



2015 MIC MRA International Workshop -Tokyo, Japan FCC Update

**Federal Communications Commission
Office of Engineering and Technology**

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Overview

- FCC Function
- FCC Rulemakings
- Certification and MRA Status
- Market Surveillance
- Information Sources



Federal Communications Commission

- Federal Communications Commission (FCC) regulates the private sector telecommunications industry, in the public interest
 - Establishes technical regulations for transmitters and other equipment to minimize their potential for causing interference to radio services.
 - Administers an authorization program to ensure that equipment reaching the market complies with the technical requirements



OET Lab Principal Functions

- Equipment Authorization including monitoring Telecommunication Certification Bodies (TCBs)
- Ensure compliance through market surveillance and enforcement
- Technical Studies supporting regulatory policies and rulemaking
- Providing web-based comprehensive and timely clarification of technical standards and procedures



FCC Equipment Authorization Process

- Notice of Proposed Rulemaking(NPRM) FCC 13-19 became Report and Order FCC 14-208
 - Released FCC 13-19 February 15, 2013
 - Also known as ET Docket 13-44
 - FCC 14-208 adopted December 17, 2014
 - Released December 30, 2014
 - Order becomes effective 30 days after publication in the Federal Register
 - Expected to be published very shortly
 - Highlights described in following slides
 - Some changes effective immediately and others have specific transition dates
 - FCC updating multiple KDBs to reflect changes
 - Plan to publish draft KDBs where applicable and final publications closer to effective date



FCC 14-208 Summary

- Equipment Authorization Order overview
 - FCC will no longer accept grants for equipment certification
 - Pending applications will be completed
 - TCBs will Certify all equipment
 - Establishes a pre-approval guidance procedure (formerly Permit but ask) and removes all devices from TCB exclusion list
 - Equipment list and procedures specified in KDB publication
 - TCBs permitted to Dismiss applications not compliant with standards and upload relevant information
 - Limited to applications they approved or been requested to approve
 - Limited to pre-grant and within 30 days after grant
 - Pending system programming
 - Codifies TCB Post Market Surveillance requirements
 - TCBs required to audit 5% of total EMC/Telecom devices they certified annually
 - » 1% of devices with RF exposure compliance requirements
 - TCB may request voucher to obtain product from marketplace
 - System programming changes pending to allow TCBs to request devices through FCC website



FCC 14-208 Summary 2

- Additional options for addressing TCB Performance issues:
 - Limit scope of deficient TCB
 - Require all deficient TCB grants to be issued through pre-approval guidance procedures
- Update rules to reference current ISO/IEC Standards:
 - ISO/IEC 17011:2004 for Accreditation Bodies
 - ISO/IEC 17025:2005 for Accredited Laboratories
 - ISO/IEC 17065:2012 – TCBs must be accredited by 9/15/2015
- Update requirements for testing laboratories:
 - Require all Certification and DoC testing to be done at accredited lab that is FCC recognized
 - All testing completed by external resources/subcontracted shall be done at a lab that is accredited and FCC recognized
 - FCC reviewing procedures for scopes of recognized labs
 - FCC will no longer recognize 2,948 Listed Test Firms
 - Existing recognized labs will remain recognized for 1 year from effective date of rules
 - FCC will stop accepting requests for recognition of new 2,948 listed labs as of effective date of rules

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FCC 14-208 Summary 3

- Codify requirements for recognition of laboratory Accreditation bodies- 47 CFR 2.949
 - Current procedures allow FCC to recognize:
 - Domestic accredited labs
 - Foreign accredited labs under the terms of Government to Government Mutual Recognition Agreement (MRA)
 - Alternative arrangements can be recognized by FCC
 - » Currently no alternative arrangements recognized
 - » If procedures to recognize non MRA country labs are developed they will be published but this is not required by FCC 14-208
 - New procedures allow same options but do not require that FCC develop procedures to recognize accrediting bodies in non MRA countries



