

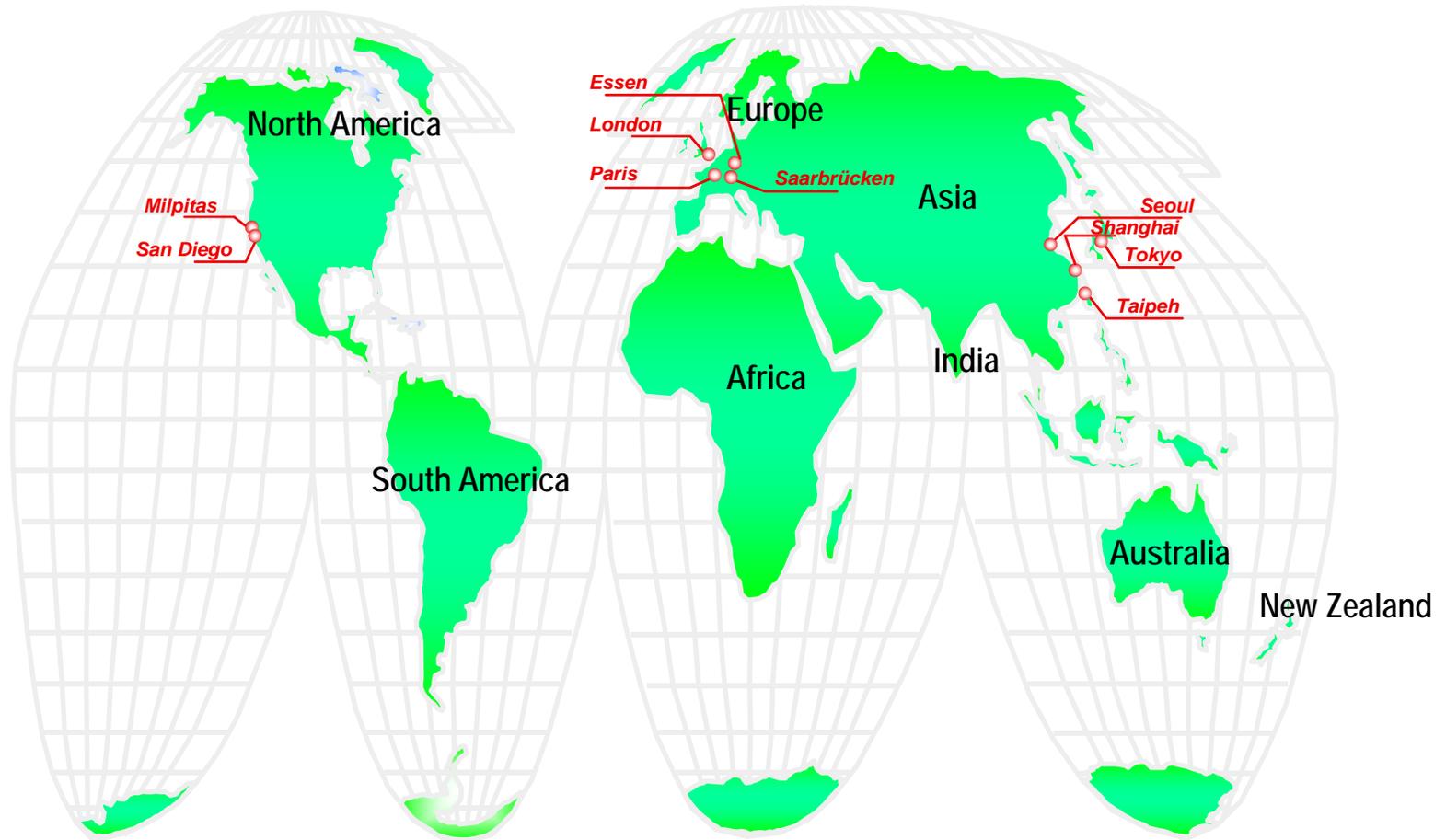
# **A CAB Experience under the EU-Japan MRA**

