



BUSINESS PLAN

CEN/TC 138, Non-Destructive testing (NDT)

- **Context**

NDT is a way to provide information on the state of a piece or a material without causing any deterioration. With NDT, any modification that may have a consequence on a material integrity or its safety is detected. NDT can be performed at each stage of the lifespan of a product: from manufacturing to maintenance. The development of NDT is closely linked to the development of instrumentation which enables the characterization of defects.

- **Business Environment**

CEN/TC 138 is the structure in charge of general NDT standards in the following methods: radiographic testing, ultrasonic testing, eddy current testing, penetrant testing, magnetic particle testing, acoustic emission testing, leak testing, thermographic testing, X-ray diffraction, visual testing. CEN/TC 138 provides standards for terminology, general principles, equipment and also certification of NDT personnel. These standards establish bases for "application standards" (e.g. for forgings, tubes, welding) drafted by others TCs. Nearly 90 % of the standards prepared by CEN/TC 138 are under the Vienna agreement which means that they are EN ISO standards in order to facilitate the international trade in the worldwide market.

- **Parties involved**

As NDT ensures the security of persons, properties and also quality of products, it affects various stakeholders: national authorities, industries (energy, nuclear, gas...), transportation industries (aerospace, railways, shipping train...), civil engineering, laboratories, inspection and certification bodies, personnel certification bodies, training centres, NDT equipment manufacturers, service providers...

- **Benefits**

NDT standards provide answers to safety and economic questions. As most of NDT standards are EN ISO, their implementation leads to a harmonisation of practices; this facilitates interoperability at an international level.

For organisations, applying NDT standards is a way to be more competitive, reduce costs by selecting the most suitable material, avoid variability when performing a test, ensure a high level of qualification of NDT personnel and clarify transactions between suppliers and customers...

- **Environmental aspects**

Environmental aspects are a key issue of standardization. NDT is integrated in the risk management of companies and, by avoiding dysfunction of pieces, is a means to protect environment. As a matter of fact, NDT standards take into account environmental aspects. Moreover, standards are drafted in order to ensure that the best products are used (environment-friendly products as far as possible), the use of radiation is controlled and energy consumption is regulated.

- **For more information**

[Link to CEN/TC 138 work programme and published standards.](#)