

The Role of EFNDT in Radiation Protection

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Content

- 1. Introduction**
- 2. What is EFNDT?**
 - Objectives
 - Members
 - Organisation
- 3. Current Activities**
- 4. EFNDT and Radiation Protection**
- 5. Aims and Goals of WG 2**
- 6. Further Activities of WG 2**
- 7. Conclusion**

History



- **Founded as a legal Federation in 1996**
- **Origins in European Council (1984)**
- **Non profit, legal entity, registered in Brussels**
- **Aim is to increase influence at “European level”**
- **EFNDT is one of 4 Regional Groups in ICNDT, the others being America, Asia- Pacific, and Africa**

Objectives of EFNDT

- **Promote the science and practice of NDT**
- **Improve quality and reliability of NDT**
- **Remove technical barriers to trade**
- **Act as a spokesperson for NDT in Europe**
- **Arrange conferences, seminars, meetings**
- **Seek to harmonise and develop mutual recognition of personnel qualification and certification**

Membership Criteria

- **Full Membership**
 - **NDT Societies in Europe (UN definition)**
 - **Non profit, legal entities**
 - **One per country**
 - **Fee 350 euro/year**
- **Associate membership**
 - **Non profit organisations with an interest in NDT**
 - **Not limited to Europe**
 - **Fee 200 euro/year**

EFNDT Members

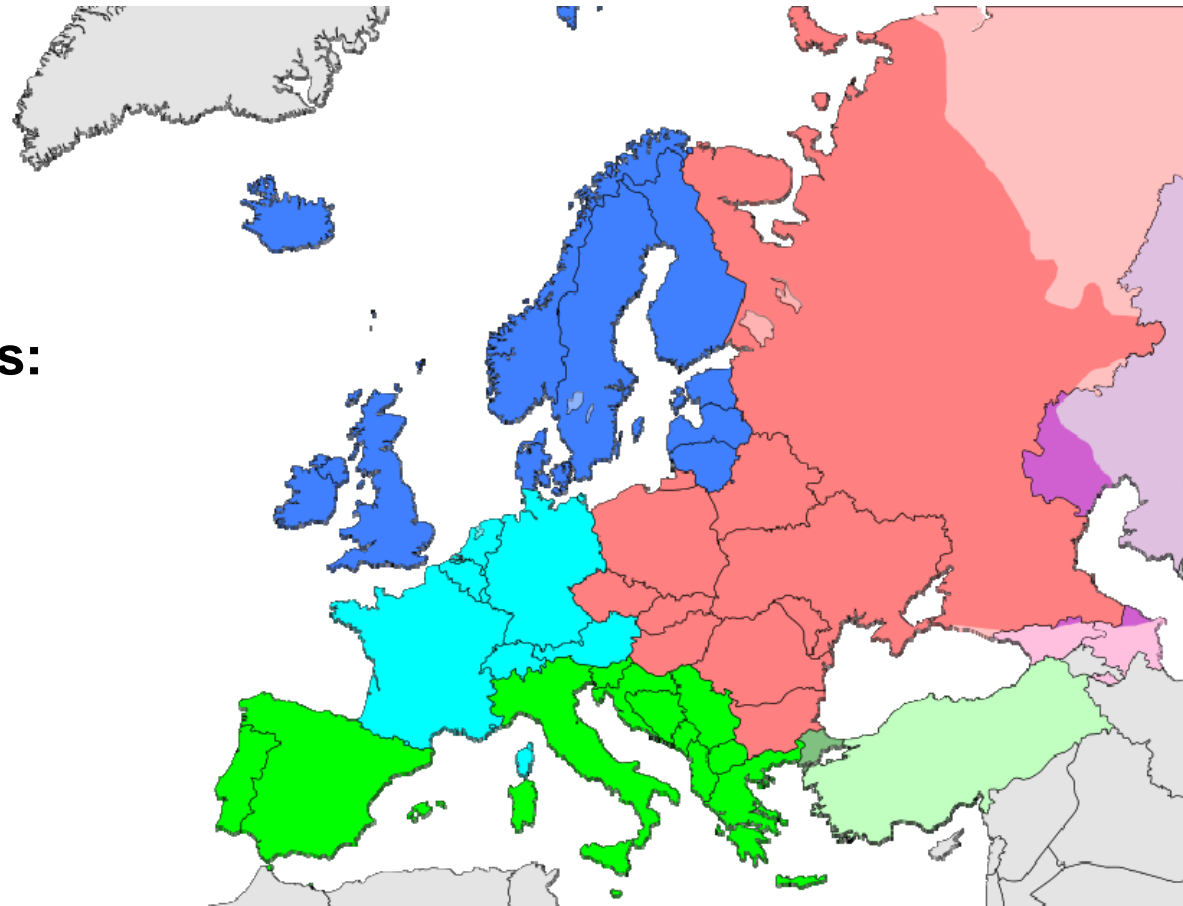
www.efndt.org

EF European Federation for
Non-Destructive Testing
NDT

32 full members

7 associate members:

- Australia
- Brasil
- China
- India
- Israel
- Japan
- South Africa



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Acceptance of EFNDT Value and Principals

Mission Statement



The European Federation for NDT

A Europe-wide partnership to promote NDT and related fields for the benefit of industry, the professions, the users and the wider community.

The overall mission of EFNDT is to bring together the resources of the national societies and organisations involved in NDT and related topics in Europe to create a more effective and more valuable voice for industry, the professions, the users and the wider community.

Mission Statement



EFNDT Values and Principles:

- Members adopt a Code of Ethics.
- Members are dedicated to public safety in a technological world.
- Members maintain a high level of quality with respect to their activities.
- Members promote the value of NDT and related topics, in particular the certification of NDT personnel, in society and in industry.
- Members shall promote, as a valuable instrument, the assurance of competence through accreditation, training and certification.
- Members consider that knowledge about NDT and related topics will be strengthened, harmonised and disseminated by means of conferences, symposia, publications and other media.
- Members shall, where appropriate, support research and development.
- Members shall, where appropriate, be actively involved in standardisation.
- Members will strive to make certification processes equivalent throughout Europe.
- Members of the Federation represents European interests in the relevant fields at the international level.

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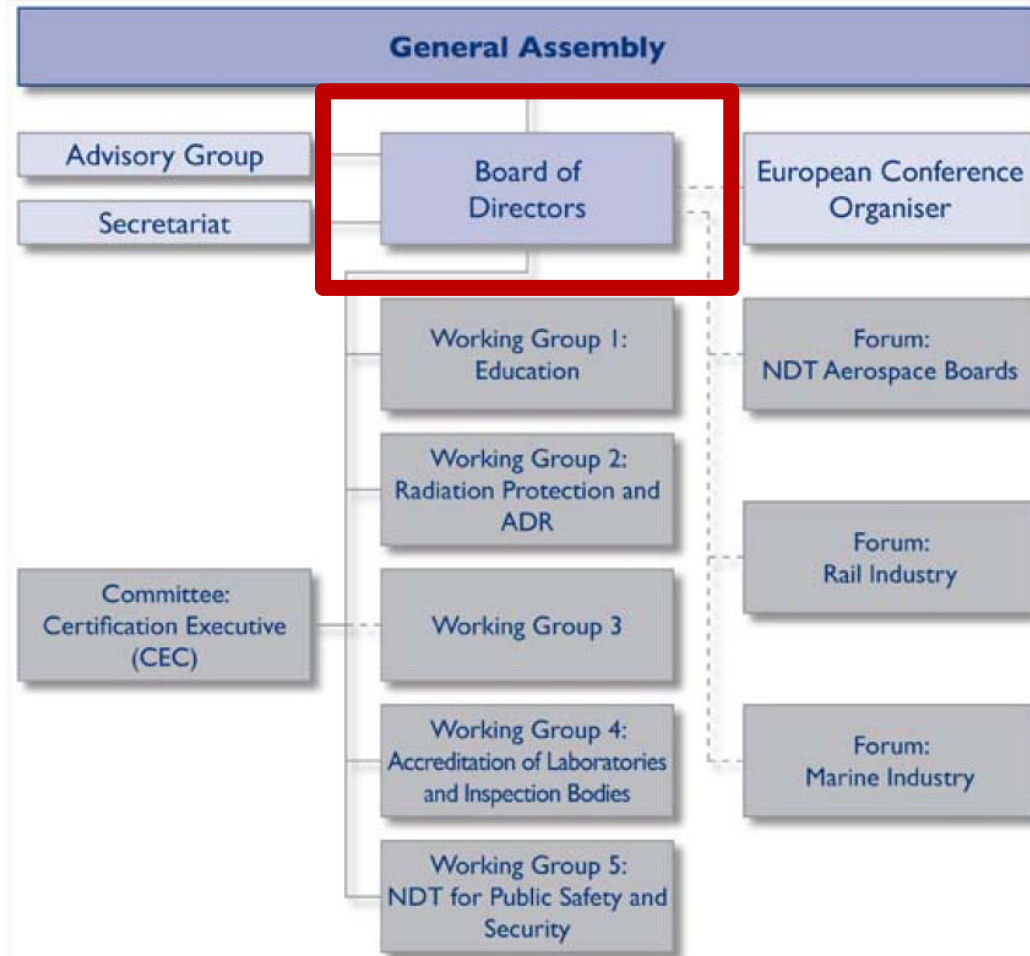
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Focus of EFNDT and EFNDT's Members

