

Release Notes for MAPS™ ED137 Radio - version 21.4.8

Reason for Release / Description of Enhancement	Version
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">Validated against VOTER Version 4.0.28.1 BASELINE SPECIFICATION Volume 1 - GRS Radio ED-137/1C compliance.Validated against VOTER Version 4.0.28.2 BASELINE SPECIFICATION Volume 2 - VCS Radio ED137/1C compliance. <u>Bug Fixes:</u> <ul style="list-style-type: none">Minor fixes in Python API's.Provided API to Stop sending RMM requests.Added multicast attribute in 200 OK messages for multicast calls.Fix to send Notify message on all active calls if call type is changed in Re-Invite.Script level bug fixes to handle MAPS Administrator client interface driven calls.	21.4.8
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">Supports combined GRS Scenario.Application is enhanced to work with MAPS-Administrator GUI client interface. <u>Bug Fixes:</u> <ul style="list-style-type: none">Fix to not to send RRC reply from GRS when RRCE node is disabled.Fix to handle more than 2500 sessions.	20.12.3
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">Supports Separated GRS (Tx and Rx) scenario.Supports PTT Summation and Coupling PTT Summation.MAPS version is enhanced to display the application/product name. <u>Bug Fixes:</u> <ul style="list-style-type: none">Fixed to retain initially created RTP session if Re-Invite is rejected.Fixed issue with not displaying sessions to a Radio with selected colour.SIP header 'Supported' is included in all INVITE request.Now received RRC reply is not posted repeatedly in call graph when Squelch is ON. It is displayed only when there is change in the received RRC value.Avoided pre-empting a session with active Squelch to accommodate incoming emergency session.	20.11.10

MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">• Included below Python APIs to get ED-137 header values received on the air-to-ground session.<ul style="list-style-type: none">➤ <code>get_rrc_values()</code> // to get RRC header values➤ <code>get_sqi_values()</code> // to get SQI header values➤ <code>get_cld_values()</code> // to get CLD header values➤ <code>get_base_headers()</code> // to get ED-137 base header values➤ <code>get_mam_values()</code> // to get MAM header values➤ <code>get_rmm_values()</code> // to get RMM header values	20.8.20
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">• MAPS source code upgraded to Visual Studio 2019.• Includes license upgrade to check warranty. <u>Bug Fixes:</u> <ul style="list-style-type: none">• Handled sigtime negotiation during call establishment and adding WG67 RTP extension headers to RTP packets as per negotiated sigtime.	20.5.26
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">• Provided option to configure WG67 Version in the profile.• Supports Call duration randomization.• Provided option to include or exclude Receiver Multicast Group and Multicast SDP Attribute.• Provided option to include or exclude Recv Info Header.• Enhanced to display RMM, MAM and RRC values in call graph.• Supports sending RMM continuously based on time interval provided at global configuration at CWP.• Enhanced to display R2S-Local Hold time in Message Sequence in case if the call gets terminated due to keep alive time out error.• Supports setting SCT bit ON, when both PTT and Squelch is ON.• Enhanced to stop speaker, when PTTM is applied.• Provided option to record GLW file Continuously. <u>Bug Fixes:</u> <ul style="list-style-type: none">• Fix to handle load local profile on the call reception dialog, if the request URI of incoming call does not match exactly when it has SIP port added.• CSeq fix for NOTIFY method. Earlier we used to send CSeq what we received in SUBSCRIBE.• Parse error fix in SIP URI with numeric and dot in between.• GUI changes for not to expand all branches of a node, if that node is disabled.• Fix for not to display "Key Non-VoIP PTT" for Radio-Idle sessions.• "Contact" header value import fix for "200 OK" to SUBSCRIBE response.• Fix to handle Multicast call without multicast group value in its address.• Fix to handle multicast calls without multicast SDP attribute.• Fix related to call Authentication, retaining digest parameters for transactions after digest negotiation and incrementing nonce for new transactions within a dialog.• "GetRxFileName" fixes for DateTimeFormat, now we are appending sequence number with milliseconds timestamp.	19.12.26

