ISO 9001:2000 to CMMI v1.2 Map

Table 1: ISO 9001:2000 Section 4, Quality management system

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
4	Quality management system				
4.1	General requirements				
	Establish QMS	All PAS OPD OPD OPD OPF OPF OPF	GP 2.1 SP 1.1 SP 1.2 SP 1.3 SP 3.1 SP 3.2 SP 3.3 SP 3.4	100 100 100 100 100 100 100 100	
	Identify processes	OPD	SP 1.1	100	
	Determine sequence	OPD	SP 1.1	100	
	Effective operation	OID OPF	SP 2.1 SP 3.3	30 30	
	Resources	All PAs	GP 2.3	100	
	Monitor processes	All PAs All PAs	GP 2.8 GP 2.9	100 100	
	Implement actions	OPF OPF	SP 2.1 SP 2.2	100 100	
	Manage using ISO standard	All PAs	GP 2.1	60	Organizational policies must address ISO 9001
	Control outsourced processes	SAM SAM SAM	SP 1.3 SP 2.1 SP 2.2	100 100 100	
	Outsourced process control in QMS	SAM SAM SAM SAM	GP 2.2 SP 1.3 SP 2.2 SP 2.3	100 100 100 100	
4.2	Documentation requirements				
4.2.1	General				
	Document quality policy	All PAs	GP 2.1	100	
	Document quality manual	OPD OPD OPD	SP 1.1 SP 1.2 SP 1.3	100 100 100	
	Document procedures	OPD OPD OPD	SP 1.1 SP 1.2 SP 1.3	100 100 100	
	Records	PP PPQA	SP 2.3 SP 2.2	30 100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
4.2.2	Quality Manual				
	Establish Quality Manual				
	QMS scope	OPD	SP 1.1	60	
	Establish QMS procedures	All PAs	GP 2.2	60	
	Describe process interaction	OPD	SP 1.1	100	See subpractice 3
4.2.3	Control of documents				
	Control required documents	All PAs PMC PP	GP 2.6 SP 1.4 SP 2.3	100 100 100	
	Control records	PMC PP	SP 1.4 SP 2.3	60 60	
	Document control procedure	CM	GP 2.2	60	
	Approve documents	CM	GP 2.2	60	
	Review & update	CM	SP 2.2	30	
	Identify changes	CM	SP 2.2	100	
	Relevant versions available	All PAs	GP 2.6	100	
	Identifiable documents			0	
	Control external documents	CM	SP 1.1	100	
	Obsolete documents	CM	SP 3.2	30	
	Identify documents	CM	SP 1.1	100	
4.2.4	Control of records				
	Records provide evidence of conformity	PPQA PP	SP 2.2 SP 2.3	100 60	ISO 9001 requirement partially addressed. Conformity is generally addressed in SCAMPI.
	Records identifiable			0	
	Record control procedure	All PAs CM	GP 2.6 GP 2.2	60 100	

Table 2: ISO 9001:2000 Section 5, Management responsibility

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
5	Management responsibility				
5.1	Management commitment				
	Communicate importance	All PAs	GP 2.1	60	
	Quality policy	All PAs	GP 2.1	60	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Quality objectives	All PAs	GP 2.10	100	This addresses evidence of commitment. Specific objectives are addressed in section 5.4.1
	Management review	All PAs	GP 2.10	100	
	Resource availability	All PAs	GP 2.3	100	
5.2	Customer focus				
	Determine customer requirements	RD RD REQM REQM	GP 2.1 GP 2.10 GP 2.1 GP 2.10	100 100 100 100	CMMI does not focus on enhancing customer satisfaction
5.3	Quality policy				
	Top management quality policy responsibility	AH 5	000	105	
	Appropriate to organization	All PAs OPF	GP 2.1 SP 1.1	100 100	