*Uwe Kartmann*

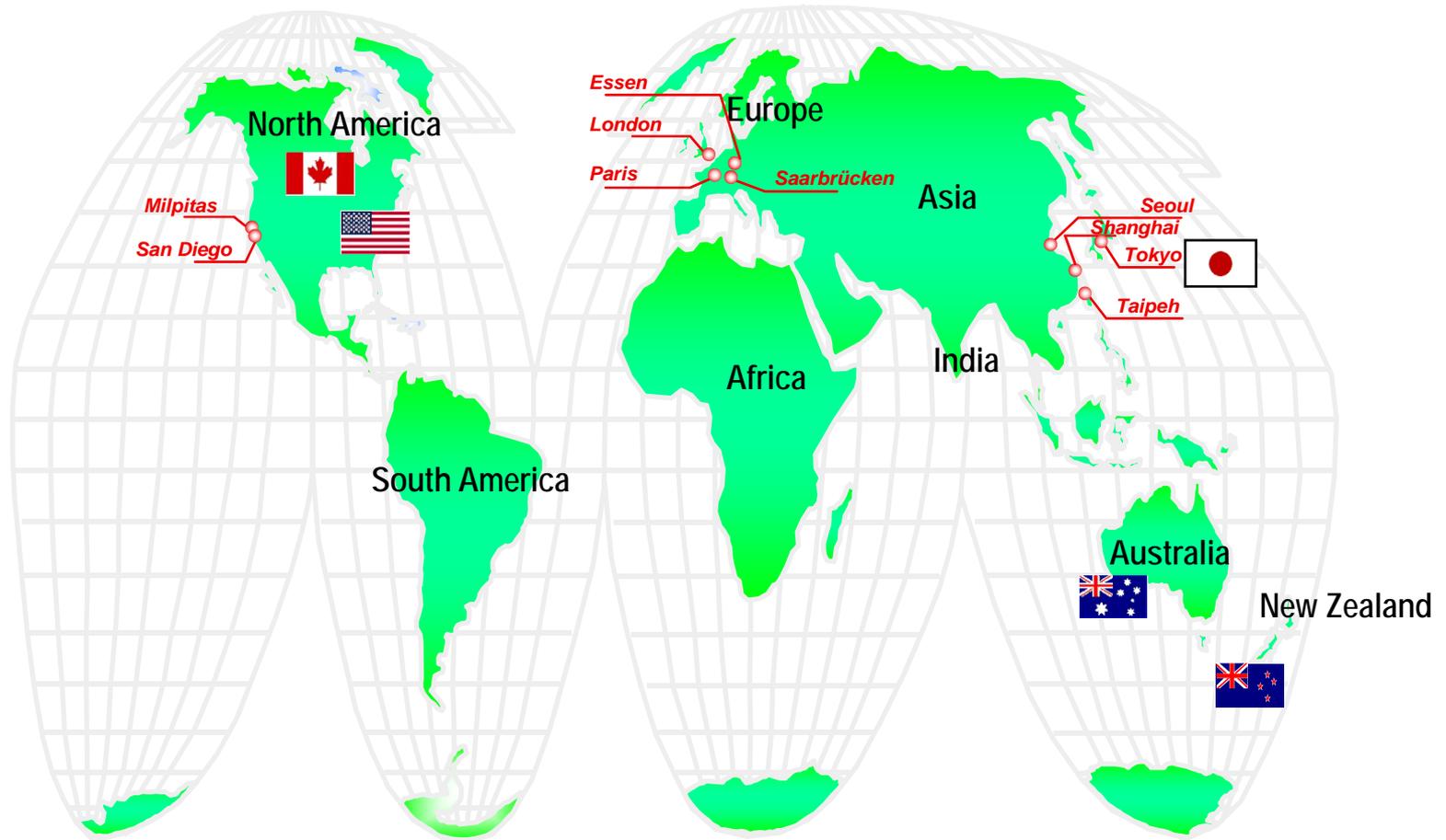
*CETECOM ICT Services*

*<http://www.cetecom-ict.de>*

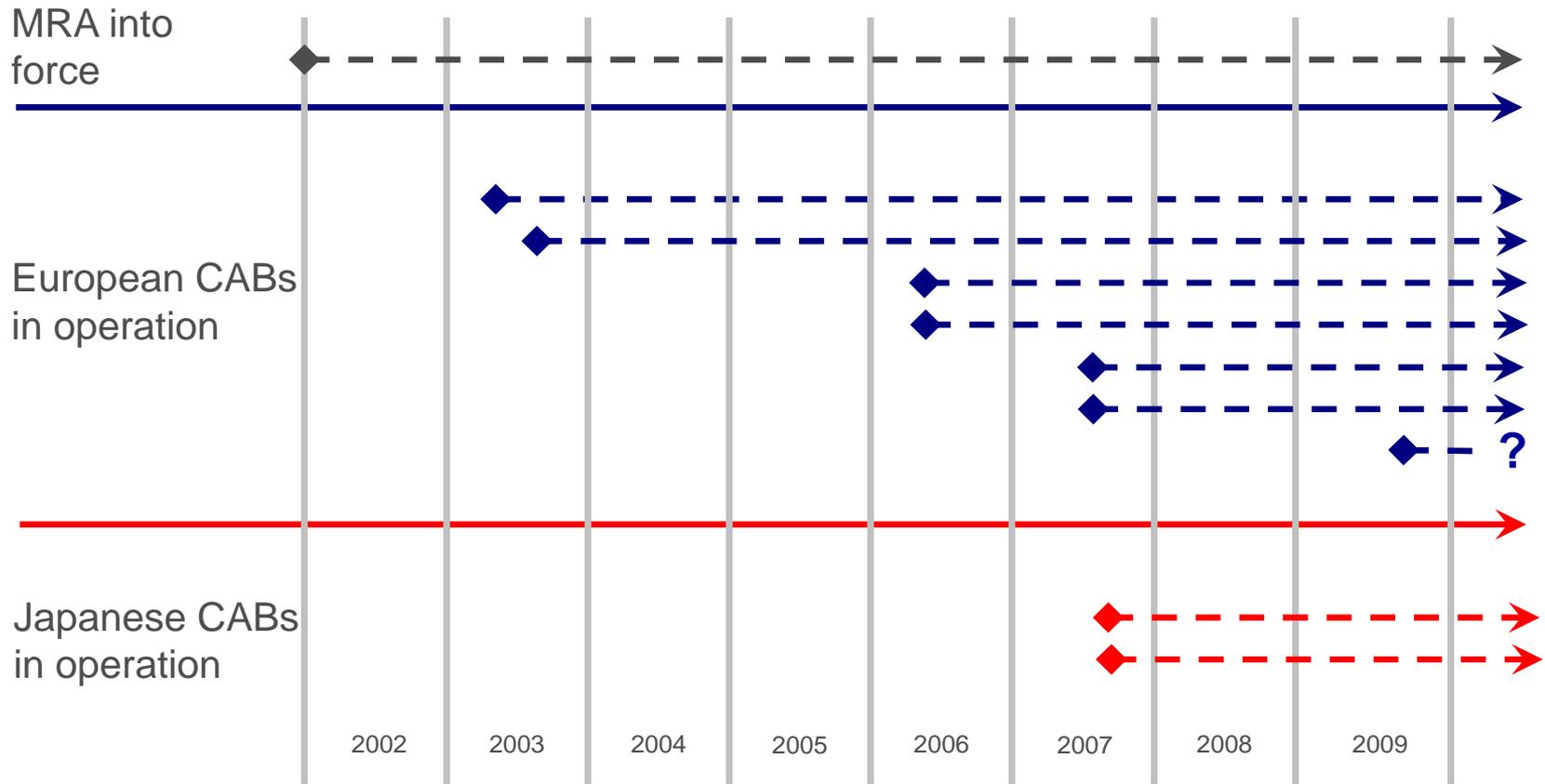
# CETECOM Locations Worldwide



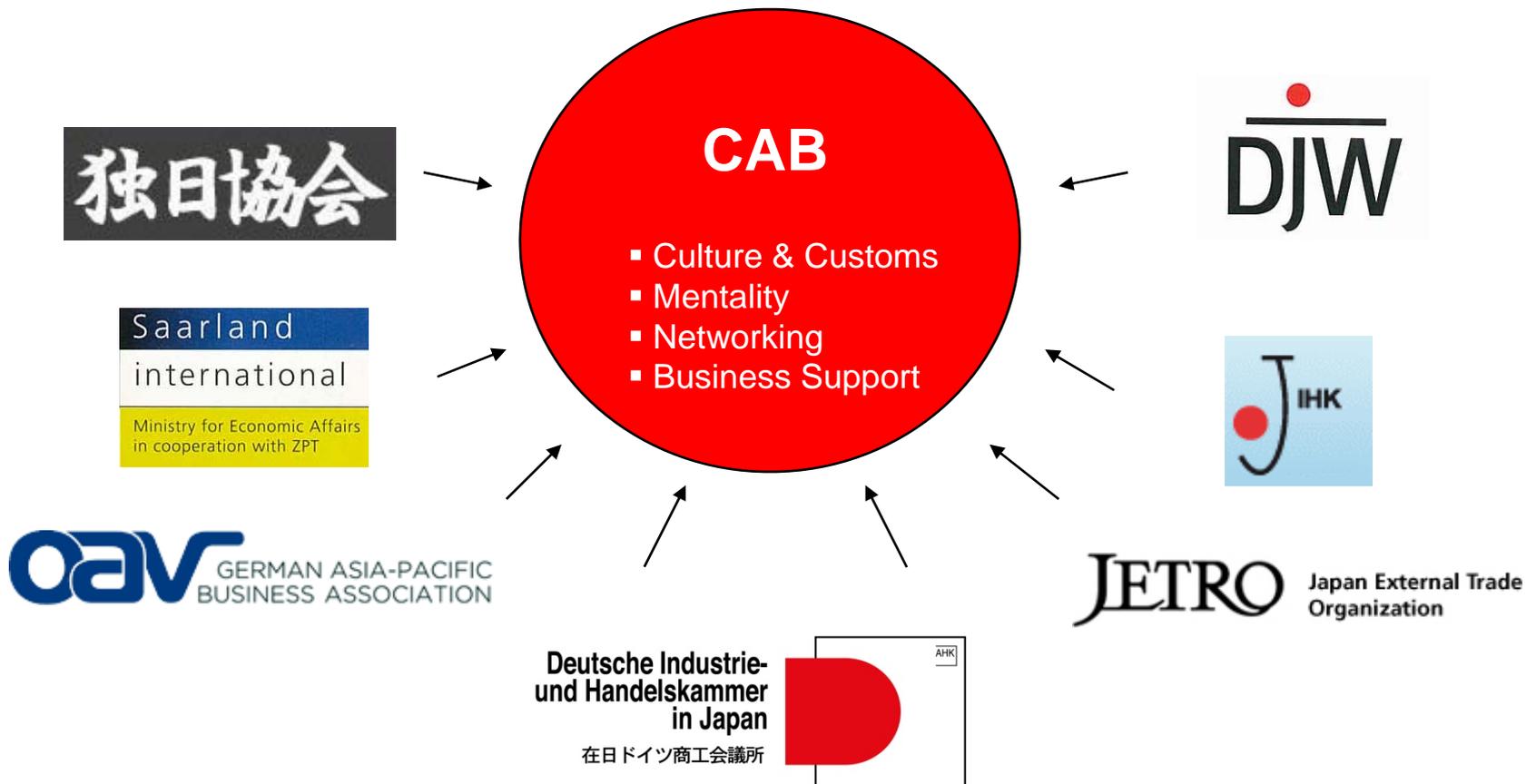
# Multisectoral EU MRAs covering R&TTE Equipment



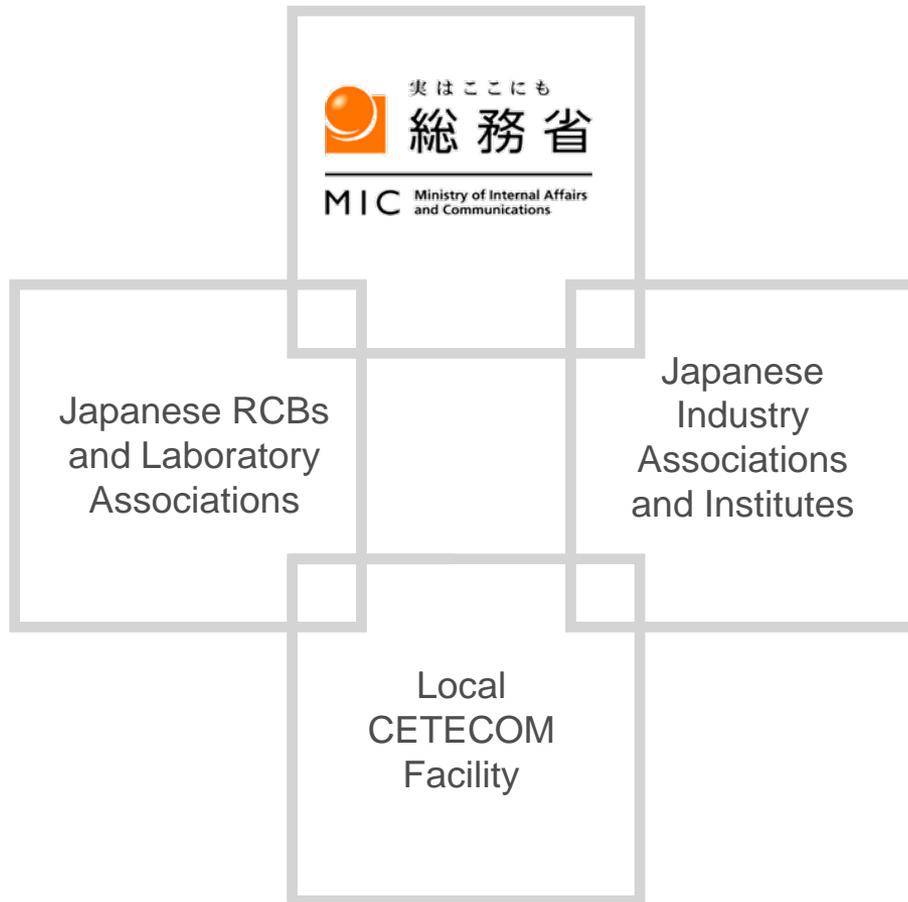
# MRA EU – Japan: Some History



## First Steps: Contacts & Memberships in Europe

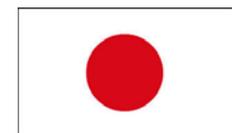


## First Steps: Contacts in Japan



Administrational  
& Technical  
Issues

... required for daily CAB work



## CAB Designation Process in Germany

- Designation Authority is the Federal Ministry for Economics
- Designation Process is performed by the Federal Network Agency (Regulatory Authority), a subordinate body of the Federal Ministry for Economics
- The Regulatory Authority, carries full and final responsibility for the designation of CAB's as well as constant monitoring of their operation in order to ensure permanent conformance with the requirements
- The designation procedure is structured as much as possible along the general principles for the designation of Test Laboratories and Notified Bodies
- All potential CAB's have related ISO Guide based accreditations (Testing Laboratories) or notifications (Notified Bodies). The testing laboratories (ISO/IEC 17025) have an exact list of standards and test procedures, whereas the Notified Bodies refer to a specific field of technology, i.e. EMC or radio transmitters (ISO/IEC Guide 65)