<ul style="list-style-type: none">• Fix to apply PTTS, PTTM and SCT on all the session of a radio if it is applied on single session also.• Fix to continue selcal transmission once it is overridden by higher priority PTT.	
<p>MAPS™ ED137 Radio</p> <p><u>Enhancements:</u></p> <ul style="list-style-type: none">• Supports CLI mode with Python API's.• CLI support for MAPS requires purchase of PKS170 license.• Provides Option to define multiple Impairment profile with different values. <p><u>Bug Fixes:</u></p> <ul style="list-style-type: none">• RTP Core fix to support different sampling rates for telephone-event codec.• Other minor bug fixes.	8.9.19

MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">• Provides option to select cause for BYE and 603 messages.• Supports sending out of dialog NOTIFY message with active connections at GRS.• Supports software license feature.	8.3.19
MAPS™ ED137 Radio <u>Enhancements:</u> <ul style="list-style-type: none">• Provides counters for Pilot-Pilot induced SCT and Controller-Pilot induced SCT (synchronous transmission).• Supports sending out of dialog SUBSCRIBE and NOTIFY messages.• Supports writing Call Statistics to file.• Provides option to include customer specific profiles and scripts. <u>Bug Fixes</u> <ul style="list-style-type: none">• Delay in incoming audio play back is fixed.• Added missing 'Recv-Info' header in initial INVITE message for calls supporting SELCAL feature.• Now change in radio call type after receiving Re-INVITEs are updated to call graph.• Provided option to stop sending RTP extended header CLD (Climax Time Delay).	8.1.9
MAPS™ ED137-C Radio: <ul style="list-style-type: none">• Radio version number is updated to 'radio.02' in WG67-Version SIP header in all requests and responses.• RRCE shared and non-shared variables are reflected properly to VCS.• The event package includes the frequency id (fid) parameter in order to indicate the current frequency used. If fid is not available, it will be set to '000.000'. Whenever GRS changes its fid, SIP NOTIFY message with changed fid will be sent to all subscribed CWPs.• PTT-id values 60, 61 and 62 are reserved for non-VoIP keying sources and SHALL not be assigned to VoIP keying sources; PTT-id value 63 is reserved for the optional SELCAL feature.• Optional SDP attribute <disconnect mode> with value 'NoFreqDisconn' can be added in INVITE to request GRS not to disconnect session in case of frequency id change.• SELCAL feature: Supports sending SELCAL tones using SIP INFO message.• Supports Radio Receiver Multicast Operation.• Supports simulating Test PTT.• Simulates non-VoIP source PTT keying.• Measurement Answer Message (MAM) includes the GRS receiver delay Ts2.	7.8.22
MAPS™ ED137-B Radio Enhancements: <ul style="list-style-type: none">• Simulate Dynamic Delay Compensation messages RMM and MAM.• Supports sending simultaneous squelch on all connected sessions to a Radio.• Supports sending simultaneous squelch on all connected sessions of selected multiple Radios.• Sample script provided to perform automated periodic PTT on AG calls.• Sample script provided to perform automated periodic SQU on AG calls.• Option to define multiple traffic profiles.• Support sending audio using microphone and playing audio to speaker on multiple sessions.	7.7.14

MAPS™ ED137-Radio Specific Enhancements:

- Supports Multiple Radio Simulation:
 - MAPS ED137 Radio has been enhanced to simulate multiple radios within a single instance.
 - IP addresses specified in the Radio profile will be created as virtual IP addresses on the system NIC interface. Profile Editor also includes Color coding option to create different profiles.
 - Sorting and color codes are used to group all calls associated to individual radios in Call Reception window.
- Enhanced to handle Linked Session Management:
 - The Linked Session functionality provides to the GRS endpoint the opportunity to detect SIP sessions which are coming from the same user but from different equipment (i.e. different IP Address) to guarantee higher service availability.
 - So, GRS can identify the calls coming with same User part in From Address but with different IP/host address and with 'ls-pl' SDP parameter included. It will treat the linked sessions and treat them as one single logical session to radio.
 - The linked session functionality enables the GRS endpoint to support handling of redundant connections between VCS endpoint and GRS endpoint for all types of connections.
 - User has the option to enable or disable linked session management for each radio.
- Button options in Call Generation and Reception window to apply Events on an ongoing call
 - "Receive Traffic" user button to provide an option to receive traffic (i.e. record to file, detect digits/tones) for every active call.
 - ReInvite user button is provided to send a Re-Invite from CWP to update an active SIP session.
 - Enhanced to update Signal Quality Information (SQI) in run-time for an active call.
 - Radio handles the incoming PTT and prioritize accordingly.

7.2.3