

GUIDE 43-1

**Proficiency testing by
interlaboratory comparisons —**

**Part 1:
Development and operation of
proficiency testing schemes**

Contents

	Page
1 Scope	1
2 References.....	1
3 Definitions	2
4 Types of proficiency testing	3
4.1 General.....	3
4.2 Measurement comparison schemes	3
4.3 Interlaboratory testing schemes	4
4.4 Split-sample testing schemes.....	4
4.5 Qualitative schemes	5
4.6 Known-value schemes	5
4.7 Partial-process schemes	5
5 Organization and design.....	5
5.1 Framework	5
5.2 Staff.....	6
5.3 Data-processing equipment	6
5.4 Statistical design	6
5.5 Test item preparation.....	6
5.6 Test item management.....	7
5.7 Choice of method/procedure	7
5.8 Evolution of proficiency testing schemes	7
6 Operation and reporting	8
6.1 Coordination and documentation	8
6.2 Instructions	8
6.3 Packaging and transportation.....	8
6.4 Data analysis and records	8
6.5 Scheme reports.....	8

© ISO/IEC 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

6.6	Evaluation of performance	9
6.7	Communication with participants	9
7	Confidentiality/ethical considerations.....	10
7.1	Confidentiality of records	10
7.2	Collusion and falsification of results.....	10
Annexes		
A	Examples of statistical methods for treatment of proficiency test data.....	11
B	Quality management of proficiency testing schemes	15
C	Bibliography.....	16