

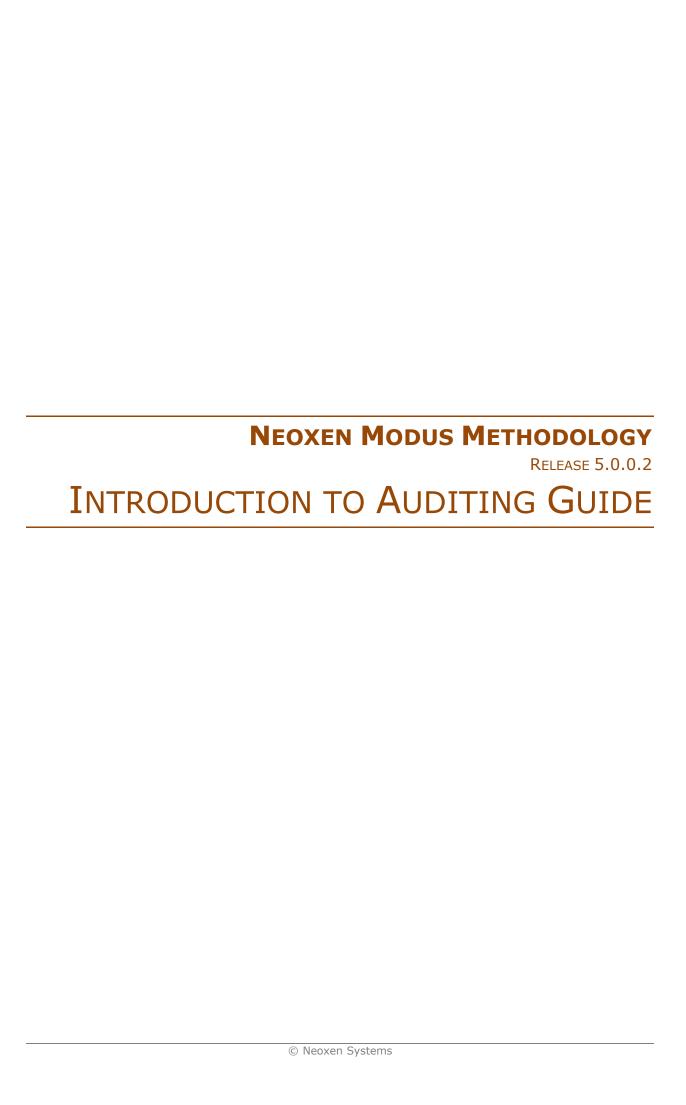
AUDITING

AUDITING GUIDE

NEOXEN MODUS METHODOLOGY

RELEASE 5.0.0







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1 About this Document

This document summarizes the contents, principles and objectives of Neoxen® Modus Auditing Guide. Neoxen® Modus is an industry standard methodology designed for Product Development, Project Work and Quality Assurance for international software and services companies.



The methodology is developed in a EUREKA project.

1.1 Intended Audience

This document is intended for project, account and product managers, corporate management, partners and customers.

1.2 Organization

This document is organized as follows:

Chapter	Contents			
Chapter 1	Describes the purpose of the document. It also explains the terminology and typographic conventions used in the document. A list of related documents can also be found in this chapter.			
Chapter 2	Introduces and outlines the Auditing Guide.			
Chapter 3	Describes the contents of the Auditing Guide.			

1.3 Typographic Conventions

Convention	Description			
Italics	Italicized Text is used to call attention to cross-references.			
Bold	Note	Important notes are written in bold.		

1.4 Terms and Concepts

The following abbreviations, terms and concepts are used in the document:

1.4.1 Abbreviations

Abbreviation	Meaning, definition		
<u>CMMI</u>	Capability Maturity Model Integration		
<u>ISO</u>	International Organization for Standardization		
MSF	Microsoft Solutions Framework		
<u>PMBOK</u>	Project Management Body of Knowledge		
<u>PMI</u>	Project Management Institute		
PRINCE2	Projects in Controlled Environments		
<u>QA</u>	Quality Assurance		
<u>QMS</u>	Quality Management System		
<u>SEI</u>	Software Engineering Institute		

1.4.2 Terminology

Term, Concept	Meaning, definition
Professional Services	Professional Services is an organization that provides a suite of services ranging from high-level consulting to improve business processes to custom application development, implementation, training and support.
Neoxen® Modus	Neoxen® Modus is a Product Development, Project Work and Quality Assurance Methodology based on over a decade of software engineering expertise, best industry practices and well-acknowledged standards and guidelines listed in <i>Appendix I</i> .

1.5 Related Documentation

The following list comprises all documents referred to herein. It also lists documents, which provide with additional information about this topic:

#	Document
[1]	Introduction to General Methodology Guide
[2]	Introduction to Project Management Guide
[3]	Introduction to Development Guide
[4]	Introduction to QA and Software Testing Guide
[5]	Introduction to Support Services Guide

2 Introduction

Neoxen® Modus Methodology is based on over a decade of software engineering and consultancy expertise, best industry practices and the well-acknowledged ISO standards and guidelines listed in *Appendix I.* Neoxen® Modus is verified against other accepted industry standards, such as PMI's PMBOK, Six Sigma, PRINCE2, SEI CMMI and MSF.

2.1 Introduction to Auditing Guide

The Auditing Guide describes the internal & external audit processes. It covers the planning, conducting and reporting of the results. The objective of an audit is to find improvement in project management, delivery, software development and quality assurance processes.

Although Auditing Guide is primarily intended for project, account and product managers, and for project team members, it is also suitable study material for all the company's representatives, integrators, partners and contractors.

