

## All SPD Forms

### Form SPD-1 General Information (All COCOMO Suite Models)

1. Project Title:	2. Project ID No.	3. Rev No.
4. Date Prepared:	5. Originator:	

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6. Organization:	7. Project Manager:	
8. Customer:	9. Platform(s):	

10. Development type (circle one):    New product                      Upgrade                      Maintenance & Minor Enhancements

11. Development approach (spiral, waterfall, etc.):

12. Step in the process after which data is collected:

Waterfall Activity (circle one):

Start	Requirements	Design	Code & Unit Test
Integration & Test	Maintenance	Completed	

MBASE Stage (circle one):

Inception	Elaboration	Construction	Transition	Maintenance
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Development Iteration (which number):

Other development approach (please explain):

13. Year of expected Initial Operational Capability:

14. Application type (circle one):

Command and control	MIS	Simulation
Communications	Operating Systems	Software Tools
Diagnostics	Process Control	Testing
Engineering & Science	Signal Processing	Utilities
Other (please specify): _____		

15. COCOMO model (circle one):

Early design	Post architecture
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16. Brief project description:

17. References:

Figure C-1: Form SPD-1 General Information (All COCOMO Suite Models)

## All SPD Forms

### 18. COCOMO II Project Scale Factor Attributes

	Ratings						Comments (Including Don't Know)
	VL	L	N	H	VH	XH	
Precedentedness (PREC)							
Development Flexibility (FLEX)							
Architecture/Risk Resolution (RESL)							
Team Cohesion (TEAM)							
Process Maturity (PMAT)							

### 18a. Post-Architecture Project Effort Multiplier Attributes

Required Software Reliability (RELY)							
Data Base Size (DATA)							
Product Complexity (CPLX)							
Develop for Reuse (RUSE)							
Documentation Match to Life-Cycle Needs (DOCU)							
Execution Time Constraint (TIME)							
Main Storage Constraint (STOR)							
Platform Volatility (PVOL)							
Analysis Personnel Capability (ACAP)							
Programmer Personnel Capability (PCAP)							
Personnel Continuity (PCON)							
Applications Experience (APEX)							
Personnel Platform Experience (PLEX)							
Language & Tool Experience (LTEX)							
Use of Software Tools (TOOL)							
Multi-Site Development (SITE)							
Required Development Schedule (SCED)							
Other (USR 1)							
Other (USR 2)							
Other (USR 3)							

### 18b. Early Design Project Effort Multiplier Attributes

Product Reliability and Complexity(RCPX)							
Required Usability (RUSE)							
Platform Difficulty (PDIF)							
Personnel Capability(PERS)							
Personnel Experience (PREX)							
Facilities(FCIL)							
Required Development Schedule (SCED)							

### 19. Special factors increasing or decreasing cost/risk:

## **All SPD Forms**

20. Management directed cost and schedule targets:

Figure C-1: Form SPD-1 General Information (cont'd)

## All SPD Forms

### Form SPD-2a Phase Summaries (Waterfall-based process)

1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_

#### 6. Resource Summary by Phase

Phase		Mile- stone	Start Date	End Date	P&R	DES	DD	CUT	I&T	Impl	O&M	Total PM	Total M
#	Name												
1	P&R												
2	DES												
3	DD												
4	CUT												
5	I&T												
6	Impl												
7	O&M												

#### Phases

P&R – Plans &  
Requirements

DES – Product  
Design

DD – Detailed  
Design

CUT – Code &  
Unit Test

I&T – Integration  
& Test

Impl –  
Implementation

O&M – Operations  
& Maintenance

#### Activities

RAA - Requirements  
Analysis

PDA – Product  
Design

PA -  
Programming

TPA - Test  
Planning

VVA - Verification  
and Validation

POA - Project  
Office

CQA -  
CM/QA

MA -  
Manuals

#### 7. Error Summary by Phase

Phase		Errors Found								Total Errors Removed	KSLOC at end of Phase
#	Name	P&R	DES	DD	CUT	I&T	Impl	O&M	Total		
1	P&R										
2	DES										
3	DD										
4	CUT										
5	I&T										
6	Impl										
7	O&M										