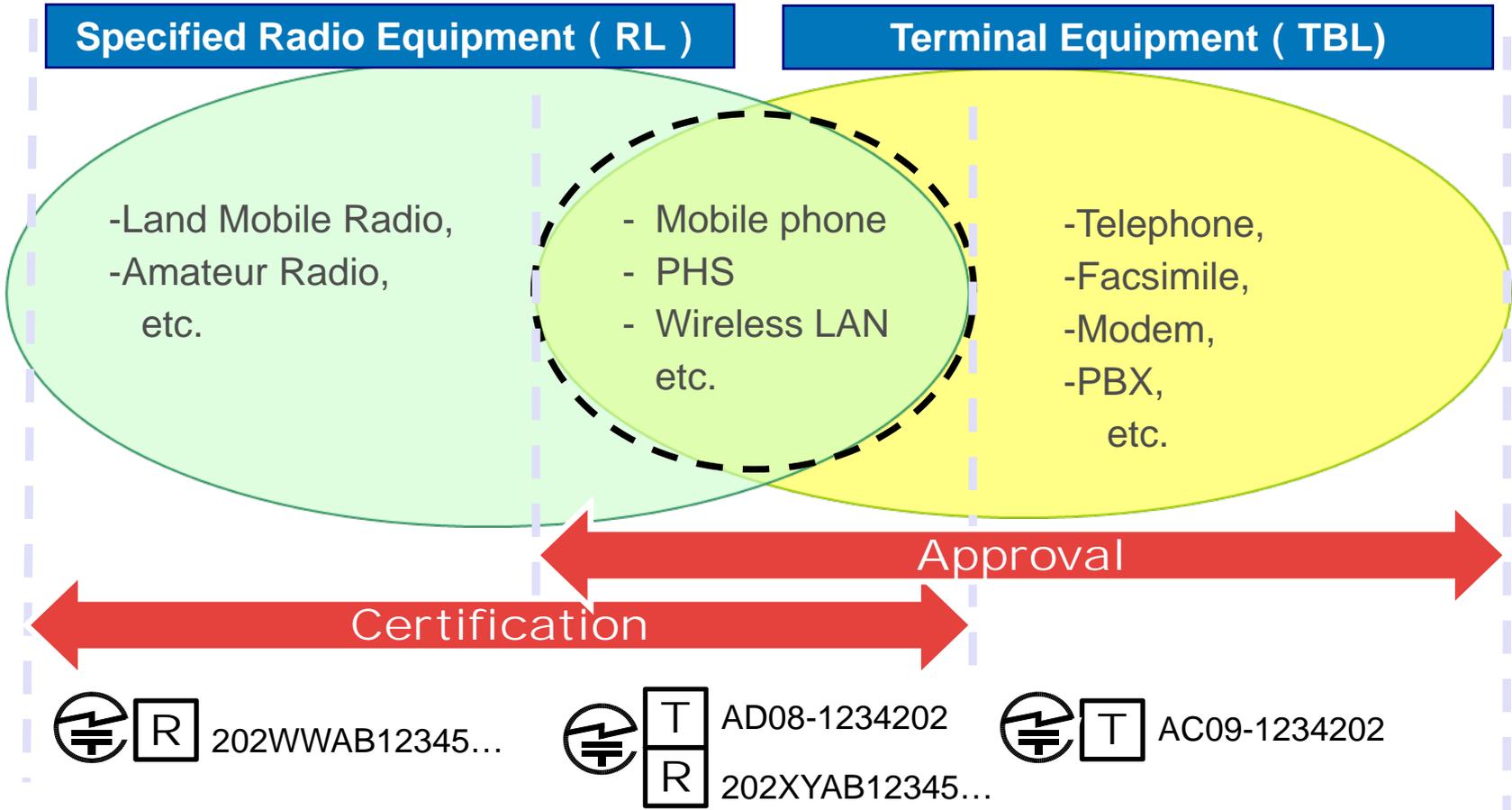
## CAB Designation Process in Germany

- After successful audit, the Designating Authority explicitly declares that the CAB has been checked to be fully competent to work as indicated in the scope of designation and tasks to be performed
  - by the CAB in respect to the Japanese market
  - familiar with the valid relevant Japanese Rules and Procedures, and to have access to them, and to be capable of applying them correctly, maintaining them and thus keeping up to date
- If the scope of designation mentions a specific area of the Japanese rules it automatically implies that all equipment within that area can be covered by the CAB. In all other cases the scope will indicate restrictions on product level
- In the designation process the CAB must indicate which personnel is qualified to perform what duty under the relevant MRA Annex

## Fundamentals

	JAPAN	EU
Product Category	<ul style="list-style-type: none"> <li>Specified Radio Equipment</li> <li>Terminal Equipment</li> </ul>	<ul style="list-style-type: none"> <li>Radio Equipment</li> <li>Telecommunications Terminal Equipment</li> </ul>
Regulations	<ul style="list-style-type: none"> <li>Radio Law</li> <li>Telecommunications Business Law</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;TTE Directive</li> </ul>
Authorities	<ul style="list-style-type: none"> <li>Radio, TE: MIC</li> <li>EMC, LVD: MIC &amp; METI</li> </ul>	<ul style="list-style-type: none"> <li>Authorities of respective EU Member State</li> </ul>
Conformity Assessment	<ul style="list-style-type: none"> <li>Type Certification, Equipment Certification, Inspection, Approval, SDoC</li> </ul>	<ul style="list-style-type: none"> <li>DoC, Notified Body Expert Opinion</li> </ul>

# Market Access System in Japan



## Classification of Radio Equipment

### Unlicensed Radio Equipment

- Extremely Low Power Radio Equipment
- Type 1 Specified Radio Equipment: 17 Types

