AS 2000—1978
UDC 658.562

1987.

Australian Standard 2000–1978

GUIDE TO AS 1821-1823 SUPPLIERS QUALITY CONTROL SYSTEMS

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS AND departments were officially represented on the committee entrusted with the preparation of this standard:

Australasian Institute of Metals

Australasian Institute of Mining and Metallurgy

Australian Organization for Quality Control

Bureau of Steel Manufacturers of Australia

Commonwealth Scientific and Industrial Research Organization

Confederation of Australian Industry

Council of Australian Food Technology Associations Incorporated

Department of Defence

Department of Health (Commonwealth)

Department of Primary Industry

Department of Productivity

Telecom Australia

This standard prepared by Committee MS/29, Quality Control, was approved on behalf of the Council of the Standards Association of Australia on 17 July 1978, and was published on 1 August 1978.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association are welcomed.

This standard was issued in draft form for public review as DR 76103.

AUSTRALIAN STANDARD

GUIDE TO AS 1821-1823 SUPPLIERS QUALITY CONTROL SYSTEMS

AS 2000–1978

First published 1978

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 1525 2

PREFACE

This standard was prepared by the Association's Committee on Quality Control to provide guidance to industrial and commercial purchasers on procedures which might be followed in assessing capability of suppliers with regard to the contractual situations described in AS 1821 to AS 1823, Suppliers Quality Control Systems. It may also be used as a guide to suppliers on procedures which could satisfy purchasers.

It offers suggestions as to the elements to be investigated and factors to be considered in the evaluation of the potential and continuing ability of a supplier to satisfy a particular requirement of AS 1821 to 1823.

CONTENTS

		Page
FOREWORD		3
GUIDE		
1	Scope	4
2	Application	4
3	Review and Audit	4
4	Organization	5
5	Planning	7
6	Work Instructions	8
7	Records	9
8	Corrective Action	10
9	Design Control	11
10	Documentation and Documentation Change Control	14
11	Responsibility for Inspection	16
12	Inspection Equipment (including Test Equipment)	16
13	Control of Supplier-procured Supplies and Services	19
14	Manufacturing Control	21
15	Control of Non-conforming Supplies and Services	23
16	Indication of Inspection Status	24
17	Statistical Quality Control	25
18	Handling, Storage, Delivery and Use	26
19	Verification of Conformance and Facilities and Assistance to be Provided by the Supplier	28
APPENDIX A.	Summary of Requirement Applicability Charts	29

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
GUIDE TO AS 1821-1823, SUPPLIERS QUALITY CONTROL SYSTEMS

FOREWORD

Australian Standards 1821 to 1823 were prepared as a result of the need expressed by many organizations for national standards which can be used both by Australian industry and by government instrumentalities as a condition of contract in the purchasing of goods or services of an assured quality. These standards describe the requirements of three discrete quality control systems of descending order of complexity which may be utilized for the assurance of quality in manufacturers' supplies or services. The total scope of the standards could be applied to a large variety of types of supply and service from the highly sophisticated to the extremely simple and from the largest organization to the very small company.

Whilst these standards are essentially concerned with industrial purchasing utilizing methods of contract control and supplier evaluation where a purchaser specifies his requirements for the supply of goods or services in a contractual manner, they may be applied to service type industries under similar contractual relationships.

They are also recommended to suppliers whose products are distributed for general sale as a guide in the identification of the requirements of effective and economical management systems and in the evaluation of their ability to control and assure the quality of their products.

The standards define the essential features of the three systems but do not describe how they should be implemented. It is for each supplier to establish procedures appropriate to his own industry, technology and organization to achieve the requirements of a particular system. This standard is intended to assist in this regard by suggesting ways by which these procedures can be effective. For a potential customer, the supplier's means of implementing the required system of quality control should be agreed before making a contract and subsequently the customer should be able to satisfy himself that the quality control system in operation will assure the required quality.

At appropriate places in this standard and in AS 1821-1823, reference is made to measurements which are most suitably made by a laboratory. Where such reference is made to measurements and calibrations, NATA registration of a laboratory is acceptable evidence of the standard of that laboratory for the ranges and accuracies of measurement for which it has NATA accreditation and registration.