#### 8. Other Project Costs by Phase

Phase		Mile- stone	Start Date	End Date	RAA	PDA	PA	TPA	VVA	POA	CQA	MA	Total PM	Total M
#	Name													
1	P&R													
2	DES													
3	DD													
4	CUT													
5	I&T													
6	Impl													
7	O&M													

Figure C-2a: Form SPD-2a Phase Summaries (Waterfall-based process)

## All SPD Forms

### Form SPD-2b Phase Summaries (MBASE/RUP process)

1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_

#### 6. Resource Summary by Phase

Phase	Anchor	Start	End	MGT	ENV	REQ	DES	Impl	ASS	DEP	Total	Total
#	Name	Points	Date	Date							PM	M
1	Incpt.											
2	Elab.											
3	Cnst.											
4	Trns.											

#### Activities

MGT – Management      ENV – Environment incl. CM      REQ – Requirements incl. Bus. Modeling      DES – Design      Impl – Implementation      ASS – Assessment incl. Test, QA, R/D V&V      DEP – Deployment

#### Phases

Incpt. – Inception      Elab. – Elaboration      Cnst. – Construction      Trns. – Transition

#### 7. Error Summary by Phase

Phase	Errors Found									Errors	KSLOC
(above)										Removed	
#	Phase Name	MGT	ENV	REQ	DES	Impl	ASS	DEP	Total Errors		
1	Incpt.										
2	Elab.										
3	Cnst.										
4	Trns.										

#### 8. Other Project Costs by Phase

Phase	Anchor	Start	End	MGT	ENV	REQ	DES	Impl	ASS	DEP	Total	Total
#	Name	Points	Date	Date							PM	M
1	Incpt.											
2	Elab.											
3	Cnst.											
4	Trns.											

#### Activities

MGT – Management      ENV – Environment incl. CM      REQ – Requirements incl. Bus. Modeling      DES – Design      Impl – Implementation      ASS – Assessment incl. Test, QA, R/D V&V      DEP – Deployment

#### Phases

Incpt. – Inception      Elab. – Elaboration      Cnst. – Construction      Trns. – Transition

Figure C-2b: Form SPD-2b Phase Summaries (MBASE/RUP process)

## All SPD Forms

### Form SPD-3 Component Summaries

- 
- |                   |                   |            |
|-------------------|-------------------|------------|
| 1. Project Title: | 2. Project ID No. | 3. Rev No. |
| 4. Date Prepared: | 5. Originator:    |            |
- 

6. Type of components (circle one):

Software applications      Software programs      Software packages      Software builds  
 Other: \_\_\_\_\_

7. Component size (Source Lines Of Code (SLOC))

Component	REVL (%)	New SLOC	Adapted SLOC	AAF	SU (%)	AA (%)	UNFM	Reused SLOC
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
TOTAL								

REVL – Requirements Evolution and Volatility	AAF – Adaptation Adjustment Factor	SU – Software Understanding	AA – Assessment and Assimilation	UNFM - Unfamiliarity
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8. SLOC Counting Conventions (circle one):

Logical SLOC Non-blank, Non-comment SLOC COCOMO II SLOC (Section 2.2.1)	Physical SLOC (carriage returns) Physical SLOC (terminal semi-colons) Other
---	---

9. Programming language(s):

Primary language:  
 Secondary language:

Figure C-3: Form SPD-3 Component Summaries

## All SPD Forms

10. Percentage of code that was generated/translated automatically:  
 Generator/translator used:

11. Adapted code assumptions by component:

Component	% Design Modified (DM)	% Code Modified (CM)	% Integration Modified (IM)	AAF [AAF = 0.4(DM) + 0.3(CM) + 0.3 (IM)]
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				

Figure C-3: Form SPD-3 Component Summaries (cont'd)

## All SPD Forms

12. Object, feature or unadjusted function points assumed per component:

Component	Language	Backfiring ratio (SLOCs per FP)	Unadjusted Function Points
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
TOTAL			

