

Accredited Standards Committee C63[®]
Electromagnetic Compatibility
Subcommittee 3 - International Standardization
Approved Meeting Minutes

Chair: Poul Andersen
Vice Chair: Werner Schaefer
Secretary: Vacant

October 27, 2010
11:00 AM to 11:45 AM
12:40 PM to 2:03 PM

Society of Automotive Engineers Automotive Headquarters
Troy, MI

- 1. Call to Order: Chair**
 - 1.1 Opening remarks and Announcements: Chair**
 - 1.2 Meeting logistics announcements: Host (Poul Andersen)**
 - 1.3 Introductions:** Harry Hodes, Poul Andersen, Don Heirman, Jeff Silberberg, Masud Attayi, Dennis Camell, Deena Moongilan, Bob DeLisi, Dan Hoolihan, Victor Kuczynski, Bob Hofmann, Janet O'Neil, Jerry Ramie, Ed Hare, Bill Hurst, Adam Gouker were present or on the phone.
- 2. Approval of the Agenda:** The agenda was approved.
- 3. Presentation of patent slides:** The patent slides were presented. This SC has no standards of its own, so there is little chance of a violation.
- 4. Presentation of meeting attendance fee slides:** Meeting fee slides were reviewed. There were no persons present that needed to pay a fee.
- 5. Approval of minutes of previous meeting:** The minutes were approved as posted.
- 6. Review of Subcommittee Membership: Chair**
 - 6.1 Review of membership** – Wayne Hunter has retired and will be removed from the roster.
 - 6.2 Consideration of new members** – Andy Griffin is now a TA and will be formalized at the May, 2011 meeting.
 - 6.3 Selection of Secretary** – Jerry Ramie volunteered this one time. It was further decided in the meeting that the Secretary duty would be rotated among the Main Committee and SC chairs. Dennis Camell will serve as secretary for the May, 2011 meeting.
 - 6.4 Selection of new Chair** – Poul Andersen's term expires 31 Dec 2010. Werner Schaefer was consulted about assuming the Chair, but he declined because of work load. Bob Hofmann moved, seconded by Don Heirman, to nominate Poul to a second three-year term, to be recommended to the Main Committee. A voice vote was conducted to recommend Poul for another term.

7. Analysis Review and/or Establish Time Frame for Completion

Poul expressed that the scope of SC3 is to analyze and work toward harmonizing this list of C63 Stds with the related international standards where it makes sense.

C63® Document	SC	Subject	International Document	Review Leader
C63.2	SC1	Test Instruments	16.1.1	Schaefer
C63.4	SC1	Measurements	16.2.X	Heirman
C63.5	SC1	Antenna Calibration	16.1.6	Camell
C63.14	SC2	Definitions	IEV	Shellman
C63.15	SC5	Immunity	TBD	Hare
C63.16	SC5	ESD	61000-4-2	Heirman
C63.18	SC8	Medical Equip On-Site Meas.	None	Silberberg
C63.24	SC5	Generic On-Site Meas.	None	Berger
C63.19	SC8	Hearing Aid Compatibility	IEC60118-13	Berger
C63.23	SC1	Emission Meas Uncert	16.4.2	DeLisi
C63.25	SC1	Test Site Validation1	6.1.4	Windler

C63.2 (2009) vs. CISPR 16.1.1(2010) Werner supplied a report to SC3, Don Heirman pointed out that C63.2 already calls out CISPR 16.1.1 and he felt this work was already completed in 2009 version. Victor pointed out that CISPR 16.1.1 was already in the normative references of the 2009 version. Dr. Showers asked that that Werner's report be available, it was already posted. Usernames and password file was sent. Victor said that a comparison was already in a table in the 2009 Std. Dennis will contact Werner for specific changes he advocates.

C63.4 vs. CISPR 16.2.x. Mr. Heirman reports that they are "simply different." He felt harmonization would take "a decade" and he will write a report to Poul on this topic. CISPR A&I are changing Stds that were the basis of 16.2, so this item is in flux. CDV voting is occurring on CISPR 32. Item will be retained on the list and will await Don's report.

C63.5 vs. CISPR 16.1.6 Dennis said that our document is similar to this CISPR draft, he didn't see problems or conflicts. The SC agreed to keep this item alive for one more meeting.

C63.14 vs. IEV Poul received an email asking for what definitions are potential candidates for SC2 harmonization. Don stated that all the IEV definitions are from C63 and Marcus was already comparing these documents. Dr. Showers asked if we have asked for permission to use their definitions. Poul asked if ISO would also grant such permission.

C63.15 is now under SC5, according to Ed Hare. An **Action Item** was assigned to Ed Hare to find a new Review Leader. Meeting was suspended for lunch.

