

Presenting Z540.3 "Requirements for Calibration of Measurement and Test Equipment"

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Abstract

After more than two years of work in committees and subcommittees, a new standard, Z540.3 "Requirements for Calibration of Measuring and Test Equipment", has been submitted to ANSI for publication in 2006 as an American National Standard. This presentation will provide background on how the standard evolved, what it was meant to do, what it was not meant to do, and it will offer selected paragraphs from the standard for consideration and planning.

ANSI/ISO/IEC 17025: 2005 establishes the "General requirements for the competence of testing and calibration laboratories", and is great for controlling the laboratory itself. However, it was determined after much investigation and discussion amongst the NCSLI 174 Standards Writing committee that the M&TE supported by the lab was not sufficiently covered as it was in Z540.1. It was also determined that trying to comply to two very similar standards (Z540.1 and 17025) simultaneously would be very difficult. Going forward, a lab may elect to only comply with one standard for the laboratory – 17025. If the laboratory is calibrating M&TE for customers, it may also operate in accordance with Z540.3, which is specific to calibration systems, not having to do with the lab. A calibration system operating in full compliance with this Z540.3 promotes confidence and facilitates management of the risks associated with measurements, tests, and calibrations.