

**THE EUROPEAN FEDERATION
FOR NON – DESTRUCTIVE TESTING
RILOT PROJECT
“CERTIFICATION AND ACCREDITATION
OF UKRAINIAN NDT LABORATORIES”
(The 1st stage report)**



**Bruxelles
2010**



Dear ladies and gentlemen, Mrs. President

A report on the first stage of pilot project EFNDT “Certification and accreditation of Ukrainian NDT laboratories” is offered to your attention.

A few words about our country.

Ukraine is the second-largest republic of former Soviet Union, its territory makes 603,7 thousand square km and on an area it exceeds such large countries of Europe, as France, Spain, Sweden, Germany, Poland.



Ukraine - is the State with developed scientific and industrial base. The folk-economic complex of country is included by more than 20 basic branches of industry, including ferrous and coloured metallurgy, fuel and energy, chemical, petrochemical and gas industries, aerospace complex, shipbuilding, production of diesel engines, cars, tractors et cetera.



Aircraft building of Ukraine – design and produce the largest in the world sky trucks, rocket production – design space rockets-transmitters, including Program “The Marine start “.



Ukraine is the large producer of electric power. On its territory there are located 5 atomic, 47 thermal and 6 large hydroelectric power stations which produce 32,4 thousands megawatt of electric power annually.



In Ukraine there are more than 10000 enterprises of different pattern of ownership that work today. They actively use in their practice non-destructive testing which executes developed network of diagnostic laboratories and expert - technical centres. Traditionally in each branch of industry and energetic of country constantly operate commissions, which certify centres and laboratories of non-destructive testing. Such commissions exist, for example, in atomic energy, in transport et cetera.

The especially responsible and dangerous types of works in Ukraine are supervised by the State committee of Ukraine on industrial safety, labour protection and supervision in mining industry. In 1994 at Committee National research Institute of industrial safety and labour protection was created. This institute unites 28 state expert-technical centres, executing supervisory functions and tests, including non-destructive testing, and also accreditation of LNDDT. Within the framework of the Committee a certification and attestation of LNDDT is laid on state enterprise "Prombezopasnost" (The Industry safety).

Presently on the site of certification's organ at Committee of industrial safety and labour protection it is possible to obtain information about 426 laboratories of non-destructive testing, which were certificated.

Thus in Ukraine there are a few of branch's commissions, which certify and let permission on work for laboratories of non-destructive testing, operating in the structure of Ministry of energy, Ministry of industrial policy, and others, realizing a public policy on the certification and accreditation of LNDDT in Ukraine. All of them operate simultaneously.

As an alternative to these branch commissions (organs) which are presented in Ukraine now, is the National agency of accreditation. During 2002 year in Ukraine was accepted the law "About accreditation of organs of estimation of accordance", and Ministry of economy of Ukraine created National agency on accreditation (NAAU). The basic functions of NAAU are accreditation of organs which evaluates the accordance.

Agency of accreditation is the youngest and nearby on ideology to the proper European structures organ, which evaluates the accordance of laboratories. For today it maximally answers the requirements of independence, unprejudgement and absence of conflicts of interests. His work is built on the expert estimation of accordance, for realization of which NAAU attracts the skilled experts. I also more than five years am an expert NAAU in area of non-destructive testing.

To the real moment National agency of accreditation of Ukraine conducted a certification and accredited more than 300 testing laboratories, including 10 laboratories of non-destructive testing.

In accordance with the decision of Committee of Multilateral Agreements of European co-operation from accreditation (further - EA MASSES) from November, 04 of 2009 y. the national system of accreditation of Ukraine is acknowledged in a sphere "Accreditation of organs on the certification of personnel".

For the accreditation of LNDDT National agency attracts experts of the Ukrainian Society of NDT and technical diagnostic (USNDDT).

USNDT – is a public organization, united more than 200 collective members, located in all regions of Ukraine.



Society was organized in 1990 year and pursues an active policy on accreditation of LNDT. All these years it closely works with all former republics of Soviet Union on different questions of non-destructive testing and technical diagnostics. USNDT constantly leans upon scientific potential of Ukraine, including National academy of sciences (NAU). So, for example, President of the Society professor V.A. Troitskiy is the leader of department of Institute of the electric welding named by E.O. Paton NASU, Vice - president, M.L. Kazakevich is the director of state Enterprise of “KOLORAN” of Institute of physical chemistry named by L.V. Pisarzhevskiy NASU et cetera.

