



# HAC Update

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TCB Workshop  
Jim Szeliga

**FCC/OET**  
**Laboratory Division**



## 285076 D02 T-Coil testing for VoIP

- 285076 D01 HAC Guidance and D02 T-Coil testing for CMRS IP v02 are updated to clarify the exemption for T-coil testing for VoLTE and Wi-Fi calling.
- VoLTE exemption clarified –
  - issues are resolved
    - Average speech levels have been defined.
    - Base station simulators are now available supporting audio call simulation over LTE air interfaces.
    - In addition, handsets tested for VoLTE no longer require PAG.
- Fourth Report and Order and Notice of Proposed Rulemaking FCC 15-285 permits until January 2018 a HAC rating of handsets without T-coil VoIP testing.



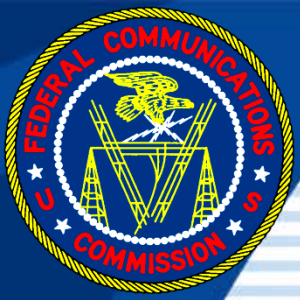
## 285076 D02 T-Coil testing for VoIP

- Handsets supporting VoLTE :
  - VoLTE T-coil testing does not require a PAG
  - Manufacturers will have the option to exclude testing until January 2018 (FCC 15-285).
- Handsets supporting Wi-Fi calling :
  - Wi-Fi Calling is CMRS based Telephone Services over Internet services using Wi-Fi access.
  - Manufacturers will have the option to exclude testing until January 2018 (FCC 15-285).
  - Manufacturers can test prior to January 2018- requires a PAG.
- Handsets with pre-installed support of OTT phone services are not required - until January 2018.
  - Google talk, Yahoo Messenger (Internet Low Bitrate Codec), WebRTC (Opus, Skype (SILK), IETF RFC 6716, H.263 and H.264, etc.
  - Manufacturers will have the option to test prior to January 2018- requires a PAG.



# Applicants Testing T-Coil for Voice over IP

- For testing Wi-Fi calling or OTT, a PAG is required
  - An attestation defining the specific details of the service must be provided.
  - A description of the Vo over Wi-Fi T-coil test set up.
  - Specify all the test equipment used, including manufacturer and model numbers.
  - Software used to simulate servers.
  - Voice Codecs tested and how they relate to the targeted telephone service. If certain codecs are not tested include a justification.
  - Specify the basis for using the test levels for the voice calls.



## Applicants excluding T-Coil Testing for Voice over IP

- Table Appendix B of D01: associated with M and T-coil air interface measurement ***“No associated T-coil measurement has been made in accordance with the guidance issued by OET in KDB publication 285076 D02 T-Coil testing for CMRS IP”.***
- Grant Note HC is to be used for all CMRS air interfaces tested: ***“This equipment complies with the hearing aid compatibility technical requirements of Section 20.19 of the rules.”***

Note: the grant note HX is no longer required.
- Grant comment: Manually add the additional grant comment: ***“Some T-Coil tests have not been performed as permitted by the Commission policy.”***
- Appropriate disclosure, as required by the rules, must be included in the user’s manual or inserted in accordance with the requirements of Section 20.19(f)(2)(i).





# Questions and Answers

**Thanks!**