

## Annex 1b GlobalRoamer Test Cases

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Please find below a list of all available Tests Cases on GlobalRoamer. The table entries show the name of the Test Case, a short description and the charged Test Units\* upon successful execution. A successful execution means the Test Case ends with a PASS or FAIL verdict. Test Cases leading to an INCONCLUSIVE verdict will not be charged.

\* Please note that the Test Unit price is charged on a per 5 minutes basis.

Examples:

- BC\_Voice\_MO\_MT Test with Test Duration <= 5 minutes --> Price is 2 Test Units
- BC\_Voice\_MO\_MT Test with Test Duration >5 and <=10 minutes --> Price is 4 Test Units
- BC\_Voice\_MO\_MT Test with Test Duration >10 and <=15 minutes --> Price is 6 Test Units
- and so forth

\*\* Please note that the LAN interface is not a public one. It is enabled only for specific services, like carrier testing or VoWiFi if they are purchased.

+ Please note that some testcases or technologies require an additional yearly license to be purchased. These are marked in the table below with a.

### NOTE:

The following table is subject to changes. Test Cases can be added, renamed and removed without notice. The implementation of Test Cases can be changed to fix problems and to cope with technological evolution.

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
base	BC_Data_MO_MT	Basic data call establishment, B-Channel check and call release. Check whether a subscriber can successfully establish and release a basic data call between A- and B-side for the specified data rate. The B-Channel will be checked after call establishment.	X								2	0
base	BC_RingNoAnswer_MO	Basic voice call establishment to an external party without answer on external side. Check whether a subscriber can successfully establish a basic voice call towards the external party. The call is not answered on B-Side. Note: This test is not applicable for GSM_Um, UMTS_Uu and PSTN as the alert on the external B-Side cannot be recognized on the A-Side.	X	X							1	0
base	BC_RingNoAnswer_MO_MT	Basic voice call establishment and call release without answer on B-side. Check whether a subscriber can successfully establish a basic voice call towards the B-side. The call is not answered on B-Side.	X	X							2	0
base	BC_RingNoAnswer_MT	Basic voice call establishment from an external party and call release without answer on B-side. Check whether a subscriber can successfully receive a basic voice call from an external party. The call is not answered on B-Side.	X	X							1	0
base	BC_Voice_MO	Basic voice call establishment to an external party. Check whether a subscriber can successfully establish and release a basic voice call to an external party. The B-Channel will be checked after call establishment by sending a specified sequence of dtmf tones.	X	X							1	0
base	BC_Voice_MO_MT	Basic voice call establishment, B-Channel check and call release. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side. The B-Channel will be checked after call establishment by sending and receiving of tones.	X	X							2	0
base	BC_Voice_MO_MT_B_release	Basic voice call establishment, B-Channel check and call release. Check whether a subscriber can successfully establish a basic voice call between A- and B-side. The B-Channel will be checked after call establishment by sending and receiving of tones. The call will be released by B-Side.	X	X							2	0
base	BC_Voice_MT	Basic voice call establishment from an external party. Check whether a subscriber can successfully receive a basic voice call from an external party. The answer of the call can be delayed by parameter RingingDuration.	X	X							1	0
base	ListAvailablePlmns	Retrieval of available PLMNs. Retrieves all available plmns from the network with additional information. No location update will be performed afterwards.	X	X	X						1	0
base	LocationUpdate	Location Update. Checks whether a subscriber can successfully perform the location update procedure.	X	X						X	1	0
base	LocationUpdate_MPTy	Location Update – MultiParty. This testcase is used at the beginning of a sequence to control which of the possible side (a to d) shall register at the network.	X	X						X	1	0
base	NetworkRegistrationWithLtePref	Checks whether a subscriber can successfully perform network registration with LTE being tried first. Please refer to the module NetworkRegistration description for more details. Please note that this test case requires MC73xx mobiles or MC77xx in QMI mode to be used.			X						1	0
csfb	CSFB_MO	Basic voice call establishment after CSFB on A-side, B-Channel check and call release. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after the A-side has performed a circuit-switched fallback.	X	X	X						2	0
csfb	CSFB_MO_External	This test case establishes a basic voice call after CSFB upon receiving a call to an external party, waits for the duration defined by parameter CallDuration, and then releases the call. This test case checks whether a basic voice call can be successfully established and released between A-side and external party after the A-side has performed a circuit-switched fallback.			X						1	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
csfb	CSFB_MO_MT	Basic voice call establishment, B-Channel check and call release after CSFB. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after both have performed a circuit-switched fallback.			X						2	0
csfb	CSFB_MO_MT_RingNoAnswer	Basic voice call establishment attempt between two LTE subscribers, but call will not be answered. This test case checks whether the LTE subscriber at the a-side can initiate a call to a LTE subscriber at the b-side, whereas the b-side subscriber is not answering the call. Once the b-side is getting the call alert, the a-side is terminating the call attempt. It is expected that for initiating the CS call and receive the incoming CS call, both side will perform a CSFB procedure.			X						2	0
csfb	CSFB_MT	Basic voice call establishment after CSFB on B-side, B-Channel check and call release. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after the B-side has performed a circuit-switched fallback.	X	X	X						2	0
csfb	CSFB_MT_External	This test case establishes a basic voice call after CSFB upon receiving a call from external party, waits for the duration defined by parameter CallDuration, and then waits for call release. This test case checks whether a basic voice call can be successfully established and released between A-side and external party after the A-side has performed a circuit-switched fallback.			X						1	0
csfb	CSFB_MT_reverse	Reverse version of CSFB_MT to be used for LTE-GRQ Macro. A-Side (LTE) receiving Call from B-Side.	X	X	X						2	0
Data_Capacity	FTP_DL_multiple_TCP_Capacity	This test case will check the TCP download bandwidth of the mobile probe by multiple parallel FTP file downloads. The mobile registers on the network and activates the IP context.	X	X	X	X					1	1
Data_Capacity	FTP_UL_multiple_TCP_Capacity	This test case will check the TCP upload bandwidth of the mobile probe by multiple parallel FTP file uploads. The mobile registers on the network and activates the IP context.	X	X	X	X					1	1
Data_Capacity	HTTP_DL_multiple_TCP_Capacity	This test case will check the HTTP download bandwidth of the mobile probe by multiple parallel HTTP file downloads. This test case is only supported for OS Images 4.0 and higher at the moment. The parameter Download_Urls is used to configure the URL's for the downloads.	X	X	X	X					1	1
Data_Capacity	HTTP_UL_multiple_TCP_Capacity	This test case will check the HTTP upload bandwidth of the mobile probe by multiple parallel HTTP Post requests using curl binary. The parameter pload_Urls is used to configure the URL's for the HTTP POST uploads.	X	X	X	X					1	1
Data_Capacity	Iperf_multiple_TCP_UL_DL_Capacity	Iperf is a network testing tool which can create TCP or UDP data streams and test and measure the bandwidth and quality of a network link carrying them. The Iperf_TCP test case uses a modified iperf client with an option to test traffic in downlink direction directly. The according Iperf server has to be started with the same option "--reverse".	X	X	X	X					1	1
Data_Capacity	Iperf_UDP_UL_DL_IP_Capacity	Iperf is a network testing tool which can create TCP or UDP data streams and test and measure the bandwidth and quality of a network link carrying them. The Iperf_UDP test case uses a modified version of the Iperf client with an additional option to configure the source port.	X	X	X	X					2	1
Data_Capacity/IP_LinkMetrics	OWAMP_Client_Server	This is a two sided test case where side A and side B act as server and client for ONE-WAY-PING operation. Side A will run the owampd server and the B side will run the owping client. The one way measurements will be made in both directions and reported to the client.	X	X	X						2	0
Data_Capacity/IP_LinkMetrics	OWPING_Client	This is a one sided test case where side A will emulate OWPING client. This means that the daemon part of the OWAMP testing infrastructure will have to be configured by the client and will be external resource to the SITE system. This resource where OWAMP server is running, is described by the parameter Host. A URL (e.g. www.google.de) or IP address can be defined.	X	X	X						1	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
Data_Capacity/IP_LinkMetrics	TWAMP_Client	This is a one-sided testcase, where side A acts as a client for Two-Way Active Measurement Protocol operation. The TWAMP server must be installed and running on a host which is reachable from the A-side directly.	X	X	X					X	1	0
Data_Capacity/IP_LinkMetrics	TWAMP_Client_Server	This is a two-sided testcase for Two-Way Active Measurement Protocol operation. Side A (LAN interface) will run the TWAMP server and the B side will run the TWAMP client. The measurements will be made in both directions and reported to the client.	X	X	X					X	2	0
Data_Capacity/IP_LinkMetrics	Traceroute_RTT_MTR	This test case uses the linux command line tool 'mtr' to retrieve IP link performance metrics from the network between the local interface and the destination host. It works similar to the tool traceroute. But additionally it combines a ping behavior to calculate round trip times to the different hops. This can be used to identify bottle necks in the network.	X	X	X						1	0
GRPS_IP	Activate_PDP_Context	Checks whether the PDP context for an IP-connection can be established. Optionally a PPP connection can be started after PDP context activation.	X	X	X	X					1	1
GRPS_IP	Activate_PDP_Context_MPTy	Checks whether the PDP context for an IP-connection can be established at two different sides in parallel. Optionally a PPP connection can be started after PDP context activation.	X	X	X						2	0
GRPS_IP	Deactivate_PDP_Context	Checks whether an activated PDP context for an IP-connection can be deactivated. Optionally an established PPP connection can be stopped before PDP context deactivation.	X	X	X	X					1	1
GRPS_IP	DNS_ps	Send a DNS request to each DNS server in the DNS. Servers parameter using the dig ( <a href="http://sitecu/site/help/dig.html">http://sitecu/site/help/dig.html</a> ) program and record the data returned and the time required to obtain the DNS response. Using packet switched connection.	X	X	X	X					1	1
GRPS_IP	Email_ps	Send an e-mail via SMTP to an e-mail address. The e-mail message is fetched via POP3/IMAP. IP access to the SMTP server and POP3/IMAP server is performed via GSM/GPRS.	X	X	X						2	0
GRPS_IP	FTP_dl_cs	FTP Download via CSD. Checks whether a file can be downloaded from the FTP server if the connection is established via CSD.	X								1	0
GRPS_IP	FTP_dl_ps	FTP Download via GPRS. Checks whether a file can be downloaded from the FTP server if the connection is established via GPRS. This test case can also be used for IPv6 tests.	X	X	X	X					1	1
GRPS_IP	FTP_ul_ps	FTP Upload via GPRS. Checks whether a file can be uploaded to the FTP server if the connection is established via GPRS. This test case can also be used for IPv6 tests.	X	X	X	X					1	1
GRPS_IP	GPRS_Attach	Check whether a GPRS attach can be performed. In case of LTE_S1 an EPS Attach without APN is performed.	X	X	X	X					1	1
GRPS_IP	GPRS_Detach	Check whether a GPRS detach can be performed. In case of LTE_S1 an EPS Detach is performed.	X	X	X	X					1	1
GRPS_IP	HTTP_Browser	Download a web page via mozilla web browser and store the complete content.	X	X	X	X					1	1
GRPS_IP	HTTP_Download	Download a website using the QT webkit engine. Pictures in javascripts can be downloaded at the same time.	X	X	X						1	0
GRPS_IP	HTTP_Download_20	Download a complete web site using an HTTP download client. This test case builds upon the feature scope of Node.js.	X	X	X	X					1	1
GRPS_IP	HTTP_Fastcom	This test case opens <a href="https://fast.com/">https://fast.com/</a> website, which is a publicly available service for throughput testing.	X	X	X	X					1	1
GRPS_IP	HTTP_multithread	Download a page via HTTP and store the headers and the decoded content.	X	X	X	X					1	1
GRPS_IP	HTTP_ps	Access one or more URLs on a HTTP server and optionally check the downloaded content for specified keywords.	X	X	X	X					1	1
GRPS_IP	HTTP_ul	This test case will upload a specified file to HTTP/HTTPS upload servers will check the upload duration and upload transfer rate afterwards. The parameter Upload_Url is used to configure the URL for the HTTP/HTTPS POST uploads.	X	X	X	X					1	1
GRPS_IP	Iperf_Analysis	Iperf is a network testing tool which can create TCP or UDP data streams and test and measure the bandwidth and quality of a network link carrying them.	X	X	X	X					1	1