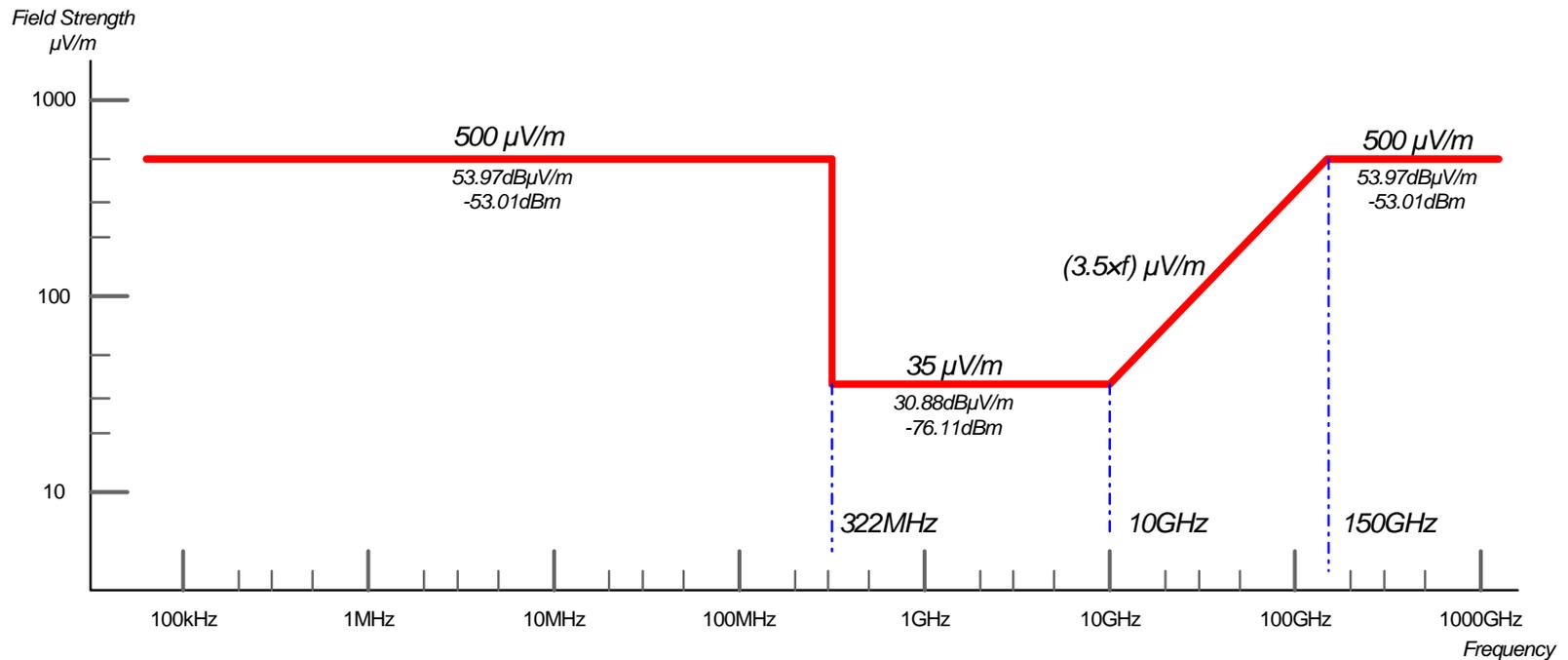
### Licensed Radio Equipment

- Type 2 Specified Radio Equipment: 31 Types  
(Blanket License)
- Type 3 Specified Radio Equipment: 75 Types  
(Simplified License)
- Others  
(Individual License or IFERW)

A light blue rectangular box with a red border containing the text "Type Certification". Three red arrows originate from the left side of the box and point to the "Type 1 Specified Radio Equipment: 17 Types", "Type 2 Specified Radio Equipment: 31 Types (Blanket License)", and "Type 3 Specified Radio Equipment: 75 Types (Simplified License)" items in the list above.

Type  
Certification

# Extremely Low Power Radio Equipment



- When the level of the electric field intensity within 3 meters of the radio equipment is under the level shown in the above figure, there is no need for getting a license
- There is no restriction on the frequency or the purpose
- Local Representative in Japan required

