

Appendix E-6

Forms

To be enlarged by copier to A4 or A3 size

1. Steplist (phased plan)
2. 3-phase improvement form
- 2A. 5-phase improvement form
3. Table of WBS (Work Breakdown Structure)
4. DTC Organization framework and management
5. DTC cost status report (for unit production cost)
6. DTC status report of development cost (Example of DTC scheduled curve line)
- 6A. DTC status report of development cost (Example of present cost, resultant contract line)
7. DTC theme/idea proposal sheet (for unit production cost)
- 7A. DTC theme/idea proposal sheet (for development cost)
8. WBS phased theme list table to reach the objective target
9. Theme/idea proposal sheet
10. Theme/Idea Promotion Table
11. Theme/Idea Promotion Table
12. Example of DTC worksheet (for hardware)
- 12A. Example of DTC worksheet (for computer software)
13. Theme/idea action expediting list
- 13A. Process expediting list
14. Predicted report to reach the final target cost
15. 2 page plan of development activities estimate
16. Engineering Link Sheet
17. Price cost breakdown table (specified form for filling price cost breakdown)
18. Implementation plan sheet
19. Work summary sheet

Form 1 Steplist (Phased Planning form)

Subject _____

Subtitle (Keyword) _____

Steplist (Phased plan)

Authorized by: _____ Date: _____

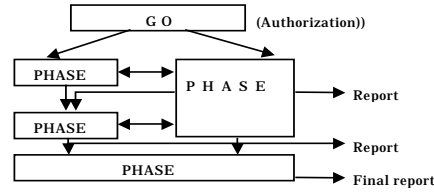
Production: _____

		A	B	C	D	E	F	G	H	I
		Step title	Input		Output		Other conditions	When approve the output and schedule	Who approve the outoput and schedule	Actual decision date and notes
			Item	Pre-assurance Activity	Item	Post-assurance Activity				
1	1st information collecting phase									
2	Basic Idea									
3	Breakdown structure (Structuring)									
4	2nd information collecting phase									
5	Basic matter or basic design									
6	Detailed matter or detail design									
7	Implementation get subjective result									
8	Review									

Form 2 3-Phase Improvement

Subject _____

Key Word
(In brief to...) _____



Approved by : _____

Promoter : _____

P H A S E I (Effective countermeasures can be taken at once and temporary ones leading up to PHASE)			P H A S E II (Countermeasure to be taken as soon as possible)			P H A S E III (Final measure to be achieved)		
Item to be done	Conditions and preparation	Assigned person and completion date	Item to be done	Conditions and preparation	Assigned person and completion date	Item to be done	Conditions and preparation	Assigned person and completion date

