neoxen®

Everyday We Build the Future

# PROJECT

PROJECT MANAGEMENT GUIDE

NEOXEN MODUS METHODOLOGY

RELEASE 4.0.0

# NEOXEN MODUS METHODOLOGY

RELEASE 4.0.0

# INTRODUCTION TO PROJECT MANAGEMENT GUIDE

## Documentation License

This documentation, as well as the software described in it, is furnished under license and may only be used or copied in accordance with the terms of the license. The information in this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Neoxen Systems.

Neoxen Systems assumes no responsibility or liability for any errors or inaccuracies that may appear in this document or any software that may be provided in association with this document. Except as permitted by such license, no part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the express written consent of Neoxen Systems.

Information in this document is provided in connection with the vendor products. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Neoxen Systems reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

## Trademarks

Neoxen, the Neoxen logo, Qwinux, Qwined, Trelox, Neoxen Kronos, Neoxen QX, Neoxen QX Framework, Neoxen Modus, Neoxen Visual Modus, Neoxen iModus and Neoxen Information Publisher are trademarks or registered trademarks of Neoxen Systems in USA and/or other countries.

Microsoft, Microsoft Office, Microsoft Windows and Microsoft Visual Studio are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Adobe, Acrobat and Acrobat Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Linux is a registered trademark of Linus Torvalds.

All other trademarks, registered trademarks and/or product names are property of their respective owners.

## Copyright



## Reader's Comments

A reader’s comments form is provided at the end of this document. Please take a moment and give us feedback on our documentation.

# Table of Contents

# 1 About this Document

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

## 1.1 Intended Audience

This document is intended for project and account managers, project personnel, 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 Project Management Guide. |
| Chapter 3 | Describes the contents of the Project Management 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 |
|---|---|
| CMMI | Capability Maturity Model Integration |
| CR | Change Request |
| ISO | International Organization for Standardization |
| MSF | Microsoft Solutions Framework |
| PMBOK | Project Management Body of Knowledge |
| PMI | Project Management Institute |
| PRINCE2 | Projects in Controlled Environments |
| RFA | Ready for Acceptance |
| RFP | Request for Proposal |
| QA | Quality Assurance |
| QMS | Quality Management System |
| SEI | Software Engineering Institute |
| SOW | Statement of Work |
| TR | Trouble Report |

### 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 ***Error! Reference source not found.***. |

## 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 Auditing 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 Project Management Guide

The Project Management Guide describes the standardized model for project work from the perspective of the company's project manager. It describes in detail the four main phases, approval procedures, as well as procedures and deliverables related to each phase.

Although the Project Management Guide is primarily intended for project and account managers, it is also suitable study material for all the company's representatives participating in the project work, including R&D and members of steering boards.

There are various work instructions, templates and checklists to support the Project Management Guide users. These provide detailed instructions on project planning and follow-up, meeting procedures, quality assurance measures, risk management, approval methods, etc.

## 2.2 Outlining

The Standish Group has unleashed with various studies that projects fail 72% of the time, and that $78 billion is wasted each year because of systems that do not work correctly. Furthermore Paul Strassman has issued findings indicating that there is no relevant relationship between the amount US companies spend on IT and any measure of their financial results (sales, profitability, or market value of the company).

Structured systems analysis, information engineering, rapid application development, the SEI Capability Maturity Model Integration, evolutionary delivery, extreme programming, and agile modeling are some of the approaches developed to help solve this problem. However, a critical requirement for a project success is collaboration between project teams on the one hand, and the business owners who will use the resulting solution. Results delivering collaboration, in turn, is impossible without three other factors:

- Professional Project Management
- Structured Coordination
- Established Processes

The success of implementing and continuously improving Project Management processes is dependent upon all employees understanding what is being asked and the benefits to be achieved through execution. Project management education will be critical to any organization to increase the ability to successfully implement a 'world class' project management methodology. Continuing education is needed to:

- Enhance the ability of all staff to make individual contributions to projects and methodology
- Enhance the ability of groups of individuals to function as a team
- Develop employee "soft" skills - the ability to communicate effectively and sensitively while recognizing individual differences
- Develop "hard" or technical skills - such as the ability to use Microsoft Project or other project and software tools

Well-educated and professional Project Management will determine the level of a project's success. Project managers utilizing Neoxen® Modus ensure that products and services are predictably delivered on time and within budget, providing the customers with a competitive advantage in their endeavors.

## 2.3 Benefits of Using the Methodology

The methodology described in the Project Management 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 any product development, hardware purchase or subcontracting projects, for example.

Each project will go through the same phases, some projects more systematically than others.

The use of the methods promotes systematization and repeatability and saves time in the long run. Some 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 should use this guide as a checklist from time to time, even after they have become familiar with the method.