There are templates and checklists available to project auditing and they are referred to in the guide. These templates and checklists give detailed information on how to audit customer deliveries, support, development, sales & service, etc.

2.2 Outlining

Standardizing project work methodology and Quality Assurance procedures aims at carrying out projects as production-like repeatable processes where agreed standard methods are followed systematically in project work, quality planning, defect management and correction, as well as in maintenance and support. Creating systematic auditing procedures aims at maintaining and continuously improving the organization's capability to deliver high quality solutions and services that meet and exceed the customer expectations.

Just as Quality Management Systems (QMS) are periodically audited, so must project management processes. As the organization is implementing an improved and consistent methodology, there is a need to check on how this is being applied and whether it is proportionate. One common failing is that the project methodology can consume a large proportion of the project resources for a disproportionate level of return. Alternatively, where there is a lack of adherence to project methodology, this leads to problems in control and communications.

To achieve proper level of adherence Neoxen® Modus defines a structured audit process similar to a Quality Audit that many should be familiar with. At the end of the audit, a report will be produced detailing the findings together with recommendations for improvements. This approach will ensure that the investment in the methodology and therefore the anticipated benefits of it are being realized.

2.3 Benefits of Using the Methodology

The methodology described in the Auditing Guide is applicable to projects of all sizes, using a 'light' version for small projects. The methodology presented in is used in feasibility study, change survey, specification and design projects, as well as in implementation and deployment projects. The methodology is not limited to software development and delivery projects, but may also be utilized in an applied form in product development or subcontracting projects, for example.

The use of the methods promotes systematization and repeatability and saves time in the long run. Plenty of time will be spent on and must be reserved for the study of the methodology in the first project. With each of the subsequent projects, the use of the methodology will become easier and more professional.

Project managers and personnel should also use this guide as a checklist from time to time, even after they have become familiar with the methodology.

3 Contents of the Auditing Guide

Auditing Guide describes the Neoxen® Modus auditing process. It is intended for guidance in planning, conducting and reporting the audit.

3.1 Objective of an Audit

The Auditing Guide defines the role of an audit within the Neoxen® Modus methodology. It describes the reasons as well as benefits of the following objectives:

- Find improvement areas in:
 - Project management process
 - Delivery process
 - Solution development process
 - Systems integration process
- Find out the methodology scope of application in projects
- Assist the project manager and the project team to pay attention to the issues that are important from the quality point of view

3.2 Audit Categories

Auditing Guide sets the following audit categories:

- Internal audit
 - Customer deliveries
 - Support
 - Solution development
 - Sales and customer service
 - Systems Integration
- Subsidiary company audit
- External audit
 - Suppliers
 - o Partners

Although recognizing a "failed" project is fairly easy, collecting the lessons learned and translating them into improved project management practices is performed sporadically or left up to the individual project manager. The audits in the categories listed above can be conducted either as post-project or pre-project.

3.2.1 The Post-project Audit

The post-project audit gives an overview of the critical incidents during the lifecycle of the project. The objective of the post-project audit is to make an evaluation of the project outcome and development process and make recommendations for the future.

3.2.2 The Pre-project Audit

At the end of the project definition phase, a pre-audit insures the definition is complete, the scope is well defined and a risk mitigation plan is in place.

3.3 Audit Program

Auditing Guide explains how the forthcoming audits are included in the audit program. General audits are planned beforehand for each quarter. During each quarter the quality assessment team suggests potential projects to be audited in the following quarter based on project follow-up, metrics and customer satisfaction. Also, the suggestions from other quality teams and managers are taken into consideration when planning forthcoming audits.

Appendix I: ISO Compliance

Neoxen Modus Methodology conforms to following standards:

Standards and Guidelines	Purpose
ISO 9000:2000, Quality management systems - Fundamentals and vocabulary	ISO 9000:2000, Quality management systems - Fundamentals and vocabulary
ISO 9001:2000, Quality management systems - Requirements	This is the requirement standard you use to assess your ability to meet customer and applicable regulatory requirements and thereby address customer satisfaction. It is now the only standard in the ISO 9000 family
	against which third-party certification can be carried.
ISO 9004:2000, Quality management systems - Guidelines for performance improvements	This guideline standard provides guidance for continual improvement of your quality management system to benefit all parties through sustained customer satisfaction.
ISO 19011, Guidelines on Quality and/or Environmental Management Systems Auditing (currently under development)	Provides you with guidelines for verifying the system's ability to achieve defined quality objectives. You can use this standard internally or for auditing your suppliers.
ISO 10005:1995, Quality management - Guidelines for quality plans	Provides guidelines to assist in the preparation, review, acceptance and revision of quality plans.
ISO 10006:1997, Quality management - Guidelines to quality in project management	Guidelines to help you ensure the quality of both the project processes and the project products.
ISO 10007:1995, Quality management - Guidelines for configuration management	Gives you guidelines to ensure that a complex product continues to function when components are changed individually.
ISO 10011-1:2002, Guidelines for quality and/or environmental management systems auditing - Part 1: Auditing	Gives you guidelines on the main requirements for auditing a quality system.
ISO 2382-1:1993, Information technology - Vocabulary - Part 1: Fundamental terms	Provides the standardized terminology.
ISO 10013:1995, Guidelines for developing quality manuals	Provides guidelines for the development, and maintenance of quality manuals, tailored to your specific needs.
ISO/TR 10014:1998, Guidelines for managing the economics of quality	Provides guidance on how to achieve economic benefits from the application of quality management.
ISO 10015:1999, Quality management - Guidelines for training	Provides guidance on the development, implementation, maintenance and improvement of strategies and systems for training that affects the quality of products.

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