13. Additional details:

Figure C-3: Form SPD-3 Component Summaries (cont'd)



## All SPD Forms

### Form SPD-4 COCOMO II Progress Runs

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1. Project Title:	2. Project ID No.	3. Rev No.
4. Date Prepared:	5. Originator:	

---

6. Starting Point:

7. Ending Point:

8. Progress Summary Information

Milestone/ Anchor Point	No.	Run Date	Cost-to-Complete (PM)	Schedule-to-Complete (Months)	Remarks

9. Component Information

Component	Total ESLOC	Composite SF Rating	Composite EAF	Estimated Effort	SCED	Estimated Schedule
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
TOTAL						

Figure C-4: Form SPD-4 COCOMO II Progress Runs

## All SPD Forms

### Form SPD-5 COCOMO II Project Actuals

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1. Project Title:	2. Project ID No.	3. Rev No.
4. Date Prepared:	5. Originator:	

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6. Actual cost data

Total no. of person-months:

Total no. of calendar months:

Total no. of SLOC:

Total no. of defects:

7. Lessons learned summary

8. Component size (SLOC)

Totals

Component	Estimated SLOC	Actual SLOC	Adapted SLOC	Reused SLOC	Gen. SLOC	Trans. SLOC	No. of Requirements.
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
TOTAL							

Figure C-5: Form SPD-5 COCOMO II Project Actuals

## All SPD Forms

### 9. Project attributes

	Ratings						Comments (Including Don't Know)
	VL	L	N	H	VH	XH	
Precedentedness (PREC)							
Development flexibility (FLEX)							
Architecture/risk resolution (RESL)							
Team cohesion (TEAM)							
Process maturity (PMAT)							
Required reliability (RELY)							
Data base size (DATA)							
Product complexity (CPLX)							
Develop for reuse (RUSE)							
Documentation match to life-cycle needs (DOCU)							
Execution time constraint (TIME)							
Main storage constraint (STOR)							
Platform volatility (PVOL)							
Analyst capability (ACAP)							
Programmer capability (PCAP)							
Personnel continuity (PCON)							
Applications experience (APEX)							
Platform experience (PLEX)							
Language & tool experience (LTEX)							
Use of software tools (TOOL)							
Multi-site development (SITE)							
Required development schedule (SCED)							
Other							

Figure C-5: Form SPD-5 COCOMO II Project Actuals (cont'd)

## All SPD Forms

### 10. Actual Resource Summary by Phase

Milestone/ Anchor Point	Effort (PM) at Completion	Schedule (months) at Completion
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10		
TOTAL		

Figure C-5: Form SPD-5 COCOMO II Project Actuals (cont'd)

## All SPD Forms

### Form SPD-5a COCOMO II Project Actuals: Simple Completed Project

1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_ 6. Organization: \_\_\_\_\_

7. Starting Milestone: \_\_\_\_\_ 8. Ending Milestone: \_\_\_\_\_  
 9. Total no. of person-months: \_\_\_\_\_ 10. Total no. of calendar months: \_\_\_\_\_  
 11. Equivalent SLOC: \_\_\_\_\_ 12. Total no. of SLOC reused: \_\_\_\_\_  
 13. Non-trivial defects detected: \_\_\_\_\_ 14. Defect detection starting milestone: \_\_\_\_\_

#### 15. Project attribute ratings

	VL	L	N	H	VH	XH	Comments (Including Don't Know)
Precedentedness (PREC)							
Development flexibility (FLEX)							
Architecture/risk resolution (RESL)							
Team cohesion (TEAM)							
Process maturity (PMAT)							
Required reliability (RELY)							
Data base size (DATA)							
Product complexity (CPLX)							
Develop for reuse (RUSE)							
Documentation match to life-cycle needs (DOCU)							
Execution time constraint (TIME)							
Main storage constraint (STOR)							
Platform volatility (PVOL)							
Analyst capability (ACAP)							
Programmer capability (PCAP)							
Personnel continuity (PCON)							
Applications experience (APEX)							
Platform experience (PLEX)							
Language & tool experience (LTEX)							
Use of software tools (TOOL)							
Multi-site development (SITE)							
Required development schedule (SCED)							
Other							

