

9110 Correlation matrices

9110:2016 to 9110:2012

9110:2012 to 9110:2016

This document provides correlation matrices from 9110:2016 to 9110:2012 and 9110:2012 to 9110:2016.

This document can be used to highlight where the new, revised and deleted clauses are located, as well as the location of clauses that are unchanged.

Please note that Annex A in 9110:2016 states the following:

A.1 Structure and terminology

- *The clause structure (i.e. clause sequence) and some of the terminology of this edition of this International Standard, in comparison with the previous edition (9110:2012), have been changed to improve alignment with other management systems standards.*
- *There is no requirement in this International Standard for its structure and terminology to be applied to the documented information of an organization's quality management system.*
- *The structure of clauses is intended to provide a coherent presentation of requirements, rather than a model for documenting an organization's policies, objectives and processes. The structure and content of documented information related to a quality management system can often be more relevant to its users if it relates to both the processes operated by the organization and information maintained for other purposes.*
- *There is no requirement for the terms used by an organization to be replaced by the terms used in this International Standard to specify quality management system requirements. Organizations can choose to use terms which suit their operations (e.g. using "records", "documentation" or "protocols" rather than "documented information"; or "supplier", "partner" or "vendor" rather than "external provider"). Information on the major differences in terminology between this edition of this International Standard and the previous edition can be found in Table A.1 of 9110:2016.*

9110:2016 and 9110:2012

Correlation Matrix

9110:2016		9110:2012	
4	Context of the organization	1	Scope
4.1	Understanding the organization and its context	1.1	General requirements
4.2	Understanding the needs and expectations of interested parties	1.1	General requirements
4.3	Determining the scope of the quality management system	1.2	Application 4.2.2 Quality manual
4.4	Quality management system and its processes	4	Quality management system 4.1 General requirements
5	Leadership	5	Management responsibility
5.1	Leadership and commitment	5.1	Management commitment
5.1.1	General	5.1	Management commitment
5.1.2	Customer focus	5.2	Customer focus
5.2	Policy	5.3	Quality policy
5.2.1	Establishing the quality policy	5.3	Quality policy
5.2.2	Communicating the quality policy	5.3	Quality policy
5.2.3	<i>Establishing and communicating the safety policy</i>	5.7	<i>Safety policy</i> 5.4.3 <i>Safety objectives</i>
5.3	Organizational roles, responsibilities and authorities	5.5.1	Responsibility and authority 5.5.2 Management representative 5.4.2 Quality management system planning
5.3.1	<i>Accountable manager</i>	5.5.1.1	<i>Accountable manager</i>
5.3.2	<i>Quality manager</i>		
5.3.3	<i>Other appointed manager(s)</i>	5.5.1.2	<i>Maintenance manager(s)</i>
6	Planning		
6.1	Actions to address risks and opportunities	5.4.2	Quality management system planning 8.5.3 Preventive action
6.2	Quality objectives and planning to achieve them	5.4.1	Quality objectives 5.4.3 <i>Safety objectives</i>
6.3	Planning of changes	5.4.2	Quality management system planning
7	Support	6	Resource management
7.1	Resources	6	Resource management
7.1.1	General	6.1	Provision of resources
7.1.2	People	6.1	Provision of resources
7.1.3	Infrastructure	6.3	Infrastructure
7.1.4	Environment for the operation of processes	6.4	Work environment
7.1.5	Monitoring and measuring resources	7.6	Control of monitoring and measuring

	equipment
7.1.5.1 General	7.6 Control of monitoring and measuring equipment
7.1.5.2 Measurement traceability	7.6 Control of monitoring and measuring equipment
7.1.6 Organizational knowledge	
7.2 Competence	6.2.1 General 6.2.2 Competence, training and awareness
7.3 Awareness	6.2.2 Competence, training and awareness
7.4 Communication	5.5.3 Internal communication
7.5 Documented information	4.2 Documentation requirements
7.5.1 General	4.2.1 General
7.5.2 Creating and updating	4.2.3 Control of documents 4.2.4 Control of records
7.5.3 Control of documented Information	4.2.3 Control of documents 4.2.4 Control of records
8 Operation	7 Product realization
8.1 Operational planning and control	7.1 Planning of product realization <i>7.1.1 Project Management</i>
<i>8.1.1 Operational risk management</i>	<i>7.1.2 Risk Management</i>
<i>8.1.2 Configuration management</i>	<i>7.1.3 Configuration Management</i>
<i>8.1.3 Product safety</i>	<i>7.1 Planning of product realization</i>
<i>8.1.4 Prevention of counterfeit Parts</i>	
<i>8.1.5 Prevention of suspected unapproved parts</i>	
<i>8.1.6 Installation of approved parts</i>	
8.2 Requirements for products and services	7.2 Customer-related processes
8.2.1 Customer communication	7.2.3 Customer communication
8.2.2 Determining the requirements for products and services	7.2.1 Determination of requirements related to the product
8.2.3 Review of requirements for products and services	7.2.2 Review of requirements related to the product
8.2.4 Changes to requirements for products and services	7.2.2 Review of requirements related to the product
8.3 Design and development of products and services	7.3.1 Design and development planning
8.3.1 General	7.3.1 Design and development planning
8.3.2 Design and development planning	7.3.1 Design and development planning
8.3.3 Design and development inputs	7.3.2 Design and development inputs
8.3.4 Design and development controls	7.3.4 Design and development review 7.3.5 Design and development verification 7.3.6 Design and development validation
8.3.5 Design and development outputs	7.3.3 Design and development outputs
8.3.6 Design and development changes	7.3.7 Control of design and development changes
8.4 Control of externally provided processes,	7.4.1 Purchasing process