FCC 14-208 - Standards Related Issues

- ANSI C63.4-2014 – Testing Unintentional Radiators
 - Replaces ANSI C63.4-2003 and ANSI C63.4-2009 version
 - ANSI C63.4-2014 may not be used until the effective date of FCC 14-208 and must be used after transition period (1 year)
 - Any of the three test standards may be used during the transition period
 - Limited exceptions in FCC 14-208 allow for use of 2003 version for limited time
- ANSI C63.10-2013 - Testing Unlicensed Wireless Devices
 - Replaces ANSI C63.10-2009 allowed by DA-09-2478
 - ANSI C63.10-2013 may not be used until the effective date of FCC 14-208 and must be used after transition period (1 year)
 - Either standard may be used during the transition period
- ANSI C63.5-2006 – RF Measurement Antenna Calibration

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FCC 14-208 - Standards Related Issues 2

- Delegated authority
 - Provides greater flexibility for FCC/OET to use delegated authority to address minor technical issues related to updating standards for Parts 2, 5, 15 and 18.
 - New standards adoption or major standards revisions must still go through rulemaking process
- Site Validation when using ANSI C63.4 or ANSI C63.10
 - 30 MHz to 1 GHz - test facilities for radiated measurements required to meet site validation requirements of ANSI C63.4-2014 as of effective date of rules
 - 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) the test facility is required to comply with CISPR 16-1-4:2010-04



FCC Equipment Authorization KDB Webpage

- Knowledge Database (KDB) Publications
 - www.fcc.gov/labhelp
- Draft Publications
 - Review and comment on proposed policies before adoption
 - <https://apps.fcc.gov/oetcf/kdb/reports/PublishedDocumentList.cfm>
- Proposed Draft Publication for update
 - 641163 – TCB Roles and Responsibilities
 - 668797 – TCB Guide 65 Technical Assessment Checklist
 - 610077 – TCB Post Market Surveillance
 - 974614 – Accredited Test Laboratory Roles and Responsibilities
 - 853844 – Accredited Test Laboratory Technical Assessors Checklist



Electronic Labeling

● E-Label Act of 2014

– KDB 784748

- <https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?switch=P&id=27980>
- Released July 11, 2014

– Allows devices with integrated non removable screens to be electronically labeled

- Must be able to access:
 - Without special access code
 - In less that three steps in device menu
- Must be secured and unmodifiable
- Access instructions must be provided to users
- Must have physical label for importation and purchase

