ANSI-ASC-C63® Interpretation Request Form

This form shall be used for submission of Interpretation Requests related to ANSI-IEEE standards that are within the responsibility of ANSI-ASC-C63®. The eight parts of the form must be filled out completely, with the exception of the Subcommittee Response, to ensure expedient processing. This completed form is to be submitted to the Secretary of ANSI-ASC-C63® via e-mail.

Submission Date	Originator Name, Company
05/19/2017	David Knight, NPL Teddington (UK)

Standard	Clause/ Sub clause	Paragraph Figure/ Table	Type (General/ Technical/ Editorial)	Comment / Inquiry	Subcommittee Response (to be filled in by Subcommittee Chair)
C63.5 2017	Section 5.1.1	(e)	Tech	Section 4.3 (c) & (e) states that attenuators should be selected to meet VSWR of 2:1 (9.5dB return loss roughly) and also a sufficient signal/noise. However Section 5.1.1 (e) states that 10dB attenuators are required for SSM. At the moment, with good VNA's and cables, we select attenuators to guarantee at least 10dB return loss, which in combination with the receiver system produces low uncertainty. We find some customers supply 6dB attenuators with their antennas in order to meet 2.5:1 VSWR (as per C63.4). The 2017 requirement may mean we now have a total of 26dB attenuation during SSM, also there is potential for confusion because in principle you can meet a 2.5 VSWR with a 4dB pad for EMI testing. The attenuation will have an impact on the signal/noise, and we may not be able to adjust for this using lower bandwidth because we need to sweep fast enough to sample the height scan.	We agree that this needs to be clarified in both sections that you have mentioned so that the text is in agreement. C63 will be starting the process of issuing an corrigendum to address this to clearly state the implementation of two port calibrations/S.O.L.T. without the use of matching attenuators is acceptable or the lab will need to implement matching attenuators that will result in a VSWR of 2:1 to be achieved.