AS 2561—2010

Australian Standard®

Guide to the determination and the use of quality costs

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- Airways New Zealand
- Association of Accredited Certification Bodies
- Australian Chamber of Commerce and Industry
- Australian Institute of Petroleum Ltd
- Australian Organization for Quality
- Bureau of Steel Manufacturers of Australia
- Commonwealth Department of Transport and Regional Services
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- Department of Housing New South Wales
- Engineers Australia
- International Accreditation Forum
- Joint Accreditation System of Australia and New Zealand
- Materials Australia
- The Royal Australian Chemical Institute
- University of Technology, Sydney

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Guide to the determination and the use of quality costs

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee QR-008, Quality Management Systems. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide guidance on identifying and managing quality costs, as part of the overall system of management of an organization. It also provides methods for studying opportunities for improvement. It is compatible with, and may be used as part of, a management system as described in the AS/NZS ISO 9000 series of Standards. It is consistent with the guidance provided in AS ISO 10014, *Quality management systems—Guidelines for realizing financial and economic benefits*, and the management principles, the process approach and the continual improvement cycle (or Plan-Do-Study-Act (PDSA) methodology) that underlie the AS/NZS ISO 9000 series of Standards.

This revised edition adopts the broader view of quality management in the AS/NZS ISO 9000 series of Standards. It recognises that, since the publication of AS 2561—1982 there has been a trend in the Australian economy away from the volume manufacture of goods. Therefore this edition places emphasis more on application of principles than defining cost categories. It accepts as basic assumptions that continual improvement of product and processes is necessary to achieve and maintain customer satisfaction in competitive markets, that the control of all waste and costs is an essential part of controlling processes and product quality, and that all functions within an organization contribute to the cost of supplying its products.

This Standard is suitable for use across a broad range of applications, although some adaptation may be required in industries that have particular definitions and terminologies, or organizations that have special accounting procedures and cost categories. It is not suitable for use in contracts or for certification purposes.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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FOREWORD

This Standard presents guidance on the concepts and a methodology that organizations can use to increase customer satisfaction while reducing total costs of supply. It also assists an organization in determining which of the techniques for the classification of costs and monitoring of customer satisfaction best meet their needs.

Quality costs or cost of quality is often misinterpreted to mean the cost of using quality control and quality assurance methods. The cost of quality actually refers to the cost incurred from failing to provide the required product in the most efficient and effective manner. Basically, quality costs are those additional costs over and above the actual cost of making the product or providing the service that would disappear if the organization's systems, processes, and products were perfect, with the provided product meeting or exceeding statutory and customer expectations.

Examples of cost due to deficiencies in an organization's process can include: the costs due to the papers or e-information for an organization's annual general meeting that need to be re-issued due to an error in the first mail out; the costs due to design deficiencies such that the product requires modification, re-placement or is delivered late; costs due to the failure to keep accounting systems up to date resulting in billing errors.

The organization should not view these effects only in the form of cost reductions in the short term. What appears to be an improvement in the short term may have negative long-term effects on customer loyalty, product reputation or user confidence. Consequently, the short and long-term economic goals should be formulated and regularly reviewed in the organization's business planning activities. The review should include the management, product realisation and system support processes as set out in the organization's quality, environmental, occupational health and safety and risk management systems.

The ISO 9000 series of standards promotes the adoption of a process approach when developing, implementing and improving a management system. The process approach is reflected in the structure of ISO 9001. The process-base for a management system is shown schematically in Figure 1.

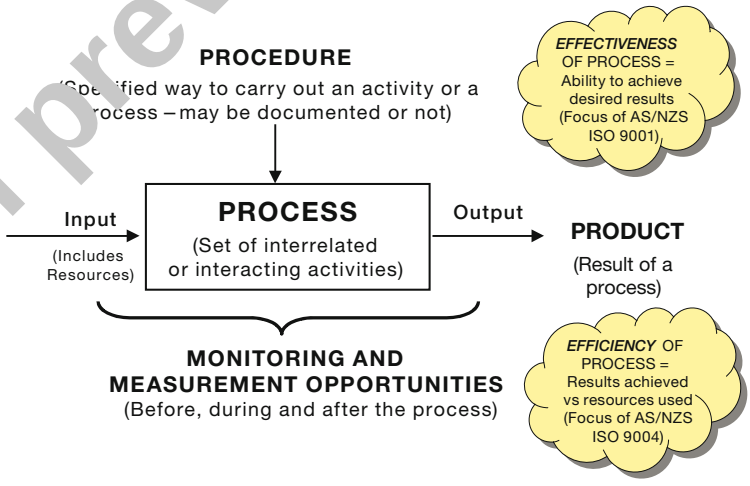

FIGURE 1 GENERIC PROCESS MODEL

NOTE: (See ISO/TC 176/SC 2 N544R3—ISO 9000 Introduction and support package: Guidance on the concept and use of the process approach for management systems, available from www.ISO.org/TC176/SC2).

ISO 9001 requires management of an organization's processes as well as its outputs. This is fundamental to improving quality and productivity for all types of products. Every person within the organization contributes to and operates within a process, and every process should have an identified process owner who is responsible for the effectiveness of that process.