products and services	
8.4.1 General	7.4.1 Purchasing process
8.4.2 Type and extent of control	7.4.1 Purchasing process 7.4.3 Verification of purchased product
	7.4.3 Verification of purchased product
8.4.3 Information for external providers	7.4.2 Purchasing information 7.4.3 Verification of purchased product
8.5 Production and service provision	7.5 Production and service provision
8.5.1 Control of production and service provision	7.5.1 Control of production and service provision 7.5.2 Validation of processes for production and service provision
<i>8.5.1.1 Control of equipment, tools and software programs</i>	<i>7.5.1.3 Control of Maintenance Equipment, Tools and Software Programs</i>
<i>8.5.1.2 Validation and control of special processes</i>	<i>7.5.1.4 Validation and control of special processes</i>
<i>8.5.1.3 Production process verification (not applicable)</i>	
<i>8.5.1.4 Evaluation of new capability</i>	<i>7.5.1.1 Maintenance process verification</i>
8.5.2 Identification and traceability	7.5.3 Identification and traceability
8.5.3 Property belonging to customers or external providers	7.5.4 Customer property
8.5.4 Preservation	7.5.5 Preservation of product
8.5.5 Post-delivery activities	7.5.1 Control of production and service provision <i>7.5.1.4 Post-delivery support</i>
8.5.6 Control of changes	7.3.7 Control of Design and Development Changes <i>7.5.1.2 Control of Maintenance Process Changes</i>
8.6 Release of products and services	7.4.3 Verification of purchased product 8.2.4 Monitoring and measurement of product
8.7 Control of nonconforming outputs	8.3 Control of nonconforming product
9 Performance evaluation	8 Measurement, analysis and improvement
9.1 Monitoring, measurement, analysis and evaluation	8 Measurement, analysis and improvement
9.1.1 General	8.1 General 8.2.3 Monitoring and Measurement Processes
9.1.2 Customer satisfaction	8.2.1 Customer satisfaction
9.1.3 Analysis and evaluation	8.4 Analysis of data
9.2 Internal audit	8.2.2 Internal audit
9.3 Management review	5.6 Management review
9.3.1 General	5.6.1 General
9.3.2 Management review inputs	5.6.2 Review input
9.3.3 Management review outputs	5.6.3 Review output
10 Improvement	
10.1 General	8.5.1 Continual improvement

10.2 Nonconformity and corrective action	8.3 Control of nonconforming product 8.5.2 Corrective action
10.3 Continual Improvement	8.5.1 Continual improvement 8.5.3 Preventive action

9110:2012 and 9110:2016

Correlation Matrix

9110:2012	9110:2016
4 Quality management system	4 Context of the organization
4.1 General requirements	4.4 Quality management system and its processes 8.4 Control of externally provided processes, products and services
4.2 Documentation requirements	7.5 Documented information
4.2.1 General	7.5.1 General
4.2.2 Quality manual	4.3 Determining the scope of the quality management system 7.5.1 General 4.4 Quality management system and its Processes
4.2.3 Control of documents	7.5.2 Creating and updating 7.5.3 Control of documented Information
4.2.4 Control of records	7.5.2 Creating and updating 7.5.3 Control of documented Information
5 Management responsibility	5 Leadership
5.1 Management commitment	5.1 Leadership and commitment
5.2 Customer focus	5.1.2 Customer focus
5.3 Quality policy	5.2 Policy 5.2.1 Establishing the quality policy 5.2.2 Communicating the quality policy
5.4 Planning	6 Planning
5.4.1 Quality objectives	6.2 Quality objectives and planning to achieve them
5.4.2 Quality management system planning	6 Planning 6.1 Actions to address risks and opportunities 6.3 Planning of changes
5.4.3 <i>Safety Objectives</i>	5.2.3 <i>Establishing and communicating the safety policy</i>