	Commitment to comply	OPF	GP 2.1	100	
	Framework for quality objectives	MA OPF OPF PPQA	GP 2.10 GP 2.1 GP 2.10 GP 2.10	100 100 100 100	
	Communicated	OPF	GP 2.1	100	
5.4	Planning				
5.4.1	Quality objectives				
	Quality objectives established	MA MA OPF OPF OPP OPP QPM QPM	GP 2.10 SP 1.1 GP 2.10 SP 1.1 GP 2.10 SP 1.3 GP 2.10 SP 1.1	100 100 100 100 100 100 100 100	
	Measurable objectives	OPP QPM	SP 1.3 SP 1.1	100 100	
5.4.2	Quality management system planning	0.05	00010	105	
	Plan to meet quality objectives Maintain QMS integrity	OPD OPF OPD	GP 2.10 GP 2.10 GP 2.6	100 100 60	
5.5	Responsibility, authority and communication				
5.5.1	Responsibility and authority				
	Top management defines responsibility	All PAs	GP 2.4	100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
5.5.2	Management representative				
	Appoint member of management	OPF	GP 2.4	100	
	Establish QMS processes	OPD OPF	GP 2.4 GP 2.4	100 100	
	Report performance of QMS	OPF	GP 2.10	100	
	Customer requirement awareness	RD REQM	GP 2.10 GP 2.10	60 60	
5.5.3	Internal communication				
	Establish communication processes	OPD OPF OPF	GP 2.10 GP 2.1 GP 2.10	100 100 100	
5.6	Management review				
5.6.1	General				
	Review QMS	OPD OPF	GP 2.10 GP 2.10	100 100	
	Assess improvement opportunities	OPF OPF	GP 2.10 SP 1.2 SP 1.3	100 100 100	
	Maintain records	OPD OPF	GP 2.6 GP 2.6	60 60	
5.6.2	Review input				
	Audit	PPQA	GP 2.10	100	
	Customer			0	
	Conformity	PPQA	GP 2.10	100	
	Preventive action	CAR	GP 2.10	60	
	Follow-up	All PAs	GP 2.10	100	
	QMS plans	OPF	GP 2.10	100	
	Improvement	OID OPF	GP 2.10 GP 2.10	100 100	
5.6.3	Review output	-	-		
	Improve effectiveness	OPF	GP 2.10	60	
	Improve product	All PAs	GP 2.10	60	
	Resources	All PAs All PAs	GP 2.3 GP 2.10	100 100	

Table 3: ISO 9001:2000 Section 6, Resource Management

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
6	Resource Management				
6.1	Provision of resources				
	Implement & maintain QMS	All PAs OPD	GP 2.3 SP 1.6	100 60	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Enhance customer satisfaction	All PAs	GP 2.3	30	Customer satisfaction is not explicitly addressed but is implied through many PAs
6.2	Human resources				
6.2.1	General				
	Staff has needed skills	All PAs OT	GP 2.5 All SPs	100 100	
6.2.2	Competence, awareness and training				
	Determine competence	OT OT PP	SP 1.1 SP 1.2 SP 2.5	100 30 100	
	Provide training	All PAs OT OT OT	GP 2.5 SP 1.3 SP 1.4 SP 2.1	100 100 100 100	
	Evaluate effectiveness	OT	SP 2.3	100	
	Ensure awareness of importance	IPM	SP 3.1	100	Uses IPPD
	Maintain records	OT	SP 2.2	100	
6.3	Infrastructure				
	Provide services and equipment	All PAs IPM OPD PI PP VAL VER	GP 2.3 SP 1.3 SP 1.6 SP 1.2 SP 2.4 SP 1.2 SP 1.2	100 100 100 100 100 100 100	
6.4	Work environment				
	Maintain environment to meet requirements	All PAS IPM OPD PI PP VAL VER	GP 2.3 SP 1.3 SP 1.6 SP 1.2 SP 2.4 SP 1.2 SP 1.2	100 100 100 100 100 100 100	

Table 4: ISO 9001:2000 Section 7, Product realization

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
