

SPECIAL SESSION

NDT Reliability

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OBJECTIVE AND TOPICS: Reliability remains a key concern across all areas of Non-Destructive Testing (NDT), as it directly determines the confidence in inspection results and the safety of components and systems. While early reliability assessments focused mainly on highly regulated sectors such as aerospace and nuclear, the need for structured reliability evaluation has now expanded to all industrial domains. This special session aims to bring together experts and practitioners to discuss current approaches and emerging trends in assessing and improving the reliability of NDT. Topics will include methodological advances, the integration of human and organisational factors, and new challenges arising from the increasing use of automation and artificial intelligence in inspection processes. The goal is to exchange experience, harmonise practices, and strengthen international collaboration in this field.

Areas of interest include, but are not limited to:

- Probability of Detection (POD) and alternative reliability metrics
- Reliability assessment of Al-supported or automated NDT systems
- Human and organisational factors influencing reliability
- Practical implementation and case studies across industries

All the instructions for paper submission are included in the conference website: https://www.ecndt2026.org