- BULK Import Workshop Tokyo
Japan
- Must have adhesive label with conditions

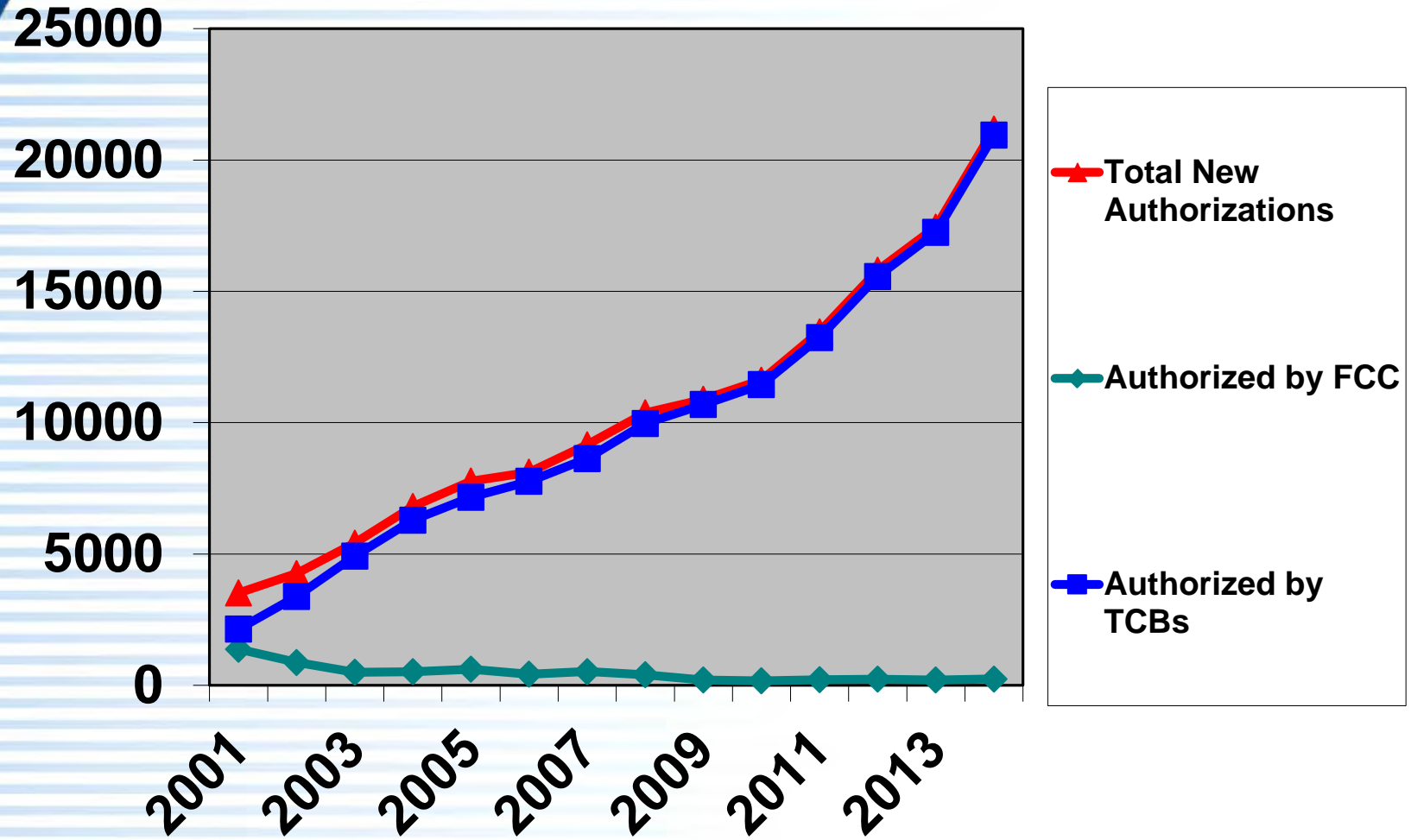


Other Recent Questions

- Fast SAR Methods under Consideration
 - Currently FCC has recognized Fast SAR method known as Motorola Fast SAR Method (Polynomial Fit Method)
 - Also known as “estimated 1-g SAR”
 - See KDB 447498 for details
 - Applicable only for SAR estimation in 30 MHz to 6 GHz
 - <https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?switch=P&id=20676>
 - FCC has received requests to accept Sensor Array SAR Systems
 - FCC is currently evaluating system capabilities, limitations and restrictions
 - Waiting on results to validate process
 - Updated guidance will be published once the review is finished



Equipment Authorization Certification Process Trends





Phase I/EMC Arrangement MRA Status

- 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
 - 74 recognized
- Korea
- Singapore
- Vietnam

Region	Number of Labs FCC Recognized
North America	132
Europe	49
Asia	167
Israel	3
Total	351



MRA Status

- MRA's for mutual acceptance of approvals are operational with the following countries:
 - Canada
 - European Union
 - Hong Kong, China
 - Singapore
 - Japan
- A total of 36 Telecommunication Certification Bodies (TCBs) have been recognized by the FCC.
 - 20 domestic TCBs
 - 16 foreign TCBs
 - 1 Japan



Market Surveillance

- FCC
 - Reviews TCB Grants
 - Requests Samples from Grantees and TCB's
 - Purchases Samples
 - Focused sampling projects
- TCB
 - FCC requires each TCB to audit 5 % of products they authorized annually
 - 1 % RF Exposure if applicable
 - www.fcc.gov/labhelp KDB 610077
 - <https://apps.fcc.gov/oetcf/kdb/forms/FTSSeArchResultPage.cfm?switch=P&id=20540>
- Other
 - General public complaints/testing
 - Competitors complaints/testing



Market Surveillance Audit Issues

- FCC Actions
 - Non compliance issues:
 - Require explanation
 - Monetary fines
 - Confiscate equipment
 - Fix equipment
- TCB Responsibilities
 - Required to report issues to FCC & Grantee
- Common Issues
 - Applicant Non responsive
 - Grantee code deferral
 - Applicant didn't produce or market product
 - Applicant may request dismissal



