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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 ID label location

The FCC has provided a new interpretation:

[FCC quote]

The FCC identifier has to be on the exterior of the device. The following are the only exceptions.

- 1) The device is an ingestible transmitter or it is smaller than a 1/4 inch. In either case, the FCC identifier may go in the manual.
- 2) Cell phones or Cordless phones can have the Identifier in the battery compartment under the following conditions.
 - a) The available label area on the phone is limited because they are relatively small and have many contoured surfaces, keypads, LCD displays, charge contacts and/or other connectors.
 - b) The batteries for these devices are designed for easy removal and that the labels will be visible whenever the batteries are removed for charging or replacement
 - c) The label will be readily visible at the time of purchase because the phone will be marketed without the battery installed. *Phones utilizing a conventional battery and battery compartment not made for easy removal for charging or replacement may not have the label placed under the battery, inside the battery compartment because this location is not visible from the outside of the equipment enclosure as required by **Section 2.925(d)(2)**.

[end of quote]

Concerning item c), the FCC indicated that this requirement is to be declared by the grantee or the manufacturer.

For devices other than cordless and cell phones, we will have to ask the FCC to issue an exception for unique designs before issuing the grant. The FCC has reiterated that TCBs are not allowed to issue exemptions.

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2. Probe Calibration Range & System Verification

Reminder for probe calibration range and system verification with dipole:

[FCC quote] FCC/TCB guidance and Supplement C requires SAR system verification testing is done at +/-100 MHz of the mid-band frequency of the device. In addition, TCB filings should have SAR probe cal within device transmission band. **[end of quote]**

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3. HAC-Variou models under one FCC ID

Question: It is possible to have HAC rating for only some of the models?

Answer: Applicants must clearly identify the specific details of each relevant model in the HAC test report. Grants will include such a note: "HAC Rating Mx Ty . HAC rating only evaluated for the specific configurations described in this filing

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4. Fcc Part 90 Subpart y (4.9GHz Band) Updates:

[FCC quote]

1) There is a typo in Section 90.210 (l)6 which should list 40 dB NOT 50 dB.

2) With regard to the L and M masks in Part 90.210, the rule indicates using a minimum RBW of 1% of the fundamental emission to determine the reference level and a minimum RBW of 1% of the fundamental to determine the mask skirts. The mask should be developed using the same resolution bandwidth throughout, for the reference level and the mask skirts. * UNII devices should fit in mask L but may require additional filtering to meet mask M requirement.

3) Was there any general intention to measure Part 90 devices in the same manner as allowed in the UNII bands ? * We have been asked whether the procedure in DA 02-2138(UNII output power procedure) is acceptable for Part 90 devices. Still pending. Use peak measurements. Do not approve devices using the UNII procedure.

4) 20 dB reference the 20 dBm breakout point is Peak, average or RMS and whether this is conducted or EIRP (including gain of antenna).

FCC follow up: The 20 dBm breakout point in 90.210(m) is Peak conducted as consistent with the 90.1215 limits.

5) clarify whether the mask is measured using average or peak. FCC follow up: Section 90.210(l)7and (m)7 lists average so average is used to measure the L and M mask. **[end of quote]**

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5. Part 15.219 - AM transmitters in 510-1705 kHz

[FCC quote] Section 15.219 restricts the length of the antenna, connecting cable and ground lead to 3 meters. Watch out for filings with elevated installation mounting that require running a ground connection down to a ground plane. It is the ground, which now is well over 3 m itself and becomes the major radiator. This is how Certified AM transmitters are being installed or modified to operate over long distances. **[end of quote]**

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6. Part 95A - GMRS operation

Part 95.183(a)(4) prohibits voice scrambling.

[FCC quote] Frequency inversion and Digital scrambling are prohibited. Any type of signal manipulation that does not allow for interoperable communications between devices is prohibited. **[end of quote]**

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7. Part 15.239 - FM transmitters

TCBs are required to contact the FCC and to provide info on the following items before issuing a grant (The FCC will perform a review of the test report)

[FCC quote]

- 1) How does this device operate?
- 2) Provide information on the device and its antenna.
- 3) How is it installed?
- 4) What test procedure was used?
- 5) If tested in a car, how was it configured/tested?
- 6) Was the tuning range properly verified? The test lab should indicate in the report that the tuning controls were manually adjusted to verify maximum tuning range.
- 7) Was the bandwidth properly tested with maximum audio input?
- 8) Provide the test report.

[end of quote]

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8. Industry Canada RSS-119 Issue 8

RSS 119 issue 8 came into force on September 16, 2006. There is no transition period. Application for certification must reference the new version.

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9. EU 88-108MHz Transmitters:

EN 301 357-2 - FM transmitters in the 88-108MHz band: Currently EN 301 357-2 V1.2.1 is harmonized in the OJ and it refers to EN 301 357 v1.2.1 for limits and test methods. The new version of EN 301 357-2 V1.3.1, which is expected to be published in the OJ soon, contains specific test methods and parameters from ERC/REC 70-03 Annex 13 (Nov 05) for Band II LPD (AKA "88-108MHz low power device"). According to section 8.1 of v1.3.1, devices must be capable of operating over the whole or a majority of the broadcast band and NOT on a single fixed frequency. According to ETSI, this is to minimize the probability of interferences between devices. The intent here is that it would be impossible for a single fixed frequency Band II LPD device to prevent interference to broadcast reception.

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10. The following standards were published

ETSI TR 102 439 V1.1.1 (2006-08): Technical Report Broadband Radio Access Networks (BRAN) Test Report Template for testing to EN 301 893 (V1.3.1) (R&TTE), http://webapp.etsi.org/action/PU/20060829/tr_102439v010101p.pdf

ETSI standards under the One-step approval procedure:

Final draft ETSI EN 301 025-1 V1.3.1 (2006-09) VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 1: Technical characteristics and methods of measurement http://webapp.etsi.org/action/OP/OP20070119/en_30102501v010301o.pdf

Final draft ETSI EN 301 025-2 V1.3.1 (2006-09) VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 2: Harmonized EN under article 3.2 of the R&TTE Directive http://webapp.etsi.org/action/OP/OP20070119/en_30102502v010301o.pdf

Final draft ETSI EN 301 025-3 V1.3.1 (2006-09) VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 3: Harmonized EN under article 3.3 (e) of the R&TTE Directive http://webapp.etsi.org/action/OP/OP20070119/en_30102503v010301o.pdf

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11. TRANSCEIVER APPLICATIONS

If you are only submitting the transmitter for Certification the test report should make a statement that the receiver was tested and meets the FCC requirements and that a Verification or DoC was issued. This will save time.

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Do you have any questions? Ask our experts, send email to FAQ1@timco.cc

Best Regards,

Sid Sanders

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