16. Special project characteristics or lessons learned:

Figure C-5a: Form SPD-5a COCOMO II Project Actuals: Simple Completed Project

## All SPD Forms

### Form SPD-6a COCOTS Project Level Data

1. Project Title:	2. Project ID No.	3. Rev No.
4. Date Prepared:	5. Originator:	

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6. Project Domain (circle one):

*Core System Functionality*  
Operational, Mission Critical  
Operational, Non-mission Critical  
Support

*Communications, Navigation, and Surveillance*  
Operational, Mission Critical  
Operational, Non-mission Critical  
Support

*Administrative*  
Operational, Business Critical  
Operational, Non-business Critical  
Support

*Other (describe):*

7. Where does COTS assessment occur in life cycle?:

8. Delivery Scheduling (circle one):

Delivery to one location, no on-going maintenance	Delivery to one location, maintenance on-going	Delivery to multiple locations, no on-going maintenance	Delivery to multiple locations, maintenance on-going
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9. Schedule Duration (calendar months):

10. Project Total Effort (person-months):

Development \_\_\_\_\_

Maintenance \_\_\_\_\_

16. Standard Person-month(hours/person-month):

17. Project Total Delivered Source Code (SLOC):

Figure C-6a: Form SPD-6a COCOTS Project Level Data

## All SPD Forms

18. SLOC Count Type (circle one):

Logical

Physical  
(semicolons)

Physical (carriage  
returns)

Non-commented/  
Non-blank

Other:

19. Programming Languages

Language	Percentage of Total SLOC

20. Total System Function Points:

21. System Architecture (circle as needed):

Pipe & Filter

Distributed

Main/Subroutine

Event Based

Multithreaded

Blackboard/Single Layer  
or General Repository

Closed Loop Feedback  
Control

Real Time

Rule-based

Transactional Database  
Centric

Layered

Other:

22. System Architecting Process (describe):

Figure C-6a: Form SPD-6a COCOTS Project Level Data (cont'd)

## All SPD Forms

### Form SPD-6b COCOTS Assessment Data

1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_ 5a. COTS Class: \_\_\_\_\_

Initial Filtering Effort by COTS class

6. Total number of COTS candidates filtered:  
 7. Total initial filtering effort (person-months):  
 8. Average filtering effort per COTS candidate (person-months):

Attribute Assessment Effort by COTS class

9. Total number of COTS products assessed:  
 10. Total number COTS products selected/integrated:  
 11. Total attribute assessment effort (person-months):  
 12. Assessment Schedule duration (calendar months):  
 13. Assessment Effort per attribute:

Attribute	Effort							
	U	EL	VL	L	N	H	VH	EH
Correctness								
Availability/Robustness								
Security								
Product Performance								
Understandability								
Ease of Use								
Version Compatibility								
Intercomponent Compatibility								
Flexibility								
Installation/Upgrade Ease								
Portability								
Functionality								
Price								
Maturity								
Vendor Support								
Training								
Vendor Concessions								
Other1:								
Other2:								

U – don't know  
 N – 1 per-day<X<1 per-wk

EL – no effort  
 H – 1 per-wk<X<1 per-mt

VL – <1 per-hr  
 VH – 1 per-mt<X<3 per-mt

L – 1 per-hr<X<1 per-day  
 VH – 1 per-mt<X<N per-ys

Figure C-6b: Form SPD-6b COCOTS Assessment Data



## All SPD Forms

### Form SPD-6c COCOTS Tailoring Data

1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_ 5a. COTS Class: \_\_\_\_\_

#### Tailoring Effort by COTS class

6. Total number of COTS components tailored: \_\_\_\_\_  
 7. Total tailoring effort (person-months): \_\_\_\_\_  
 8. Tailoring schedule duration (calendar months): \_\_\_\_\_

