

# NDT Personnel Certification System at Turkish Standards Institution (TSE) and Developments in Turkey

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This Poster presents the NDT Personnel Certification System at Turkish Standards Institution Personnel Certification Center and other developments of NDT Personnel Certifications in Turkey.

To start with a wide perspective, we briefly introduce the historical outline of personnel certification and specifically non-destructive testing certification in Turkey.

Tools of competition are continuously changing as we have been shifting from industrial society to information society. Owning and effective using information is now the most important condition to compete with. At this stage, the human resource has the central importance. That is to compete with, human resource should be improved. This, consequently, gives rise to the need of qualification of personnel, or *personnel certification*. This situation puts the Turkish Standards Institution (TSE) to deal with personnel certification.

Certification of NDT personnel in Turkey goes to early 1990's. On 31<sup>st</sup> January 1990, the first NDT National Committee was founded at the secretariat of TSE and performed certification according to EN 473 until 1990. Then, the Personnel Certification Center (PCC) is created at TSE as a distinguished department to carry out all types of personnel certifications systematically.

At this stage the most important need was *recognition*, at national and international level, of certification activities. To provide recognition, best way is getting accreditation. However, in Turkey, national accreditation board, TÜRKAK, was not functional at that time. Therefore, TSE searched international recognition possibilities.

At TSE, the personnel certification activities include certification of auditors and managers at quality, environmental, health and safety systems, NDT and welding personnel certification, and other certification of some qualifications.

For management systems, European Organization for Quality (EOQ) has a scheme and applies a recognition system according to EN 45013 and "EOQ harmonized Schemes". TSE, at this stage, decided to get EOQ recognition for certification of management system personnel. The implementation of these criteria was completed about one year and in July 2001, TSE was recognized by EOQ.

For NDT and welding, we still need a means of recognition. TÜRKAK, Turkish Accreditation Agency, accepted our accreditation application one year later and in September 2002 TSE was accredited including NDT and welding personnel. The accreditation audit was against EN 45013 and related reference document, i.e. for NDT EN 473.

The TSE PCC was the *first* accredited personnel certification center, in general and specifically at NDT, in Turkey.

The system at NDT personnel certification implemented for accreditation was developed by cooperative and intensive working of both TSE Personnel Certification Center and NDT Laboratory. In the system NDT Laboratory is subcontractor of PCC and act as training and examination center. The implemented system at the beginning was according to EN 45013 and at NDT, EN 473:1995. Later the system was revised according to EN ISO/IEC 17024 and at NDT EN 473:2000. The system offers two levels of certification specific to industry sectors and NDT methods.

In November 2004, NDT Personnel Certification at Middle East Technical University (METU NDT PCC) is also accredited according to EN ISO/IEC 17024 and EN 473. METU NDT PCC was second accredited personnel certification center.

TSE NDT Laboratory, as an outside agency according to EN 4179, is also provided Level 3 services (Written practices, training and qualification examinations) to direct aviation sector in Turkey.

With efforts of TSE NDT Laboratory, an independent national aerospace Board was founded on 21.06.2007. Turkish National Aerospace Board chartered by aerospace maintenance organizations, airlines and training organizations. Turkish national aerospace board is also recognized by the Turkish Civil Aviation Authority.

Duration the second EF ANDTB Forum on 29.06.2007 in Istanbul, to application for membership, Turkish National Aerospace Board gave a formal letter to secretary of EF ANDTB.