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TCB for FCC Approval
FCB for Industry Canada Approval
Notified Body (CAB) for EU

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Dear All,

This newsletter contains great amount of information. Please do not hesitate to email to Sid (sid@timco.cc) or Bruno (bruno@timcoengr.com) if you have questions.

1. FCC Revision in Progress for Places to Test in the Band

Please read the following carefully because it can possibly have a big impact on your testing requirements. If you have any questions please contact us immediately.

Generally in the past the FCC has required that you test as follows:

1 place for 1 MHz of Frequency Range;

2 places for more than 1 MHz but less than 10 MHz of Frequency Range;

3 places for more than 10 MHz of Frequency Range .

This is still valid for a continuous band under a single rule part, i.e. Part 90, as long as there are no component changes, outside the purview of 2.1043, for the transmitter or amplifier that is being tested.

Most recently the FCC has said:

[quote] For testing in accordance with 47 CFR 2.1046-2.1057, OET/Lab recommends that the following be used to select test frequencies for licensed devices:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
10 to 100 MHz	3	1 near top, 1 near middle and 1 near bottom
More than 100 MHz	TBD	TBD

Tests shall be done on at least one frequency in each of the bands within which the equipment is capable of tuning (without change of components). Grantees are responsible to properly evaluate device changes and apply 47 CFR 2.1043 to determine whether Class I or Class II permissive change is needed. [end of quote]

On 9 May 2006 on the TCB/FCC conference call the FCC said that amplifiers that operate in multiple sub-bands implanted via internal hardware (filters) are not considered identical and require multiple FCC identifiers.

Frequencies listed on the certificate - The FCC has said that if a certification has a rule part on it then the frequency range for that rule part must be legal. You can no longer put a broad frequency range on a grant even if some of the frequencies are not licensable under that rule part. The device must be tested at frequencies that are available and licensable under the applicable rule part.

“Electrically identical” as described under section 2.907, 2.908(b), 2.924, 2.1031, 2.1032, and 2.1043. Take a **Part 74 Wireless Microphone** as example:

If you are testing a wireless microphone (EUT) that covers the range from 450 to 952 MHz and you are planning on making it with the following tunable bands:

- a. 450-451MHz – Test in one place
- b. 455-456MHz - Test in one place
- c. 470-488MHz - Test in three places
- d. 488-494MHz - Test in three places
- e. 494-608MHz - Test in three places
- f. 614-806MHz - Test in three places

g. 944- 952MHz - Test in three places

Cases a-g could have the same FCC Identifier as long as there were no change of components, in which case the FCC would require only the following bands to be tested according to 2.106:

Case a. 450 - 451 MHz - Test in one place

Case b. 455 - 456 MHz - Test in one place

Case c+d+e:470 MHz - 608MHz - Test in three places

Case f. 614-806 MHz - Test in three places

Case g. 944- 952MHz - Test in three places

If the EUT required a change of components to cover all bands then it would require a separate FCC Identifier for each band and it would have to be tested in each band.

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2. FCC New Interpretations about DFS

Question: ET Docket No. 03-122 extends the transition period for U-NII devices operating in the 5.250-5.350 GHz band. Devices operating under the previous rules must not be imported or marketed after July 20, 2007. However it was noted that users who obtained equipment prior to that date could operate them indefinitely. Does the restriction on importation and marketing after that date include warranty parts and field replacement parts for users whose U-NII devices may become damaged or are no longer functional and they wish to replace the original device under warranty or secure a replacement?

Answer: After the final transition date, all devices imported or marketed need to comply with the rules, even replacement devices. Also, all filings need to comply with the rules. Repairing a device within the US which does not require a new filing is ok. If the repair requires a new filing or is brought outside of the US and imported back in after repair, it is considered imported and is not allowed. [<Back to Top>](#)

3. Reminder of DFS Testing

Clients must be tested with a pending or approved Master device. Clients will not be approved until the associated Master device is approved. TCBs will be able to approve Clients without radar detection. [<Back to Top>](#)

4. Reminder about FM transmitter under part 15.239

The tuning range of an FM transmitter under 15.239 must be within 88-108 MHz. Test labs should adjust the user tuning controls to ensure compliance. The bandwidth must comply when the transmitter is loaded at full audio input with a typical device (e.g. CD player). [<Back to Top>](#)

5. FCC Released New Documents!

The FCC has released two new documents, which can be downloaded from our website:

- SAR Measurement Procedures for 3G Devices – CDMA 2000 / Ev-Do – WCDMA / HSDPA
- FCC 3G Technologies Certification Policy May 9, 2006

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Do you have any questions? Ask our experts, send email to sid@timco.cc

Best Regards,

Sid Sanders

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EMC-Wireless/Radio Testing

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