



## NIST Designation of CABs:

- Upcoming Changes for the US and EU
  - Review for Japan
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Japan MRA Workshop

March 2, 2016

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*Version updated 2/26/2016*



# Topics

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- Introduction: NIST and MRAs
- United States: Changes to Test Data Acceptance by **Telecommunication Certification Bodies (TCBs)**
- Europe: New notifications of U.S. **Notified Bodies (NBs)**
- Japan: Accreditation and designation of U.S. **Registered Certification Bodies (RCBs)**

# NIST



- National Institute of Standards and Technology
- Part of the U.S. Department of Commerce
- Purpose:
  - Advance measurement science, standards, and technology
  - Promote innovation and industrial competitiveness
  - Support research and programs to help industry



# NIST Telecom MRA Program Office

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- Designating Authority for Telecom MRAs:
  - Designates U.S. CABS to MRA partners
  - Monitors recognized U.S. CABS
  - Helps facilitate communications between U.S. CABS and MRA partners
- Supports Federal Communications Commission (FCC)
  - Designates U.S. Telecommunication Certification Bodies (TCBs) to the FCC





## Negotiating New Telecom MRAs

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- Lead Agency
  - Office of the United States Trade Representative (USTR)
- Regulatory Agency
  - Federal Communication Commission (FCC)
- Designating Authority
  - National Institute of Standards and Technology (NIST)

# Update on Changes to FCC Test Data Acceptance

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## FCC Report and Order 14-208

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- Released December 30, 2014
- Included revisions to the FCC radiofrequency (RF) equipment authorization program
- Included announcement that the 2.948 Listed Laboratory Program is being phased out.
  - Changes the test data acceptance requirements for TCBs
  - Changes the rules for the types of testing laboratories that manufacturers can use for regulatory testing of products for U.S. market

## Current Rules for TCB Acceptance of Test Data

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Certified Devices Covered under Parts 15 and 18	All Other Devices Subject to Certification
<p><b>“Accredited and FCC Recognized” Labs</b> These are labs accredited by an accreditation body recognized by the FCC and formally recognized by the FCC</p>	<p><b>Competent Labs</b> TCB accepts responsibility for quality of data</p>
<p><b>“2.948 Listed” Labs</b> - Measurement facilities are registered with FCC</p>	



## Future Rules for TCB Acceptance of Test Data as of July 13, 2016

Certified Devices Covered under Parts 15 and 18	All Other Devices Subject to Certification
<p><del>“Accredited and FCC Recognized” Labs</del> These are labs accredited by an accreditation body recognized by the FCC and formally recognized by the FCC</p>	<p><del>Competent Labs</del> TCB accepts responsibility for quality of data</p>
<p><del>“2.948 Listed” Labs</del> - Measurement facilities are registered with FCC</p>	



## Also, Expansion of the Scope of Tests covered under the U.S. Phase I MRA (for Laboratories)

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- The U.S. Phase I MRA previously only covered testing in support of the FCC's **Declaration of Conformity** (DoC).
- The U.S. Phase I MRA is now expanded to include testing in support of the FCC's **Certification Program**.
- FCC Recognized testing laboratories must now be recognized for specific test methods.
- As of July 13, 2016, TCBs can only use FCC recognized test labs that are recognized for the correct test methods.
- This means MRA Partner Designating Authorities need to start designating testing laboratories for specific test methods.

**MRA Partners should update the designations of eligible labs with the FCC**



## FCC Guidance to TCBs and Recognized Labs

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- TCB Program Roles and Responsibilities (July 2015)
  - FCC Knowledge Database (KDB)
  - See Section O - TCB Acceptance of Test Data
  
- Accredited Testing Laboratories Program Roles and Responsibilities
  - FCC Knowledge Database (KDB) 974614
  - See Tables for FCC Rules Parts and associated test methods
  - Proposed revisions issued in February 23, 2016 Draft for Review
    - *974614 Accredited Test Lab Roles and Resp DR03-42423*



## Example of FCC Table of Test Methods

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- FCC Part 15, Subpart D
  - Unlicensed Personal Communication Systems devices.
  - Test Method: *ANSI C63.17-2013, American National Standard Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices*
- FCC Part 15 Subpart E
  - Unlicensed National Information Infrastructure (U-NII) Dynamic Devices with Dynamic Frequency Selection (DFS)
  - Test Method: *FCC KDB 905462*
- FCC Part 18, Industrial, Scientific, and Medical Equipment
  - Consumer ISM equipment
  - Test Method: *FCC MP-5 (February 1986), FCC Methods of Measurements of Radio Noise Emissions From Industrial, Scientific, and Medical Equipment*



## Stakeholder Actions

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- **2.948 listed labs** that want their test data to be accepted by TCBs in the future must get accredited and obtain FCC recognition
  - FCC does not recognize labs in non-Telecom MRA countries
- **Manufacturers** must, as of July 13, 2016, use “Accredited and FCC Recognized” labs for all device/equipment testing prior to submittal of certification application(s) to TCBs
- “Accredited and FCC Recognized” labs should consider getting their Scope of Accreditation expanded to include testing for applicable devices.
- TCBs must, as of July 13, 2016, only accept test data from “Accredited and FCC Recognized” labs that are recognized for the correct scope/test methods/devices.