7	Product realization				
7.1	Planning product realization				

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Develop needed processes	OPD	SP 1.1	100	
		OPD	SP 1.2	100	
	Planning is consistent with	OPD All PAs	SP 1.3 GP 2.2	100 100	
	Planning is consistent with other processes	All PAs	GP 2.2 GP 3.1	100	
	other processes	IPM	SP 1.1	100	
		IPM	SP 1.4	100	
		OPD	SP 1.1	100	
		OPD	SP 1.2	100	
		OPD	SP 1.3	100	
		PP PP	SP 2.7	100	
	Quality objectives	RD	SP 3.1 SP 1.2	100 100	
	Quality objectives	RD	SP 1.2 SP 2.1	100	
		RD	SP 2.3	100	
		RD	SP 3.2	100	
		QPM	SP 1.1	100	
	Establish processes	IPM	SP 1.1	100	
		PP	GP 2.2	100	
	Determine activities	IPM	SP 1.1	100	
	Determine records	PP All PAs	SP 1.3 GP 2.6	100	
	Determine records	PP	SP 2.6	100 100	
	Plans in appropriate format	All PAs	GP 2.2	100	
		PP	SP 2.7	100	
7.2	Customer-related processes				
7.2.1	Determination of requirements related to the product				
	Customer requirements	RD	SP 1.1	100	
	Unstated requirements	RD	SP 1.2	100	
		RD	SP 2.1	100	
		RD	SP 2.3	100	
		RD	SP 3.1	100	
	Statutory requirements	RD RD	SP 3.2 SP 1.1	100 100	
	Additional requirements	טאו	01 1.1	0	
7.2.2	Review of requirements			-	
1.2.2	related to the product				
	Organization reviews	RD	SP 3.3	100	
	requirements	RD	SP 3.4 SP 3.5	100	
		RD RD	GP 2.7	100 100	
		REQM	SP 1.1	100	
		REQM	GP 2.7	100	
	Review before commitment	REQM	SP 1.2	100	
	Requirements are defined	RD	SP 3.3	100	
		REQM	SP 1.1	100	
	Differing requirements	REQM	SP 1.3	30	
	Able to meet requirements	RD	SP 3.3	30	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Records are kept	RD REQM	GP 2.6 GP 2.6	100 100	
	Confirm understanding of requirements	RD RD RD REQM	SP 1.2 SP 2.1 SP 3.5 SP 1.1	100 30 100 100	
	Keep documents current when requirements change	REQM REQM	SP 1.3 SP 1.5	100 100	
7.2.3	Customer communication				
	Communicate product information	RD RD RD RD RD REQM	GP 2.7 SP 1.1 SP 1.2 SP 3.1 SP 3.5 SP 1.1	100 100 100 100 100 100	
	Inquiries	IPM	SP 2.1	30	
	Customer feedback	All PAs	GP 2.7	30	Customer complaints not explicitly addressed in CMMI
7.3	Design and development				
7.3.1	Design and development planning				
	Plan design and development	IPM IPM PI PP TS VAL VER	SP 1.4 SP 1.5 SP 1.1 SP 2.7 GP 2.2 SP 1.1 SP 1.1	100 100 100 100 100 100 100	This mapping is guided by material in ISO 9004 and ISO 90003.
	Determine stages	IPM PI PP TS	SP 1.1 GP 2.2 SP 1.3 GP 2.2	100 100 100 100	
	Determine verification & validation Determine responsibility	VAL VER PI TS	SP 1.1 SP 1.1 GP 2.4 GP 2.4	100 100 100 100	
	Manage interfaces	IPM IPM IPM IPM PI RD TS VAL VER	SP 2.1 SP 2.2 SP 2.3 SP 3.5 GP 2.7 GP 2.7 GP 2.7 GP 2.7 GP 2.7 GP 2.7	100 100 100 100 100 100 100 100 100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Update plans during development	IPM IPM PP	SP 1.1 SP 1.4 All SPs	100 100 100	
7.3.2	Design and development inputs				
	Determine inputs to development processes	RD RD RD RD	SP 1.1 SP 1.2 SP 2.1 SP 3.2	100 100 100 100	