Such is a today's “variegated” picture of certification and accreditation of NDT laboratories in our country.

In this situation we with thanks and attention behaved to suggestion of the President EFNDT Mrs. Vjera Krstelj about realization of pilot Project: “A certification and accreditation of laboratories of non-destructive testing is in Ukraine”. On first stage we conducted collection of information about state of art on a certification and accreditation of LNDT. For this purpose under the direction of our President a questionnaire, resulted below, was developed.

This Questionnaire is to obtain information from NDT Laboratories providing NDT and related measurements. EFNDT is trying to gather NDT Laboratories capabilities to support them in C&A processes. Your reply will be very appreciated. NDT Laboratories with the best organization and practice will be examine and include in the International program for NDT Laboratory reliability development. Please use multiple copies of the Questionnaire if you have more than one laboratory including NDT methods or diagnostics.

Return please completed questionnaires to:

e-mail: Казакевич Михаил Леонидович [m_kazakevich@ukr.net]

Сс: vk@fsb.hr

1. Institution providing answers

Name of institution:

Name of NDT Laboratory:

Address: _____

Contact person: _____

e-mail: _____ phone: _____

2. Type of institution (please underline)

Industry

University/College

Other type (please describe):

3. Institution – Ownership (please underline)

State / Governmental

Private

Other (please describe):

4. Number of graduated persons working in Lab.

High school	College and University	Post graduate

5. Number of NDT Qualified persons

Method	Level of qualification in NDT		
	1	2	3
VT			
PT			
MT			
RT			
UT			
IR			
EC			

6. Organization of Laboratory

Does your laboratory have Quality Manager	Yes	No
Does your Quality Manager have direct link with Managing Board	Yes	No
Does your laboratory issued Statement of Quality Policy	Yes	No
Does your laboratory perform once a year the internal independent quality evaluation of laboratory's testing methods	Yes	No
Does the Quality Manager issue a program for laboratory personnel's certification	Yes	No
Did your laboratory develop any testing methods of its own	Yes	No
By which manner the laboratory estimate the validity of laboratory testing methods		
a) comparing results obtained by particular testing method with results obtained by another testing method	Yes	No
b) comparing results obtained by particular testing methods with results obtained by another laboratory;	Yes	No
c) analyzing factors that influences the results of testing method	Yes	No
d) estimating the measurement uncertainty	Yes	No

7. Experience of laboratory in specialist techniques;

In the case of positive answer, please specify the year when work has started

TOFD		UTPA		DIRT		etc					
No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

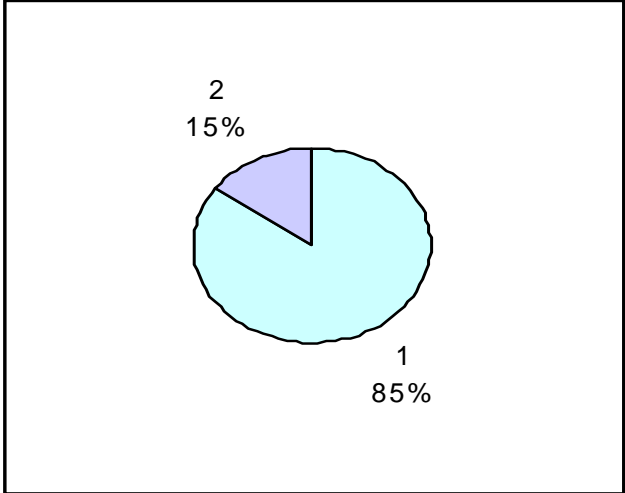
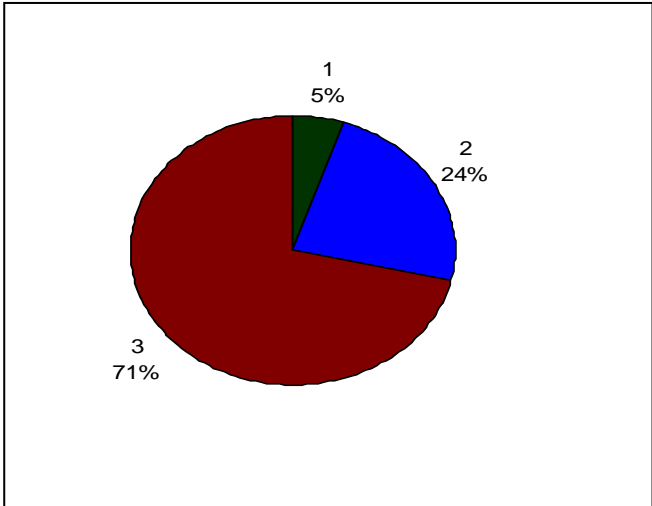
8. Accreditation status of laboratory