5.5	Responsibility, authority and communication	5	Leadership
5.5.1	Responsibility and authority	5.3	Organizational roles, responsibilities and authorities
	<i>5.5.1.1 Accountable manager</i>		<i>5.3.1 Accountable manager</i>
	<i>5.5.1.2 Maintenance manager(s)</i>		<i>5.3.3 Other appointed manager(s)</i>
5.5.2	Management representative	5.3	Organizational roles, responsibilities and authorities
5.5.3	Internal communication	7.4	Communication
5.6	Management review	9.3	Management review
5.6.1	General	9.3.1	General
5.6.2	Review input	9.3.2	Management review input
5.6.3	Review output	9.3.3	Management review output
5.7	<i>Safety policy</i>	5.2.3	<i>Establishing and communicating the safety policy</i>
6	Resource management	7	Support
6.1	Provision of resources	7.1	Resources
		7.1.1	General
		7.1.2	People
6.2	Human resources	7.2	Competence
6.2.1	General	7.2	Competence
6.2.2	Competence, training and awareness	7.2	Competence
		7.3	Awareness
6.3	Infrastructure	7.1.3	Infrastructure
6.4	Work environment	7.1.4	Environment for the operation of processes
7	Product realization	8	Operation
7.1	Planning of product realization	8.1	Operational planning and control
		8.1.3	<i>Product safety</i>
	<i>7.1.1 Project Management</i>	8.1	Operational planning and control
	<i>7.1.2 Risk Management</i>	8.1.1	<i>Operational risk management</i>
	<i>7.1.3 Configuration Management</i>	8.1.2	<i>Configuration Management</i>
	<i>7.1.4 Control of Work Transfers</i>	8.1	Operational planning and control
7.2	Customer-related processes	8.2	Requirements for products and services
7.2.1	Determination of requirements related to the product	8.2.2	Determining the requirements for products and services
7.2.2	Review of requirements related to the product	8.2.3	Review of requirements for products and services
		8.2.4	Changes to requirements for products and services
7.2.3	Customer communication	8.2.1	Customer communication
7.3	Design and development	8.3	Design and development of products and services
7.3.1	Design and development planning	8.3.1	General

	8.3.2 Design and development planning
7.3.2 Design and development inputs	8.3.3 Design and development Inputs
7.3.3 Design and development outputs	8.3.5 Design and development outputs
7.3.4 Design and development review	8.3.4 Design and development controls
7.3.5 Design and development verification	8.3.4 Design and development controls
7.3.6 Design and development validation	8.3.4 Design and development controls
<i>7.3.6.1 Design and Development Verification and Validation Testing</i>	<i>8.3.4.1(no title)</i>
<i>7.3.6.2 Design and Development Verification and Validation Documentation</i>	<i>8.3.4.1(no title)</i>
7.3.7 Control of design and development changes	8.3.6 Design and development changes
7.4 Purchasing	8.4 Control of externally provided processes, products and services
7.4.1 Purchasing process	8.4.1 General 8.4.2 Type and extent of control
7.4.2 Purchasing information	8.4.3 Information for external providers
7.4.3 Verification of purchased product	8.4.3 Information for external providers 8.6 Release of products and services
7.5 Production and service provision	8.5 Production and service provision
7.5.1 Control of production and service provision	8.5.1 Control of production and service provision 8.5.5 Post-delivery activities
<i>7.5.1.1 Maintenance Process Verification</i>	<i>8.5.1.4 Evaluation of new capability</i>
<i>7.5.1.2 Control of Maintenance Process Changes</i>	8.1 Operational planning and control
<i>7.5.1.3 Control of Maintenance Equipment, Tools and Software Programs</i>	<i>8.5.1.1Control of equipment, tools and software programs</i>
<i>7.5.1.4 Post-delivery support</i>	8.5.5 Post-delivery activities
7.5.2 Validation of processes for production and service provision	8.5.1 Control of production and service provision
7.5.3 Identification and traceability	8.5.2 Identification and traceability
7.5.4 Customer property	8.5.3 Property belonging to customers or external providers
7.5.5 Preservation of product	8.5.4 Preservation
7.6 Control of monitoring and measuring equipment	7.1.5 Monitoring and measuring resources 7.1.5.1 General 7.1.5.2 Measurement traceability
8 Measurement, analysis and improvement	9 Performance evaluation 9.1 Monitoring, measurement, analysis and evaluation
8.1 General	9.1.1 General

8.2 Monitoring and measurement	9.1 Monitoring, measurement, analysis and evaluation
8.2.1 Customer satisfaction	9.1.2 Customer satisfaction
8.2.2 Internal audit	9.2 Internal audit
8.2.3 Monitoring and measurement of processes	9.1.1 General
8.2.4 Monitoring and measurement of product	8.6 Release of products and services
8.3 Control of nonconforming product	8.7 Control of nonconforming outputs
8.4 Analysis of data	9.1.3 Analysis and evaluation
8.5 Improvement	10 Improvement
8.5.1 Continual improvement	10.1 General 10.3 Continual Improvement
8.5.2 Corrective action	10.2 Nonconformity and corrective action
8.5.3 Preventive action	6.1 Actions to address risks and opportunities (see 6.1.1, 6.1.2)