	Functional requirements	RD RD	SP 2.1 SP 3.2	100 100	
	Statutory requirements	RD RD	SP 1.1 SP 1.2	100 100	
	Similar designs	IPM	SP 1.2	60	
	Other requirements	RD RD RD RD	SP 1.2 SP 2.1 SP 2.3 SP 3.1	100 100 100 100	
	Review inputs	RD RD RD	SP 3.3 SP 3.4 SP 3.5	100 60 100	
	Requirements are consistent and clear	RD RD RD	SP 3.3 SP 3.4 SP 3.5	100 100 100	
7.3.3	Design and development outputs				
	Outputs are verifiable	TS TS TS TS	SP 2.1 SP 2.2 SP 2.3 SP 3.1 SP 3.2	100 100 100 100 100	
	Outputs approved	TS TS	SP 3.1 SP 3.2	30 30	
	Meet input requirements	TS TS TS TS TS	SP 1.1 SP 1.2 SP 2.1 SP 3.1 SP 3.2	100 100 100 100 100	
	Provide information	TS TS TS TS	SP 1.1 SP 1.2 SP 2.2 SP 2.4	30 30 100 100	
	Acceptance criteria	VAL VER	SP 1.3 SP 1.3	60 60	
	Specify characteristics	TS	SP 2.2	60	
7.3.4	Design and development review				
	Development reviewed and evaluated	PMC PMC PMC	SP 1.6 SP 1.7 SP 2.1	100 100 100	

Identify problems	Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
PMC SP 1.7 100 PMC SP 2.1 100 PMC SP 2.2 30 PMC GP 2.7 100 PMC GP 2.7 100 PMC GP 2.6 100 PMC GMC GM		Identify problems	_	• · · · · · · · · · · · · · · · · · · ·		
PMC SP 2.1 100			-			
Appropriate functions participate in reviews IPM SP 2.1 100 SP 2.2 30 IPM SP 2.2 30 IPM SP 2.2 30 IPM SP 2.3 30 IPM SP 2.3 30 IPM SP 2.3 30 IPM SP 2.5 30 IPM SP 2.5 30 IPM SP 2.5 30 IPM SP 2.5 30 IPM SP 2.6 60 IPM GP 2.6 60 IPM GP 2.6 60 IPM GP 2.6 100			_	_		
Participate in reviews IPM SP 2.2 30 New IPM SP 2.3 30 New SP 2.5 100 New SP 2.6 100 New SP 2.2 100 New SP 2.4 100 New SP 2.4 100 New SP 2.6 N		Appropriate functions	_			
PMC GP 2.7 100 1				_		
Records of review are kept		participate in reviews				
PMC GP 2.6 100			PMC	GP 2.7	100	
Verification		•				
Keep verification records	7.3.5	verification				
7.3.6 Design and development validation VAL All SPs 100 Validation follows plans VAL All SPs 100 Validate before delivery RD SP 3.5 100 Keep validation records RD GP 2.6 100 VAL GP 2.6 100 VAL GP 2.6 100 VAL GP 2.6 60 GP 2.6 60 60 Hentify changes CM SP 3.1 100 Pl GP 2.6 60 GP 2.6 60 60 Review and approve changes CM SP 2.1 100 CM SP 2.2 100 Evaluate effect of changes CM SP 2.1 100 Keep records of changes CM SP 2.1 100 Keep records of changes CM SP 3.1 100 For 2.6 60 60 60 TS GP 2.6 60 TS GP 2.6 60 TS S		Ensure requirements are met	VER	All SPs	100	
validation VAL All SPs 100 Validation follows plans VAL All SPs 100 Validate before delivery RD SP 3.5 100 Keep validation records RD GP 2.6 100 7.3.7 Control of design and development changes CM GP 2.6 60 Identify changes CM SP 3.1 100 Pl Pl GP 2.6 60 60 GP 2.6 60 Review and approve changes CM SP 2.1 100 SP 2.2 100 Evaluate effect of changes CM SP 2.1 100 SP 2.2 100 Keep records of changes CM SP 3.1 100 FR 2.6 60 </th <th></th> <th>Keep verification records</th> <th>VER</th> <th>GP 2.6</th> <th>100</th> <th></th>		Keep verification records	VER	GP 2.6	100	
Validate before delivery RD SP 3.5 100	7.3.6					
Records RD		Validation follows plans	VAL	All SPs	100	