The only partitioning which is ultimately valid is that between the costs of conformance to requirements and the costs of nonconformance. Both are usually capable of improvement. The 'process' may be considered at any level within the organization, e.g. the process may be a particular work stage or it may be the overall process of operating the business. In either case the process uses materials and resources and the process owner, whether an individual, a supervisor or the managing director, needs to be able to monitor the costs of that process and take action to ensure that the costs of the process are defined, standardized controlled and optimized.

All too often the costs due to the lack of quality in a product or process can be viewed as an iceberg with only the tip of the iceberg being seen. See Figure 2.

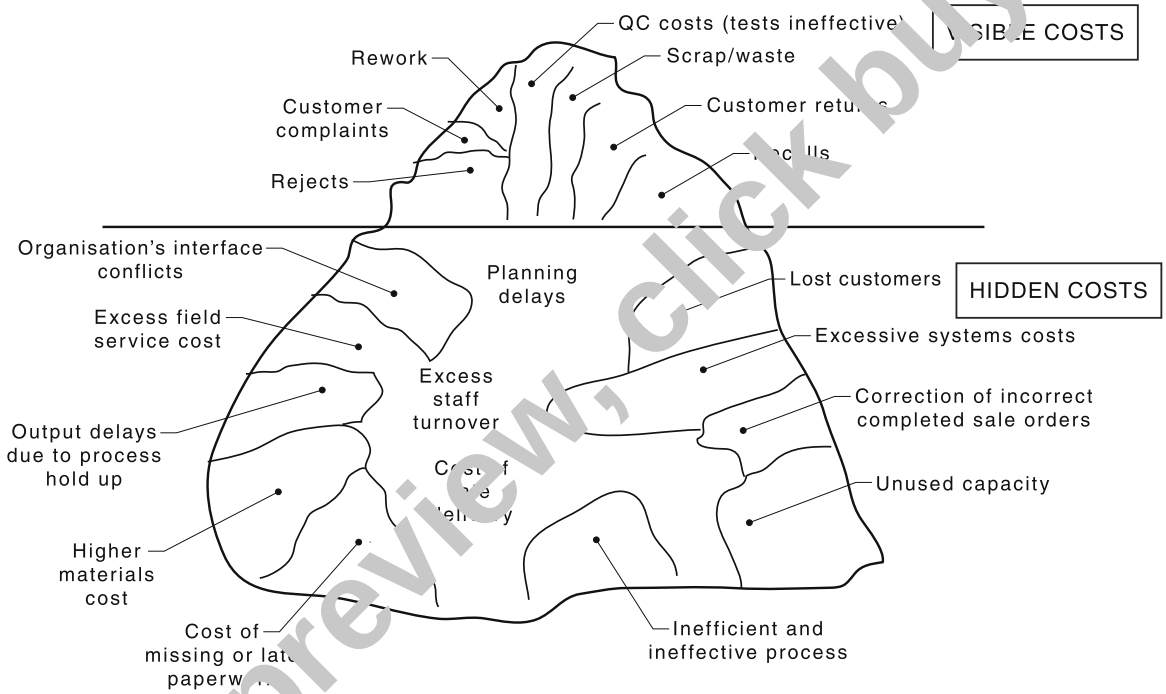

FIGURE 2 EXAMPLES OF VISIBLE AND HIDDEN COSTS OF QUALITY

STANDARDS AUSTRALIA

Australian Standard
Guide to the determination and the use of quality costs

1 SCOPE

This standard provides guidance on how to achieve economic benefits from the application of quality costs analysis and the use of cost data. It may be applied broadly to all organizations and at all levels within an organization. It is not intended to be used in contractual situations nor as a subject for third-party audits.

2 NORMATIVE REFERENCES

The following normative documents contain provisions that, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to periodic revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standards listed below.

AS/NZS ISO
9000 Quality management systems—Fundamentals and vocabulary

9001 Quality management systems—Requirements

NOTE: AS ISO 10014, *Quality management systems—Guidelines for realizing financial and economic benefits*, provides guidance to top management which may be relevant.

3 DEFINITIONS

For the purposes of this standard the definitions in AS/NZS ISO 9000 and the following definitions apply.

3.1 Actual cost

A cost required by the financial system of the organization to be separately identified and recorded.

3.2 Controls

Means of restraining or regulating.

NOTE: Controls embrace procedures, methods, plans, Standards policies, strategy and legislation.

3.3 Cost of conformity

Cost to fulfil stated and implied requirements.

3.4 Cost of nonconformity

Cost incurred due to failure to meet requirements.

3.5 Cost of quality

Costs incurred from failing to provide the required product in the most efficient and effective manner.

NOTE: The cost of poor quality represents the difference between the actual cost of providing a product that satisfies customer requirements, and the theoretical cost of providing the same fully conforming product if the organization's systems, processes and products were optimized to be perfectly efficient and effective, i.e. costs due to deficiencies or lack of quality in specification and design, materials and components, the processes or the supply system.

3.6 Effectiveness

Extent to which planned activities are realized and planned results achieved.