## U.S. Phase I MRA Partners

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- EU member states
- Japan
- Australia
- Canada
- Chinese Taipei
- Hong Kong
- Israel
- Korea
- Singapore
- Vietnam

In progress: Mexico and Malaysia

# US-EU MRA – Update on New Directive Notifications

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## U.S. Notified Bodies for EU

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- 23 U.S. CABs have Notified Body status for the EMC Directive (2001/108/EC)
  - Status expires on **April 20, 2016**
  - May be re-notified to revised **EMC Directive (2014/30/EU)** if the new requirements are met
- 18 U.S. CABs have Notified Body status for the R&TTE Directive
  - Status expires on **June 13, 2017**
- **New Directive: Radio Equipment Directive (2014/53/EU)**
  - Qualified U.S. CABs may be notified under the new Directive effective on **June 13, 2016**
  - Mandatory use of an NB by the manufacturer if harmonized standards are not used in full for radio essential requirements





## Role of the Notified Body

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- Under Module B, the Notified Body will
  - Examine a manufacturer's technical documentation and supporting evidence
  - Verify and attest that the technical product design meets the relevant legislative requirements
- The Notified Body then
  - Writes an evaluation report
  - Issues an EU-Type Examination Certificate



## Main Change for Notification Process

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- Formal accreditation is now the *preferred route* for demonstrating NB competence
  - US NBs must obtain accreditation for their NB activities
- EA-2/17 - INF, *EA Document on Accreditation for Notification Purposes*
- *The EU Blue Guide* states that the basic standards for Module B are:
  - ISO/IEC 17065 (Certification Bodies)
  - ISO/IEC 17020 (Inspection Bodies)



## Steps to Notification of U.S. CABS as NBs

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- NIST published new requirements for re-notification
  - 4<sup>th</sup> quarter of 2015 ([NIST website link](#))
- Accreditation Body Assessors completed preliminary training
  - 4<sup>th</sup> quarter 2015
- Accreditation Bodies begin to assess NBs
  - Feb/March 2016
- Notified Bodies apply to NIST for re-notification
  - February 2016
- NIST re-notifies NBs to the Commission
  - Start mid-March 2016 for EMCD/mid-April 2016 for RED
- European Commission publishes lists of NBs
  - [NANDO list of NBs for new EMC Directive](#)
  - [NANDO List of NBs for the new RED](#)

# Japan-US

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## MRA & Arrangement

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### Certification Bodies - RCBs

- Covered under **Japan-US MRA**

- A1/A2: Terminal Equipment
- B1/B2/B3: Radio Equipment
- To be an RCB, the CAB must have capability to certify all classes of equipment covered under a scope (B1, for example)

### Laboratories

- Covered under separate exchange of letters between the U.S. and Japan – known as the **EMC Arrangement**

- EMI from ITE
- VCCI accepts test reports issued by accredited U.S. labs that are members of VCCI and have registered their test facilities with VCCI



# Japan-US MRA Timeline

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## Timeline and Status

February 2007 – Japan-US MRA Signed

November 2010 – NIST begins to accept U.S. CB applications

March 2011 – First 2 RCBs from U.S. are recognized by MIC

Today - 5 U.S. RCBs are recognized by MIC (no change)

American Certification Body, Inc. (ACB, Inc.)  
Bay Area Compliance Laboratories, Corp. (BACL)  
MiCOM Labs  
SIEMIC, Inc.  
UL Verification Services, Inc.



## RCB – NIST Criteria for Designation

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- NIST Criteria for Designation
  - Published Document: *Criteria for Designation of U.S. Conformity Assessment Bodies under the U.S.-Japan Mutual Recognition Agreement* – Oct. 1 2012 (V2)
- Covers
  - Scope of the MRA
  - Applicable Laws and Ordinances
  - Test Methods Notified by MIC
  - Requirements for U.S. CAB Designation
  - Application Checklist
  - Excerpts of Information on Affidavit
  - Excerpts on Technical and Educational Requirements for the Radio Law
  - Information on Additional Resources



## RCBs – Accreditation Requirements

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The U.S. RCB must

○ Be accredited to ISO/IEC 17065 (by September 15, 2015) for one or more US-Japan MRA scopes and must:

- Have expert knowledge in Japan's laws, ordinances, technical regulations, and administrative requirements
- Meet educational and experience requirements for personnel
- Demonstrate the capability to access MIC requirements and obtain English translations





## RCBs - Laboratory & Test Method Requirements

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The U.S. RCB must

- Have an ISO/IEC 17025 lab that is accredited for
  - For relevant MIC test methods; or
  - For test methods that are equal to or surpass the MIC test methods
    - Procedures for determining equivalency
    - Maintain records of equivalency determination
- Contractual arrangements with other labs are acceptable
- Maintain procedures for acceptance of test data from other labs



## RCBs – Designation & Recognition Processes

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- NIST **reviews** all documents submitted and prepares
  - Designation letter
  - Nomination form
  - Joint Committee Decision form
- NIST **designates** CAB – all documents are sent to MOFA & MIC
- MIC **recognizes** CAB as RCB and notifies NIST
  - Publication in Gazette
  - RCB number assigned
- NIST confirms recognition to RCB
- NIST provides the Excel Spreadsheet for periodic reporting of certified products
- RCBs must address any market surveillance issues
- RCBs get reassessed every two years



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Questions?

Thank you.

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