VAL GP 2.6 100		Validate before delivery	RD	SP 3.5	100	
7.3.7 Control of design and development changes CM SP 3.1 100 Identify changes CM SP 2.6 60 TS GP 2.6 60 Review and approve changes CM SP 2.1 100 Evaluate effect of changes CM SP 2.2 100 Keep records of changes CM SP 2.1 100 Keep records of changes CM SP 3.1 100 PI SP 3.1 100 PI SP 2.6 60 TS GP 2.6 60 TS SP 3.1 100 SAM SP 2.4 100 SAM SP 2.4 100 SAM SP 2.1 100 SAM SP 2.3 100 SP 2.4 30 30		Keep validation records	RD	GP 2.6	100	
Identify changes			VAL	GP 2.6	100	
PI	7.3.7	development changes				
TS		Identify changes				
Review and approve changes						
CM		Poviow and approve changes		4		
Evaluate effect of changes		Review and approve changes				
CM		Evaluate effect of changes				
PI GP 2.6 60 TS GP 2.6 60 GP 2.6 100 TS SP 3.1 100 SP 3.1 100 SP 3.1 100 SP 2.4 100 SP 2.3 100 SP 1.3 100 TS SP 1.1 100 TS TS TS TS TS TS TS		_ randate enter en enangee				
7.4 Purchasing Purchasing process Purchased product meets requirements PI SP 3.1 100 SAM SP 2.4 100 Control of supplier depends on product SAM SP 2.1 100 SAM SP 2.2 100 SAM SP 2.3 100 SAM SP 2.3 100 SAM SP 2.3 100 SAM SP 2.4 30 SP 2.4		Keep records of changes	CM		100	
7.4 Purchasing process Purchased product meets requirements PI SP 3.1 SAM SP 2.4 SAM SP 2.4 SAM SP 2.4 SAM SP 2.4 SAM SP 2.2 SAM SP 2.2 SAM SP 2.2 SAM SP 2.2 SAM SP 2.3 SAM SP 2.3 SAM SP 2.3 SAM SP 2.4 SAM SP 2.5 SAM SP 2.5 SAM SP 2.6		-				
7.4.1 Purchasing process PI SP 3.1 100 Purchased product meets requirements PI SP 3.1 100 Control of supplier depends on product SAM SP 2.1 100 SAM SP 2.2 100 SAM SP 2.3 100 TS SP 2.4 30 Suppliers selected based on ability SAM SP 1.2 100 Selection criteria established SAM SP 1.2 100 SP 1.3 100 SP 1.3 100 Records of evaluations kept SAM GP 2.6 100 7.4.2 Purchasing information SAM SP 1.3 100 Product requirements described TS SP 1.3 100			TS	GP 2.6	60	
Purchased product meets requirements PI SP 3.1 100						
requirements	7.4.1	Purchasing process				
Control of supplier depends on product						
on product SAM SP 2.2 100 SAM SP 2.3 100 TS SP 2.4 30 Suppliers selected based on ability SAM SP 1.2 100 SP 1.2 100 SP 1.3 SP 1.3 100 SP 1.3 SP 1.3 SP 1.3 SP 1.1 100 SP 1.3 SP 1.1 100 SP 1.3 SP 1.1 100 SP 1.1 SP 1.1 100 SP 1.1 S						
SAM SP 2.3 100 TS SP 2.4 30 Suppliers selected based on ability Selection criteria established SAM SP 1.2 100 Selection criteria established SAM SP 1.2 100 SP 1.3 100 Records of evaluations kept SAM GP 2.6 100 T.4.2 Purchasing information Product requirements SAM SP 1.3 100 described TS SP 1.1 100						
TS		on product				
Suppliers selected based on ability Selection criteria established Records of evaluations kept SAM SP 1.2 100 SP 1.3 100 Records of evaluations kept SAM GP 2.6 TO Product requirements described SAM SP 1.2 100 SP 1.3 100 SP 1.3 SP 1.3						
Selection criteria established SAM SP 1.2 100 SP 1.3 100 Records of evaluations kept SAM GP 2.6 100 7.4.2 Purchasing information Product requirements SAM SP 1.3 100 described TS SP 1.1 100						