#### Tailoring Activity Complexity by COTS class

Tailoring Activities & Aids	Individual Activity & Aid Complexity Ratings					Corresponding Points
	Very Low (point value = 1)	Low (point value = 2)	Nominal (point value = 3)	High (point value = 4)	Very High (point value = 5)	
Parameter Specification	Zero to 50 parms to be initialized.	51 to 100 parms to be initialized.	101 to 500 parms to be initialized.	501 to 1000 parms to be initialized.	1001 or more parms to be initialized.	-----
Script Writing	Menu driven; 1 to 5 line scripts; 1 to 5 scripts needed.	Menu driven; 6 to 10 line scripts; 6 to 15 scripts needed.	Hand written; 11 to 25 line scripts; 16 to 30 scripts needed.	Hand written; 26 to 50 line scripts; 31 to 50 scripts needed.	Hand written; 51 or more line scripts; 51 or more scripts needed.	-----
I/O Report & GUI Screen Specification & Layout	Automated or standard templates used; 1 to 5 reports/screens needed.	Automated or standard templates used; 6 to 15 reports/screens needed.	Automated or standard templates used; 16 to 25 reports/screens needed.	Hand written or custom designed; 26 to 50 reports/screens needed.	Hand written or custom designed; 51 or more reports/screens needed.	-----
Security/Access Protocol Initialization & Set-up	1 security level; 1 to 20 user profiles; 1 input screen/user.	2 security levels 21 to 50 user profiles; 2 input screens/user.	3 security levels 51 to 75 user profiles; 3 input screens/user.	4 security levels 76 to 100 user profiles; 4 input screens/user.	5 or more security levels 101 or more user profiles; 5 or more input screens/user.	-----
Availability of COTS Tailoring Tools	Tools were highly useful.	Tools were very useful.	Tools were moderately useful.	Tools were somewhat useful.	No tools available.	-----

Total Point Score = \_\_\_\_\_

Very Low	Low	Nominal	High	Very High
Point total is between 5 and 10.	Point total is between 11 and 15.	Point total is between 16 and 20.	Point total is between 21 and 25.	Point total is between 26 and 30.

9. Aggregate complexity rating (circle one):    VL    L    N    H    VH

Figure C-6c: Form SPD-6c COCOTS Tailoring Data

## All SPD Forms

### Form SPD-6d COCOTS Glue Code Data

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1. Project Title: \_\_\_\_\_ 2. Project ID No. \_\_\_\_\_ 3. Rev No. \_\_\_\_\_  
 4. Date Prepared: \_\_\_\_\_ 5. Originator: \_\_\_\_\_ 5a. COTS Class: \_\_\_\_\_

---

6. Number COTS components with Glue Code: \_\_\_\_\_  
 7. Functions provided by these COTS components (circle as needed):

Spreadsheet	Communications	Message Handling	Word Processing	User Display
CASE Environment	Scheduling	Database	Diagnostics	Mathematical Utilities
Signal Processing	Compiler	Other:		

8. Glue Code integration nature: % new integration \_\_\_\_\_ % upgrade/refresh \_\_\_\_\_

9. Glue Code schedule duration (calendar months): \_\_\_\_\_  
 10. Total Glue Code effort (person-months): \_\_\_\_\_  
 11. Glue Code SLOC: \_\_\_\_\_  
 12. Glue Code SLOC count type (circle one):

Logical	Physical (semicolons)	Physical (carriage returns)	Non-commented/ Non-blank	Other:
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13. Glue Code Programming Languages

Language	Percentage of Total Glue SLOC	Language	Percentage of Total Glue SLOC

14. Total Glue Code Function Points: \_\_\_\_\_

15. Percentage rework Glue Code (CREVOL): SLOC: \_\_\_\_\_ UFP: \_\_\_\_\_

Figure C-6d: Form SPD-6d COCOTS Glue Code Data

## All SPD Forms

### 16. Glue Code Project Scale Factor Attribute

	Ratings					Comments (Including Don't Know)
	VL	L	N	H	VH	
Application Architectural Engineering (AAREN)						

