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

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

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

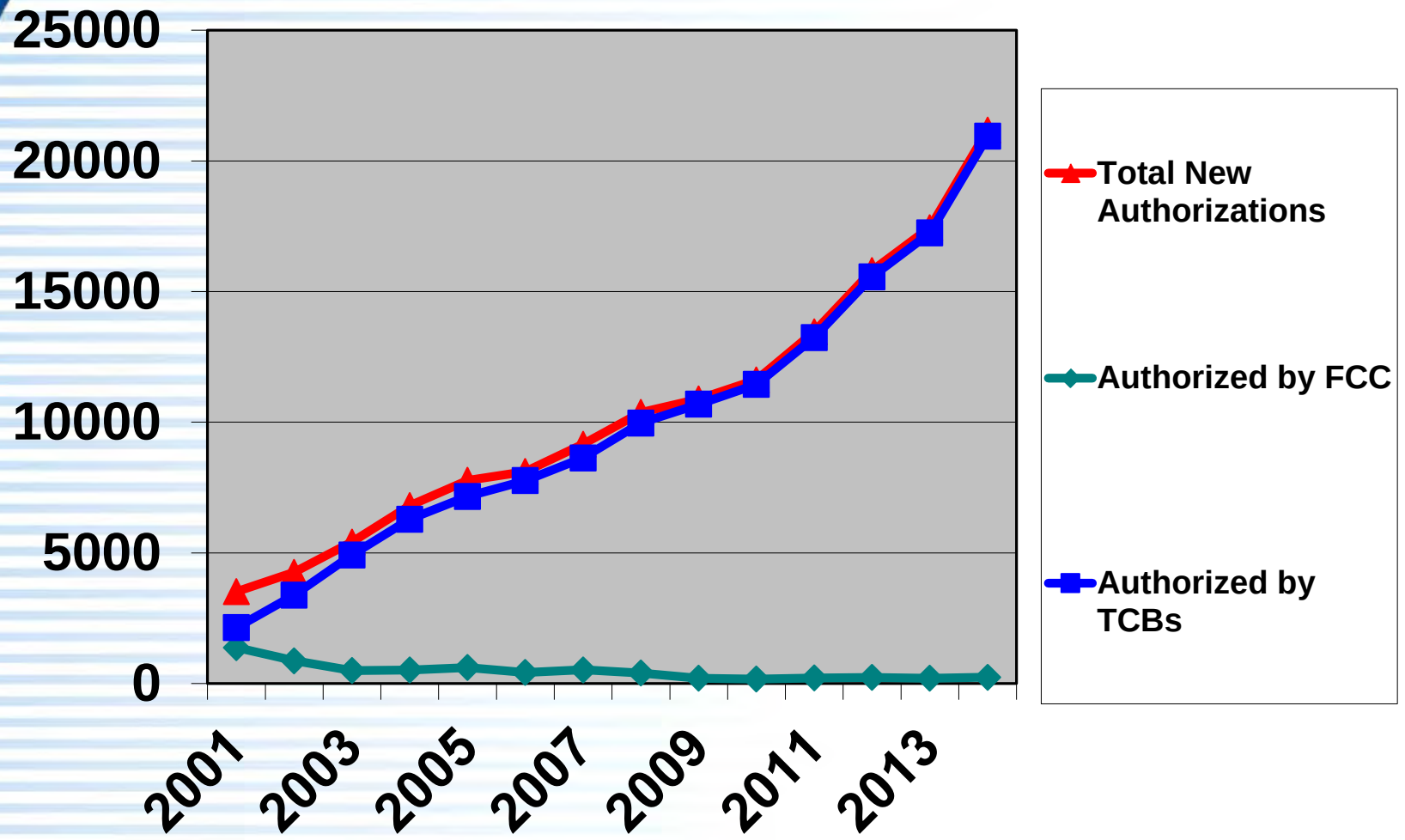
Electronic Labeling

- 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 imports may 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!

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