



United Accreditation Body of India

**Guidelines for Inter-Laboratory Comparison
Participation where Formal PT Programs
are not available**



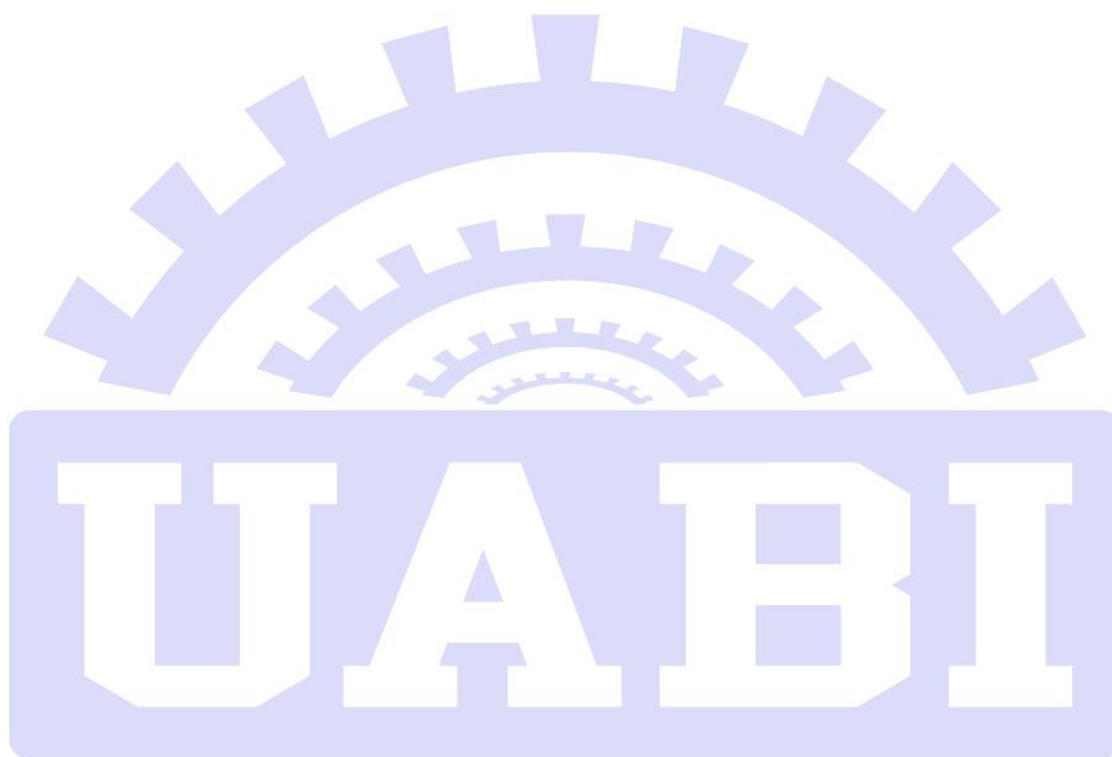
AMENDMENT SHEET

S.No	Page No.	Clause No.	Amendment Date	Amendment	Reason	Sign QM	Sign CEO
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

UNITED ACCREDITATION BODY OF INDIA			
Doc No. UABI 434		Doc Name: Guideline for ILC participation where formal PT not available	
Issue No. 1		Issue Date: 02.04.2019	Issue Date: 02.04.2019
Amendment No. – 0		Amendment Date: -----	Amendment Date: -----

TABLE OF CONTENTS

S.No	Title	Page No.
1.	Amendment Sheet	2
2.	Table of contents	3
3.	Introduction	4
4.	Procedure	5
5.	Calculation of Z-Score	6