Records of evaluations kept SAM GP 2.6 100 7.4.2 Purchasing information Product requirements SAM SP 1.3 100 described TS SP 1.1 100			SAM			
7.4.2 Purchasing information Product requirements SAM SP 1.3 100 described TS SP 1.1 100		Records of evaluations kept	SAM			
Product requirements SAM SP 1.3 100 described TS SP 1.1 100	7.4.2	·				
described TS SP 1.1 100			SAM	SP 1.3	100	
		Approval requirements	SAM		100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Personnel	SAM	SP 1.3	60	
	QMS	SAM	SP 1.3	60	
	Adequate requirements described	SAM	SP 1.3	100	
7.4.3	Verification of purchased product				
	Ensure product meets requirements	SAM SAM SAM SAM SAM VER	SP 1.3 SP 2.1 SP 2.2 SP 2.3 SP 2.4 SP 3.1	100 100 100 100 100 60	
	Supplier site verification	SAM	SP 1.3	60	
7.5	Production and service provision				
7.5.1	Control of production and service provision				
	Plan & implement service provision	PI PI PI PI TS TS	GP 2.2 SP 3.1 SP 3.2 SP 3.3 SP 3.4 GP 2.2 SP 3.1 SP 3.2	100 100 100 100 100 100 100	
	Product characteristics	PI TS	SP 2.1 SP 2.2	100 100	
	Work instructions	PI TS	SP 1.3 GP 2.2	100	
	Equipment	PI TS	GP 2.3 GP 2.3	100 100	
	Availability of monitoring devices	PI PI TS TS	GP 2.3 GP 2.8 GP 2.3 GP 2.8	100 100 100 100	
	Implementation of monitoring	PI TS	GP 2.8 GP 2.8	100 100	
	Release activities	CM PI	SP 1.3 SP 3.4	60 60	CMMI doesn't address post- delivery activities
7.5.2	Validation of processes for production and service provision				
	Validate production & service processes	VAL	All SPs	100	
	Demonstrate ability to meet planned results	VAL	All SPs	100	
	Establish review criteria	VAL	SP 1.3	30	
	Approve equipment	VAL	SP 1.2	100	
	Use specific methods	VAL	SP 1.3	100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Records	VAL	GP 2.6	100	
	Revalidation	VAL VAL	SP 2.2 SP 2.1	100 100	
7.5.3	Identification and	V/ (L	01 2.1	100	
7.0.0	traceability				
	Identify products	CM	SP 1.1	100	
		CM CM	SP 2.1 SP 2.2	60 100	
	Identify product status	MA	SP 2.4	100	
	raditiny product diatas	PI	GP 2.8	100	
		PI	SP 3.3	100	
		TS	GP 2.8	100	
		VAL	GP 2.8	100	
		VAL VER	SP 2.2 GP 2.8	100	
		VER	SP 3.2	100 100	
	Control traceability	CM	SP 3.1	100	
	Common massassimly	REQM	SP 1.4	100	
7.5.4	Customer property				
	Exercise care	PP	SP 2.3	30	
	Identify property	PP	SP 2.3	30	
	Report damage	PMC PP	SP 1.4	30	
7.5.5	Preservation of Product	PP	SP 2.3	30	
	Maintain conformity during	PI	SP 3.4	100	
	delivery				
	Preserve identification	PI	SP 3.4	100	
	Preserve product component parts	PI	SP 3.4	100	
7.6	Control of monitoring and measuring devices				
	Determine monitoring and	MA	SP 1.1	100	
	devices needed	MA	SP 1.2	100	
		MA MA	SP 1.3 SP 1.4	100 100	
		VAL	SP 1.4	100	
		VER	SP 1.3	100	
	Establish monitoring	MA	GP 2.2	60	
	processes	MA	GP 2.9	60	
		MA	SP 1.3	60	
		MA	SP 1.4	60	
		VAL VAL	GP 2.9 SP 1.3	60 60	
		VAL VER	GP 2.9	60	
		VER	SP 1.3	60	
	Calibrate at specified intervals			0	
	Adjust as needed			0	
	Calibration status			0	