**Qualification and certification
of NDT personnel**

!

Organisation



Board of Directors 2015 – 2018 (Voting Members)



**Peter Trampus,
Roger Lion,**



Péter Trampus
President EFNDT
EfndtPresident@efndt.org

**Hungary (President)
U. Kingdom (Vice President)**



Roger Lyon
Vice-President EFNDT
EfndtVicePresident@efndt.org

**Dominique Moussebois,
Gerhard Aufricht,
Miro Dzapo,
Anton Erhard,
Fermin Gomez,
Etienne Martin,
Alexander Mullin,
Goran Sofronic,**

**Belgium (Treasurer)
Austria
Croatia
Germany
Spain
France
Russia
Serbia**

Board of Directors

2015 – 2018

(Non-Voting Members)

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Peter Merck,

Annamaria Nagy,

Emilio Romero,

Bento Ottone Alves,

Patrick Fallouey,

David Gilbert,

Germany

Sweden

Hungary

Spain

Portugal

France

U. Kingdom

(Past President)

(ECNDT President),

(Secretary)

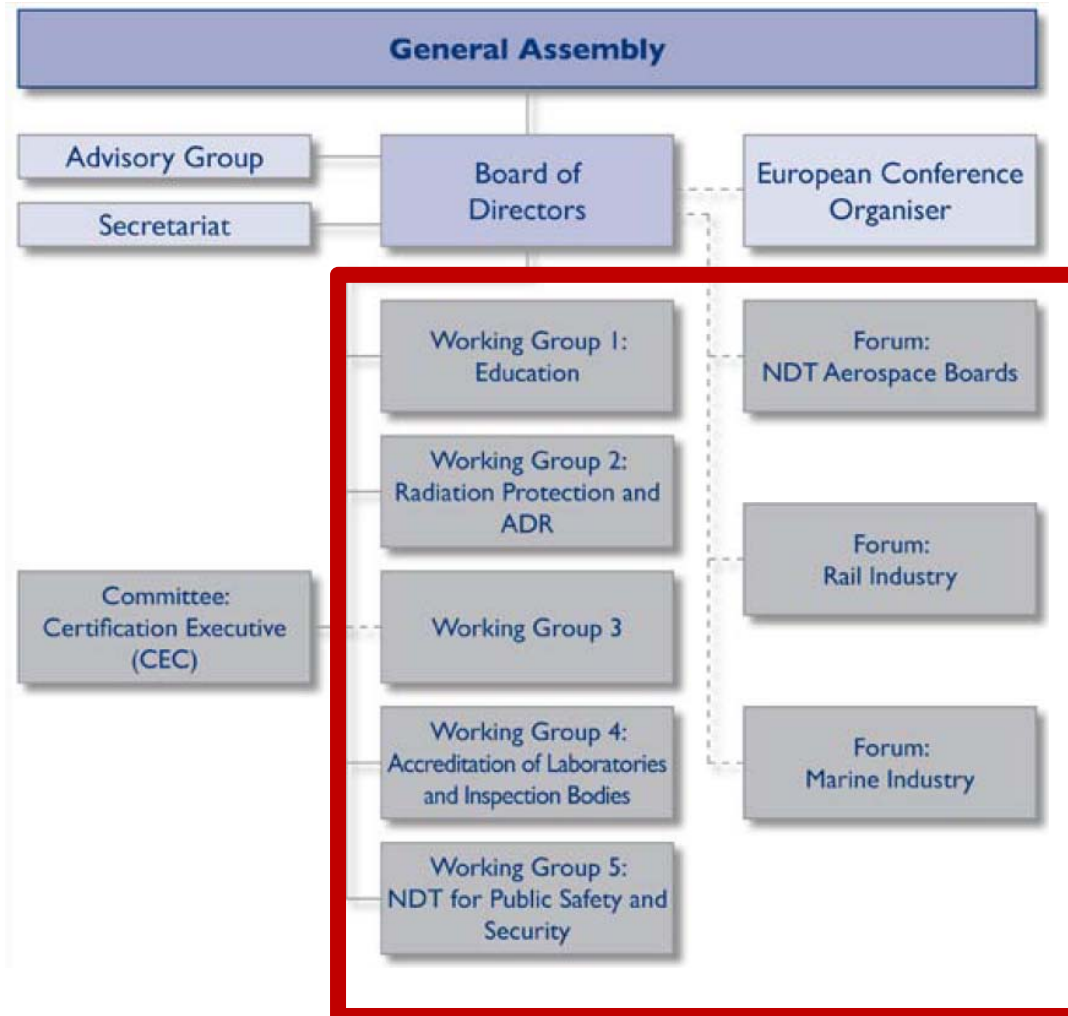
(co-opted member)

