

Configuration Management (CM) Process Checklist

Date(s) of Assessment: _____ Project: _____

Assessor(s): _____ Process Assessed: _____

		Y, N, NA	F, O	Comments
ASSESSMENT PREPARATION				
1	Have standards been identified to clearly define the process being assessed?			
2	Were guidelines used to prepare for the assessment?			
3	Has the project submitted any request for deviations or waivers to the defined process?			
4	Have entrance and exit criteria been established for the assessment?			
5	Were the appropriate stakeholders involved in the implementation of this process?			
CONFIGURATION MANAGEMENT INFRASTRUCTURE				
6	Has the project identified those persons or groups with authority to approve baselines and authorize changes?			
7	Has a CM Plan been established?			
8	Have CM Procedures been developed to implement the plan?			
9	Has a CCB been established to approve all formal baselines and modifications that affect configured software products?			
10	Has a centralized software library been established for retention and controlled retrieval of software support documentation and change control records?			
11	Have CM tools been identified to manage the project's software work products?			
12	Have CM training requirements been identified?			
13	Is there evidence of higher level management review of the CM process?			

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14	Has the project obtained commitment from the stakeholders responsible for performing and supporting the CMP's execution?			
CONFIGURATION IDENTIFICATION				
15	Has the project identified all configuration items (CI) and related work products to be placed under configuration control?			
16	Does the CM process identify product baselines for major stages in the project's life cycle (e.g., requirements baseline, design baseline, build/release baselines, acceptance baselines)?			
17	Does the CM process assign unique identifiers (i.e., naming and labeling conventions) to configuration items?			
18	Does the CM process specify when each configuration item is placed under configuration management?			
19	Does the CM process identify each configuration item owner?			
CONFIGURATION CONTROL AND BASELINE MANAGEMENT				
20	Is there evidence that the CM Process establishes and maintains a configuration management and change management system for controlling software work products? If so, is the CM & change management system(s) capable of the following:			
20a	Managing multiple control levels of CM?			
20b	Storing and retrieving configuration items?			
20c	Storing and recovering archived versions of configuration items?			
20d	Maintaining the accuracy and integrity of the configuration items?			
20e	Accepting change requests from all project members?			
21	Is there evidence that the CM system has created or released a baseline for internal use and/or delivery to the customer?			
22	Is there evidence of CCB authorization for creating, modifying, or releasing a baseline?			

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Y=Yes, N=No, NA=Not Applicable, F=Finding, O=Observation

For more information, please visit the NASA GSFC Software Assurance Website, at <http://sw-assurance.gsfc.nasa.gov>.

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23	Is there evidence that the impact of changes and proposed fixes are analyzed and recorded?			
24	Are backups made to ensure retrieval of previous baselines or work products?			
25	Is there off-line storage of master copies of software media, software documents, etc.?			
26	Does the Software Library provide controlled access and distribution of software configuration items and work products to authorized persons only?			
CONFIGURATION STATUS ACCOUNTING				
27	Does the CM system maintain records of the status and contents of the software throughout the project's life cycle?			
28	Does the CM system record and monitor all change requests (and the reasons for change) to controlled software products to assure that the configuration of all identified items is known at all times?			
29	Does the CM system track the status of change requests to closure?			
30	Does the CM system report the status of approved configuration items and the status of approved changes?			
31	Can the CM system report the latest version of the baselines?			
32	Are CM records readily available to affected groups and/or individuals?			
CONFIGURATION AUDITS				
33	Is there evidence that configuration audits have been performed?			
34	Do these CM audits confirm that the configuration records correctly identify the configuration items in the baseline?			
35	Do the CM audits confirm the completeness and correctness of items in the CM system?			
36	Do the CM audits confirm compliance with applicable CM standards & procedures?			
37	Are CM audit reports/ records available?			
38	Is there evidence that action items from CM audits have been tracked to closure?			

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MEASUREMENT				
39	Is there evidence of measures, measurement results, and improvement information derived from planning and performing the CM process to support the future use and improvement of the organization's processes and process assets?			
POST REVIEW ACTIVITIES				
40	At the conclusion of the assessment, is an understanding reached on the validity and degree of completeness of the CM Process?			
41	Did all designated parties concur in the acceptability of the CM Process?			
42	Are there any risks, issues, or request for actions (RFAs) that require follow-up?			
43	Is there a process in place for reviewing and tracking the closure of risks, issues, or RFAs?			
44	Were Lessons Learned addressed and captured?			
REFERENCE ITEMS/DOCUMENTS				
<i>CMMI Version 1.1, Guidelines for Process and Integration and Product Improvement</i>				
<i>NPR 7120.5B, NASA Program and Project Management Processes and Requirements</i>				
<i>ISD Software Configuration Management Process, 580-PC-019-01</i>				

