



# **Equipment Authorization Order & Accredited Testing Laboratories**

**May 3, 2017**



# FCC Equipment Authorization Process

- Notice of Proposed Rulemaking (NPRM) (FCC 13-19) resulted in the FCC adopting Report and Order (FCC 14-208)
  - FCC 14-208 became effective July 13, 2015
    - Some changes effective immediately and others became effective after specific transition dates
    - Next transition date for Accredited Testing Laboratories on July 12, 2017
      - Require all Certification and DoC testing to be done at accredited lab that is FCC recognized as accredited
        - » FCC KDB 974614 identifies scopes for recognized labs
      - FCC stopped accepting requests for recognition of new 2.948 Listed Test Firms on July 12, 2015
        - » Existing 2.948 recognized laboratories may test products for FCC certification requirements until July 12, 2017 per FCC 16-74



# Petitions for Reconsideration

- Two Petitions for Reconsideration were filed to FCC 14-208
  - Requesting FCC extend 2,948 listed laboratory program beyond initial transition date of July 12, 2016.
  - Requesting FCC develop procedures for recognizing accredited testing laboratories in non-mutual recognition agreement (MRA) countries
- Memorandum Opinion and Order and Order on Reconsideration (FCC 16-74) adopted on June 14, 2016
  - Extended 2,948 listed lab program expiration date to July 12, 2017
  - Directed OET to develop procedures for recognizing Test Firm Accrediting Bodies to assess and designate testing laboratories in non-MRA countries for FCC recognition



# Test Firm Accrediting Body Requirements (FCC 16-74)

- Test Firm Accrediting Bodies (TFABs)
  - Per the requirements of 47 CFR 2.949 and KDB 974614 D02 the FCC will accept requests from TFABs to be recognized by the FCC to assess and designate test laboratories in non-MRA countries for FCC recognition
  - Procedures follow those for domestic TFABs
  - TFAB Non-MRA country requirements
    - Must request on a per country basis
    - Must provide justification of TFAB experience
      - ISO/IEC 17011/17025/FCC Equipment Authorization
    - Must provide procedures for each country and address any unique issues for each country (e.g. language)
    - When the necessary information is received, FCC will publish a public notice asking for comment



# ET Docket 16-313

- Opened by FCC on October 5, 2016 as a result of FCC 16-74 to address requests from Test Firm Accrediting Bodies (TFABs) to be recognized to assess and designate testing laboratories in non-MRA countries for FCC recognition
  - As of October 2016 the FCC had received requests from two domestic accreditation bodies which provided sufficient information to publish a public notice
    - A2LA
    - NVLAP
  - Proceeding and comments viewable at [www.fcc.gov/ecfs](http://www.fcc.gov/ecfs) by specifying ET Docket 16-313
  - If additional TFAB requests are received with the necessary information they will be published as part of the same proceeding.



# ET Docket 16-313 (cont'd)

- Test Firm Accreditation Body (TFAB) Scope Expansion
  - Public comments for TFABs requesting scope expansion for specific non-MRA countries
    - A2LA - Public Notice DA 16-1138
    - NVLAP - Public Notice DA 16-1139
  - FCC Public Notices DA 17-274 and DA 17-275
    - March 23, 2017
    - FCC recognized A2LA and NVLAP to assess and designate specific non-MRA country laboratories
      - Filing system being updated to accept designations for non-MRA laboratories



# KDB 974614 - Accredited Lab Recognition

- Per FCC 14-208 requirement for FCC recognized accredited testing laboratories the FCC will initially recognize accredited testing laboratories for 18 scopes
  - See KDB 974614 Attachment D01 for scopes
  - Labs currently recognized for up to 3 scopes
  - Test firms don't need to be accredited to all scopes but must be accredited to everything within each scope that they are requesting FCC recognition for
    - i.e., no partial scopes recognized
  - FCC will be sending information to TFABs to request updated scope information for ~430 current Labs
  - Electronic filing system updates pending



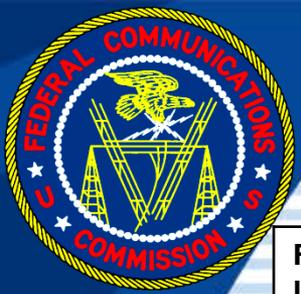
# KDB 974614 Accredited Testing Laboratory Roles and Responsibilities