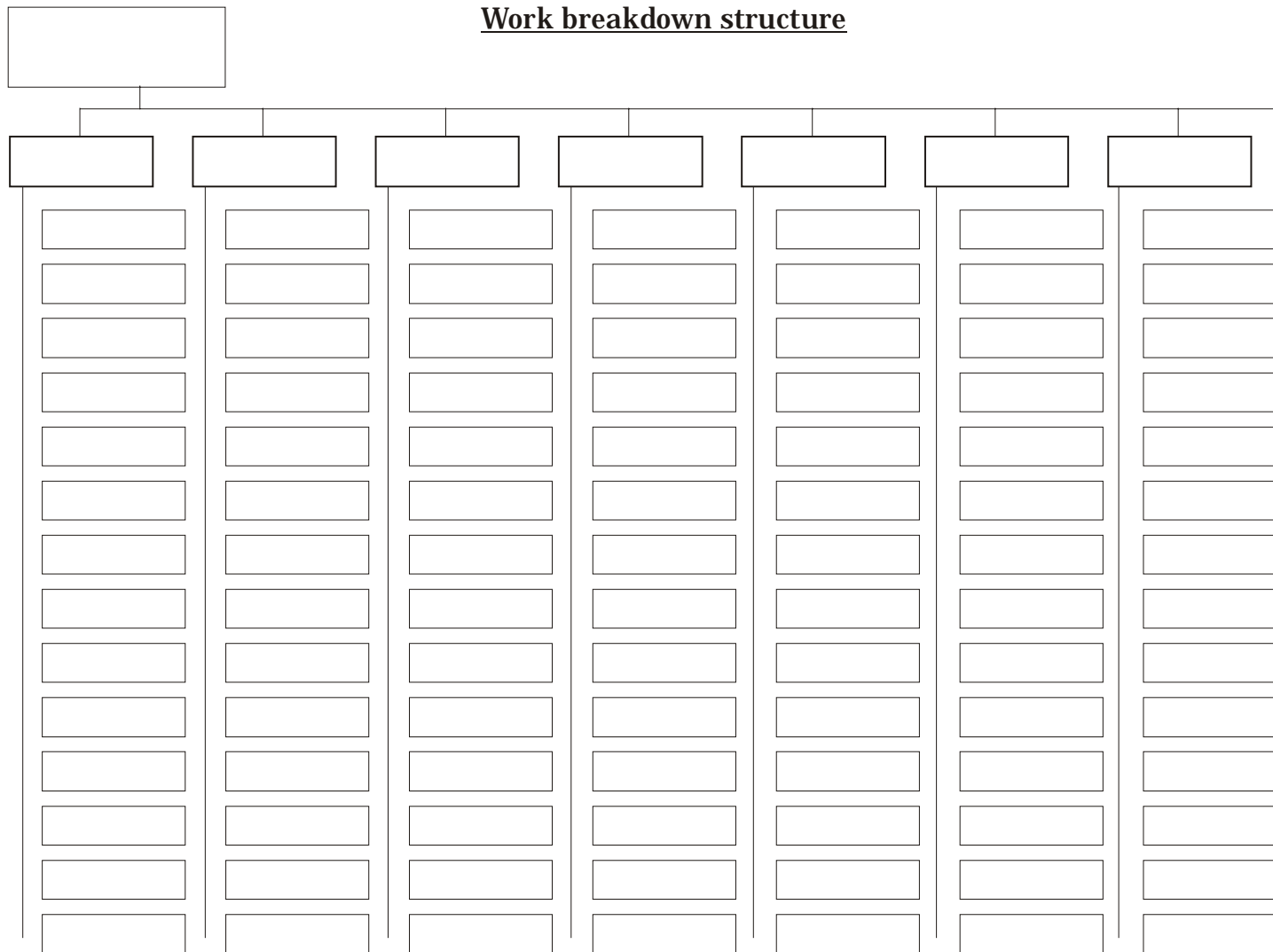
Form 2A 5-Phase improvement

Subject : _____
 Key Word : _____
 (In order to...) _____

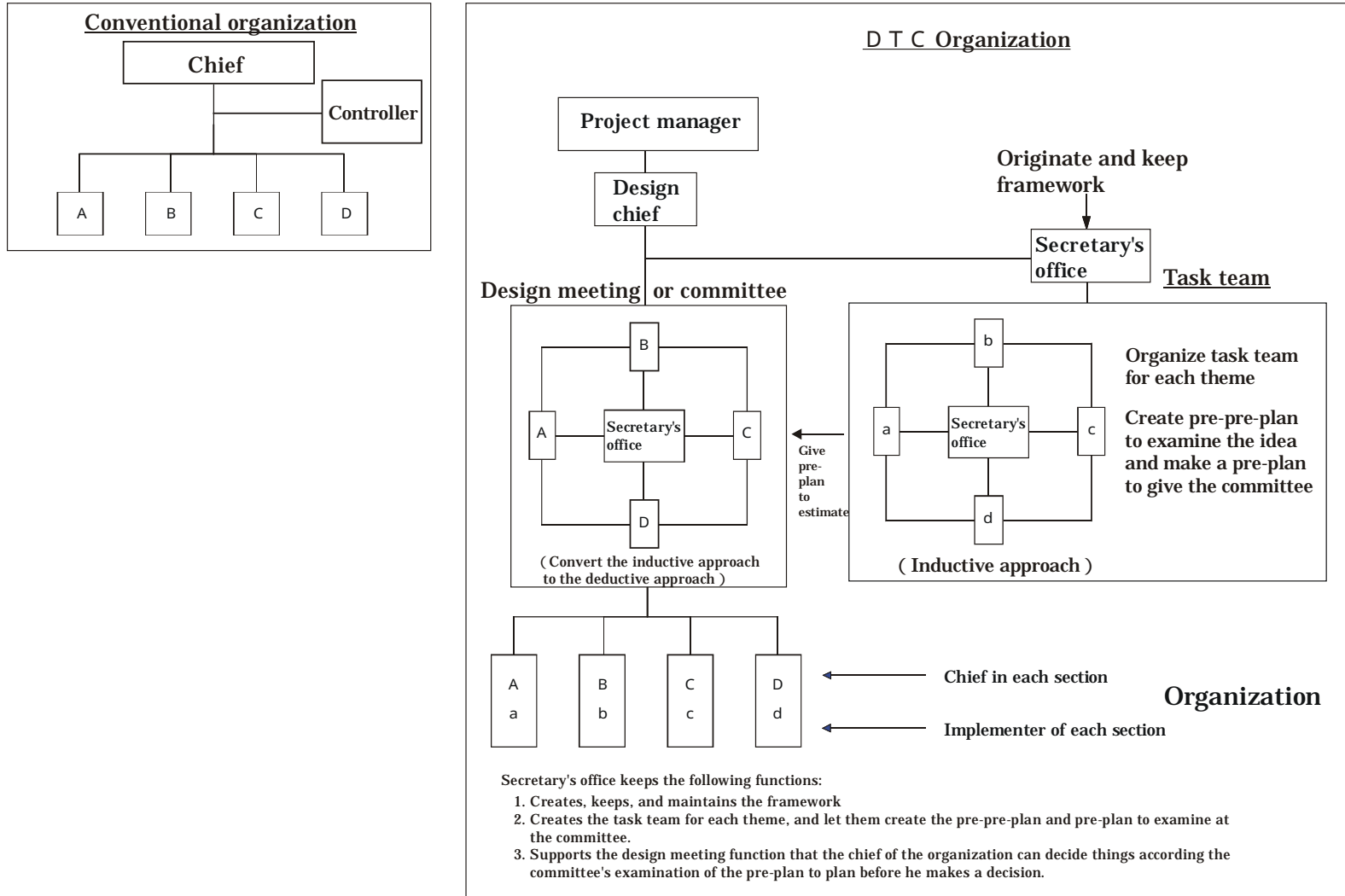
Approved by : _____
 Promoter : _____

PHASE			PHASE			PHASE Countermeasures			PHASE Countermeasures			PHASE Countermeasures		
Item to be done	Conditions and preparation	Assgn. compl. date	Item to be done	Conditions and preparation	Assgn. compl. date	Item to be done	Conditions and Preparations	Assgn. compl. date	Item to be done	Conditions and preparation	Assgn. compl. date	Item to be done	Conditions and preparation	Assgn. compl. date