	Safeguard from adjustment			0	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Protect from damage			0	
	Assess prior measurement results			0	
	Take action on equipment			0	
	Keep calibration records			0	
	Confirm applicability of software	VAL VAL VER VER	SP 1.2 SP 1.3 SP 1.2 SP 1.3	30 30 30 30	
	Confirm software before use			0	

Table 5: ISO 9001:2000 Section 8, Measurement, analysis and improvement

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
8	Measurement, analysis and improvement				
8.1	General				
	Product conformity	PPQA VER VER VER VER VER	SP 1.2 GP 2.8 SP 1.1 SP 1.2 SP 1.3 SP 2.2	100 100 100 100 100 100	
	ONC conformation	VER	SP 3.1	100	
	QMS conformity	OPF	SP 1.2	100	
	QMS improvement	OID OPF OPF OPF	All SPs SP 1.3 SP 2.1 SP 2.2	100 100 100 100	
	Determine methods and techniques	All PAs MA MA MA QPM QPM	GP 2.8 SP 1.2 SP 1.3 SP 1.4 SP 2.1 SP 2.2	60 100 100 100 100 100	
8.2	Monitoring and measurement				
8.2.1	Customer satisfaction				
	Monitor customer perceptions	MA MA MA PMC VAL VAL	SP 1.1 SP 1.2 SP 2.2 SP 1.5 GP 2.7 SP 2.1	30 30 30 30 60 60	
	Define methods for measuring satisfaction	MA MA MA	SP 1.2 SP 1.3 SP 1.4	60 60 60	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
8.2.2	Internal audit				
	Determine conformance	OPF	SP 1.2	100	
	5	PPQA	All SPs	100	
	Determine effectiveness	OPF OPF	SP 1.1 SP 1.2	100 100	
		OPF	SP 1.2 SP 1.3	100	
	Audits consider process	OPF	SP 1.1	100	
	importance	OPF	SP 1.2	100	
	-	PPQA	GP 2.2	100	
	Define audit criteria	OPF	SP 1.1	100	
		OPF	SP 1.2	100	
	Coloot objective auditors	PPQA	GP 2.2	100	Objectivity is
	Select objective auditors	PPQA	GP 2.4	100	Objectivity is addressed in
					PPQA introductory
					notes
	Don't audit own output			0	Objectivity is
					addressed in
					PPQA introductory
	Documented procedure	OPF	GP 2.2	100	notes
	defines audits	OPF	GP 2.2	100	
	dominos addito	PPQA	GP 2.2	100	
		PPQA	GP 2.4	100	
		PPQA	SP 2.2	100	
	Actions taken promptly	OPF	GP 2.1	100	
		OPF	GP 2.4 GP 2.1	100	
		PPQA PPQA	GP 2.1 GP 2.4	100 100	
		PPQA	SP 2.1	100	
	Verify actions taken	OPF	SP 2.1	30	
		OPF	SP 2.2	60	
		OPF	SP 3.3	100	
		PPQA	SP 2.1	100	
8.2.3	Monitoring and	PPQA	SP 2.2	100	
0.2.3	measurement of process				
	Use suitable methods	All PAs	GP 2.8	100	
		MA	SP 1.2	100	
		MA	SP 1.3	100	
		MA OPP	SP 1.4 SP 1.2	100 100	
	Demonstrate process	MA	SP 1.2 SP 2.2	100	
	capability	QPM	SP 2.2	100	
		QPM	SP 2.2	100	
		QPM	SP 2.3	100	
		QPM	SP 2.4	100	
	Take corrective actions	PMC	SP 2.1	100	
		PMC PMC	SP 2.2 SP 2.3	100 100	
		QPM	SP 2.3 SP 2.3	100	
8.2.4	Monitoring and	ζ. IVI	J. 2.0	. 55	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	measurement of product				
	Monitor product characteristics	All PAs MA MA VAL VAL VER	GP 2.8 SP 2.1 SP 2.2 SP 2.1 SP 2.2 SP 3.1	60 100 100 100 100 100	
	Measure at appropriate stages	VER VAL VER	SP 3.2 All SPs All SPs	100 100 100	
	Maintain conformity record	PI SAM VAL VER	SP 3.3 SP 2.4 GP 2.6 GP 2.6	100 100 60 60	
	Maintain release records	PI	GP 2.6	60	