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
GRPS_IP	Ping_TripleAPN	This testcase shall activate two different PDP Contexts with two separate APNs for a single resource type, and will get different IP Addresses per APN. Both stay active in parallel and over both IP addresses received same or different Ping Hosts can be pinged. If a third non-empty APN is given a signalling only (i.e. no user-plane IP traffic) PDP context will additionally be activated before activating the PDP contexts for the first two APNs. All APNs used must be different.	X	X	X						1	0
GRPS_IP	Ping_ps	Ping a host and record round-trip-delay and packet loss using the external ping command. Using packet switched connection.	X	X	X	X					1	1
GRPS_IP	SFTP_dl_ps	Checks if a file can be downloaded from an SFTP server using the given username and password.	X	X	X	X					1	1
GRPS_IP	SFTP_ul_ps	Checks whether a file can be uploaded to an SFTP server using the given username and password.	X	X	X	X					1	1
GRPS_IP	TCPIP_Cmd_ps	Execute TCPIP_Command within the GPRS TCP/IP context. Please refer to the description of the T_TCPIP_Command parameter on restrictions regarding commands to be used by this testcase.	X	X	X						1	0
GRPS_IP	Traceroute_ps	Perform traceroute to a specified Host. Traceroute is the program that shows you the route over the network between two systems, listing all the intermediate routers a connection must pass through to get to its destination.	X	X	X	X					1	1
ICQ	ICQT_Premium	Call from A-Side to B-Side and perform speech quality check. After releasing the call from B-side, information is derived whether Late Disconnect has taken place. Checks the international carrier quality by checking the voice quality of connected call. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized POLQA algorithm.	X	X	X						2	0
ICQ	ICQ_Basic	Basic voice call establishment and call release without answer on B-side. Check the international carrier quality by establishing a basic voice call towards the B-side. The call is not answered on B-Side. Additionally the test case detects whether early charging resp. false answer was applied. Checking the received CLI and measuring call setup time are also performed. These information is delivered via KPIs.	X	X							2	0
ICQ	ICQ_Basic_DynamicAnswer	Basic voice call establishment and call release with conditional answer on B-side. Check the international carrier quality by establishing a basic voice call towards the B-side.	X	X	X						2	0
ICQ	ICQ_Tests	Macro to create ICQ tests. Allows to schedule different type of ICQ tests with an easier user interface. The A and B side need to be defined and the call type: Ring no Answer, Dynamic answer and Answer with Voice Quality. Once the Macro is expanded, the necessary test case are included and parameterised.	X	X							Min 2	0
ICQ	ICQT_Call_Stretching	This Test provides information whether a fraud scenario named 'Call Stretching' or 'Carrier Playback' has taken place in an international call. The fraud scenario takes place as follows: An international call once connected runs for a time (about one minute). During this time one of the international carriers (the fraudster) records the audio of the call receiving side (B-Side). Then the fraudster releases the call on the B-Side while maintaining the call on the call initiating side (A-Side) and starts playing back the audio to the A-Side. The goal is to achieve a longer call duration on the A-Side leading to an increased revenue.	X	X	X						2	0
ICQ	ICQ_Premium	Call from A-Side to B-Side and perform speech quality check. After releasing the call from B-side, information is derived whether Late Disconnect has taken place. Checks the international carrier quality by checking the voice quality of connected call. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm.	X	X							2	0
ICQ/SIPtrunk/Basic	ICQ_MobileOrFixed_To_SIPtrunk_Answer	The test case will check if a basic call establishment from the fixed and/or from the Mobile network to SIP exchange is possible.	X	X					X		2	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
ICQ/SIPtrunk/Basic	ICQ_SIPtrunk_To_MobileOrFixed_Answer	The test case will check if a basic call establishment from the SIP exchange to fixed and/or from the Mobile is possible.	X	X						X	2	0
ICQ/SIPtrunk/Basic	ICQ_SIPtrunk_To_SIPtrunk_Answer	The test case will check if a basic call establishment from the SIP exchange to the same or another SIP exchange is possible.								X	2	0
ICQ/SIPtrunk/Basic	MVPM_ICQ_MobileOrFixed_To_SIPtrunk_RingNoAnswer	The test case will check if a basic call establishment from the fixed and/or from the Mobile network to SIP exchange is possible while the incoming call is not answered by the terminating party.	X	X						X	2	0
ICQ/SIPtrunk/Premium	ICQ_MobileOrFixed_To_SIPtrunk	The test case will check if a basic call establishment from the fixed and/or from the Mobile network to SIP exchange is possible.	X	X	X					X	2	0
ICQ/SIPtrunk/Premium	ICQ_SIPtrunk_To_MobileOrFixed	The test case will check if a basic call establishment from the SIP exchange to the fixed or Mobile network is possible.	X	X						X	2	0
ICQ/SIPtrunk/Premium	ICQ_SIPtrunk_To_MobileOrFixed_DynamicAnswer	The test case will check if a basic call establishment from the SIP exchange to the fixed or Mobile network is possible by considering conditional answer on the B-party.	X	X	X						2	0
ICQ/SIPtrunk/Premium	ICQ_SIPtrunk_To_SIPtrunk	The test case will check if a basic call establishment from the SIP exchange to the same or another SIP exchange is possible.								X	2	0
ICQ/SIPtrunk/Premium	ICQ_SIPtrunk_To_SIPtrunk_DynamicAnswer	The test case will check if a basic call establishment from the SIP exchange to the same or another SIP exchange is possible by considering conditional answer on the B-party.								X	2	0
IVR	IVR_AudioDialog	This test case is used to call to (or receive a call from) an external number, play an audio file and afterwards record audio until call release. The test case is supported for GSM and UMTS mobile interfaces, or for fixed-net interfaces like PSTN or ISDN.	X	X							1	0
IVR	IVR_PlayAudio	Call to an external number (optionally send DTMF sequence) and play an audio file. This test case can be used to check if audio can be sent to an external number.	X	X							1	0
IVR	IVR_PlayAudio_IMS	Call to an external number via IMS (optionally send DTMF sequence) and play an audio file. This test case can be used to check if audio can be sent to an external number.			X						2	0
IVR	IVR_RecognizeNetworkPrompt	This test case checks if a number does not exist or is not reachable. Additionally this is the test case at premium rate services, where an initial announcement will be played before the call will be connected. This test case will record such an announcement by specifying the call duration and afterwards compare the recording with certain reference prompts specified by a prompt pool.	X	X							1	0
IVR	IVR_RecognizePrompt	Call to an external number (optionally send DTMF sequence), record an audio file and recognize a prompt in the audio file. This test case can be used to ensure that the right announcement is played at a certain service.	X	X							1	0
IVR	IVR_RecognizePrompt_IMS	Call to an external number via IMS (optionally send DTMF sequence), record an audio file and recognize a prompt in the audio file.			X						1	0
IVR	IVR_RecognizePromptParts	Call to an external number (optionally send DTMF sequence), record an audio file and recognize several subsequent prompt parts in the audio file. This test case can be used to ensure that several subsequent announcements are played at a certain service.	X	X							1	0
IVR	IVR_RecordNetworkPrompt	The test case checks if a number does not exist or is not reachable. Additionally this is the case at premium rate services, where an initial announcement will be played before the call will be connected. This test case will record such an announcement by specifying the call duration.	X	X							1	0
IVR	IVR_RecordPrompt	Call to an external number (optionally send DTMF sequence) and record an audio file. This test case can either be used to record prompts for the IVR application, or check if audio can be received from an external number.	X	X							1	0
IVR	IVR_RecordPrompt_IMS	Call to an external number via IMS (optionally send DTMF sequence), record audio and create an audio result file.			X						2	0



Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
MMS/1x	MMS_MO_ToLegacy	Sending and receiving of a MMS (notification and download via WAP 1.x protocol stack). The MMS is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is optionally checked in order to verify that the right MMS has been received.	X	X							2	0
MMS/1x	MMS_MT	Shows that upon receipt of a WAP Push SMS it is possible to retrieve the corresponding WAP Page. Fetch WAP_Page and store the decoded WSP headers and contents. This testcase is mainly used during developments as the file contents are stored on the local unit on which this testcases is executed.	X	X							1	0
MMS/20	MMS20_MO	Sending an MMS. The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	1	0
MMS/20	MMS20_MO_loopBack	SendingFrom and ReceivingOf a MMS at the same subscriber. The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	1	0
MMS/20	MMS20_MO_MT	Sending and receiving of a MMS. The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	2	0
MMS/20	MMS20_MO_MT_KPI	Sending and receiving of a MMS (notification and up-/download via HTTP/1.1). The MMS is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	2	0
MMS/20	MMS20_MO_ToLegacy	Sending and receiving of a MMS. The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	2	0
MMS/20	MMS20_MT	Receiving of a MMS. The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.	X	X	X					X	1	0
MultiRAB	BC_Voice_MO_MT_w_bg_FTP_dl_ps	Basic voice call establishment, B-Channel check and call release with background FTP download. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side while a background FTP download is active on the A-side.	X	X						X	2	0
MultiRAB	BC_Voice_MO_MT_w_bg_HTTP_ps	Basic voice call establishment, B-Channel check and call release with background HTTP download. Please note that only the first URL given in the Download_URLs parameter will be used by the test case. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side while a background HTTP download is active on the A-side.	X	X						X	2	0
MultiRAB	CSFB_MO_w_bg_FTP_dl_ps	CSFB call establishment and call release with background FTP download. This test case checks whether a CSFB voice call can be successfully established and released between A-side and B-side while a background FTP download is active on the A-side.	X	X	X					X	2	0
MultiRAB	CSFB_MO_w_bg_HTTP_ps	CSFB call establishment and call release with background HTTP download. Please note that only the first URL given in the Download_URLs parameter will be used by the test case. This test case checks whether a CSFB voice call can be successfully established and released between A-side and B-side while a background HTTP download is active on the A-side.	X	X	X					X	2	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
MultiRAB	CSFB_MT_w_bg_FTP_dl_ps	CSFB call establishment and call release with background FTP download. This test case checks whether a CSFB voice call can be successfully established and released between A-side and B-side while a background FTP download is active on the B-side.	X	X	X					X	2	0
MultiRAB	CSFB_MT_w_bg_HTTP_ps	CSFB call establishment and call release with background HTTP download. Please note that only the first URL given in the Download_URLs parameter will be used by the test case. This test case checks whether a CSFB voice call can be successfully established and released between A-side and B-side while a background HTTP download is active on the B-side.	X	X	X					X	2	0
MultiRAB	VoiceQ_P862_w_bg_FTP_dl_ps	Call from A-Side to B-Side and perform speech quality check with background FTP download. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm while a background FTP download is active on the A-side.	X	X						X	2	0
MultiRAB	VoiceQ_P862_w_bg_HTTP_ps	Call from A-Side to B-Side and perform speech quality check with background HTTP download. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm while a background HTTP download is active on the A-side.	X	X						X	2	0
MultiRAB	VoiceQ_P863_w_bg_FTP_dl_ps	Call from A-Side to B-Side and perform speech quality check with background FTP download. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized POLQA algorithm while a background FTP download is active on the A-side.	X	X						X	2	0
MultiRAB	VoiceQ_P863_w_bg_HTTP_ps	Call from A-Side to B-Side and perform speech quality check with background HTTP download. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized POLQA algorithm while a background HTTP download is active on the A-side.	X	X						X	2	0
MultiRAB	VoLTE_MO_MT_w_bg_FTP_dl_ps	Check whether a call establishment between two VoLTE subscribers is possible, and play and record audiofiles while performing an FTP download over a second, standard IP APN at each side in the background. Optionally, a VQ check is performed.			X						3	0
MultiRAB	VoLTE_MO_MT_w_bg_FTP_ul_ps	Check whether a call establishment between two VoLTE subscribers is possible, and play and record audiofiles while performing an FTP upload over a second, standard IP APN at each side in the background. Optionally, a VQ check is performed.			X						3	0
MultiRAB	VoLTE_MO_MT_w_bg_HTTP_ps	Check whether a call establishment between two VoLTE subscribers is possible, and play and record audiofiles while performing an HTTP download over a second, standard IP APN at each side in the background. Optionally, a VQ check is performed.			X						3	0
MultiRAB	VoLTE_MO_w_bg_FTP_dl_ps	Check whether a call establishment from a VoLTE subscriber to a B-side user is possible, and play and record audiofiles while performing an FTP download over a second, standard IP APN at the originating side in the background. Optionally, a VQ check is performed.	X	X	X						3	0
MultiRAB	VoLTE_MO_w_bg_FTP_ul_ps	Check whether a call establishment from a VoLTE subscriber to a B-side user is possible, and play and record audiofiles while performing an FTP upload over a second, standard IP APN at the originating side in the background. Optionally, a VQ check is performed.	X	X	X						3	0
MultiRAB	VoLTE_MO_w_bg_HTTP_ps	Check whether a call establishment from a VoLTE subscriber to a B-side user is possible, and play and record audiofiles while performing an HTTP download over a second, standard IP APN at the originating side in the background. Optionally, a VQ check is performed.	X	X	X						3	0





Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
MVPN	Forwarding_CFB_MVPN	Calling line identification presentation - CLIP (via MVPN) – CFB. Check whether a subscriber with the selected b_type at b_location can arrange the forwarding cfb supplementary service to c-part. A call from selected a_type at a_location is directed to selected c_type at c_location. The B-side is busy.	X	X							3	0
MVPN	Forwarding_CFNRC_no_detach_MVPN	Call forwarding on not reachable (via MVPN) - CFNRC, no IMS Detach. Check whether a subscriber with the selected b_type at b_location can arrange the forwarding cfnrc supplementary service to c-part. A call from selected a_type at a_location is directed to selected c_type at c_location. The B-side turns the power off without imsi detach. The B-Channel is checked during the connection.	X	X							2	0
MVPN	Forwarding_CFNRC_with_detach_MVPN	Call forwarding on not reachable (via MVPN) - CFNRC, with IMS Detach. Check whether a subscriber with the selected b_type at b_location can arrange the forwarding cfnrc supplementary service to c-part. A call from selected a_type at a_location is directed to selected c_type at c_location. The B-side turns the power off with imsi detach. The B-Channel is checked during the connection.	X	X							2	0
MVPN	Forwarding_CFNRY_MVPN	Call forwarding on no reply - CFNRY (via MVPN). Check whether a subscriber with the selected b_type at b_location can arrange the forwarding cfnry supplementary service to c-part. A call from selected a_type at a_location is directed to selected c_type at c_location. The B-side doesn't reply to the call. The B-Channel is checked during the connection.	X	X							2	0
MVPN	Forwarding_CFU_MVPN	Call forwarding unconditional - CFU (via MVPN). Check whether a subscriber with the selected b_type at b_location can arrange the forwarding cfu supplementary service to the c-part. A call from selected a_type at a_location is directed to selected c_type at c_location. The B-Channel is checked during the connection.	X	X							2	0
MVPN	SMS_MVPN	Send and receive an SMS via vpn short number. Check whether the A-side can transmit a SMS to B-side over the Short Message Service Center. The content of the SMS is checked for string matching.	X	X							2	0
MVPN	VoiceQ_MVPN	Call from A-Side to B-Side (via MVPN) and perform speech quality check. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm.	X	X							2	0
Recharging	Recharging_IVR	This testcase checks if the recharging procedure of a prepaid card (via IVR) using a voucher will be performed successfully.	X	X							1	0
Recharging	Recharging_USSD	This testcase checks if the recharging procedure of a prepaid card (via USSD) using a voucher will be performed successfully.	X	X							1	0
Roaming	Anti_SteeringOfRoaming	This Test case is related to the existing Test Case SteeringOfRoaming. The intention of this test case is to derive information about potential AntiSteering methods applied in Non preferred networks. The Antisteering methods are described in the GSMA document IR.89.	X	X							3	0
Roaming	GRQ_Tests	Macro to create roaming test sequences for a list of visited PLMNs. For all visited PLMNs a list of testcases can be defined. Tests with A and B-Side can be executed in multiple directions: home to visited, visited to home. The tests can be performed for 2G, 3G or both technologies.	X	X							1 to 7	0
Roaming	LTE_GRQ_Tests	Macro to create roaming test sequences for a list of visited LTE PLMNs. For all visited PLMNs a list of testcases can be defined. Tests with A and B-Side can be executed in multiple directions: home to visited, visited to home. The tests at the visited side will be performed in 4G.	X	X	X						1 to 11	0
Roaming	VoLTE_GRQ_Tests	Macro to create VoLTE roaming test sequences for a list of visited PLMNs. For all visited PLMNs a list of testcases can be defined. Tests with A- and B-Side can be executed in multiple directions: home to visited, visited to home. The tests at the both sides will be performed in a 4G network and VoLTE/IMS registered.			X						Min 3	0









Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VAS	VAS_SMS_WAP_SIC	Sends a Request-SMS to external number and receives a WAP-Push Service Indication. Check whether value added services (VAS) work.	X	X							1	0
VAS	VAS_WAP20_MMS20	Accesses a WAP Page, follows specified links and receives MMS (notification and download via HTTP/1.1) from extern.	X	X							1	0
VAS	VAS_WAP20_SMS	Accesses a WAP Page, follows specified links and receives SMS(s) from extern.	X	X							1	0
VAS	VAS_WAP_MMS	Accesses a WAP Page, follows specified links and receives MMS from extern. Check whether the WAP page in WAP_Page parameter can be accessed and the links given in WAP_Page_FollowLinks can also be accessed.	X	X							1	0
VAS	VAS_WAP_SMS	Accesses a WAP Page, follows specified links and receives SMS(s) from extern. Check whether the WAP page in WAP_Page parameter can be accessed and the links given in WAP_Page_FollowLinks can also be accessed.	X	X							1	0
ViLTE	VoLTE_Video_Calling_MO_External	The test case will check if a video call establishment between an IMS VoLTE subscriber to external number (real mobile) is possible, and the video and audio reference samples are transmitted to the external participator.			X						2	0
ViLTE	VoLTE_Video_Calling_MO_MT	The test case will check if a video call establishment between two IMS VoLTE subscribers is possible, and the video and audio reference samples are transmitted.			X						3	0
VMS	VoiceMail_MO_MT	This test case checks the voicemail service. The test can be configured to run with two or three sides.	X	X							3	0
Voice/P862	VoiceQuality	Call from A-Side to B-Side and perform speech quality check. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm.	X	X							2	0
Voice/P862	VoiceQ_MultiTransmissions	Check the quality of the audio channel between the two participants of a basic call. After registration of both subscribers the a-side establishes a call to b-site.	X	X							2	0
Voice/P863	VoiceQ_MultiTransmissions_P863	Call from A-Side to B-Side, transfer multiple vq samples and perform speech quality check via POLQA.	X	X							2	0
Voice/P863	VoiceQuality_P863	Call from A-Side to B-Side and perform speech quality check. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized POLQA algorithm.	X	X							2	0
VoIP	BC_VoIP_MO	The test case will check if a call establishment from a VoIP subscriber to B side user is possible, and performs a bchannel check between both sides (optionally).	X	X						X	2	0
VoIP	BC_VoIP_MO_CSFB	The test case will check if a call establishment from a VoIP subscriber to B side user is possible after CSFB on B-side, and performs a bchannel check between both sides (optionally).	X	X	X					X	2	0
VoIP	BC_VoIP_MO_MT	The test case will check if a call establishment between two VoIP subscribers is possible, and optionally performs a bchannel check between both sides after the call establishment until the call is released by A side user.	X	X						X	2	0
VoIP	BC_VoIP_MT	The test case will check if a call establishment to a VoIP subscriber B by A side user is possible, and optionally waits for some time after the call establishment, performs a bchannel check between both sides (optional) and finally the call is released by A side user.	X	X						X	2	0
VoIP	BC_VoIP_MT_CSFB	The test case will check if a call establishment after CSFB on A-side to a VoIP subscriber B by A side user is possible, and optionally waits for some time after the call establishment, performs a bchannel check between both sides (optional) and finally the call is released by A side user.	X	X	X					X	2	0
VoIP	FixedNet_To_VoIP	Basic call establishment from a fixed net to a VoIP subscriber.	X	X						X	2	0
VoIP	Mobile_To_VoIP	Basic call establishment from a mobile to a VoIP subscriber. Speech quality check by playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ ( <a href="http://globalroamer.com/site/help/SITE_VQ.pdf">http://globalroamer.com/site/help/SITE_VQ.pdf</a> ) algorithm, and finally the call release.	X	X						X	2	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoIP	MobileOrFixed_To_VoIP_RingNoAnswer	This test case will if a basic call establishment from a mobile/fixednet user to a VoIP subscribe without an answer on the B-side is possible or not.	X	X						X	2	0
VoIP	VoIP_MO	Basic call establishment from a VoIP subscriber to an external side, and optionally play an audiofile.	X	X						X	1	0
VoIP	VoIP_MT	Basic call reception of a VoIP subscriber from an external side.	X	X						X	1	0
VoIP	VoIP_MultiTransmission_MO	The test case will check if a call establishment from a VoIP user to a mobile or fixednet subscriber is possible, and the same audio file contents shall be transmitted multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	2	0
VoIP	VoIP_MultiTransmission_MT	The test case will check if a call establishment from a mobile or fixednet subscriber to a VoIP user is possible, and the same audio file contents shall be transmitted multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	2	0
VoIP	VoIP_Register	Registration of a VoIP subscriber at a certain SIP proxy server.	X	X						X	1	0
VoIP	VoIP_To_FixedNet	Basic call establishment from a VoIP to a fixed net subscriber. B-Channel check via transfer of audio data and final voice quality check, and finally the call release.	X	X						X	2	0
VoIP	VoIP_To_Mobile	Basic call establishment from VoIP to a mobile subscriber. Speech quality check by playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ ( <a href="http://globalroamer.com/site/help/SITE_VQ.pdf">http://globalroamer.com/site/help/SITE_VQ.pdf</a> ) algorithm, and finally the call release.	X	X						X	2	0
VoIP	VoIP_To_MobileOrFixed_RingNoAnswer	This test case will if a basic call establishment from a VoIP subscriber to a mobile/fixednet user without an answer on the B-side is possible or not.	X	X						X	2	0
VoIP	VoIP_To_VoIP	Basic call establishment from a VoIP to another VoIP subscriber. B-Channel check via transfer of audio data and final voice quality check, and finally the call release.	X	X						X	2	0
VoIP	VoIP_To_VoIP_RingNoAnswer	This test case will if a basic call establishment from a VoIP subscriber to another VoIP subscriber without an answer on the B-side is possible or not.	X	X						X	2	0
VoLTE	IMS_Register	The test case will check if a successful registration of a VoLTE subscriber at a certain IMS Proxy- Call Session Control Function (P-CSCF) is made.			X						2	0
VoLTE	VoLTE_MO	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and optionally play and record audiofiles. The VQ measurements are produced if the audio file is played by A side.	X	X	X						3	0
VoLTE	VoLTE_MO_External	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and optionally plays audio data.			X						2	0
VoLTE	VoLTE_MO_MT	The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			X						3	0
VoLTE	VoLTE_MT	The test case will check if a call establishment to a VoLTE subscriber B by A side user is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	X	X	X						3	0
VoLTE	VoLTE_MT_External	The test case will check if a call termination to a VoLTE subscriber is possible, and optionally plays audio data.			X						2	0
VoLTE/Basic	BC_VoLTE_MO	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and performs a bchannel check between both sides (optionally).	X	X	X						3	0
VoLTE/Basic	BC_VoLTE_MO_CSFB	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible after CSFB on B-side, and performs a bchannel check between both sides (optionally).			X						3	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoLTE/Basic	BC_VoLTE_MO_MT	The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally performs a bchannel check between both sides after the call establishment until the call is released by A side user.			X						3	0
VoLTE/Basic	BC_VoLTE_MT	The test case will check if a call establishment to a VoLTE subscriber B by A side user is possible, and optionally waits for some time after the call establishment, performs a bchannel check between both sides (optional) and finally the call is released by A side user.	X	X	X						3	0
VoLTE/Basic	BC_VoLTE_MT_CSFB	The test case will check if a call establishment after CSFB on A-side to a VoLTE subscriber B by A side user is possible, and optionally waits for some time after the call establishment, performs a bchannel check between both sides (optional) and finally the call is released by A side user.			X						3	0
VoLTE/Basic	BC_VoLTE_MT_External	The test case will check if a call termination to a VoLTE subscriber is possible, and optionally plays DTMF tone to the calling party.			X						2	0
VoLTE/Basic	VoLTE_MO_MT_RingNoAnswer	The test case will check if a basic call establishment between two IMS VoLTE subscribers is possible, where the call shall not be answered by the terminating party.			X						3	0
VoLTE/Basic	VoLTE_MO_RingNoAnswer	The test case will check if a basic call establishment between an IMS VoLTE subscriber and a non-IMS user possible, where the call shall not be answered by the terminating party.	X	X	X						3	0
VoLTE/Basic	VoLTE_MT_RingNoAnswer	The test case will check if a basic call establishment between a non-IMS user to an IMS VoLTE subscriber is possible, where the call shall not be answered by the terminating party.	X	X	X						3	0
VoLTE/Basic	VoLTE_MT_B_busy	The test case will check if a basic call establishment between a non-IMS user to an IMS VoLTE subscriber, which is in another active call, is rejected with a busy indication. Prerequisite: call forwarding and call waiting for the IMS VoLTE subscriber on the B-side need to be deactivated.	X	X	X						4	0
VoLTE/VQ_MultiTransmission	VoLTE_MO_MT_MultiTransmission	The test case will check if a call establishment between two IMS VoLTE subscribers is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.			X						3	0
VoLTE/VQ_MultiTransmission	VoLTE_MO_MultiTransmission	The test case will check if a call establishment between an IMS VoLTE subscriber and a non-IMS user possible, the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X	X						3	0
VoLTE/VQ_MultiTransmission	VoLTE_MT_MultiTransmission	The test case will check if a call establishment between a non-IMS user to an IMS VoLTE subscriber is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X	X						3	0
VoLTE/SSoIMS/Barring	Barring_BAIC_IMS_MO_MT	Barring all incoming calls. The test case shall verify the capability of the IMS to block selected incoming sessions to a VoLTE subscriber that has Incoming Call Barring (ICB) enabled.			X						3	0
VoLTE/SSoIMS/Barring	Barring_BAOC_IMS_MO_MT	Barring all outgoing calls. The test case shall verify the capability of the IMS to block selected outgoing sessions from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls enabled.			X						3	0
VoLTE/SSoIMS/Barring	Barring_BiCroam_IMS_MT	Barring incoming calls while roaming. The test case shall verify the capability of the IMS to block selected incoming sessions from a VoLTE subscriber that has ICB when roaming enabled.	X	X	X						3	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoLTE/SSoIMS/Barring	Barring_BOICexHC_home_IMS_MO	Barring outgoing international calls except to HPLMN - call to HPLMN. The test case shall verify the capability of the IMS to block selected outgoing international calls except to Home PLMN Country - BOICexHC - call to home country from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls except home is enabled.	x	x	x						3	0
VoLTE/SSoIMS/Barring	Barring_BOICexHC_int_IMS_MO	Barring outgoing international calls except to HPLMN - call to international number (not HPLMN/VPLMN). The test case shall verify the capability of the IMS to block selected outgoing international calls except to Home PLMN Country - BOICexHC - international call, not home country from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls except home is enabled.			x						2	0
VoLTE/SSoIMS/Barring	Barring_BOICexHC_nat_IMS_MO	Barring outgoing international calls except to HPLMN - call to local number. The test case shall verify the capability of the IMS to block selected outgoing international calls except to Home PLMN Country - BOICexHC - national call from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls except home enabled.	x	x	x						3	0
VoLTE/SSoIMS/Barring	Barring_BOIC_home_IMS_MO	Barring outgoing international calls - call to HPLMN. The test case shall verify the capability of the IMS to block selected international calls - BOIC - home call in international format from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls in roaming.	x	x	x						3	0
VoLTE/SSoIMS/Barring	Barring_BOIC_int_IMS_MO	Barring of outgoing international calls - BOIC - international call. Check whether an VoLTE subscriber with the selected a_type at a_location can arrange the barring boic supplementary service and cannot establish an outgoing call to an international part.			x						2	0
VoLTE/SSoIMS/Barring	Barring_BOIC_nat_IMS_MO	Barring of outgoing international calls - call to a local number. The test case shall verify the capability of the IMS to block selected outgoing international calls - BOIC - national call from a VoLTE subscriber that has Outgoing Call Barring (OCB) for international calls except home enabled.	x	x	x						3	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_3G_3G_VoLTE	Call forwarding on Busy - CFB This test case will check the call forwarding on Busy with a VoLTE bearer on the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_IMS_3G	Call Forward on Busy. The test case will check if a call forwarding on-busy (CFB) between a non-VoLTE and a VoLTE subscriber is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_IMS_MO	Call Forward on Busy. The test case will check if a call forwarding on-busy (CFB) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user. C-side is non-VoLTE subscriber.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_IMS_MO_MT	Call Forward on Busy. The test case will check if a call forwarding on-busy (CFB) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_IMS_MT	Call Forward on Busy. The test case will check if a call forwarding on-busy (CFB) between a non-VoLTE and a VoLTE subscriber is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_VMS_MWI_IMS_MO_MT	Call Forward on Busy to VMS with Message Waiting Indication. The test case shall verify if a VoLTE user can successfully subscribe to the MWI package and receive notifications.			x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_VMS_MWI_IMS_MT	Call Forward on Busy to VMS with Message Waiting Indication. The test case shall verify if a VoLTE user can successfully subscribe to the MWI package and receive notifications. A-side is non-VoLTE subscriber.	x	x	x						5	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_VoLTE_3G_3G	Call forwarding on Busy - CFB This test case will check the call forwarding on Busy with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_VoLTE_3G_VoLTE	Call forwarding on Busy - CFB This test case will check the call forwarding on Busy with a VoLTE bearer on the A-side and the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						5	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFB_VoLTE_3G_Voicemailbox	Call forwarding on busy - CFB to voice mail box. This test case will check the Call forwarding on busy - CFB with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer. A call from selected a_type at a_location is directed to the VMS number.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_3G_3G_VoLTE_no_detach	Call forwarding on not reachable - CFNRc, no IMS Detach This test case will check the call forwarding on not-reachable with a VoLTE bearer on the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_IMS_3G	Call forwarding on not reachable. The test case will check if a call forwarding on-not reachable (CFNRc) between a non-VoLTE and a VoLTE subscriber is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_IMS_MO	Call forwarding on not reachable. The test case will check if a call forwarding on-not reachable (CFNRc) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user. C-side is a non-VoLTE subscriber.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_IMS_MO_MT	Call forwarding on not reachable. The test case will check if a call forwarding on-not reachable (CFNRc) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_IMS_MT	Call forwarding on not reachable. The test case will check if a call forwarding on-not reachable (CFNRc) between a non-VoLTE and a VoLTE subscriber is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_VoLTE_3G_3G_no_detach	Call forwarding on not reachable - CFNRc, no IMS Detach This test case will check the call forwarding on not-reachable with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRc_VoLTE_3G_VoLTE_no_detach	Call forwarding on not reachable - CFNRc, no IMS Detach This test case will check the call forwarding on not-reachable with a VoLTE bearer on the A-side and the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRy_3G_3G_VoLTE	Call forwarding on no reply - CFNRy This test case will check the call forwarding on no-reply with a VoLTE bearer on the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRy_IMS_3G	Call forwarding on no reply - CFNRy The test case will check if a call forwarding on-noreply (CFNRy) between a non-VoLTE and a VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRy_IMS_MO	Call forwarding on no reply - CFNRy The test case will check if a call forwarding on-noreply (CFNRy) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user. C-side is a non-VoLTE subscriber.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRy_IMS_MO_MT	Call forwarding on no reply - CFNRy The test case will check if a call forwarding on-noreply (CFNRy) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			x						4	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRY_IMS_MT	Call forwarding on no reply - CFNRY The test case will check if a call forwarding on-noreply (CFNRY) between a non-VoLTE and a VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRY_VoLTE_3G_3G	Call forwarding on no reply - CFNRY This test case will check the call forwarding on no-reply with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRY_VoLTE_3G_VoLTE	Call forwarding on no reply - CFNRY This test case will check the call forwarding on no-reply with a VoLTE bearer on the A-side and the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFNRY_VoLTE_3G_Voicemailbox	<b>Call forwarding on no reply (CFNRY) to voice mail box.</b> <b>This test case will check the call forwarding on no-reply with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.</b>	x	x	x						3	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_3G_3G_VoLTE	Call forwarding on Unconditional - CFU This test case will check the call forwarding on unconditional with a VoLTE bearer on the A-side-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_IMS_3G	Call forwarding unconditional - CFU The test case will check if a call forwarding unconditional (CFU) between a non-VoLTE and a VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_IMS_MO	Call forwarding unconditional - CFU The test case will check if a call forwarding unconditional (CFU) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_IMS_MO_MT	Call forwarding unconditional - CFU The test case will check if a call forwarding unconditional (CFU) between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_IMS_MT	Call forwarding unconditional - CFU The test case will check if a call forwarding unconditional (CFU) between a non-VoLTE and a VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_VoLTE_3G_3G	Call forwarding Unconditional - CFU This test case will check the call forwarding on Unconditional with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_VoLTE_3G_VoLTE	Call forwarding on Unconditional - CFU This test case will check the call forwarding on Unconditional with a VoLTE bearer on the A-side and the C-side. The forwarding B-side is using a CS based bearer.	x	x	x						4	0
VoLTE/SSoIMS/Forwarding	Forwarding_CFU_VoLTE_3G_Voicemailbox	Call forwarding unconditional - CFU to voice mail box. This test case will check the Call forwarding unconditional - CFU with a VoLTE bearer on the A-side. The forwarding B-side is using a CS based bearer.	x	x	x						3	0
VoLTE/SSoIMS/Other	CallHoldRetrieve_IMS_MO_MT_MO_A	This test case will check if an IMS user can suspend the receptions of RTP media streams of an already established IP media session with another IMS user and resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS.			x						4	0
VoLTE/SSoIMS/Other	CallHoldRetrieve_IMS_MO_MT_MO_B	This test case will check if an IMS user can suspend the receptions of RTP media streams of an already established IP media session with another IMS user and resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS.			x						4	0
VoLTE/SSoIMS/Other	CallHold_IMS_MO	This test case will check if an IMS user can receive a suspend of the receptions of RTP media streams of an already established IP media session and can resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS	x	x	x						3	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoLTE/SSoIMS/Other	CallHold_IMS_MO_External	This test case will check if an IMS user can put and/or receive a suspend of the receptions of RTP media streams of an already established IP media session with an external number, and can resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS.									2	0
VoLTE/SSoIMS/Other	CallHold_IMS_MO_MT	This test case will check if an IMS user can suspend the receptions of RTP media streams of an already established IP media session with another IMS user and resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS.									3	0
VoLTE/SSoIMS/Other	CallHold_IMS_MT	This test case will check if an IMS user can suspend the receptions of RTP media streams of an already established IP media session and resume the RTP media streams later if necessary, by using communication on hold supplementary service over IMS.	x	x	x						3	0
VoLTE/SSoIMS/Other	CallWaiting_IMS_MO_MT	This will check if a call (from VoLTE UE-C) terminates on a VoLTE client (UE-B), for the case where the VoLTE (UE-B) client already has an existing active call (with UE-A) and The VoLTE Client (UE-B) accepts the incoming call by releasing the earlier call and/or by putting the earlier call in hold.				x					4	0
VoLTE/SSoIMS/Other	MultiPartyCall_3G_3G_VoLTE	Multi party call: A calls B and puts B on hold; A calls C and builds the multiparty call. The c-side is using a VoLTE bearer.	x	x	x						4	0
VoLTE/SSoIMS/Other	MultiPartyCall_IMS_MO	The test case shall verify if a 3-party conference call via IMS which can be established among A, B and C sides where A and B-side users are VoLTE capable but C-side is non-VoLTE.	x	x	x						4	0
VoLTE/SSoIMS/Other	MultiPartyCall_IMS_MO_3G	The test case shall verify if a 3-party conference call via IMS which can be established among A, B and C sides where the A-side user is VoLTE capable but B-side and C-side are non-VoLTE.	x	x	x						4	0
VoLTE/SSoIMS/Other	MultiPartyCall_IMS_MO_MT	The test case shall verify if a 3-party conference call via IMS which can be established among A, B and C sides where all involved users are VoLTE capable.			x						4	0
VoLTE/SSoIMS/Other	MultiPartyCall_IMS_MO_MT_B_Released	The test case shall verify if a 3-party conference call via IMS can be established among A, B and C sides where all involved users are VoLTE capable. Optional B-channel check is performed among all sides and subsequently B-side leaves the multiparty call.			x						4	0
VoLTE/SSoIMS/Other	OIP_IMS_MO_MT	This test case will check the functionality of Originating Identity Presentation (OIP) over IMS CN when both parties are IMS user.			x						3	0
VoLTE/SSoIMS/Other	OIR_IMS_MO_MT	This test case will check the functionality of Originating Identity Restriction (OIR) over IMS CN when both parties are IMS user.			x						3	0
VoLTE/SSoIMS/Other	TIP_IMS_MO_MT	This test case will check the functionality of Terminating Identity Presentation (TIP) over IMS CN when both parties are IMS user.			x						3	0
VoLTE/SSoIMS/Other	TIR_IMS_MO_MT	This test case will check the functionality of Terminating Identity Restriction (TIR) over IMS CN when both parties are IMS user.			x						3	0
VoLTE/SSoIMS/Other	USSD_Command_IMS	Sends a USSD Command via IMS and optionally checks the result.			x						2	0
VoWiFi	VoIP_To_VoWiFi	The test case will check if a call establishment to a VoLTE subscriber B by A side VoIP user is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	X	X						X	4	0
VoWiFi	VoLTE_To_VoWiFi	The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			X					X	4	0
VoWiFi	VoWiFi_IMS_Registration	The test case will check if a successful registration of a VoLTE subscriber at a certain IMS Proxy- Call Session Control Function (P-CSCF) is made.								X	2	0
VoWiFi	VoWiFi_MO	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and optionally play and record audiofiles. The VQ measurements are produced if the audio file is played by A side.	X	X						X	4	0
VoWiFi	VoWiFi_MO_MT	The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.								X	4	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
VoWiFi	VoWiFi_MT	The test case will check if a call establishment to a VoLTE subscriber B by A side user is possible, and optionally waits for some time after the call establishment until the call is released by A side user.	X	X						X	4	0
VoWiFi	VoWiFi_To_External	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and optionally plays audio data.								X	2	0
VoWiFi	VoWiFi_To_VoIP	The test case will check if a call establishment from a VoLTE subscriber to B side user is possible, and optionally play and record audiofiles. The VQ measurements are produced if the audio file is played by A side.	X	X						X	4	0
VoWiFi	VoWiFi_To_VoLTE	The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.			X					X	4	0
VoWiFi/VQ_MultiTransmission	VoIP_To_VoWiFi_MultiTransmission	The test case will check if a call establishment from a VoIP user to an IMS VoLTE subscriber is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	4	0
VoWiFi/VQ_MultiTransmission	VoLTE_To_VoWiFi_MultiTransmission	The test case will check if a call establishment between two IMS VoLTE subscribers is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.			X					X	4	0
VoWiFi/VQ_MultiTransmission	VoWiFi_MO_MT_MultiTransmission	The test case will check if a call establishment between two IMS VoLTE subscribers is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.								X	4	0
VoWiFi/VQ_MultiTransmission	VoWiFi_MO_MultiTransmission	The test case will check if a call establishment between an IMS VoLTE subscriber and a non-IMS user possible, the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	4	0
VoWiFi/VQ_MultiTransmission	VoWiFi_MT_MultiTransmission	The test case will check if a call establishment between a non-IMS user to an IMS VoLTE subscriber is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	4	0
VoWiFi/VQ_MultiTransmission	VoWiFi_To_VoIP_MultiTransmission	The test case will check if a call establishment from an IMS VoLTE subscriber to a VoIP user is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.	X	X						X	4	0
VoWiFi/VQ_MultiTransmission	VoWiFi_To_VoLTE_MultiTransmission	The test case will check if a call establishment between two IMS VoLTE subscribers is possible, and the same audio file contents shall be transmitted (if VoiceQualityReference not empty) multiple times in both directions and the voice quality shall be checked for the received audio packets against the pre-defined audio file content.			X					X	4	0
WAP/1X	WAP_PageAccessViaWTP	Check whether the WAP portal at the URL contained in the WAP_Page parameter can be accessed by fetching it with WapGet.	X	X	X					X	1	0
WAP/20	WAP20_BrowsingViaWHTTP	Execute a WAP browsing session via W-HTTP (e.g. request URL, follow link, submit HTML forms, etc.). Caching is not supported by the test case. The parameter field WAP_Browsing_Desc is used to describe behaviour within the browsing session with functions of the Tclwebtest library.	X	X	X					X	1	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
WAP/20	WAP_CheckPageLinksViaWHTTP	Fetch WAP_Page via WHTTP and check whether all static links are accessible. Extract the URL of the links contained in the page which match pattern WAP_CheckLinkPattern using sig_matchWords. Check whether URL can be accessed by performing a HTTP_Request (method=HEAD) on it. Assign verdict PASS if all URLs can be accessed and FAIL otherwise.	X	X	X					X	1	0
WAP/20	WAP_JavaDownloadViaWHTTP	Download Java application via HTTP. The test case navigates through all the links specified in Parameter PageActions.	X	X	X					X	1	0
WAP/20	WAP_PageAccessDynamicLinkViaWHTTP	Check whether the WAP page set in the parameter WAP_Page can be accessed and the links given in WAP_Page_FollowLinks can be accessed as well.	X	X	X					X	1	0
WAP/20	WAP_PageAccessViaWHTTP	Check whether the WAP portal at the URL contained in the WAP_Page parameter can be accessed by fetching via WHTTP.	X	X	X					X	1	0
Ookla SpeedTest	Ookla_Speedtest	This test case uses Ookla's official command-line client for measuring the speed of the current internet connection.	X	X	X	X				X	1	1
Test cases for Charged calls with SIM POOL	POOL_CSFB_MO	Basic voice call establishment after CSFB on A-side, B-Channel check and call release. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after the A-side has performed a circuit-switched fallback.	X	X	X						2	0
Test cases for Charged calls with SIM POOL	POOL_CSFB_MO_MT	Basic voice call establishment, B-Channel check and call release after CSFB. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after both have performed a circuit-switched fallback.			X						2	0
Test cases for Charged calls with SIM POOL	POOL_FTP_dl_PS	FTP Download via GPRS. Checks whether a file can be downloaded from the FTP server if the connection is established via GPRS. This test case can also be used for IPv6 tests.	X	X	X						1	0
Test cases for Charged calls with SIM POOL	POOL_HTTP_Browser	Download a web page via mozilla web browser and store the complete content.	X	X	X						2	0
Test cases for Charged calls with SIM POOL	POOL_SMS_MO	Sends an SMS to any external number. Check whether the selected A-side can send a SMS to any external number.	X	X							2	0
Test cases for Charged calls with SIM POOL	POOL_SMS_MO_MT	Send and receive an SMS. Check whether the A-side can transmit an SMS to B-side over the Short Message Service Center. The content of the SMS is checked for string matching. Please note that LTE_Uu interfaces only support SMS over the SGs interface.	X	X	X						2	0
Test cases for Charged calls with SIM POOL	POOL_Voice_Quality_P862	Call from A-Side to B-Side and perform speech quality check. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized PESQ algorithm.	X	X							2	0
Test cases for Charged calls with SIM POOL	POOL_Voice_Quality_P863	Call from A-Side to B-Side and perform speech quality check. Playing an audio reference file from A-Side to B-Side and check the received audio signal against the original audio signal using the standardized POLQA algorithm.	X	X							2	0
Test cases for Charged calls with SIM POOL	POOL_BC_Voice_MO_MT	Basic voice call establishment, B-Channel check and call release. This test case checks whether a basic voice call can be successfully established and released between A-side and B-side. The B-Channel will be checked after call establishment by sending and receiving of tones.	X	X							2	0
Test cases for Charged calls with SIM POOL	POOL_Ookla_Speedtest	This test case uses Ookla's official command-line client for measuring the speed of the current internet connection.	X	X	X						1	0
IoT	IoT_Attach	Check whether a IoT attach can be performed.	X	X			X	X			2	0
IoT	IoT_DataTransfer_IP_MO	Perform a dummy data transfer from A side to application server	X	X			X	X			2	0
IoT	IoT_Ping	Ping a host and record round-trip-delay and packet loss using the external ping command. Using packet switched connection. This test case can also be used for IPv6 tests	X	X			X	X			2	0
IoT	IoT_Detach	Check whether a IoT detach can be performed.	X	X			X	X			2	0
IoT	IoT_PSM_TAU	The purpose of this test is to set PSM and/or eDRX parameters, followed by Tracking Area Update (TAU) procedure verification after the mobile device enters into PSM.	X	X			X	X			2	0



Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
MQTT	MQTT_Subscribe_Publish	1 sided MQTT test case where client publishes a topic for which it has subscribed already. It is expected to receive a Publish message with topic it published from Broker.	x	x							2	0
MQTT	MQTT_Subscribe_Unsubscribe	MQTT Subscribe_Unsubscribe test case shall determine if MQTT client successfully subscribed and unsubscribe from a selected topic.	x	x							2	0
MQTT	MQTT_Unsubscribe	MQTT Unsubscribe test case shall determine if MQTT client successfully unsubscribed from a selected topic.	x	x							2	0
MQTTSN	MQTTSN_Connect	MQTTSN Connect test case shall determine if a connection can be established between the client and the MQTT-SN GW by using the CONNECT message.	x	x							2	0
MQTTSN	MQTTSN_Publish	Perform MQTT-SN Register if configured and then send Publish message and handle any responses from MQTT-SN Gateway.	x	x							2	0
MQTTSN	MQTTSN_Subscribe	MQTT-SN Subscribe test case shall determine if MQTT-SN client can successfully subscribe to a selected topic.	x	x							2	0
MQTTSN	MQTTSN_Subscribe_Publish	MQTT-SN test case to test end to end duration of published topic. Test case first subscribes for a topic, then publishes payload for the same topic, it is expected that that published payload is received back from the MQTT-SN GW via publish message.	x	x							2	0
MQTTSN	MQTTSN_Subscribe_Unsubscribe	MQTT-SN Subscribe_Unsubscribe test case shall determine if MQTT-SN client can successfully subscribe and unsubscribe to/from a selected topic.	x	x							2	0
MQTTSN	MQTTSN_Unsubscribe	MQTT-SN Unsubscribe test case shall determine if MQTT-SN client can successfully unsubscribe from a selected topic.	x	x							2	0
SOS/Emergency Call	VoLTE_EmergencyCall_Interactive	This test case will check if an emergency call (e911/e112) via VoLTE bearer is possible without a technician being present at the specific location. Initially, the A-side of the test case performs an EMM attach with emergency bearer (APN sos) to have an emergency IMS registration followed by an emergency VoLTE session. The B-side shall use normal IMS registration steps to make a call to an external number from the test user. The A-side initiates an emergency call to the emergency number (e. g. 911) configured with the test case parameter EmergencyNumber. Once the call is established, the test case shall merge both audio sessions and record the conversation between emergency operator and test user.				x			X		3	0
SOS/Emergency Call	CS_EmergencyCall_Interactive	Emergency Call Interactive - The B-side is for the network tester and calls the number from parameter ExternalNumber. Then an announcement is played to the tester and the test waits for any key tone. Then the announcement is played again and the test waits for another tone. Then the A-side calls the emergency number and transmits the audio from the A-side probe to the B-side probe and vice-versa, so that the test operator can talk with the emergency operator.	x	x				X	X		2	0
SOS/Emergency Call	VoLTE_EmergencyCall	This test case will check if an VoLTE emergency call (e911) via IMS bearer/Emergency bearer is possible. Initially, the A-side of the test case performs an EMM attach . Then based on configured EmergencyPDN_Connection parameter , does an emergency IMS registration or normal IMS registration followed by an emergency VoLTE session. Test case initiates an emergency call to the emergency number (e. g. 911) configured with the test case parameter EmergencyNumber. Once the call is established, based on configured ActionAfterCallConnect parameter either send preconfigured audio or record a prompt. It can also recognize a prompt based on the configured parameters. The test case shall store the recorded audio content into a result file to listen afterwards in case of record prompt/recognize prompt.				x			X		2	0













Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
ireg	IR25_2_2_1	<p>IMS Registration of the UE1 (a)</p> <p>Check that MS1(a) can correctly perform the location update procedure when roaming in VPLMN (b)</p> <p>If auto configuration with Auto_ConfigWithoutSIM is used, then VoLTE user account information is extracted from IMSI information stored in SITE DB of the used ISIM.</p> <p>If auto configuration with Auto_ConfigWithSIM is used, then VoLTE user account information is built from UMSI of the used USIM.</p> <p>Otherwise, user defined VoLTE user account information will be used.</p> <p>If auto configuration is used, then the IP address found in the Proxy-Call Session Control Function (P-CSCF) discovery during PDP context activation is used, otherwise the test user has to define the correct P-CSCF address.</p> <p>Afterwards, the user A registers via SIP at the SIP-proxy (P-CSCF) of the IMS-core server. The user of the A-side waits for some time and then deregisters from P-CSCF and shuts down the probe.</p> <p>Package: ireg/25</p>			X	X					3	1
ireg	IR25_2_2_2	<p>The test case will check if a call establishment between two VoLTE subscribers is possible, and optionally waits for some time after the call establishment until the call is released by A side user.</p> <p>If auto configuration with Auto_ConfigWithoutSIM is used, then the VoLTE user account information is extracted from IMSI information stored in SITE DB of the used ISIM.</p> <p>If auto configuration with Auto_ConfigWithSIM is used, then the VoLTE user account information is built from UMSI of the used USIM.</p> <p>Otherwise, user defined VoLTE user account information shall be used.</p> <p>If auto configuration is used, then the IP address found in the Proxy-Call Session Control Function (P-CSCF) discovery during PDP context activation is used, otherwise the test user has to define the correct P-CSCF address.</p> <p>Afterwards, both the VoLTE users register via SIP at the SIP-proxy (P-CSCF) of the IMS-core server. The user of the A-side invites the other user with a SIP INVITE request. After the successful session establishment, optionally waits for sometime before releasing the call.</p> <p>The session is released with a SIP BYE request from the A-side.</p> <p>Package: ireg/25</p>			X	X					6	1

























Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
ireg	IR35_2_2_3_mms20	<p>Sending and receiving of an MMS.</p> <p>The MMS (notification and up-/download via HTTP/1.1) is sent with an identification contained in the subject. The subjects in the received push SMS and the received MMS is checked in order to verify that the right MMS has been received.</p> <p>Send an MMS message using the corresponding parameters from the MMS_SendParameters group to the B side MSISDN on the A side. Wait for a WAP Push SM, perform a HTTP/1.1 GET request for the corresponding URL and store the decoded MMS contents in a file on the B side</p> <p>Package: ireg/35</p>	X	X							6	0
ireg	IR35_2_2_3_GbA	<p>MMS Roaming: Mobile originated and terminated MMS (MS1(a)/MS2(a)).</p> <p>Verification that a roaming subscriber (MS1(a)) from HPLMN(a) can successfully transmit a MMS over GPRS to another roaming subscriber (MS2(a)) from the same PLMN.</p> <p>Package: ireg/35</p>	X	X							6	0
ireg	IR35_2_3_3	<p>Operator Determined Barring for all MS initiated PDP context activations of MS1(a).</p> <p>HPLMN(a) personnel activates ODB for MS initiated PDP context activation for MS1(a) from HLR(a) using Man Machine Interface (MMI).</p> <p>Check for a roaming subscriber that operator determined barring (ODB) for PDP Context Activation is successful. This test requires operator interaction!!!</p> <p>Package: ireg/35</p>	X	X							3	0
ireg	IR38_3_1_1	<p>LTE-only Attach and Detach</p> <p>This test case confirms operation of Insert Subscriber Data procedures after LTE-Attach only. It checks the support of relevant Diameter operations</p> <p>Expected Results: EMM contexts are established in the UE1(a) and MME(b). PDN Connectivity towards to the default APN is established. LTE-detach for UE1(a) is completed.</p> <p>Package: ireg/38</p>			X						3	0

Package	TestCaseGroup&TestCaseName	Description	GSM	UMTS	LTE	NR	LTE-M	NB-IoT	eCall	LAN	Test Units	Additional 5G TU
ireg	IR38_3_1_2	LTE Cancel Location  This test case confirms that the „Cancel Location,“ between HSS(a) and MME(b) and „Detach initiated by the network“ operate correctly. This test requires operator interaction!!!  Package: ireg/38			X						3	0
ireg	IR38_3_1_3	LTE Operator Determined Barring.  Check that after ODB activation attach request is rejected and no PDN connectivity establishment are successful. This test requires operator interaction!!!  Package: ireg/38			X						3	0
ireg	IR38_3_2_2	CS Fallback Mobile Originating Voice Call - UE1(a) calls UE2(a)  Package: ireg/38			X						6	0
ireg	IR38_3_2_3	CS Fallback Mobile Terminating Voice Call - UE2(a) calls UE1(a)  This test case checks whether a basic voice call can be successfully established and released between A-side and B-side after the B-side has performed a circuit-switched fallback. The B-Channel will be checked after call establishment by sending and receiving of tones. The type of tones can be DTMF or MF according to the setting of the ConfigurationParameter 'tcSpeechChannelCheckMode'. The duration of this call connection phase is defined by the test case parameter CallDuration. The call is released by the A-side. A specific routing for call establishment can be forced via the test case parameter PrefixDigits. The answer of the call by B-side can be delayed by parameter RingingDuration.  Error Handling: No call received on B-side (timeout 80s): fail B-ChannelCheck fails: fail  Preconditions: no special preconditions  Note: For long duration calls (CallDuration > 200s) the parameter MaxTcDuration should be enhanced to avoid Inconclusive test results.  Package: ireg/38			X					6	0	
ireg	IR38_3_2_4	SMS over SGs (Mobile Originated and Mobile Terminated)  Package: ireg/38			X						6	0
ireg	IR38_3_3_1	Data Access from 2G/3G using PGW in HPLMN (a) over Gp Interface  Package: ireg/38			X						3	0













