Software Development Plan Review Checklist

Peer Review Version: P1b.DO178C.Peer-Review-Checklist-Planning-SDP.2022.R1.0
Checklist Name SDP Peer Review Checklist
Document(s) Under Review:
Supporting Documents:
Reviewer Name:
Reviewer Role:
Notes:

										Review Date:	<date>		Review Date:	<date>
#	**Checklist Item (i.e., Question)**	**DO-178C or Other Guidance Reference**	**DAL**				**Supplements**			**Latest Review Compliance**	**Latest Review Remarks**		**Compliance**	**Review Remarks**
			A	**B**	**C**	**D**	**DO-331 (MB)**	**DO-332 (OO)**	**DO-333 (FM)**	**Y/N/NA**	<add notes if there is something noteworthy about this review iteration>		**Y/N/NA**	<add notes if there is something noteworthy about this review iteration>
1	Does the SDP include (or reference) standards for requirements, design and code? (See separate checklists for reviewing these standards)	11.2.a OO.11.2.a	X	X	X		X	X	X	0	0			
2	Does the SDP include (or reference) standards for previously developed software or COTS software if those standards are different?	11.2.a	X	X	X		X	X	X	0	0			
3	Does the SDP include the specific software life cycle processes to be used on the project, including transition criteria for each development process (i.e., requirements, design, implementation, and integration) with enough detail to ensure proper implementation of the software life cycle processes?	11.2.b	X	X	X	X	X	X	X	0	0			
4	Does the transition criteria contained in the SDP specify: a. inputs to the process, including feedback from other processes. b. Any integral process activities that may be required to act on these inputs (e.g., peer review of source document. complete, SQA audit closed, document released to CC1, etc.) c. Availability of tools, methods, plans and procedures.	11.2.b	X	X	X		X	X	X	0	0			
5	If different software development processes are used based on software level, partition processor or LRU, are they described?	11.2.b	X	X	X	X	X	X	X	0	0			
6	Does the SDP describe or reference peer review activities for each development process including independence where required?	6.3.1	X	X	X	X	X	X	X	0	0			
7	Does the SDP describe a process for how derived high-level and derived low-level software requirements are fed back to the system processes, including the system safety assessment process for analysis of their impact on the safety assessment?	5.1.1.b 5.2.1.b	X	X	X	X	X	X	X	0	0			
8	Does the SDP describe how inadequate or incorrect inputs to each of the software development processes are fed back to the input source processes for clarification or correction?	5.1.2.b 5.2.2.g 5.3.2.c 5.4.2.d	X	X	X	X	X	X	X	0	0			

#	Question	Ref											
9	Does the SDP describe how bi-directional traceability between system requirements, software high-level requirements, software low-level requirements, and code will be accomplished?	5.5	X	X	X	X	X	X	X	0	0		
10	Does the SDP address the OOT & RT Specific Considerations related to identifying and evaluating traceability in an OO design?	OO.5.5.d OO.D.2.1	X	X	X	X		X		0	0		
11	Does the documented software development environment include the requirements development methods and tools?	11.2.c.1	X	X	X	X	X	X	X	0	0		
12	Does the documented software development environment include the design methods and tools? (see further tool requirements under TQP checklist)	11.2.c.2	X	X	X	X	X	X	X	0	0		
13	Does the documented software development environment include the coding methods, programming languages, and coding tools to be used, and options/constraints of autocode generators if applicable?	11.2.c.3	X	X	X	X	X	X	X	0	0		
14	Does the documented software development environment include the compilers, linkage editors, and loaders to be used?	11.2.c.4	X	X	X	X	X	X	X	0	0		
15	Does the documented software development environment describe the hardware platform(s) used to host the development tools?	11.2.c.5	X	X	X	X	X	X	X	0	0		
16	If Model-Based Development is used, does the SDP identify the following: a. Software life cycle data represented by each model (ex: Requirements data or design data). b. Category of each development model as either a Specification model or Design model.	MB.4.2.m	X	X	X	X	X			0	0		
17	Does the software development environment information include the modeling methods, languages, and tools used?	MB 11.2.c; MB.4.2.n	X	X	X		X			0	0		
18	If OOT Virtualization use is planned does the SDP discuss associated executable program(s) and the associated vulnerabilities?	OO.4.2.m OO.D.1.7.1	X	X	X	X		X		0	0		
19	If OOT Reuse of Components is planned does the SDP describe how the component will be integrated with the new development and discuss the associated vulnerabilites? This includes the maintenance of type consistency, requirements mapping, and exception management strategy between the components and the using system.	OO.4.2.n OO.D.1.1.1 OO.D.1.5.1 OO.D.2.3.1	X	X	X	X		X		0	0		
20	Does the SDP detail the precise development steps that will include the use of OOT & RT?	OO.4.3	X	X	X	X		X		0	0		
21	Does the chosen software development environment limit the opportunity for introducing errors?	4.4	X	X	X	X	X	X	X	0	0		
22	If optional features of software development tools are chosen for use in the project, does the SDP examine and specify the effects of these optional features? (note: this is especially important for compilers and autocode generators since they generate part of the software product)	4.4.1.e	X	X	X	X	X	X	X	0	0		
23	Does the SDP assess and address known tool problems and limitations that may adversely affect airborne software?	4.4.1.f	X	X	X	X	X	X	X	0	0		
24	Do the Software Life Cycle processes in the SDP address error handling at the design level?	6.3; AC 00-69 3.3	X	X	X		X	X	X	0	0		
25	Is the SDP under configuration management category CC1?	Table A-1	X	X			X	X	X	0	0		

| 26 | Is the SDP under configuration management category CC2? | Table A-1 | | | X | X | X | X | X | 0 | 0 | | |

0	Total "Y"	0	Total "Y"
0	Total "N"	0	Total "N"
0	Total "NA"	0	Total "NA"
0	Total "0"	0	Total "0"
0	0	0	0