	Don't release until product realization plans are implemented	СМ	SP 3.2	30	
8.3	Control of nonconforming product				
	Identify and control nonconforming product	CM PMC PMC PMC VAL VER	SP 1.3 SP 2.1 SP 2.2 SP 2.3 SP 2.2 SP 3.2	60 100 100 100 60 60	
	Define control of nonconforming product	VAL VAL VER VER	GP 2.2 GP 2.4 GP 2.2 GP 2.4	100 100 100 100	
	Take action	CM CM PPQA PMC PMC PMC VER	SP 2.1 SP 2.2 SP 2.1 SP 2.1 SP 2.2 SP 2.3 SP 3.2	100 100 100 100 100 100 100	
	Authorize use	PMC PMC PMC VER	SP 2.1 SP 2.2 SP 2.3 SP 3.2	100 100 100 100	
	Preclude use	PMC PMC PMC VER	SP 2.1 SP 2.2 SP 2.3 SP 3.2	100 100 100 100	
	Keep records of nonconformities	CM VER VER	SP 3.1 GP 2.6 SP 3.2	100 60 100	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Re-verify corrected nonconformance			0	Implied by the non-sequential and recursive nature of CMMI
	Take action after delivery			0	
8.4	Analysis of data				
	Collect data on QMS effectiveness	All PAS IPM MA OID OID OID OID OPF OPF OPP OPP	GP 3.2 SP 1.6 All SPs SP 1.1 SP 1.2 SP 1.3 SP 1.4 SP 1.2 SP 1.3 SP 1.1 SP 1.2 SP 1.3	100 100 100 100 100 100 100 100 100 100	
	Include monitoring data	All PAs	GP 2.8	100	
	Analyze customer satisfaction	MA MA MA PMC VAL VAL	SP 1.1 SP 1.2 SP 2.2 SP 1.5 GP 2.7 SP 2.1	30 30 30 30 30 30	
	Analyze conformance	VER	SP 3.2	100	
	Analyze trends Analyze suppliers	CAR CAR OPP QPM SAM SAM	SP 1.1 SP 1.2 SP 1.4 SP 1.4 GP 2.8 SP 2.2	60 60 100 100 60 100	
		SAM	SP 2.3	100	
8.5	Improvement				
8.5.1	Continual improvement	All DA	00.0	400	
	Improve QMS effectiveness	All PAS All PAS CAR MA MA OID OPF	GP 2.1 GP 2.10 All SPs SP 1.1 SP 2.2 All SPs All SPs	100 100 100 100 100 100 100	
8.5.2	Corrective action				
	Eliminate causes of nonconformities	CAR OPF OPF OPF	All SPs SP 2.1 SP 2.2 SP 3.1	100 100 100 100	
	Take appropriate actions			0	

Sect.	ISO 9001:2000 Requirement Keywords	CMMI PAs	CMMI Practices	Conf	Comment
	Review nonconformities	CAR	GP 2.2	60	
		CAR	SP 1.1	100	
		PMC	GP 2.2	60	
		PMC	SP 2.1	100	
		PPQA	SP 2.1	100	
		VER	GP 2.2	60	
		VER	SP 3.2	100	
	Determine causes	CAR	SP 1.2	100	
	Evaluate need for action	CAR	SP 1.2	100	
		PMC	SP 2.1	100	
	Determine action needed	CAR	GP 2.2	100	
		CAR	SP 1.1	100	
		CAR	SP 1.2	100	
		CAR	SP 2.1	100	
		PMC	SP 2.2	100	
		PPQA	SP 2.1	100	
	Record results	CAR	SP 2.3	100	
		PMC	GP 2.6	60	
		PPQA	SP 2.2	100	
	Review action	CAR	SP 2.2	100	
		PMC	SP 2.3	100	
		PPQA	SP 2.1	100	
8.5.3	Preventive action				
	Determine action to prevent	CAR	SP 1.1	100	
	nonconformity	CAR	SP 1.2	100	
		OPF	SP 3.4	100	
	Take appropriate actions			0	
	Determine potential	CAR	GP 2.2	60	
	nonconformities	CAR	SP 1.1	100	
		PMC	GP 2.2	60	
		PMC	SP 2.1	100	
		PPQA	SP 2.1	100	
		VER	GP 2.2	60	
		VER	SP 3.2	100	
	Evaluate need for action	CAR	SP 1.2	100	
		PMC	SP 2.1	100	
	Determine action needed	CAR	GP 2.2	100	
		CAR	SP 1.1	100	
		CAR	SP 1.2	100	
		CAR	SP 2.1	100	
		PMC	SP 2.2	100	
	Record results	CAR	SP 2.3	100	
	5	PMC	GP 2.6	60	
	Review action	CAR	SP 2.2	100	
		PMC	SP 2.3	100	