- Recognition of accredited testing laboratories
  - Test firms must be accredited to ISO/IEC 17025 and the FCC requirements and be FCC recognized in order for reports to be valid
  - Testing by external resources/subcontracted must be completed by accredited test firm that is FCC recognized
    - FCC recognition is an expansion of the requirements in ISO/IEC 17025
  - TCBs are required to verify that a test firm is FCC recognized for scope of testing for test reports they accept and authorize



# KDB 974614 Scopes for 17025 Labs

FCC Accredited Testing Laboratory Scope	Test Method(s)	Additional Guidance
Unintentional Radiators (FCC Part 15B)	<ul style="list-style-type: none"> <li>ANSI C63.4-2014</li> </ul>	
Industrial, Scientific, and Medical Equipment (FCC Part 18)	<ul style="list-style-type: none"> <li>FCC MP-5 (February 1986)</li> </ul>	
Intentional Radiators (FCC Part 15C)	<ul style="list-style-type: none"> <li>ANSI C63.10-2013</li> </ul>	
UPCS (Part 15D)	<ul style="list-style-type: none"> <li>ANSI C63.17-2013</li> </ul>	
UNII without DFS Intentional Radiators (FCC Part 15E)	<ul style="list-style-type: none"> <li>ANSI C63.10-2013</li> </ul>	<ul style="list-style-type: none"> <li>KDB Publication 789033</li> </ul>
UNII with DFS Intentional Radiators (FCC Part 15E)	<ul style="list-style-type: none"> <li>KDB Publication 905462 D02 UNII DFS Compliance Procedures new rules v01</li> </ul>	
UWB Intentional Radiators (FCC Part 15F)	<ul style="list-style-type: none"> <li>ANSI C63.10-2013</li> </ul>	
BPL Intentional Radiators (FCC Part 15G)	<ul style="list-style-type: none"> <li>ANSI C63.10-2013</li> </ul>	
White Space Device Intentional Radiators (FCC Part 15H)	<ul style="list-style-type: none"> <li>ANSI C63.10-2013</li> </ul>	



# KDB 974614 Scopes for 17025 Labs II

FCC Accredited Testing Laboratory Scope	Test Method(s)	Additional Guidance
Commercial Mobile Services (FCC Licensed Radio Service Parts 22(cellular), 24, 25(non microwave), and 27)	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> <li>TIA-102.CAAA-D</li> </ul>	<ul style="list-style-type: none"> <li>KDB Publication <a href="#">971168</a></li> </ul>
General Mobile Radio Services (FCC Licensed Radio Service Equipment - 22(non-cellular), 90 (NM), 95, 97 and 101 (non-microwave))	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> <li>TIA-102.CAAA-D</li> </ul>	
Citizens Broadband Radio Service (FCC Licensed Radio Service Equipment – Part 96)	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> <li>TIA-102.CAAA-D</li> </ul>	<ul style="list-style-type: none"> <li>KDB Publication <a href="#">971168</a></li> </ul>
Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment – Part 80 and 87)	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> </ul>	
Microwave and Millimeter Band Radio Services (FCC Licensed Radio Service Equipment – Parts 25, 74, 90 (90Y, 90Z, DSRC) and 101)	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> <li>TIA-102.CAAA-D</li> </ul>	
Broadcast Radio Services (FCC Licensed Radio Service Equipment – Parts 73 and 74(non-microwave))	<ul style="list-style-type: none"> <li>ANSI/TIA-603-D (2010)</li> <li>TIA-102.CAAA-D</li> </ul>	
RF Radiation Exposure – (FCC devices subject to SAR requirements)	<ul style="list-style-type: none"> <li>IEEE Std 1528™-2013</li> </ul>	<ul style="list-style-type: none"> <li>KDB Publication <a href="#">865664</a></li> <li>KDB Publication <a href="#">447498</a></li> </ul>
Hearing Aid Compatibility (FCC Part 20 – HAC for commercial mobile services)	<ul style="list-style-type: none"> <li>ANSI C63.19-2007; or</li> <li>ANSI C63.19-2011</li> </ul>	
Signal Boosters(FCC Part 20–wideband consumer, provider specific & Industrial)	<ul style="list-style-type: none"> <li>FCC KDB Publication 935210 attachments D03, D04, and D05</li> </ul>	



