DGZfP AUSBILDUNG UND TRAINING GMBH

Overview of 2nd party qualification compared
with
3rd party qualification and certification
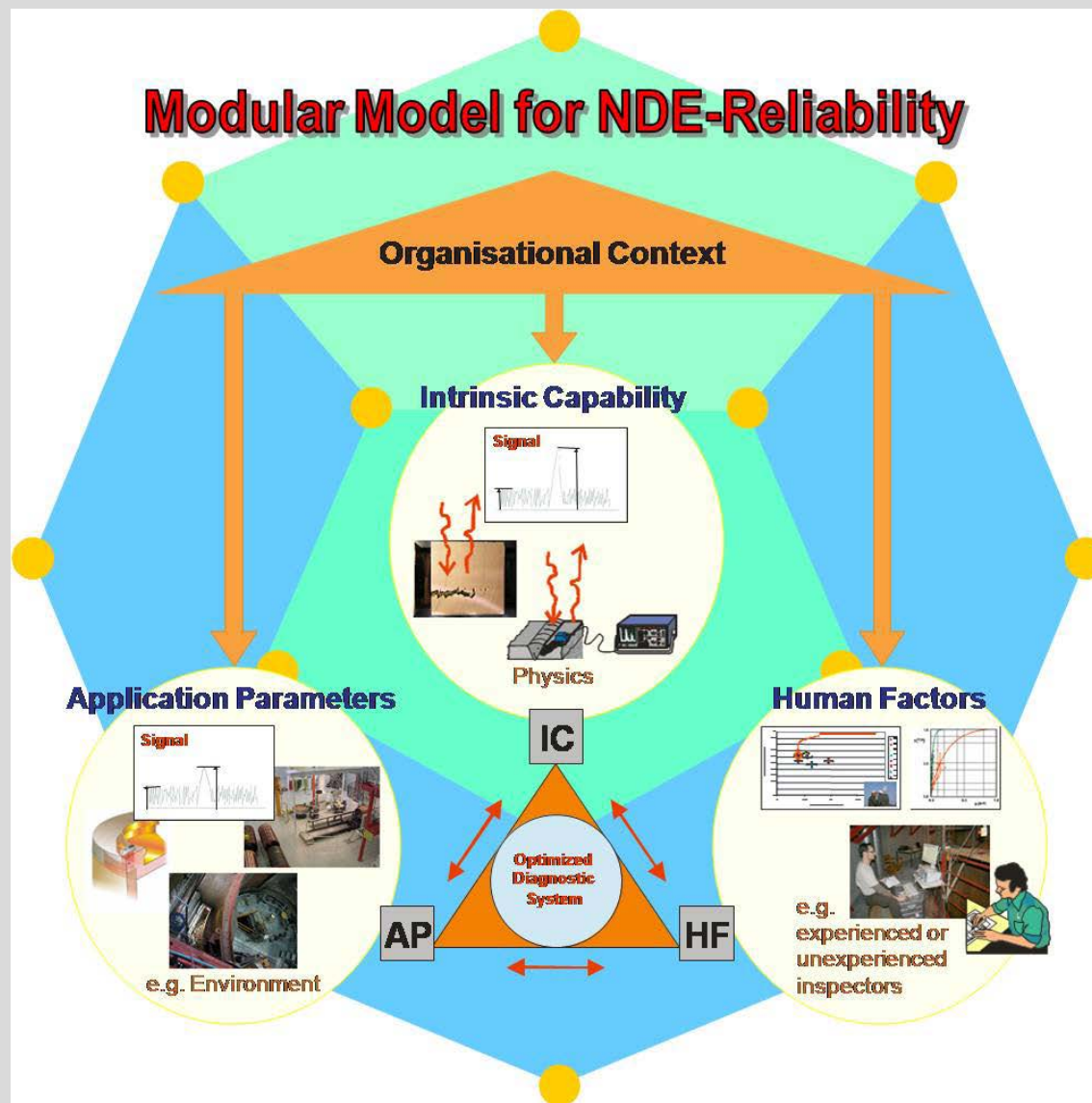
Content

- Definitions

- Codes and Standards

- Key Aspects

- Pro and Con

- Golden Way?

Source: C. Müller u.a. ; Progress in Evaluating the Reliability of NDE Systems - Paradigm Shift; 4th European-American Workshop on Reliability of NDE, Berlin, 2009

Human Factor Influences

- Education
- Experience
- Training
- Motivation
- Character
- Environment

ASME - Human Factor in NDE

Qualification and Certification of NDE-personnel

- **Qualification**
  The knowledge, talent and skills required to perform the specific tasks attached to a particular work position.

- **Certification** Process of issuing a certificate, <u>formally attesting</u> that an individuals knowledge and skills <u>have been assessed and validated</u> by a competent body against a defined standard

- **Certification** can also mean a procedure used by the certification body to confirm that an individual fulfills all the qualification requirements of a standard for a limited time

Qualification in NDE

- Physical ability -> Vision Test
- Documented training
- Demonstrated knowledge -> written examination
- Demonstrated skill   -> practical examination
- Documented experience

How much do we need?
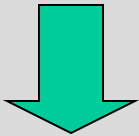
Amount of Qualification

- Employer defines his requirements ("Written Practice"):

- Required initial knowledge

- Basic knowledge of test method

- Company specific used Codes, Materials, Processes

- Skills based on the companies testing procedures

- Levels of qualification and their responsibility

Is there a good practice?

Standards of ASNT for Personnel

SNT-TC-1A

Guidelines

Training
Examination
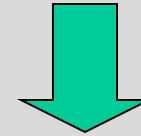Certification
by
Employer

**ANSI/ASNT
CP-189**

Level III
Program
of ASNT:

Examination
Certification
by
ASNT

ACCP

ASNT Central
Certification
Program

Training
Examination
Certification
by
ASNT

International Standards
for NDE-Personnel

ISO 9712:2012

NAS 410
EN 4179

UIC 960

3rd Party
Qualification
Certification

2nd Party
Qualification
Approval

3rd Party
Qualification

General
Industries

Aearospace
Industries
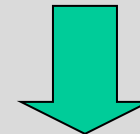
Railway
Industries

	2nd Party ASNT-TC-1A	3rd Party ISO 9712
Methods	15	10
Levels	3 + trainee	3
Training hours	proposed	required
Training content	CP 106	ISO TR 25108
Experience		
Examination grading	80%	70%
Examination content	employer	specimen
Visual Acuity	annually	annually
Authorization to work	employer	employer
Certification	employer	Certification Body
Revalidation	1+2: 3 years	1,2,3: 5 years

2nd Party	3rd Party
Employer sets priorities	High formal quality requirements
Concentration on knowledge needed for the specific job	More general – wider knowledge
Deeper knowledge on specifics	Additional training required
Training valid only in company - Investment in it protected	Competition
Need for Infrastructure on training, certification and documentation	Use of external agencies for training and certification
Training of new employees takes time	Hiring of trained experts from the market
Use of external personnel from service providers requires additional training	Only briefing for training providers
Sometimes low acceptance on international markets	Wide acceptance – well known

Golden Way?

Individual decision of company:

- Standard, Code, Product
- Marked practice and authorities
- Costumer requirements

3rd Party qualification + employer specific training opens many options

Thank you!