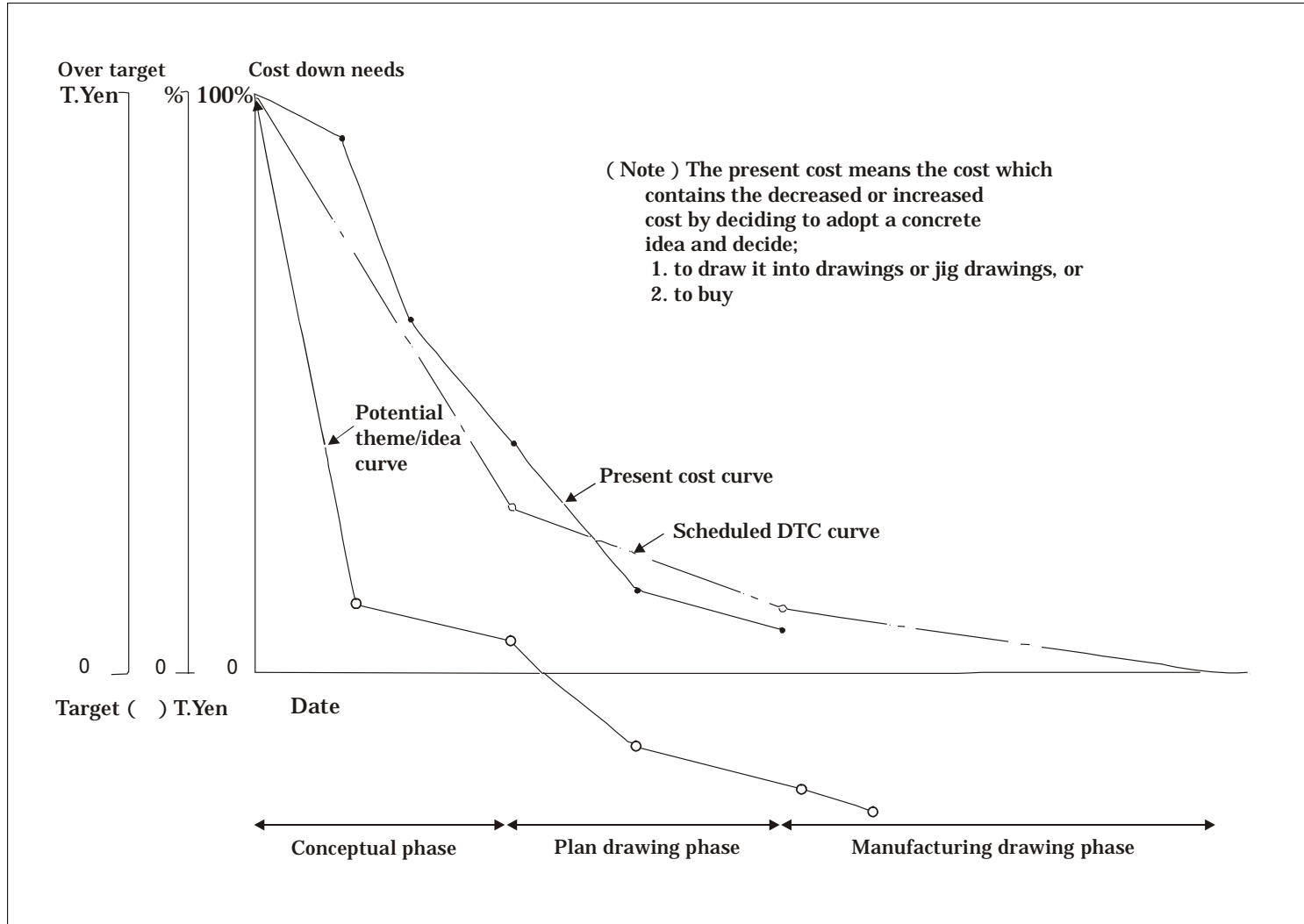
Form 3 Table of WBS (Work Breakdown Structure)