# 3 Contents of the Project Management Guide

Standardizing project planning and management under the umbrella of Neoxen® Modus aims at carrying out projects as production-like repeatable processes where agreed standard methods are followed systematically in project planning, task assignments, as well as in supervising and managing work.

Project Management Guide does not describe:

- Phases (feasibility study, specification, software design and implementation), tasks or deliverables related to Software Development or Project Deliveries, which have been described in the other related Neoxen® Modus guides
- Phases related to the financial preparation or decision making, tendering and contract negotiations of projects
- Quality planning, which forms a separate and extensive theme

The Project Management Guide starts from the assumption that a contract has been signed and the project will be launched.

Furthermore, the Project Management Guide assumes that the Supplier and the Customer are from different organizations. If the project in question is internal, it is advisable to use the same methodology, but at discretion in an applied form.

Project Management Guide covers seven major areas relating to successful project management.

## 3.1 Project Organization

This part of the guide describes the objectives, prerequisites, responsibilities, tasks and procedures of

- Steering Board
- Assistant Team
- Project Manager
- Project Team Members
- External Project Control (Project Controller’s Role)

## 3.2 Project Planning and Startup

This part of the guide defines the objectives and steps in project planning and startup. It contains illustrative process charts and lists the expected deliverables.

Practical tips and instructions are given in the following aspects:

- Getting Familiar with the Project
- Re-checking the Prerequisites
- Outlining
- Workload Estimates, Scheduling and Task Assignment
- Careful Planning and Iteration

## 3.3 Project Management and Implementation

This part of the Project Management Guide defines the objectives and steps in project management and implementation phases. It contains illustrative process charts and lists the expected deliverables.

Practical tips are given in the following aspects:

- Project Meetings as Management Tool
- Steering Board to Support the Project Manager

  Freezing a Situation Before Delivery
- How to Write a Good Status Report to the Steering Board
- How to Handle Crises
- How to Maintain Good Team Spirit

## 3.4 Change Request Management in a Project

This part of the Project Management Guide defines the processes in Change Request Management. It contains illustrative process charts and lists the appropriate acceptance criteria.

## 3.5 Approval Procedures

This part of the Project Management Guide describes the objectives, prerequisites, points and steps relating approval procedures. It contains illustrative process charts and lists the expected deliverables.

## 3.6 Completing the Project and Transferring the Delivery to Maintenance

This part of the Project Management Guide describes the objectives, prerequisites and steps relating project completion. It contains illustrative process charts and lists the expected deliverables.

## 3.7 Quality Assurance during the Project

This part of the Project Management Guide describes the relevant Quality Assurance instructions, reviews, inspection meetings and defines the following metrics:

- Operative Metrics Monitored during the Project
  - Project Metrics
  - Metrics of Change Request Management
- Strategic Metrics Collected on Project Completion
  - Financial Success
  - Project Implementation and Steering Metrics
  - Metrics of the Project Deliverable

# 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.<br>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. |

# Reader's Comments

We welcome your comments and suggestions on this manual. Your input will help us to write documentation that meets your needs. Please print this page, insert your comments and send it to us either by mail or by faxing it to the following number:

**Fax: +358 2 232 2884, Attn: Document Feedback**

If you have any other comments and you do not use this form, please be sure to report the name and version of the document, the page number, and the product name and release. Send your comments via email to the following address:

**Internet Electronic Mail:** support@neoxen.com

| **Please rate this document:** | **Excellent** | **Good** | **Fair** | **Poor** |
|---|---|---|---|---|
| Accuracy (software works as manual says) | [ ] | [ ] | [ ] | [ ] |
| Completeness (enough information) | [ ] | [ ] | [ ] | [ ] |
| Clarity (easy to understand) | [ ] | [ ] | [ ] | [ ] |
| Organization (structure of subject matter) | [ ] | [ ] | [ ] | [ ] |
| Figures, if any (useful) | [ ] | [ ] | [ ] | [ ] |
| Examples, if any (useful) | [ ] | [ ] | [ ] | [ ] |
| Index, if any (ability to find topics) | [ ] | [ ] | [ ] | [ ] |
| Usability (ability to access information fast) | [ ] | [ ] | [ ] | [ ] |

**Please list errors that you have found in this document:**

| Page | Description |
|---|---|
| | |
| | |
| | |
| | |

**Additional comments and suggestions to improve this document:**

**What version of the software described in this document are you using?**

| | | | |
|---|---|---|---|
| Name/Title | | Dept. | |
| Company | | Date | |
| Mailing Address | | | |
| Email | | Phone | |

neoxen®

Everyday We Build the Future

**Headquarters, R&D**
**Turku, Finland**

Neoxen Systems
Joukahaisenkatu 1
FIN-20520 TURKU
Finland

Phone: +358 2 232 2883
Fax: +358 2 232 2884
info@neoxen.com
http://www.neoxen.com