### 17. Glue Code Project Effort Multiplier Attributes

COTS Integrator Experience with Product (ACIEP)						
COTS Integrator Personnel Capability (ACIPC)						
Integrator Experience with COTS Integration Processes (AXCIP)						
Integrator Personnel Continuity (APCON)						
COTS Product Maturity (ACPMT)						
COTS Supplier Product Extension Willingness (ACSEW)						
COTS Product Interface Complexity (APCPX)						
COTS Supplier Product Support (ACPPS)						
COTS Supplier Provided Training and Documentation (ACPTD)						
Constraints on System/subsystem Reliability (ACREL)						
Application Interface Complexity (AAPX)						
Constraints on System/subsystem Technical Performance (ACPER)						
System Portability (ASPRT)						

Figure C-6d: Form SPD-6d COCOTS Glue Code Data (cont'd)

## All SPD Forms

### Form SPD-6e COCOTS Volatility Data

- 
- |                   |                   |            |
|-------------------|-------------------|------------|
| 1. Project Title: | 2. Project ID No. | 3. Rev No. |
| 4. Date Prepared: | 5. Originator:    |            |
- 

6. Application effort *excluding* effort due to COTS integration (person-months):
7. Percentage application rework effort due to requirements evolution *excluding* rework effort directly related to COTS integration (%):
8. Percentage application rework effort due to COTS product volatility (%):
9. COCOMO II Project Scale Factor Attributes

	Ratings						Comments (Including Don't Know)
	VL	L	N	H	VH	XH	
Precedentedness (PREC)							
Development Flexibility (FLEX)							
Architecture/Risk Resolution (RESL)							
Team Cohesion (TEAM)							
Process Maturity (PMAT)							

Figure C-6e: Form SPD-6e COCOTS Volatility Data

## All SPD Forms

### Form SPD-7 COPSEMO Details Summaries

- 
- |                   |                   |            |
|-------------------|-------------------|------------|
| 1. Project Title: | 2. Project ID No. | 3. Rev No. |
| 4. Date Prepared: | 5. Originator:    |            |
- 

6. Cycles and total effort and schedule per phase

Phase		Number of Cycles	Start Date	End Date	Total PM	Total M
#	Name					
1	Incpt.					
2	Elab.					
3	Cnst.					
4	Trns.					

7. Effort per Activity per Cycle per Phase

Phase		Cycle #	Start Date	End Date	MGT	ENV	REQ	DES	Impl	ASS	DEP	Total PM	Total M
#	Name												
1	Incpt.	1.											

**Activities**

MGT – Management      ENV – Environment incl. CM      REQ – Requirements incl. Bus. Modeling      DES – Design      Impl – Implementation      ASS – Assessment incl. Test, QA, R/D V&V      DEP – Deployment

**Phases**

Incpt. – Inception      Elab. – Elaboration      Cnst. – Construction      Trns. – Transition

8. Persons per Activity per Cycle per Phase

Phase		Cycle #	Start Date	End Date	MGT	ENV	REQ	DES	Impl	ASS	DEP	Total PM	Total M
#	Name												
1	Incpt.	1.											

Figure C-7: Form SPD-7 COPSEMO Details Summaries

## All SPD Forms

### Form SPD-8 COQUALMO Details Summaries

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1. Project Title:	2. Project ID No.	3. Rev No.
4. Date Prepared:	5. Originator:	

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#### 6. Defect Introduction by Stage and Artifact

##### Number of Defects Introduced

	Inception (WF P&R)	Elaboration (WF PD)	Construction (WF P+I+T)	Transition	Don't Know
No. of Requirements Defects					
No. of Design Defects					
No. of Code Defects					

TOTAL

#### 7. Defect Removal by Stage and Artifact

##### Number of Defects Removed

	Inception (WF P&R)	Elaboration (WF PD)	Construction (WF P+I+T)	Transition	Don't Know
No. of Requirements Defects					
No. of Design Defects					
No. of Code Defects					