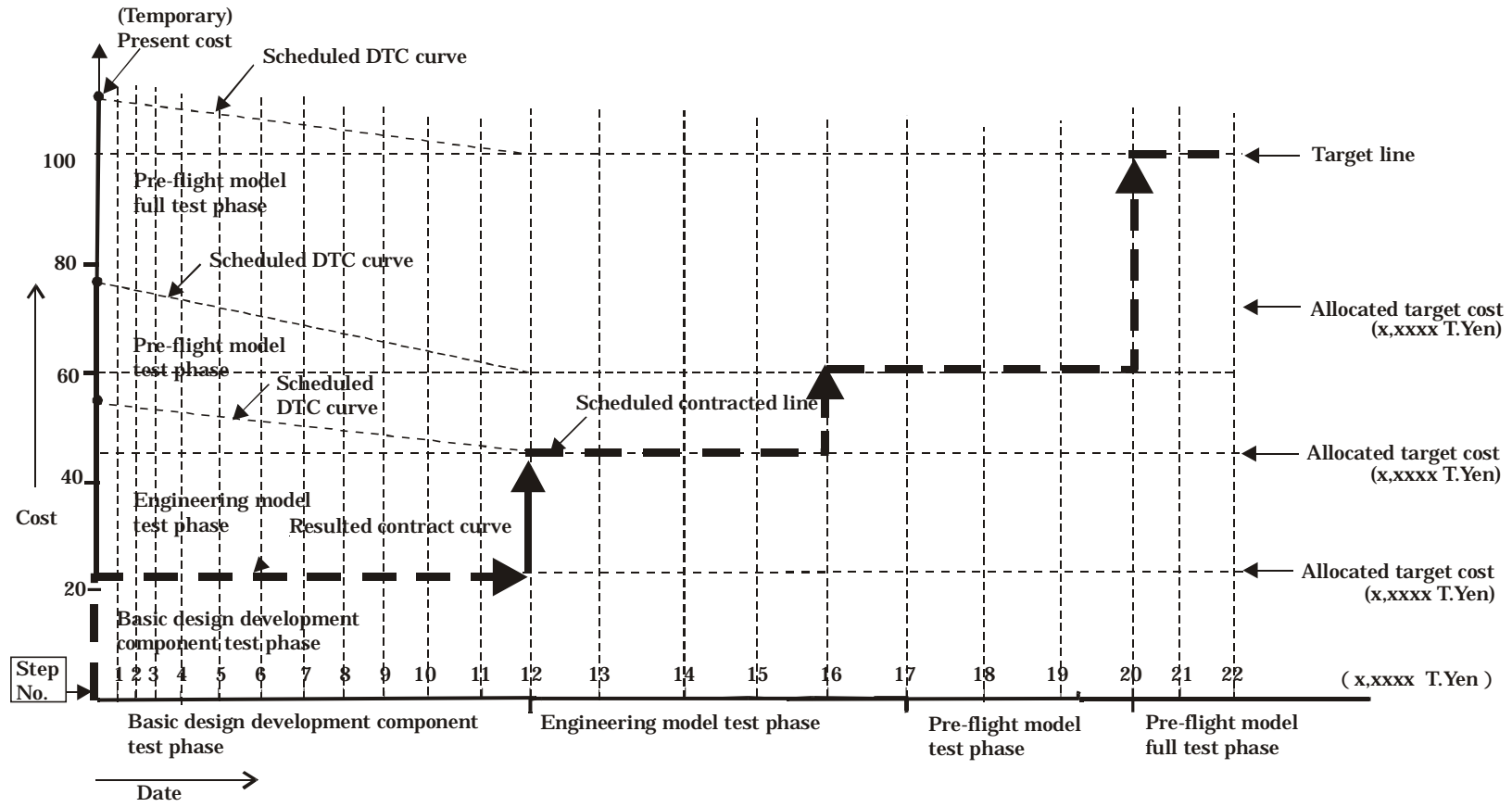
Form 4 DTC organization framework and management



Form 5 DTC cost status report (For unit production cost)