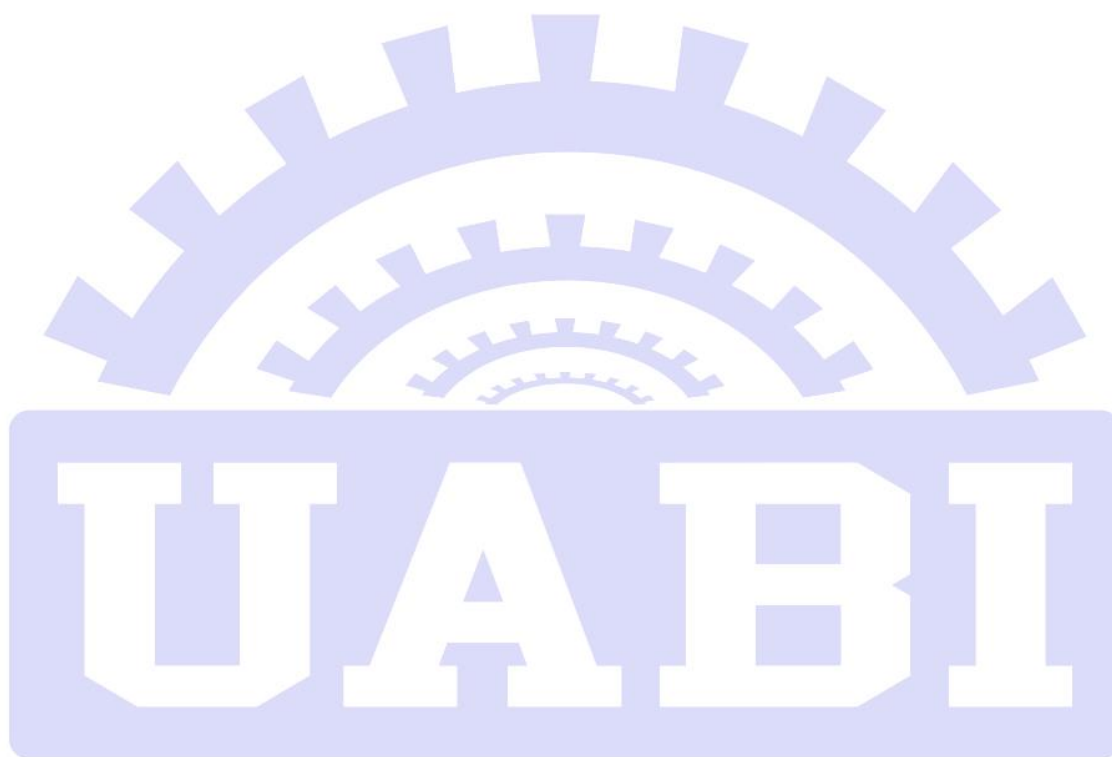


UNITED ACCREDITATION BODY OF INDIA		
Doc No. UABI 434	Doc Name: Guideline for ILC participation where formal PT not available	
Issue No. 1	Issue Date: 02.04.2019	Issued By QM:
Amendment No. – 0	Amendment Date: -----	Approved By CEO:

- **INTRODUCTION**

The purpose of this document is to formulate instructions which are beneficial for testing, calibration or for medical testing laboratories who faces difficulties when formal PT programs are not available nationally/regionally.

These instructions are used alternatively in the absence of Proficiency program which is thus necessary for monitoring laboratories performance. Guidelines for participation in PT is given in UABI 433.



UNITED ACCREDITATION BODY OF INDIA		
Doc No. UABI 434	Doc Name: Guideline for ILC participation where formal PT not available	
Issue No. 1	Issue Date: 02.04.2019	Issued By QM:
Amendment No. – 0	Amendment Date: -----	Approved By CEO:

• PROCEDURE

1. A laboratory must prepare a 4 year PT/ILC plan before they can go for ILC program where formal PT is not available. Refer UABI 433 for ILC/PT plan.
2. After that a laboratory must identify for which group or parameter they want to initiate ILC program.
3. The number of participating laboratory in ILC program should not be less than 5. There is no limit for maximum participating laboratory in ILC program.
4. The nodal ILC laboratory should prepare homogenous test sample.
5. The nodal ILC laboratory should ensure that mean value of test results are obtained and this should not be shared with anyone. If found guilty by UABI, then that parameter will be withdrawn with immediate effect from CAB scope.
6. The nodal ILC laboratory should dispatch all the samples appropriately to all the participants.
7. The nodal ILC laboratory should give appropriate testing time to other laboratory and this should not be greater than 10 days from the date of initiating of program.
8. The nodal ILC laboratory shall collect all the test results and make summary of the same in due time.
9. The nodal ILC laboratory should submit Z score/ En Score as calculated from summary of results and submit the Z-score to each participating laboratory.

UNITED ACCREDITATION BODY OF INDIA		
Doc No. UABI 434	Doc Name: Guideline for ILC participation where formal PT not available	
Issue No. 1	Issue Date: 02.04.2019	Issued By QM:
Amendment No. – 0	Amendment Date: -----	Approved By CEO:

• CALCULATION OF Z-SCORE / En-SCORE

1. Collect all the results from participating laboratory including nodal laboratory.
Now calculate mean value of results as well as their standard deviation observed.
2. Now evaluate Z-score for each of the parameters as follows:
E.g. taking parameter temperature during calibration for Muffle furnace.
Mean value observed is 863.6 C and standard deviation obtained is 5.76 and the laboratory observed value was 866.2
Now, determining Z-score or En score is as follows:
Z-score or En score = Observed Value – Mean Value / Standard deviation observed
So Z-score or En score obtained for above value will be
$$= 866.2 - 863.6 / 5.76$$
$$= 0.45$$
3. The formula for determining Z-score or En score is same as above.

Note:

1. The formulae in equations are correct only if \bar{x} and S are independent
2. Measurement results and reported uncertainty shall be in same unit.
3. Z-score or En score shall always be below ± 2 , this defines satisfactory performance of laboratory in ILC participation.
4. If Z-score or En score is above ± 2 then that parameter should be cautiously monitored and appropriate corrective actions shall be taken.

UNITED ACCREDITATION BODY OF INDIA		
Doc No. UABI 434	Doc Name: Guideline for ILC participation where formal PT not available	
Issue No. 1	Issue Date: 02.04.2019	Issued By QM:
Amendment No. – 0	Amendment Date: -----	Approved By CEO:

