

This form may be submitted via E-mail to mweldon@ansi.org

PINS: PROJECT INITIATION NOTIFICATION SYSTEM FORM *(Effective 1/07/05)*

*NOTE: Adoptions of an ISO or IEC standards require compliance with ANSI's Sales & Exploitation Policy.

1. Designation of Proposed Standard:	C63.4-2014
2. Title of Standard:	American National Standard for Methods of Measurement of Radio- Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
3. Project Intent: (Check the applicable box below)	3a. Supersedes or Affects: (Specify designation of approved ANS standard(s) to be superseded and/or ISO or IEC standard(s)* to be adopted)
Create new standard	<input type="checkbox"/>
*Adopt ISO or IEC standard (3.0 Expedited Procedures for the Identical Adoption of an ISO or IEC standard as an ANS)	<input type="checkbox"/>
*Adopt modified ISO or IEC standard (2.0 Requirements Associated with the Identical or Modified Adoption of an ISO or IEC Standard as an ANS)	<input type="checkbox"/>
*AND this adoption revises this current ANS	<input type="checkbox"/>
Revise current standard	<input checked="" type="checkbox"/>
Revise and Redesignate current standard	<input type="checkbox"/>
Revise, Redesignate and Consolidate current standard	<input type="checkbox"/>
Revise and Partition current standard	<input type="checkbox"/>
Reaffirm current standard	<input type="checkbox"/>
Reaffirm and Redesignate current standard	<input type="checkbox"/>
Addenda to a current standard under Continuous Maintenance: (this document relates to/updates the following base document that is registered under Continuous Maintenance)	<input type="checkbox"/>
Supplement to a current standard	<input type="checkbox"/>
Withdraw current standard	<input type="checkbox"/>
4. This standard contains excerpted text from an ISO or IEC standard, but is not an ISO or IEC adoption.	<input type="checkbox"/> Check here if this standard includes excerpted text from an ISO or IEC standard but is not an identical or modified adoption of an ISO or IEC standard.
5. Provide a brief explanation of the need for the project:	Requests for interpretation of Annex D of the standard on validation of radiated emission test sites indicate the need to amend the annex; in addition corrections to formulas are to be made. See attached for the breadth of the topics to be considered.
6. Identify the stakeholders (e.g., telecom, consumer, medical, environmental, etc.) likely to be directly impacted by the standard:	EMC test laboratories, EMC test equipment manufacturers (software designers), EMC laboratory accreditation bodies
7. This PINS revises a previous PINS submittal:	<input type="checkbox"/> Note: A revised PINS is only required if the previously identified stakeholders have changed substantively (see item 6 on this form.).
8. Description of Contents of Standard: (Provide a one paragraph description, not to exceed 500 characters.)	Standard provides requirements for performing measurements of radiated and conducted emissions. The requirement for qualifying a test site for radiated measurements are contained in Annex D which will be the main focus of this amendment.

9. Canvass Developers: (This request must include a statement of how to obtain a copy of the canvass list.)	<input type="checkbox"/> Check here to request Canvass Initiation Announcement.					
10. Obtain a Copy of the Canvass List: (Specify name of contact or a URL address.)						
11. Consumer Product or Service:	<input checked="" type="checkbox"/>	Check here if standard covers Consumer Product or Service				
12. Accredited Standards Developer Acronym:						
13. Procedure Used for Consensus: (check one)	<input type="checkbox"/>	Canvass	<input checked="" type="checkbox"/>	Committee	<input type="checkbox"/>	Organization
14. Submitter: (Specify Accredited Standards Developer submitter's name and complete contact information, address, phone, email, etc.)	Name:	Donald Heirman				
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Limited Amendment to C63.4-2014

The chair of C63 has asked the WG to prepare a PINS on amending C63.4-2014 in the wake of multiple question on material in Annex D. As a starting point here is what might be entered into the PINS to describe what might be the changes agreed to.

Summary of those question for NSA measurements (30 to 1000 MHz)

1. Replace Figure D.4 in 2014 with Figure D.4 in the 2009 edition which had the correct distance between all transmit antennas and the receiving antenna that for some reason did not port over to the 2014 edition.
2. Decide on the need for the back location of the transmit antenna touching the circumference of the EUT volume (an imaginary cylinder encompassing the EUT and cables).
3. Allowing tests to be performed for EUTs higher than 2 meters even though NSA is only found for up to 2 meters in height for the transmit antenna
4. Review or remove the moving the transmit antenna on the right and left locations for alternate test sites (chambers and covered OATS) towards the center of the test volume (this is the 10 percent movement of the left and right antenna positions equal to the test volume diameter length towards the center of the test volume for horizontal polarization). This also includes identifying better the closest part of the antenna touching the periphery of the test volume or the point of movement in by 10 percent of the test volume diameter.
5. How to deal with large antennas that may have a portion extending beyond the center of the test volume when they are placed on the right and left transmit antenna locations
6. How to deal with test volumes that are small, e.g. less than 1 meter in diameter and again using a large antenna such as a hybrid. This follows what has to be considered for item 5 above.
7. Reconsideration of the 1 meter minimal separation distance between the closest part of the absorbers in a semi anechoic chamber and the transmit antenna.
8. Equation corrections in Annex D and other places in standard
9. Error corrections

F.6.1	TEM w/g to OATS validation data	<p>Formula (F.3) is not correct. The <i>estimated standard deviation</i> should be calculated as $\text{SQRT}((\text{SUM}((x_i - \text{mean}(x_i))^2)) / (n - 1))$, i.e.:</p> $\sqrt{\frac{\sum_{i=1}^n (x_i - \text{mean}(x_i))^2}{n - 1}}$
Annex G	First table (not numbered)	<p>Last table row, for column (12), formula for "Standard Deviation": please correct this formula to $20 \cdot \text{LOG}_{10}(\text{SQRT}((\text{SUM}((10^{(\text{Difference}(\text{dB})/20) - 10^{(\text{Mean}/20)})^2)) / (n - 1)))$, i.e.:</p> $20 \log_{10} \sqrt{\frac{\sum_{i=1}^n (10^{\text{Difference}_{dB} / 20} - 10^{\text{mean}_{dB} / 20})^2}{n - 1}}$
Annex G	Table G.1	<p>Please correct formula 5 to “formula 5 = $20 \cdot \text{LOG}_{10}(\text{SQRT}((\text{SUM}((10^{(\text{Column}11/20) - 10^{(\text{formula}4/20)})^2)) / (n - 1)))$”, i.e.:</p> $\text{formula}_5 = 20 \log_{10} \sqrt{\frac{\sum_{i=1}^n (10^{\text{Column}_11 / 20} - 10^{\text{formula}_4 / 20})^2}{n - 1}}$