



# EMC Post Cards From the Wireless Side

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## Outsourcing Design Manufacturing—Upside/Downside

A beneficial thing about engineering is that there are always changes—some good, some bad, and in some instances there are lessons to be learned.

A good example is the issue of Outsourced Design Manufacturing. This allows a company to partner with other firms usually offshore to co-develop products. For senior engineers it provides an opportunity to manage a diversified team to address the problem. In most cases the senior engineers collaborate with their counterparts and their junior engineering staff to design, evaluate, test and produce a product. This allows everyone to leverage off the expertise of their partners.

However, there is a down side that most have missed. This downside I suspect will not be noticed until perhaps about 10 or more years from now. Since it allows company "A" senior engineers to work with company "B" senior engineers and junior engineers, company "B" staff (again mostly off shore) get excellent training. However company "A" junior engineers may end up on the short end of the stick by not perfecting their skill sets.

Hence in 10 or so years, as the senior engineers of company "A" move on, finding qualified engineers on their staff to fill their positions may be a problem.

Therefore the one distinction to separate those with the correct skill sets from those without, is *certification*. NARTE can play a key role in this effort.

## FCC On the Move

At the recent Commission meeting the FCC approved several NPRM's to go forward, including one on Broadband over Power Lines (BPL), and one possible regulation for the internet that includes addressing the Voice Over IP (VoIP) issue.

The FCC NOI on the BPL issue has generated over 5000 responses to this one inquiry. I can't wait to see what the NPRM responses will be!

The FCC also released two NPRMs; one on Cognitive Radios and one on Noise Temperature Interference Measurements. Additional information on these NRPMs can be found at [www.fcc.gov](http://www.fcc.gov)

## More Spectrum Openings

The FCC adopted several Report and Orders addressing spectrum, including opening the 5470-5725 MHz band for Part 15 U-NII use, and under Part 101, opening the 71 and 81 GHz bands for FWA.

## Professional Installer Definition

NARTE sent comments on NPRM 03-201, specifically addressing the FCC question regarding the definition of a professional installer. This question was posed for NARTE by the FCC based on our meeting with them back in 2002.

Please send comments, thoughts, or opinions to me at [davecase@cisco.com](mailto:davecase@cisco.com).

## NARTE/JAPAN EMC COMMITTEE DEVELOPS AND TESTS NEW PRACTICE EXAM

*(The following was contributed by Mr. Shin Ichiro Kudo, Secretariat of the NARTE/Japan EMC Committee)*

The NARTE/Japan EMC committee held a practice examination session and preparation workshop on December 11, 2003, in Osaka Japan. The practice exam was developed by the NARTE/Japan EMC committee and consisted of 35 questions. The students were given 2 hours to answer 25 of the 35 questions. The passing grade for the examination was 70%.

72 examinees attended the practice examination session (See photo, right), 61 took the engineer exam and 11 took the technician examination.

Thirty-three of the 61 individuals taking the engineer exam passed, for a pass rate of 54%, and highest grade achieved was 96%. Six of the 11 technicians passed their exam, a 55% pass rate. The highest grade achieved was 88%.

Following the practice examination, the committee held a 2-hour detailed review of the test problems with the examinees. Dr. R. Sasaki, NARTE/Japan Committee Chair; Dr. T. Ikeda, Professor Emeritus; and Mr. E. Hariya, NCE and Vice Director of KEC, who had worked with the committee in development of the practice exam, assisted in tutoring the attendees.



The full exam session held by the NARTE/Japan Committee on February 6th, 2004, was the real thing! The committee examined 102 Engineers and 23 Technicians .