(co-opted member)

(Chairman CEC)

**(Communications
Secretary)**

Organisation



Forums & Working Groups

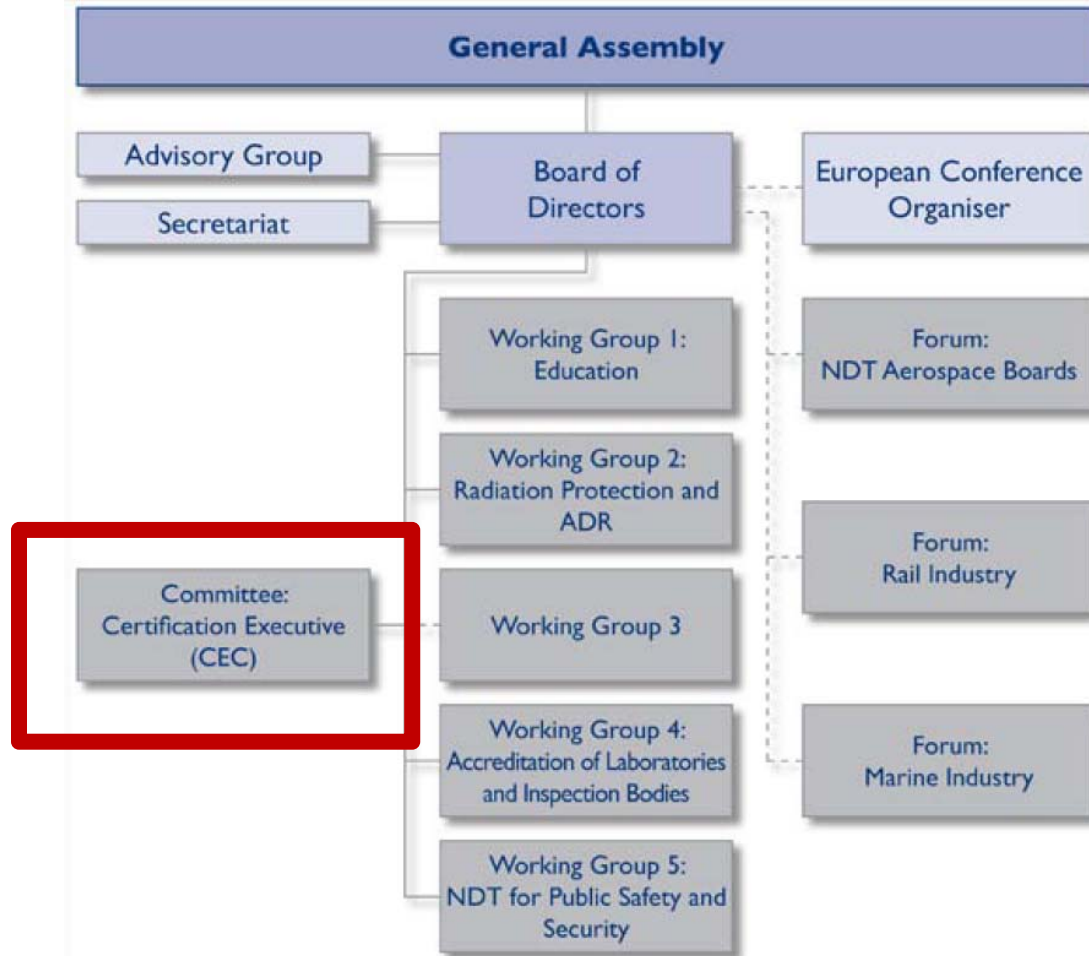
Aims and objectives

- **To provide a platform for discussion of matters of common interest**
- **Harmonisation of methodology for the control of qualification examinations provided at the various national levels**
- **Provide formal representation of the common concerns of the forum and working group members to European institutions**
- **act as an advisory body for implementing applicable regulations and standards**
- **Provide a mechanism for interpretation in cases of dispute regarding the implementation of applicable regulations and standards**

Current Activities

- **Personnel Qualification and Certification – Certification Executive Committee (CEC)**
- Forums & Working Groups
- Internet – intelligent portal
- European NDT Quality Guidelines
- Promotion of NDT for Safety
- Best Practice for National NDT Societies
- Liaison with ASNT
- Contribution to ICNDT
- European Conference
- Event Calendar

Organisation



Personnel Qualification and Certification

- **Worldwide Standard EN ISO 9712:2012**
 - EN ISO 9712:2012 replaced EN 473 in 2012



First worldwide standard for
Qualification and Certification of
NDT personnel !

Personnel Qualification and Certification

Contents	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Methods and abbreviated terms	5
5 Responsibilities	5
5.1 General	5
5.2 Certification body	5
5.3 Authorized qualification body	6
5.4 Examination centre	6
5.5 Employer	7
5.6 Candidate	8
5.7 Certificate holders	8
6 Levels of qualification	8
6.1 Level 1	8
6.2 Level 2	8
6.3 Level 3	9
7 Eligibility	9
7.1 General	9
7.2 Training	9
7.3 Industrial NDT experience	11
7.4 Vision requirements — all levels	12
8 Qualification examination	13
8.1 General	13
8.2 Examination content and grading for Level 1 and Level 2	13
8.3 Examination content and grading for Level 3	15
8.4 Conduct of examinations	17
8.5 Re-examination	17
8.6 Examination exemptions	18
9 Certification	18
9.1 Administration	18
9.2 Certificates and/or wallet cards	18
9.3 Digital certificates	19
9.4 Validity	19
10 Renewal	19
11 Recertification	20
11.1 General	20
11.2 Level 1 and 2	20
11.3 Level 3	20
12 Files	21
13 Transition period	21
14 Transition between EN 473:2008, ^[4] ISO 9712:2005 and this International Standard	22
Annex A (normative) Sectors	23
Annex B (normative) Minimum number and type of specimens for the Level 1 and Level 2 practical examination	24
Annex C (normative) Structured credit system for Level 3 recertification	25

ISO 9712 describes minimum requirements for the qualification and certification of NDT personnel!

Personnel Qualification and Certification

Table 2 — Minimum training requirements

NDT method		Level 1 h	Level 2 h	Level 3 h
	AT	40	64	48
	ET	40	48	48
LT	B — Pressure method	24	32	32
	C — Tracer gas method	24	40	40
	MT	16	24	32
	PT	16	24	24
	ST	16	24	20
	TT	40	80	40
	RT	40	80	40
	UT	40	80	40
	VT	16	24	24
NOTE	For RT, training hours do not include radiation safety training.			

Personnel Qualification and Certification

Still looking for RP in 9712 ? There is one more sentence:

8.2 Examination content and grading for Level 1 and Level 2

8.2.1 General examination

The general examination shall include only questions selected in an unpredictable way from the certification body's or authorized qualification body's collection of general examination questions valid at the date of examination. The candidate shall be required, as a minimum, to give answers to the number of multiple choice questions shown in Table 4.

Where not otherwise addressed by national regulations, there shall be an additional examination on radiation safety for the radiographic test method.