It should be noted that all the questions included in this standard are not necessarily relevant to each assessment. There is obviously a need for the assessor (customer) to carefully analyse his particular quality requirements and to extract and use only those questions which are applicable. The assessor should also give consideration to the fact that a current approval granted by a reputable organization may well be partly or wholly acceptable, thus reducing the time and cost of full assessment.

In the course of an assessment certain facts are elicited during discussions. Unless otherwise indicated all such facts should be verified by observation.

GUIDE

1 SCOPE. This guide reviews the clauses in AS 1821 to 1823, Suppliers Quality Control Systems, and attempts to explain why the element covered by a particular clause is a desirable part of a quality control system. In appropriate cases it provides a suggested interpretation and course of action likely to satisfy the provisions of the clause. Suggestions as to the elements to be investigated, factors to be considered in the evaluation of a supplier's quality control system, and questions that should be answered as the result of an evaluation of a particular element of the supplier's system, are included for the guidance of the representative of the purchasing organization.

2 APPLICATION. Decisions as to when and where in the manufacturing process evaluations should be instituted and to what extent have to be made to suit each industrial situation. Consequently it has not been possible to provide all-embracing guidance in this respect. The questions posed are typical questions and not necessarily applicable in all situations, e.g. for small organizations.

In the requirement applicability charts following the questions, those questions indicated by an asterisk (*) indicate questions where an affirmative answer is considered to be of particular importance in meeting the requirements of the relevant standard. Questions indicated by a dagger (†) sign indicate questions which are of somewhat lesser importance, but nevertheless where an affirmative answer is desirable.

Examples of suitable check lists are provided in Appendix A for the convenience of the assessor.

3 REVIEW AND AUDIT.

3.1 Review of Clause 1.3 of AS 1821, AS 1822 and AS 1823. In this context, quality is a supplier's management responsibility. To attain required quality, management must specify its objectives, establish plans and a system of procedures to accomplish them, assign duties, delegate authority, set up adequate methods and standards of performance, and evaluate results objectively. In order to ensure that the recommendations for quality are adequately met, supplier's management should periodically and systematically conduct reviews.

It is emphasized that such reviews must be systematic and not merely casual or superficial inquiries. For purposes of clarity it might be more appropriate to say that the supplier should conduct 'management audits' of his quality control system.

A 'management audit' may be defined as a planned, purposeful and comprehensive examination of management objectives, assignments of duties, delegation of responsibilities and methods of operation. Such audits are conducted by, or on behalf of, management to check that these objectives, delegations and methods are achieving the required results, to reveal defects or irregularities in any of the elements examined, and to indicate possible improvements. Audits serve as a check on the abilities of managements at all levels. They are designed to uncover potential danger spots and to eliminate waste or unnecessary loss. The requirement for a management audit should not be interpreted to mean that top management must personally conduct the audit. This task may, and undoubtedly will, be delegated.

To carry out an audit adequately, it is necessary that procedures be prepared which define the conduct of the audit, who will perform the audit, what will be examined, how and where the audit will be done, to whom the results of the audit will be reported, and how any necessary corrective actions will be instituted. Audits should be conducted at intervals dependent on their demonstrated need. Some elements of the system will undoubtedly require more frequent auditing than others. The supplier should establish a schedule for audits and adjust it on the basis of previous results.

3.2 Evaluation Guidance. The customer's representative should evaluate the effectiveness of the supplier's particular practices as well as the effectiveness of the overall quality control system.

The customer's representative's assessment of the adequacy of the supplier's system (i.e. the validity of the test and inspection findings, the effectiveness of process controls, recognition of need for corrective action, etc) is achieved through independent evaluations and verifications of supplier's functions. It is only through such independent evaluation and verification that the customer's representative can be assured of the effectiveness of the supplier's quality control system.

The following are typical questions which can be asked in respect of —

AS 1821 — Clause 1.3, Review and Audit

AS 1822 — Clause 1.3, Review and Audit

AS 1823 — Clause 1.3, Review and Audit.

REVIEW AND AUDIT

Typical questions

	Requirement applicability chart		
	1821	1822	1823
1. Does the supplier plan the audit of the quality control/ inspection system?	*	*	*
2. Does the planning cover all facets of the quality control/ inspection system in all operating areas?	*	*	*
3. Is the plan documented?	*	*	*
4. Is the frequency of audit satisfactory?	*	*	*