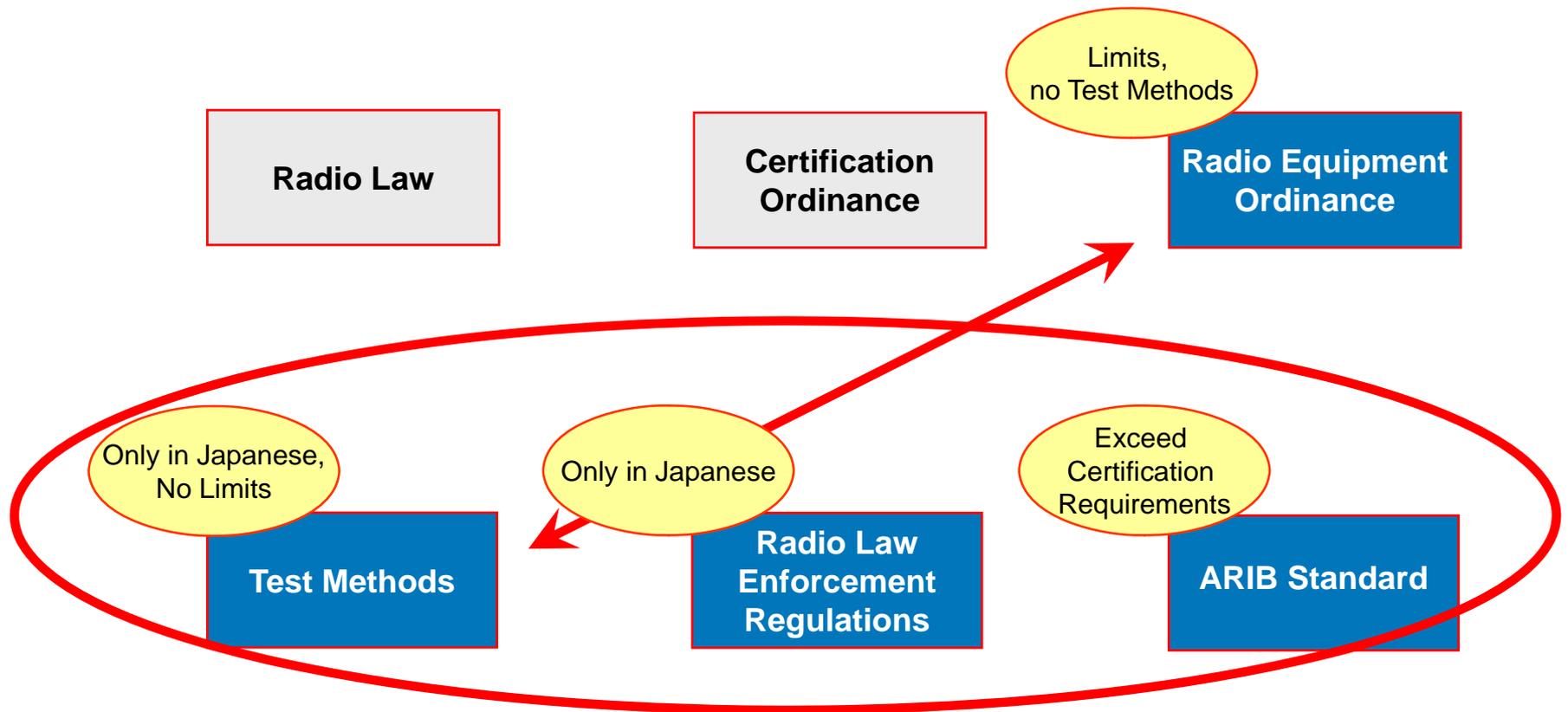
## References Certification and DoC

		SDoC System	Certification/Approval System
TTE	Telecom Business Law	Article 63 to 68	Article 56 to 62
	Ordinance	Article 41 to 44	Article 19 to 24
RE	Radio Law	Article 38-33 to 38-38	Article 38-24 to 38-30
	Ordinance	Article 39 to 42	Article 17 to 22

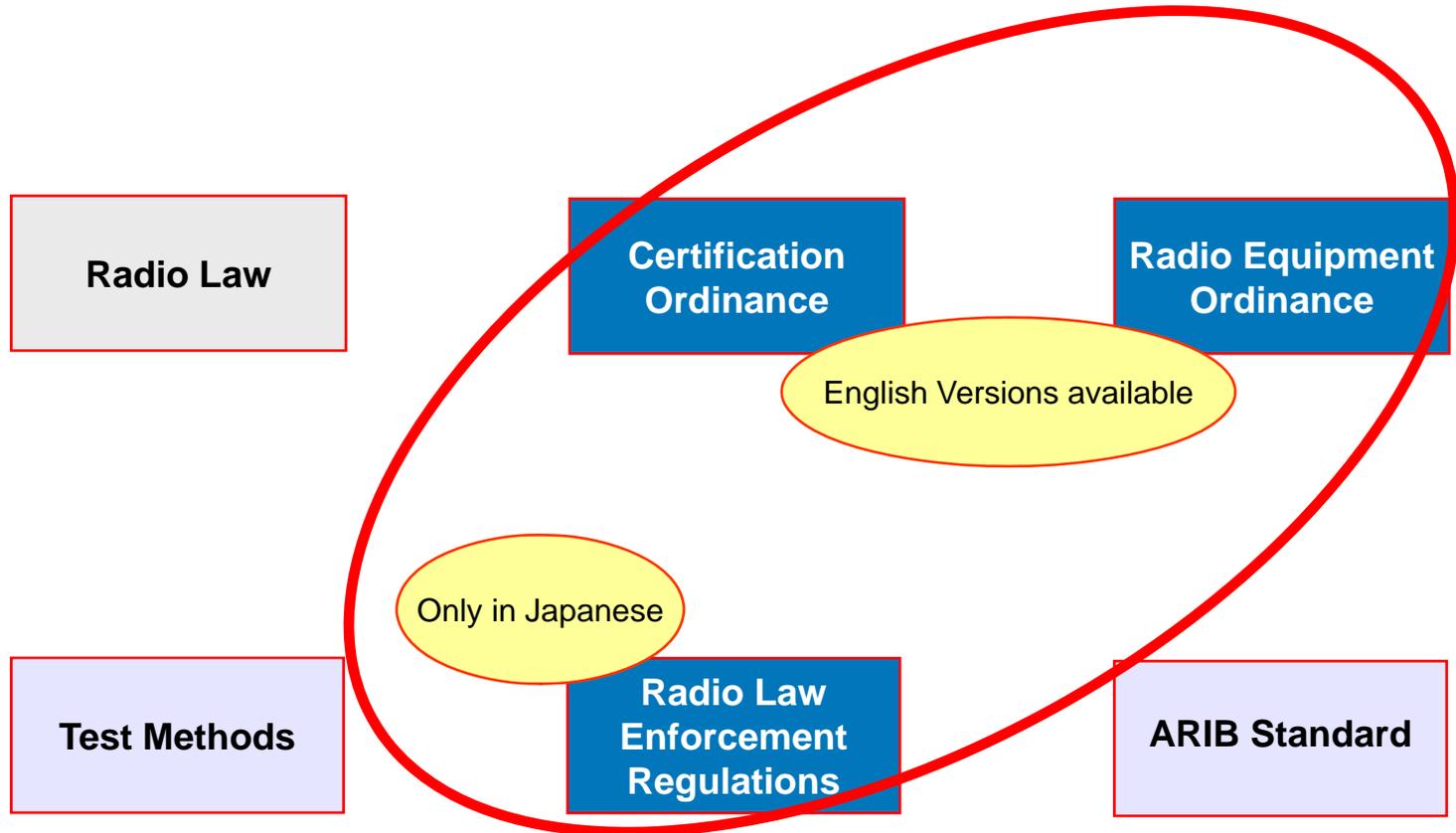
## Relevant Technical Specifications

	Radio Law	Telecom Business Law
Ordinances (mandatory)	<ul style="list-style-type: none"> <li>▪ Certification Ordinance (Assessment Procedures)</li> <li>▪ Radio Equipment Ordinance (Technical Requirements)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Approval Ordinance (Assessment Procedures)</li> <li>▪ Terminal Facilities Ordinance (Technical Requirements)</li> </ul>
Others (mandatory)	<ul style="list-style-type: none"> <li>▪ Radio Law Enforcement Regulations</li> <li>▪ Over 150 Test Methods</li> </ul>	
Voluntary standards	<ul style="list-style-type: none"> <li>▪ ARIB Standards</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3GPP (Only WCDMA)</li> </ul>

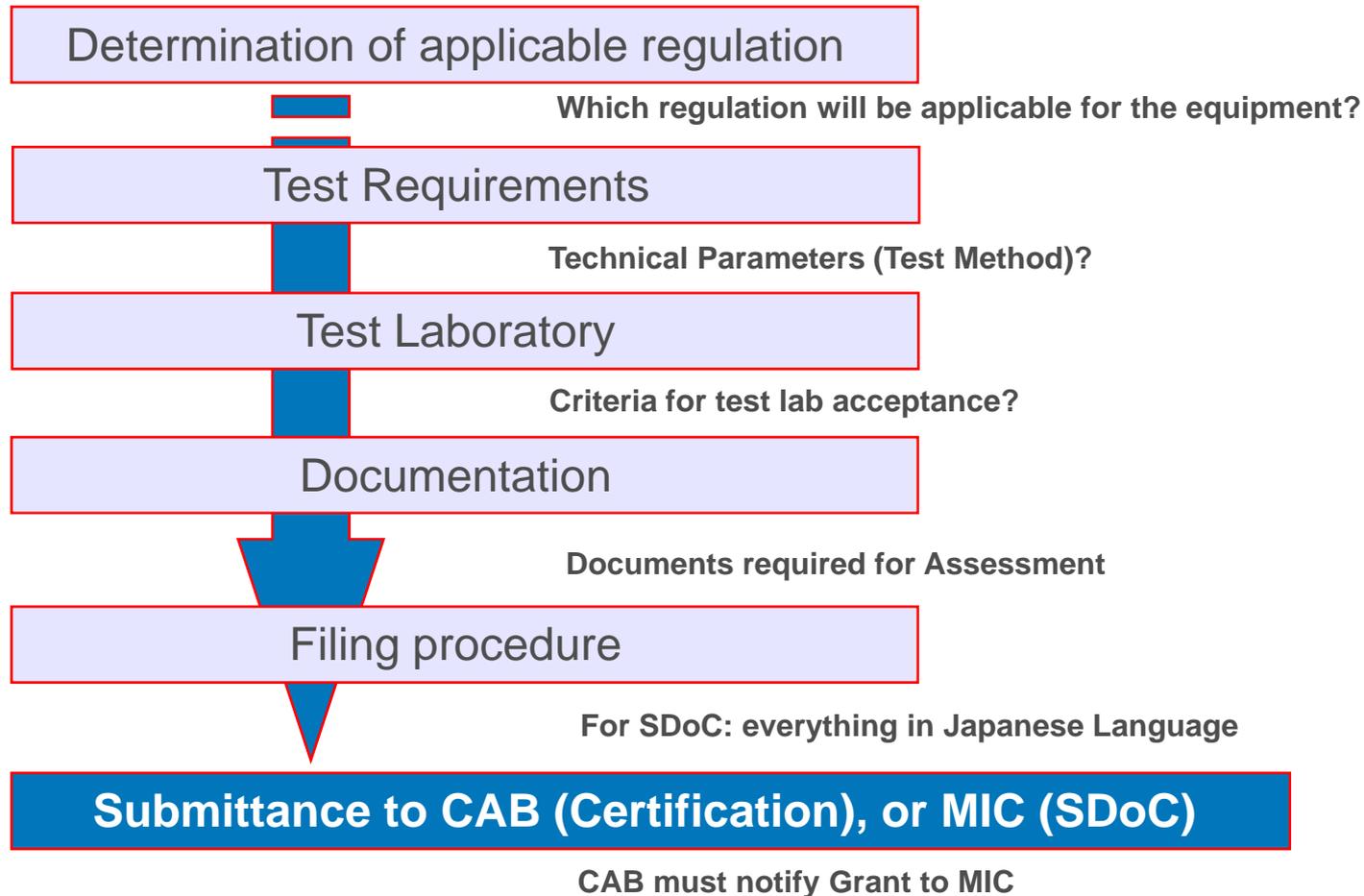
# Rules required for Conformity Testing



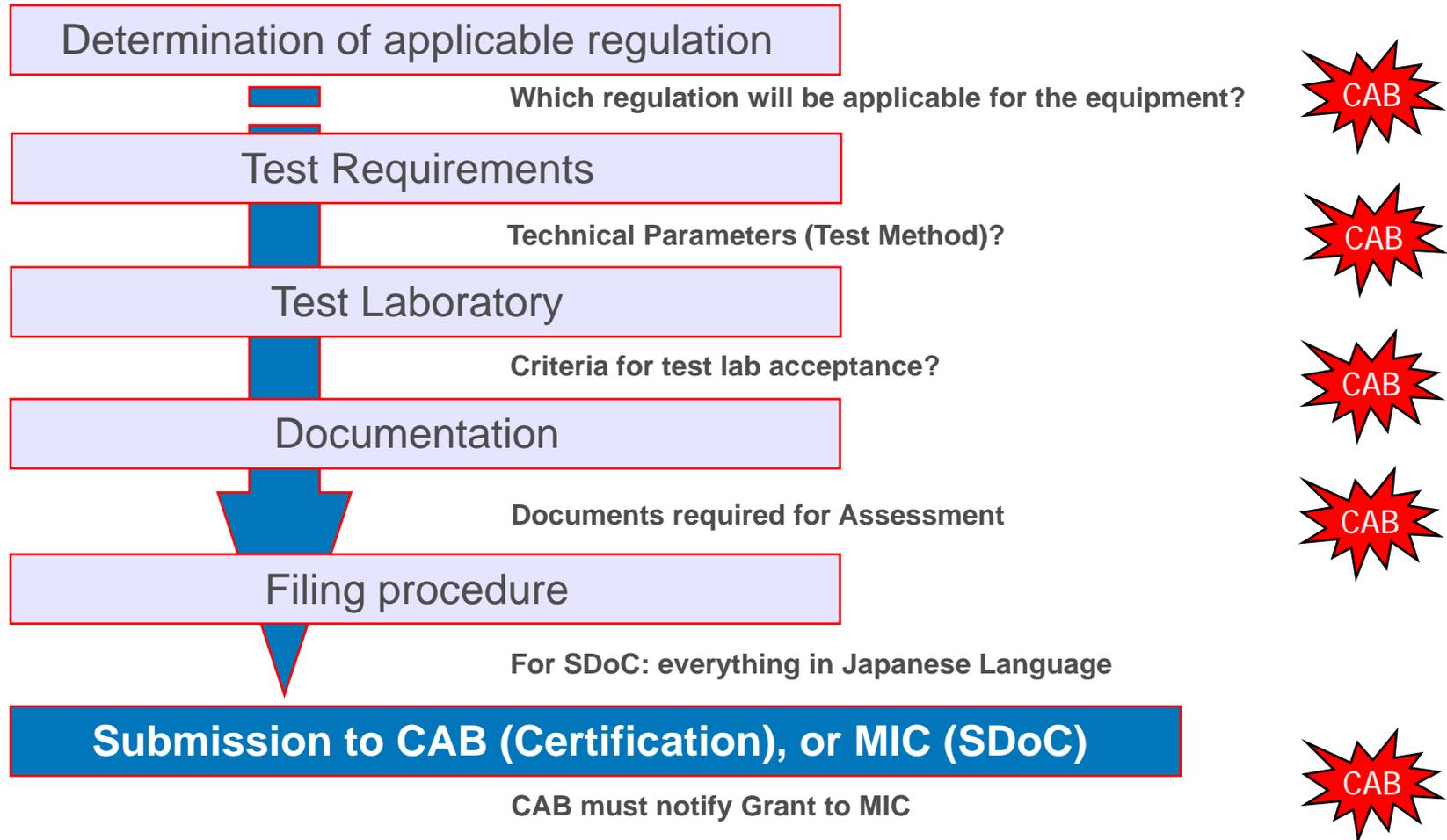
# Rules required for Certification



## Roadmap for the Assessment Process



# Roadmap for the Assessment Process



## Assessment Procedure

- Application Form
- Product Description
- Label / Label Location Info
- Dimension Diagram / Weight
- Shielding provision of the RF part
- Block Diagram
- External/Internal Photos
- Schematics
- User manual / Operation Description
- Antenna information:  
Antenna Diagram
- ISO 9001 certification / Interaction File
- Test Report

CAB is generating an Assessment Report, containing all relevant technical and non technical information on the equipment, and an exhibit list on the received documents.



## Required Input: Example

- Application Form
- Product Description
- Label / Label Location Info
- Dimension Diagram / Weight
- Shielding provision of the RF part
- Block Diagram
- External/Internal Photos
- Schematics
- User manual / Operation Description
- Antenna information:  
Antenna Diagram
- ISO 9001 certification
- Test Report



The complete radio part, its radio frequency generation, amplification and the antenna is completely encapsulated in the housing. There are no accessible means for changing the transmitter frequency. The housing can only be opened by trained staff with a special tool set.

## Example: Bluetooth Device

English versions of Ordinances up-to-date?  
English ARIB-Standard available?

	Art. 2 clause 1 item 19	Art. 49-20 item 1 & Art. 9-4 item 9	Art. 6 clause 4 item 4 & Art. 6-2 item 3	43 & 44	STD-T66	WW
Certification Ordinance	◇					
Radio Equipment Ordinance		◇				
Radio Law Enforcement Regulation			◇			
Test Method				◇		
ARIB Standard					◇	
Certification Code						◇

# Certificate, Marking, Publication

**CETECOM ICT Services GmbH**  
 Untertürkheimer Strasse 6-10, D-66117 Saarbrücken, Germany

**Conformity Assessment Body**  
**Recognized Certification Body for Japan**

**認証書 TYPE- BASED CERTIFICATE**

特定無線設備の種類 Classification of specified radio equipment:	Article 2, Clause 1, Item 19 2.4 GHz Band Wide Band Low Power Data Communication