Fraudulent Test Reports

- Multiple complaints received about testing laboratories generating fraudulent test reports
 - Reports generally indicated Test lab or agent copied reports from different application
 - FCC Lab and FCC Enforcement Bureau investigating
 - FCC requires explanation and retest
 - Provide test laboratory procedures for testing devices to FCC rules and keeping up to date with FCC requirements
- Recent concerns:
 - 2.948 laboratory questioned about fraudulent reports indicated that someone else was using their name and format and generating reports
 - Some applications dismissed and others still under review
 - Recognition removed until investigation complete
 - 2.948 laboratory submitting SAR reports represented data as full SAR test when improper fast SAR method was used
 - TCBs accepting reports without properly validating
 - TCB recognition under review



Training Opportunities

- Monthly conference calls with TCB Council
 - 10:30 AM first Tuesday of every month
- TCB Meetings
 - TCB/FCC workshop twice annually to discuss issues and for training.
 - Next Meeting April 14-16
 - April 13 – Training for new TCB Staff
 - April 14-16 - Regular meeting
- Other training opportunities as necessary
- FCC Knowledge Database
 - www.fcc.gov/labhelp
- Beta Test/Practice Website
 - <http://appsdemo.fcc.gov/oetcf/eas/index.cfm>



Questions and Answers

Thanks



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Information On Line

- **Equipment Authorization Webpage**
 - Measurement techniques, explanation of EA programs, filing information, MRAs, TCBs, EA announcements, etc.:
<http://www.fcc.gov/oet/ea/>
- **Procedures for information sharing and distribution**
 - Updated Interpretation Database & new contact desk for web based inquiries: <http://www.fcc.gov/labhelp>
- **OET Info on line (Orders, Public Notices, etc.)**
 - <http://www.fcc.gov/oet/info/>
- **FCC Rules and Regulations:**
 - <http://www.fcc.gov/oet/info/rules>
- **General FCC Information:**
 - <http://www.fcc.gov>
- **FCC MRA Webpage**
 - www.fcc.gov/oet/ea/mra



US – Japan Telecom MRA

Scope: Telecommunications terminal equipment and radio equipment

- Limited to radio and telecommunications equipment subject to certification
 - Doesn't include ISM and unintentional radiators.
- United States – FCC Rules (47 CFR)
- Japan – Telecom Business Law, Radio Law, related ordinances
- Regardless of location of the supplier or country of origin of the equipment



US – Japan Telecom MRA

● Entry into force

- Signed February 16, 2007 in Washington, D.C. by officials of the U.S. and Japan
- Japan's Parliament (Diet) approved the MRA; June 19, 2007
- Arrangement on Electro-Magnetic Compatibility (EMC): through Exchange of letters Exchange of diplomatic notes – December 2007
 - Official implementation date January 1, 2008

● Information on US-Japan MRA:

- <http://gsi.nist.gov/global/index.cfm/L1-4/L2-16/L3-92>
- <http://transition.fcc.gov/oet/ea/mra/Japan.html>



MRA Webpage

- Organizes all FCC related MRA information in one location:
 - www.fcc.gov/oet/ea/mra
 - Links to agreements
 - Implementation information
 - Accredited CAB requirements
 - Certification Body requirements
 - » TCB Guide 65/17065 Checklist
 - » TCB Roles and Responsibilities
 - » Measure procedures
 - Contact information for stakeholders



FCC MRA Participation

- **US-EU Mutual Recognition Agreement**
 - Bi-lateral, multi-sector
- **US-EFTA Mutual Recognition Agreement**
 - Bi-lateral, multi-sector
- **US-Japan Telecom MRA**
 - Bi-lateral, single sector
- **Asia Pacific Economic Co-operation (APEC) Mutual Recognition Arrangement**
 - Multi-lateral, single sector
- **Inter-American Telecommunication Commission (CITEL) Mutual Recognition Agreement**
 - Multi-lateral, single sector
- **US – Mexico (signed but not operational yet)**
 - Bilateral, Single sector
- **US – Israel**
 - Bilateral, Single sector