The Chair re-convened the meeting at 12:40AM-EDT

C63.16 (withdrawn) vs. IEC 61000-4-2: Don Heirman reports that the review is almost complete. We want to strip all similar content and keep different content, such as furniture event testing. Document should be ready by the end of the year.

C63.18 vs. none: Mr. Silberberg reports that IEC SC-62A-MT23 is working on a test method that could be applied in similar situations. Publication is not expected for several years. The close-distance RF immunity test is something that might be considered for future C63.18 release.

C63.24 vs. None: Mr. Berger was not here, but Ed Hare reported that we won't be able to compare until IEC completes their work.

C63.19 vs. IEC60118-13: Mr. Heirman reports that this IEC Std. uses a TEM waveguide for immunity testing. The question is if this method yields similar results to C63.19 methods. (as an alternate) Mr. Berger is to report at our next meeting. TC-29 Electro-Acoustics deals with hearing aids in the EU.

C63.23 vs. CISPR 16.4.2: Mr. DiLisi reports that we're still developing the Type A portion for submittal to SC3.

C63.25 vs CISPR 16.1.4: Mr. Camell reports that this is still in draft, but they can incorporate verbage from 16.1.4. New text will be introduced to CISPR. Poul reports that a joint task force for component test methodologies in chambers is in CISPR D.

- 8. International Standards relating to ASC C63[®] membership standards development that need SC3 analysis: Chair** – Poul asked if there were any new candidates for analysis? Don Heirman wanted to add C63.9 vs. 61000-4-3 to be considered in SC5. (immunity for conference room audio equipment) Any old business? (NO)

Other Old Business and discussions

- 8.1 Issues from IEC (including CISPR), ISO and other international standards activity potentially affecting US standards development: Chair** – Victor Kuczynski reported his comparison of EMC conducted emissions limits. He showed a slide with three limit lines. CISPR 11 categories of <16A and >100A primary currents. They now use Class A limit. Some equipment (industrial printers) may pull more than 16A; the Industrial generic Std. does not recognize that some equipment may pull more than 16A. Variable speed drives must use the lower limit, instead of the higher one, with a 50dB difference. The WG penalizes the finished-equipment mfg with the Class A limit. The drive as a component has the higher limit, but the equipment it's placed in must meet the 50dB lower equipment. Victor thinks that this is a mistake! Don asked why the National Committees haven't brought this up? Don suggested taking this up with Terry Mann, the US technical advisor to CISPR-B. Poul agreed with Don, that this will have to be taken up with the technical advisor. Victor reported that there was

a 10dB difference between the radiated limits.

8.2 Information about whether Head of Delegation reports can be attached to the SC3 minutes: [Don Heirman](#) – Yes. Don to find link to ANSI portal to US National Committee.

8.3 CISPR/A HoD report Summary: Test lab or customer can pick the level of uncertainty. Reference site method of C63.5 uses the same antennas and cables on two sites, a reference site and an unknown one. Emissions have been measured in the frequency domain in the past. We can now take emissions scans in time domain and FFT them into the frequency domain. Instrumentation, methods and techniques/reports are well along in the IS stage.

8.4 CISPR/D HoD Report Summary: Minimal-absorber chambers Std. is moving forward with an annex to CISPR 25. CISPR A has joined with TC77 in comparison of OATS and chambers and TEMs. FAR for radiated emissions & radiated immunity is being considered.

Poul said that a new task force in SAE is looking at testing high voltage components in vehicles. (PHEV) Certification of autos also addressing PHEVs. (CISPR12) no conflicts.. Chargers to be included in the test. US autos digital electronics are exempt to FCC conducted & radiated requirements, but chargers should comply, according to Bill Hurst. (Engine noise is an incidental radiator, not regulated in the US)

CISPR/I HoD Report Summary: PLT will not be addressed in CISPR-I until other inputs come in from CISPR. Double insulated devices need special testing setups? Radiated emissions limits under 30MHz from plasma sets?

9. New Business: Jeff Silberberg reported that IEC 62A proposed a replacement of 60601-2, covering both safety and EMC performance for medical electrical equipment. Proposal was not approved. Radiated Immunity update was delivered, he's looking for volunteers. He will propose a wireless coexistence test, supported by the Univ. of Oklahoma, at the Main committee.

Don announced that C63® should to contribute to the smart grid process. Seventy IEC standards have been identified that are applicable. He will bring up the topic in the Main meeting, looking for a roadmap of our efforts to contribute.

10. [C63.org](#) website use and updates: Web Content Manager ([Ed Hare](#)) The SC3 site is up to date.

11. Review of the action items from previous meetings: None reviewed

12. Time and place of next meeting: SC3 will meet with the next C63® meeting on May 4, 2011. (Cedar Park, TX)

14. Closing remarks and Adjournment: The meeting was adjourned at 2:03PM-EDT. The Chairman expresses his thanks to Jerry Ramie for serving as secretary for this meeting.