電波の形式、周波数及び空中線電力 Type of emissions, frequency and antenna power	F1D 2441 MHz 0.001 W/MHz
型式又は名称 Model Name:	xxx
製造者名 Manufacturer Name:	yyy
認証番号 Certified Number:	202WW1234567
認証をした年月日 Certified Date:	2009-05-05

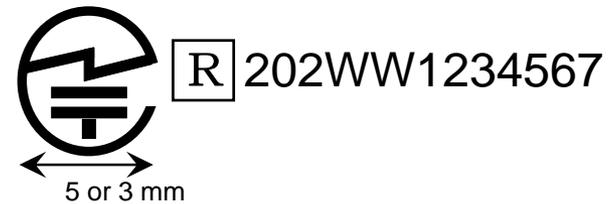
上記のとおり、電波法第 38 条の 24 第 1 項の規定に基づく認証を行ったものであることを証する。  
 This is to certify that the above-mentioned certification by type has been granted in accordance with the provisions of Article 38-24, Paragraph 1 of the Radio Law.

Cetecom ICT Services GmbH  
 Lothar Spitzer  
 Signature:

Recognized by  
 The Ministry of Internal Affairs and Communications(MIC)

CAB ID: 202

Deutscher  
 Akkreditierungs  
 Rat  
 TTI-F-G 081/04-D0



**総務省**  
 Ministry of Internal Affairs  
 and Communications

**電波利用ホームページ**  
 The Radio Use Web Site

お問い合わせ | サイトマップ | English

文字サイズ

HOME | 電波監理の概要 | 電波利用に関する制度 | ご案内/資料集 | 最新情報 | Q&A

HOME > ご案内/資料集 > 資料集 > 技術基準適合証明等の公示(平成20年度分)

**技術基準適合証明等の公示**  
 (平成20年度分)

「技術基準適合証明又は工事設計認証」は、携帯電話 端末 、PHS 端末 などの小規模な無線局に使用するための無線設備(特定無線設備)について、電波法に定める技術基準に適合していると認められるものである場合、その旨を無線設備1台ごとに証明又は無線設備のタイプ(正確には「工事設計」と呼ぶ。)ごとに認証する制度です。

「技術基準適合自己確認」は、平成16年1月の電波法の改正により新たに導入された制度であり、特定無線設備のうち、無線設備の技術基準等を助業して、妨害等を与えるおそれがない無線設備(特別特定無線設備)について、電波法に定める技術基準に適合していることを自ら確認する制度です。

申請・届出をする

無線局に関する  
 電子申請

申請書類など  
 ダウンロード

無線局情報を探す

無線局  
 情報検索

## Experience ...

- Japanese Language is different than English!
- Understanding of translated Documents
- Discrepancy in Document Versions
- Interpretation of Rules not clear
- CAB puts a lot of effort in Document Verification and Translation
- Some Requirements are different to those for EU, USA....
- CAB must be familiar to Japanese Language
- CAB must have knowledge on Japanese Customs and Culture
- CAB must work closely with relevant Japanese Institutions

## What is missing?

### RCB Council ...

- Acting similar to US-TCB Council
- With English as main Language
- Acting as Link between MIC and RCBs
- Giving Support in Rule Interpretation
- Giving permanent Information on Rule Changes
- Giving information on Handling of new Technologies
- Performing Teleconferences
- Offering understandable Document Translations

## Thank you for Listening

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