# Standards Related Issues

- ANSI C63.26-2015 published 1/15/2016
  - FCC has not adopted yet
  - Comments submitted in FCC NPRM 15-92
  - 2 KDB Draft Publications propose allowing use
    - <https://apps.fcc.gov/oetcf/kdb/reports/PublishedDocumentList.cfm>
    - 971168 - Licensed Digital Transmitter Measurements
    - 442401 – Licensed Radio Service Measurement Standards
    - Last day for comments 5/19/2017
    - If ANSI C63.26 use allowed next update KDB 974614 D01 Appendix A will need to be updated:
      - ANSI C63.26-2015
      - ANSI/TIA-603-E-2016
      - TIA-102.CAAA-E-2016



# Standards Related Issues II

- ANSI C63.4-2014 – Testing Unintentional Radiators
  - ANSI C63.4-2014 required since July 13, 2016
  - ANSI C63.4-2003 and ANSI C63.4-2009 no longer recognized
  - Limited exceptions to standards identified in KDB publications
- ANSI C63.10-2013 - Testing Unlicensed Wireless Devices
  - ANSI C63.10-2013 required since July 13, 2016
  - ANSI C63.10-2009 no longer recognized
- ANSI C63.5-2006 – RF Measurement Antenna Calibration
  - Required by ANSI C63.4-2014 and ANSI C63.10-2013
  - ANSI C63.5-2017 version recently released-
    - Not published yet or FCC adopted
- Site validation when using ANSI C63.4 or C63.10
  - 30 MHz to 1 GHz - test facilities for radiated measurements required to meet site validation requirements of ANSI C63.4-2014
  - 1 GHz to 40 GHz – test facilities can use either site validation option in ANSI C63.4-2014 clause 5.5. After transition (3 years-July 13, 2018) the test facility is required to comply with CISPR 16-1-4:2010-04



# KDB Updates

## TCB and Test Lab related

### ● FCC OET Knowledge Database (KDB)

[www.fcc.gov/kdb](http://www.fcc.gov/kdb)

- 974614 - Test Firm Roles and Responsibilities
  - Updated for FCC 16-74 on June 16, 2016
- 853844- Test Firm Assessment Checklist
  - Updated February 29, 2016
- 641163 TCB Roles and responsibilities
  - Updated November 22, 2016
- 668797 TCB Assessment Checklist
  - Updated February 29, 2016
- 414788 – Test Site Requirements for Radiated Emission Measurements
  - Published April 18, 2017
    - Consolidated and updated multiple related topic KDBs into one
    - Compliance Testing Experimental License info added



# Experimental Radio Service- Compliance Testing Licenses

- Compliance Testing Experimental Radio License
  - FCC Report and Order 13-15
  - Part 5 G - Required for US testing laboratories with an open area test site (OATS)
    - Part 5.503 - Antenna calibration, site validation, etc
  - Public Notice DA 17-362 (April 14, 2017)
    - [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-17-362A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-17-362A1.pdf)
    - Now accepting applications at:  
<https://apps.fcc.gov/oetcf/els/forms/442Dashboard.cfm>
    - User filing guide at:  
[https://apps.fcc.gov/els/GetPdf.html?file=ELS%20Web%20Application%20User%20Guide\\_Compliance%20License%20October%202016.pdf](https://apps.fcc.gov/els/GetPdf.html?file=ELS%20Web%20Application%20User%20Guide_Compliance%20License%20October%202016.pdf)



# Accredited Testing Laboratory Recognitions

- The US has an operational MRA/EMC arrangement for acceptance of test data with the following countries:
  - Australia
  - Canada
  - Chinese Taipei
  - European Union
  - Hong Kong, China
  - Israel
  - Japan
  - Korea
  - [Malaysia](#)
  - [New Zealand](#)
  - Singapore
  - Vietnam

Region	Number of Labs FCC Recognized
North America	131
Europe	59
Asia	229
Israel	5
Total	424



# Equipment Authorization Electronic Filing System (EAS)

- File upload issues ~March 2017
- Invalid email addresses
- Grantee Code Payments
  - Multiple codes
  - Non payment
- Confidentiality
  - After public availability
  - No Short term confidentiality longer than 180 days-Not an exceptional circumstance