Examinations on the radiographic test method may include either X- or gamma-radiation or both, depending upon the procedure of the certification body.

.. and that's it !

Personnel Qualification and Certification

What is the reason for this lack of specification ?

- **Within an international framework, RP qualification is subject to particular national instructions and ordinances**

What does that mean for the national NDT societies ?

- **National NDT societies are mostly not involved in RP qualification**

Personnel Qualification and Certification



Two exceptions (without claiming completeness):

- **British Institute for NDT (BINDT)**
 - Authorized for RP training and certification for NDT personnel and RP supervisors acc. to UK regulations
- **German Society for NDT (DGZfP)**
 - Authorized for RP training for NDT personnel and RP supervisors acc. to German regulations
 - Service for DGZfP members:
 - Consulting for licence holders etc.

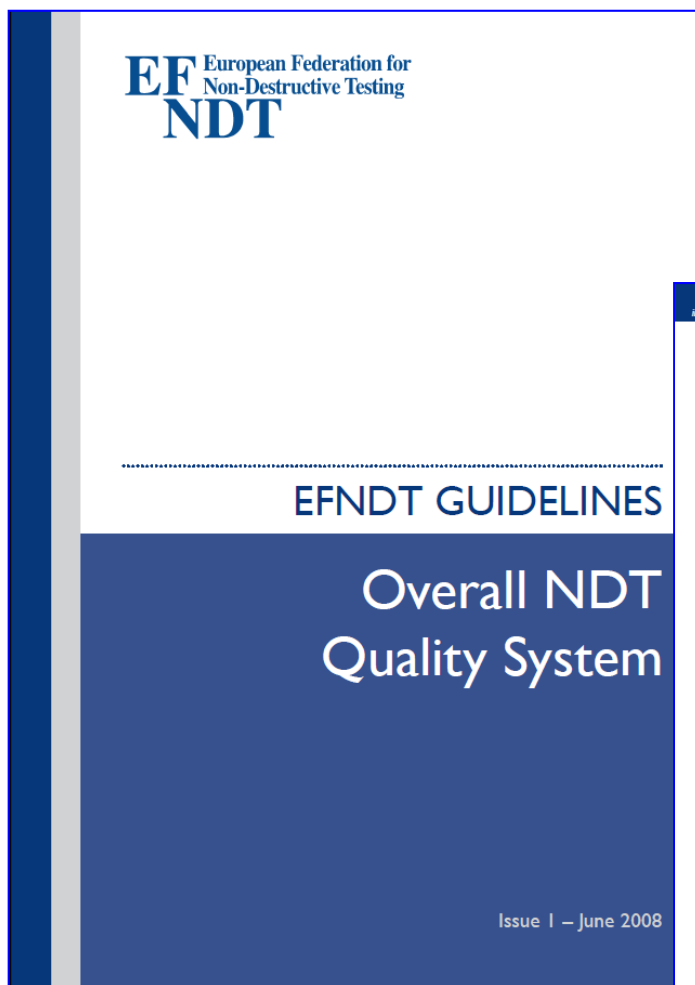
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- Personnel Qualification and Certification – Certification Executive Committee (CEC)
- Forums & Working Groups
- Internet – intelligent portal
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NDT QUALITY INFRASTRUCTURE

NDT system	Standards	Company actions	Qualification	Inspection, Certification, Notified Bodies	Accreditation Bodies
PROCEDURES	Techniques	Job Specific Procedures:	Validation	Surveillance Audit	Accredited laboratories acc. EN ISO/IEC 17025
EQUIPMENT	Equipment Accessories Calibration	Capability Trials Proficiency Tests	Performance Demonstration	Certification, e.g. EN ISO/IEC 17020	Accredited Inspection Bodies acc. EN ISO/IEC 17020
PERSONNEL	Training Qualification Certification	Job Specific Training and Qualification	Inspection Qualification e.g. ENIQ, ASME	Quality System Certification, e.g. ISO 9001	Accredited PERSONNEL Certification Bodies acc. EN ISO/IEC 17024
HUMAN FACTORS	Codes of Ethics Codes of Practice	Management and Planning (Risk based)			

EFNDT GUIDELINES “OVERALL NDT QUALITY SYSTEM”



