", if this phone represents an IVS, "psap", if this phone represents a PSAP.
tag	String	User defined tag.
allowOutgoingCalls	Boolean	Phone is allowed to make outgoing calls.

6.9. PhoneCall

Member	Type	Description
callId	Number	ID of the call.
begin	Date	Begin of the call.
end	Date?	End of the call. Null, if call is in progress.
incoming	Boolean	True, if call is incoming. False, if call is outgoing.
internalSubscriber	String?	Phone number of the internal subscriber. Null, as long as connection to internal subscriber has not been made.
externalSubscriber	Phone	Phone record of the external subscriber.
calledSubscriber	String?	The called number. Only for incoming calls and when information is known.
dataSets	Array< Msd >	Received or sent MSDs.

logMessages	Array<CallLog>	Chronologically sorted log messages belonging to the call.
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6.10. Sms

Member	Type	Description
smsId	Number	ID of the SMS.
phone	Phone	Associated phone.
otherPhone	String?	
timestamp	Number	Unix timestamp of when the SMS was sent.
deliveryTimestamp	Number?	Unix timestamp of when the SMS was delivered. Only when information is known.
incoming	Boolean	True, if SMS is incoming. False, if SMS is outgoing.
externalMessageRef	String	External message reference if known. Empty String if unknown.
type	String	Content type of SMS body, either "text" or "binary".
body	String	SMS body.
udh	String	
status	String	Either "accepted", "delivered" or "error".
errorStatus	String	Error status.
parts	Array<Sms>?	Array holding the parts of a multipart message.
concatSms	Sms?	Reference of the concatenated SMS.
concatRef	Number?	Reference id of concatenated SMS.
concatPart	Number?	Part number for concatenated SMS.
concatTotal	Number?	Total number of parts for concatenated SMS.
dataSets	Msd?	If SMS body contains a valid MSD, it is decoded and stored here, including its OSD.

6.11. TestCase

Member	Type	Description
testCaseId	Number	ID of the test case.
name	String	Name of the test case.
description	String	Description of the test case.
mode	String	"ivs", if this test case represents an IVS test case, "psap", if this test case represents a PSAP test case.
testParameters	TestParametersIvs	TestParametersPsap

6.12. TestParameters

This type is the parent type of TestParametersIvs and TestParametersPsap and contains parameters that are common to both test case modes.

Member	Type	Description
acceptCall	Boolean	
rejectCallMode	Number	Allowed values: 480, 486, 500, 503, 603, -1. The values are the SIP response code of the final response to the incoming INVITE, except -1 which means no final response will be sent.
ringingDuration	Number	In seconds, 0 to disable ringing
callAnswerMode	String	AUTOMATIC, MANUAL
callerId	String	
callSetup	String	ASAP, MODEM_CONTROLLED
hangUpCallAfter	Number	In seconds, 0 to disable.
internalSubscriber	String	
ngEcall	Boolean	
recordAudio	Boolean	
simulateCrcError	Boolean	
useInbandModem	Boolean	

6.13. TestParametersIvs

This type inherits all members from TestParameters.

Member	Type	Description
alAckHandling	String	fixed, auto
alAckValue	Number	0..15
hangUpCallOn	String	NEVER, CALL_ESTABLISHED, INBAND_SEND_SIGNAL_RECEIVED, INBAND_MSD_RECEIVED, INBAND_NACK_SENT, INBAND_LL_ACK_SENT, INBAND_AL_ACK_SENT
ignoreSendSignal	Boolean	
inbandDirection	String	PUSH, PULL
ngAckValue	String	auto, true, false, none
numberOfAlAcks	Number	
numberOfLlAcks	Number	
sendNecDisabler	Boolean	

t4Timer	Number	In seconds.
t8Timer	Number	In seconds.
numberOfMsdReqs	Number	
pauseBetweenMsdReqs	Number	In seconds.
automaticCallback	Boolean	
secondsBeforeAutomaticCall back	Number	In seconds.

6.14. TestParametersPsap

This type inherits all members from TestParameters.

Member	Type	Description
msd	Array<Msd>	
msdAutoSetMsgId	Boolean	
msdAutoSetTimestamp	Boolean	
ngUrn	String	Empty string to disable.
ngSendDataResponse	String	Allowed values: damaged, unsupported, data-unsupported, security-failure, unable or empty string to enable standard-compliant behavior.
t5Timer	Number	In seconds.
t6Timer	Number	In seconds.
t7Timer	Number	In seconds.

6.15. TestCaseGroup

Member	Type	Description
testCaseGroupId	Number	ID of the test case group.
name	String	Name of the test case group.
description	String	Description of the test case group.
mode	String	"ivs", if this test case represents an IVS test case group, "psap", if this test case represents a PSAP test case group.
testCases	Array<Number>	The IDs of the test cases that are assigned to this group.