TOTAL

#### 8. Defect Identification by Severity and Artifact

##### Number of Defects Found

	Critical	High	Medium	Low	None	Don't Know
No. of Requirements Defects						
No. of Design Defects						
No. of Code Defects						

TOTAL

#### 9. Number of Open Trouble Reports (Liens) At Product Delivery:

Figure C-8: Form SPD-8 COQUALMO Details Summaries

## All SPD Forms

### 10. Defect Removal Capability Rating Scales

#### Automated Analysis

	Very Low	Low	Nominal	High	Very High	Extra High	Don't Know
Rating Scale	Simple compiler syntax checking	Basic compiler capabilities for static module-level code analysis, syntax, type-checking.	All of the above, plus some compiler extensions for static module and inter-module level code analysis, syntax, type-checking. Basic requirements and design consistency, traceability checking.	All of the above, plus intermediate-level module and inter-module code syntax and semantic analysis. Simple requirements/design view consistency checking.	All of the above, plus more elaborate requirements/design view consistency checking. Basic distributed-processing and temporal analysis, model checking, symbolic execution.	All of the above, plus formalized* specification and verification. Advanced distributed processing and temporal analysis, model checking, symbolic execution.  *Consistency-checkable pre-conditions and post-conditions, but not mathematical theorems.	
Your Rating							

#### Peer Reviews

	Very Low	Low	Nominal	High	Very High	Extra High	Don't Know
Rating Scale	No peer review	Ad-hoc informal walkthroughs. Minimal preparation, no follow-up.	Well-defined sequence of preparation, review, minimal follow-up. Informal review roles and procedures.	Formal review roles with all participants well-trained and procedures applied to all products using basic checklists*, follow up.	Formal review roles with all participants well-trained and procedures applied to all product artifacts & changes (formal change control boards). Basic review checklists*, root cause analysis. Formal follow-up. Use of historical data on inspection rate, preparation rate, fault density.	Formal review roles and procedures for fixes, change control. Extensive review checklists*, root cause analysis. Continuous review process improvement. User/Customer involvement, Statistical Process Control.	
Your Rating							

## All SPD Forms

\* Checklists are lists of things to look for or to check against (e.g. Fagan's exit criteria)

Figure C-8: Form SPD-8 COQUALMO Details Summaries (cont'd)



## All SPD Forms

### Execution Testing and Tools

	VL	Low	Nominal	High	VH	EH	Don't Know
Rating Scale	No testing	Ad-hoc testing and debugging. Basic text-based debugger.	Basic unit test, integration test, system test process. Basic test data management, problem tracking support. Test criteria based on checklists.	Well-defined test sequence tailored to organization (acceptance, alpha, beta, flight, etc.) test. Basic test coverage tools, test support system. Basic test process management.	More advanced test tools, test data preparation, basic test oracle support, distributed monitoring and analysis, assertion checking. Metrics-based test process management.	Highly advanced tools for test oracles, distributed monitoring and analysis, assertion checking. Integration of automated analysis and test tools. Model-based test process management.	
Your Rating							

Figure C-8: Form SPD-8 COQUALMO Details Summaries (cont'd)

## All SPD Forms

### Form SPD-9 CORADMO Details Summaries

- 
- |                   |                   |            |
|-------------------|-------------------|------------|
| 1. Project Title: | 2. Project ID No. | 3. Rev No. |
| 4. Date Prepared: | 5. Originator:    |            |
- 

6. CORADMO Driver Ratings (attributes)

	Ratings						Comments (Including Don't Know)
	VL	L	N	H	VH	XH	
Reuse and Very High Level Languages (RVHL)						N/A	
Development Process Reengineering and Streamlining (DPRS)						N/A	
Collaboration Efficiency (CLAB)							
Architecture/Risk Resolution (RESL)							
Prepositioning Assets (PPOS)	N/A	N/A					

7. Brief descriptions of RAD approaches and tools:

Figure C-9: Form SPD-9 CORADMO Details Summaries