Issue 2, Prague 2014
Available free of charge

EFNDT GUIDELINES: OVERALL NDT QUALITY SYSTEM	
CONTENTS.....	Page
FOREWORDS.....	iv
1. OBJECTIVE.....	1
2. BACKGROUND.....	1
3. ACHIEVEMENT OF QUALITY IN NDT.....	1
4. OVERVIEW OF NDT INFRASTRUCTURE IN EUROPE.....	2
5. STANDARDS.....	3
5.1 European and international NDT standards.....	3
5.2 Explanation of ISO processes.....	4
5.3 Explanation of CEN processes for European Standards.....	4
6. PERSONNEL QUALIFICATION AND CERTIFICATION.....	5
6.1 Background.....	5
6.2 Central independent certification.....	5
6.3 Company-based approval/certification.....	6
6.4 Responsibilities of employer.....	6
6.5 Best Practice in certification.....	7
6.6 Standards for central/third party certification (ISO 9712/EN 473).....	7
6.7 EFNDT Certification Executive Committee activities.....	7
6.8 Accreditation/Approval of NDT Certification Bodies.....	7
6.9 Mutual Recognition of Certification to ISO 9712/EN 473.....	7
6.10 European Pressure Equipment Directive.....	7
6.11 European Aviation Safety Agency (EASA).....	7
6.12 Forum for National Aerospace NDT Boards.....	7
7. TRAINING SYLLABUSES/GUIDELINES.....	7
7.1 Introduction.....	7
7.2 Normative status of Guidelines on Training Syllabuses.....	7
7.3 IASA TECDOC-628 (2002).....	7
7.4 Question Banks.....	7
7.5 Leonardo Project.....	7
7.6 Need for integration.....	7
8. INSPECTION QUALIFICATION.....	7
8.1 History.....	7
8.2 ENIQ (European Network for Inspection Qualification).....	7
8.3 ASME XI Appendix 8 - Performance Demonstration Initiative.....	7
8.4 ASME Section V.....	7
8.5 CEN Technical Report TR 14748:2004.....	7
8.6 NADCAP Aerospace NDT approvals.....	7

EFNDT GUIDELINES: OVERALL NDT QUALITY SYSTEM	
CONTENTS.....	Page
9. ACCREDITATION OF NDT ORGANISATIONS.....	19
9.1 Background.....	19
9.2 Laboratories.....	19
9.3 Inspector Bodies.....	19
10. HUMAN FACTORS.....	20
11. OVERALL MANAGEMENT OF NDT TO ACHIEVE QUALITY.....	21
11.1 Overall Management.....	21
11.2 Guidance on best practice.....	21
12. EXEMPLARS OF GOOD PRACTICE.....	22
APPENDIX 1 - EFNDT and IONDT.....	23
APPENDIX 2 - European and international NDT standards.....	24
APPENDIX 3 - Preparation of European Standards.....	27
APPENDIX 4 - prEN 473:2006.....	29
APPENDIX 5 - Comparison EN 473 / ISO 9712.....	40
APPENDIX 6 - Forum for National Aerospace NDT Boards.....	41
APPENDIX 7 - Exemplars of Good Practice.....	44

EFNDT WG 2: Radiation Protection

**Actually WG 2 consists of DGZfP RP team
(you'll find them all in this room 😊)**

Goals and Aims:

- **To provide a platform for discussion of matters of common interest**
 - **Low level of activity**
- **Provide formal representation of the common concerns of the working group members to European/International institutions**
 - **E.g. EAN/EFNDT cooperation (MoU)**
 - **Acting as observer and advisor for particular NDT needs and perspectives**
 - **E.g. “ISEMIR” project**

EFNDT WG 2: Radiation Protection

Further Activities:

- **To provide a platform for discussion of matters of common interest**
 - increase level of activity
- **Provide formal representation of the common concerns of the working group members to European/International institutions**
 - Keeping role as observer and advisor for particular NDT needs and perspectives
- **Close cooperation with ICNDT's WG 5 Radiation Protection**

Conclusion

- EFNDT only plays a minor role in international RP
- EFNDT members are national NDT societies
- National NDT societies are usually not involved in RP
- EFNDT's WG 2 acts as an observer of European/International activities and projects
- EFNDT's WG 2 acts as an advisor for particular NDT needs and perspectives at European/International activities and projects

EF European Federation for Non-Destructive Testing NDT



Thank you very much for your attention !