6.16. Msd

When used as test parameter input then only one of raw or decoded should be set and all other fields should be omitted. The field msdType is only exists when this is being used in msdReceived event of WebSocket interface.

Member	Type	Description
decoded	MsdDecoded?	Decoded fields of MSD. May be null, if MSD could not be decoded.
errors	Array<String>	Errors that were encountered during decoding. Empty, if no errors occurred during decoding.
msdType	String	"ng" or "inband"
raw	String	Hex string encoding of 140 bytes MSD (280 characters)

6.17. MsdDecoded

Member	Type	Description
activation	String	AUTOMATIC, MANUAL
callType	String	EMERGENCY, TESTCALL
compressedNaturalGas	Boolean	
dieselTank	Boolean	
electricEnergyStorage	Boolean	
eventTime	Date	
formatVersion	Number	0..255
gasolineTank	Boolean	
hydrogenStorage	Boolean	
liquidPropaneGas	Boolean	
messageId	Number	0..255
numberOfPassengers	Number?	0..255
optionalAdditionalDataDecoded	Object?	Only if OID is known and no errors occurred during decoding.
optionalAdditionalDataOid	String	String representation of OID, e.g. "1.4.2"
optionalAdditionalDataRaw	String	Hex string encoding
otherStorage	Boolean	
positionConfidence	String	CAN_BE_TRUSTED, LOW_CONFIDENCE

positions	Array<Position>	Usually between 0 and 3 positions but can contain more if additional positions could be decoded from optional set of data.
vehicleDirection	Number?	0..359
vehicleType	String	EXTENDED, PASSENGER_VEHICLE_M1, BUSES_AND_COACHES_M2, BUSES_AND_COACHES_M3, LIGHT_COMMERCIAL_VEHICLES_N1, HEAVY_DUTY_VEHICLES_N2, HEAVY_DUTY_VEHICLES_N3, MOTORCYCLES_L1E, MOTORCYCLES_L2E, MOTORCYCLES_L3E, MOTORCYCLES_L4E, MOTORCYCLES_L5E, MOTORCYCLES_L6E, MOTORCYCLES_L7E
vin	String	17 character vehicle identification number

6.18. ConformanceTests

Member	Type	Description
ngPsapTests	Array< ConformanceTestDescription >	EN17240 conformance tests for PSAP.
ngIvsTests	Array< ConformanceTestDescription >	EN17240 conformance tests for IVS.
ibPsapTests	Array< ConformanceTestDescription >	EN16454 conformance tests for PSAP.
ibIvsTests	Array< ConformanceTestDescription >	EN16454 conformance tests for IVS.

6.19. ConformanceTestDescription

Member	Type	Description
name	String	Name of the conformance test.
shortInfo	String	Short description of the test objective.

6.20. StartTestArguments

Member	Type	Description
phoneId	Number	ID of the phone that will be the system under test.
testName	String	Name of the test to start.
testParameters	StartTestParameters	Parameters which will be used during test execution.

6.21. StartTestParameters

Member	Type	Description
caller_id	String	Caller ID for outgoing calls. Leave empty for default caller ID.
timeout_in_seconds	Number	Timeout for incoming calls etc. in seconds.
internal_subscriber	String	Calls are being forwarded to this extension. Leave empty for automatic call answer mode.
t2_timer_in_minutes	Number	T2 Timer in minutes (call clear-down fall-back timer).
msd	String	The MSD to be sent when requested by the PSAP. Hex encoded byte string.

6.22. ConformanceTestResult

Member	Type	Description
testId	Number	ID of the conformance test.
name	String	Name of the conformance test.
begin	Date	Start of the conformance test.
end	Date?	End of the conformance test.
verdict	String	"RUNNING", "PASSED", "FAILED"
phone	Phone	System under test.
logMessages	Array< ConformanceTestLog >	Log messages of the conformance test.

6.23. ConformanceTestLog

Member	Type	Description
type	String	"conformanceTestLog"
conformanceTestId	Number	ID of the conformance test.
timestamp	Date	Time of event.
level	String	"debug" = Debug log, "wait" = System is waiting for user input, "fail" = Test failed, "success" = Test succeeded, "action" = System is actively doing something
text	String	Informative message.

6.24. ConformanceTestUserPrompt

Member	Type	Description
type	String	"conformanceTestUserPrompt"
conformanceTestId	Number	ID of the conformance test.
timestamp	Date	Time of user prompt.
text	String	Question or request to be presented to the user.
title	String	Title of request.
positiveButtonText	String	Label for positive user response.
negativeButtonText	String	Label for negative user response.

6.25. ConformanceTestState

Member	Type	Description
type	String	"conformanceTestState"
conformanceTestId	Number	ID of the conformance test.
phoneNumber	String	Phone number of system under test.
name	String	Name of conformance test.
begin	Date	Start of the conformance test.
end	Date?	End of the conformance test.

verdict	String	"RUNNING", "PASSED", "FAILED"
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