In the case of positive answer, please specify the following data:

Accreditation	yes	year
	in process	year:
	no	
Accreditation body		
C&A according to Standard		

Your comments or question

It contains 23 questions, incorporated in 9 sections. It is a set of the most essential base questions, proper ISO 17025. After the discussion of Questionnaire and concordance of it with Ukrainian society of non-destructive testing and technical diagnostics. National agency of accreditation of Ukraine and branch's organs on certification of laboratories of non-destructive testing it was sent more, than in 200 addresses.



- (1+2+3) approximate full quantity of LNDT in Ukraine ~ 700
- (1+2) quantity of LNDT, which were asked ~ 200
- (1) quantity of LNDT, which gave answer - 35

The Questionnaire was filled in and returned by 35 laboratories, which are situated in all Ukrainian regions. As we consider, the quantity of laboratories, which answered, is about 15% from questionnaires, which were sent and 5% of total amount of LNDT in Ukraine.

I.e. it is enough for our conclusions.

CONCLUSIONS

From the answer's analysis of questionnaires it is possible to do next conclusions.

1. The total quantity of NDT laboratories in Ukraine is about 700.
2. We sent the questionnaire in address of the main NDTL – about 200.
3. 35 NDT laboratories answered (near 15% of questionnaires, which we sent).
4. In Ukraine operates the system of certification and accreditation of laboratories of non-destructive testing (LNDT), which have support at state level.
5. All interrogated LNDT were certificated and accredited in Ukraine.
6. The national network of LNDT includes both state centres and collective and private enterprises and covers all regions of the country.

7. Results of questioning confirms viability of the most accredited laboratories of non-destructive testing , possessing the enough body of the certificated specialists, the system of quality et cetera.
8. The enterprises of leading branches of industry of Ukraine (pipe industry, chemical engineer, steel-rolling production and other) answered on questions of Questionnaire, I.e. the personal interest of large diagnostic firms is obvious in development of connections with Europe in area of certification and search of connections (partners) in the West.
9. At the same time existing in Ukraine system of certification and accreditation of laboratories was mainly saved from times of the USSR. Overwhelming majority of NDT laboratories was passed the branch certification and attestation of the State committee for industry safety and the labour protection and supervision. By our preliminary information from more then 700 certificated domestic laboratories of non-destructive testing only 10 passed a certification and accreditation in NAAU. By analogy from 35 enterprises, answered the questions of Questionnaire, 32 were certificated in State supervision, 3 were in National agency of accreditation and 4 have a certificate of accreditation of these two organizations.
10. The conducted questioning confirms the necessity of in-plant training and expansion of list of specialists of the III level in connection with the reason of introduction of the special technologies of non-destructive testing for equipment's diagnostics.
11. In connection with abovementioned perspective directions of expansion of project "Certification and accreditation of laboratories of non-destructive testing in Ukraine" can be:
 - ✓ continue of adaptation (harmonisations) of the Ukrainian normative base on accreditation of LNTD to European;
 - ✓ support from EFNDT on introduction of science and metrology providing in work on accreditation laboratories of non-destructive control of Ukraine;
 - ✓ continuation of work on confession of the National system of accreditation of laboratories of non-destructive testing by Committee of Multilateral Agreements of European co-operation on accreditation (EA MAC).

THE SYSTEM OF ORGANS, WHICH REALIZE CERTIFICATION AND ACCREDITATION OF NDT LABORATORIES IN UKRAINE