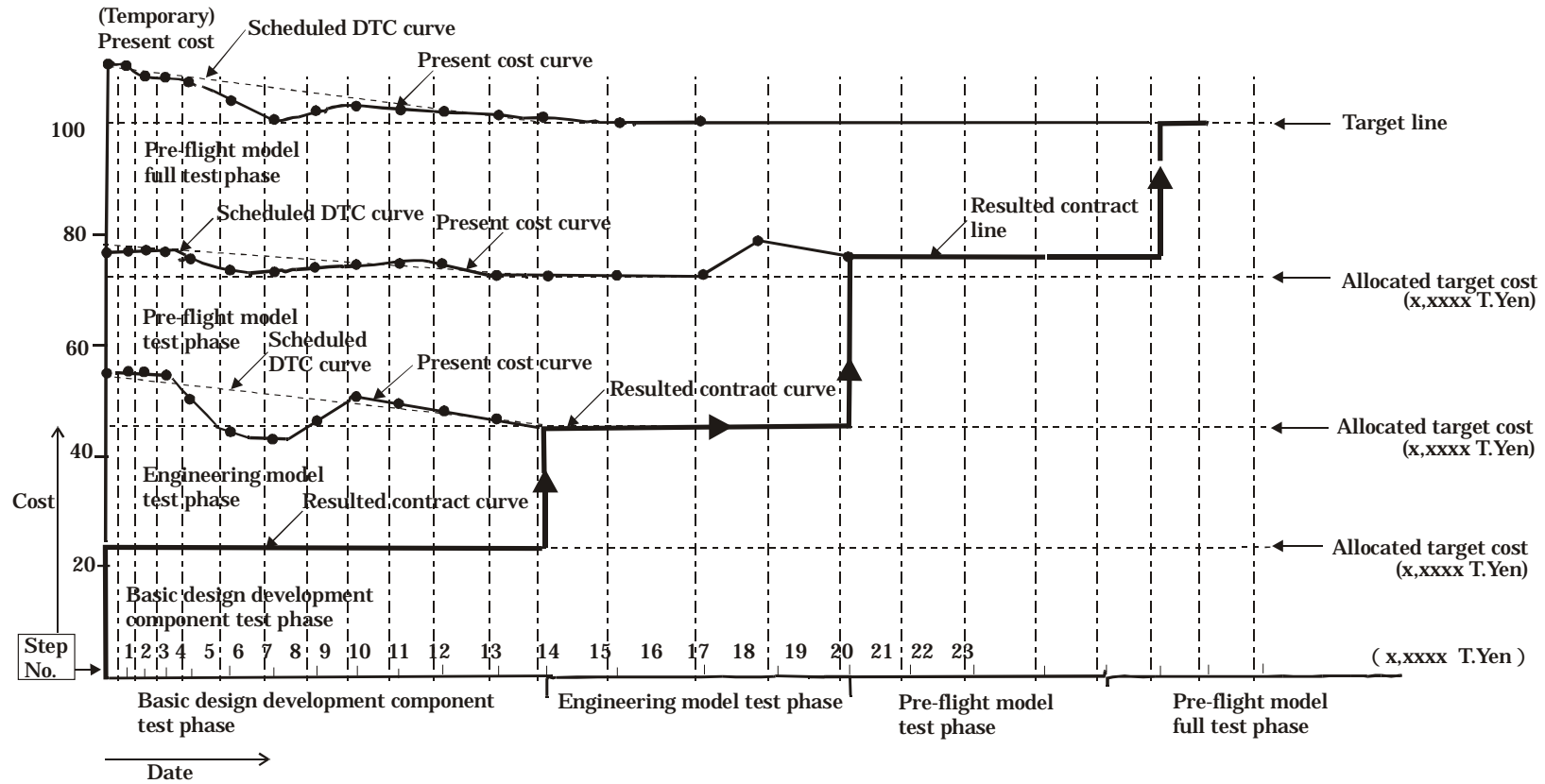


Form 6 DTC status report of development cost (Example of DTC scheduled curve line)



WBS No.,Name
Cost status report of DTC for development cost

Form 6A DTC status report of development cost (Example of present cost, resultant contract line)



WBS No.,Name
Cost status report of DTC for development cost

Form 7 DTC theme/idea proposal sheet

ACTION

(Theme / Idea proposal sheet)					Reg.No.	
Theme*			Company		Proposer Date	
W B S Nomenclature or System name			Phase to Examine		TEL	
			0			
1 . Theme(Draft)/Idea(Sketch as necessary)						
2 . What is the purpose or prospective effect?*						
3 . What conditions must be satisfied to implement proposal?						
4 . What led you to create this proposal?						
Result of investigation and/or examination					Theme accepted	
					Idea accepted	
					Pending (up to)	
					Not adopted	
Note: 1 . No need to complete all columns(columns marked with an asterisk*/must be completed.) 2 . Do not hesitate to propose even if your idea may already have been proposed or is being considered. 3 . Proposal must be forwarded to (). 4 . This proposal will be processed by "DTC, proposal and investigation/examination practice"					Follow up	
					. .	
					. .	
					. .	

Form 7A DTC theme/idea proposal sheet (For development cost)

Action

Development cost DTC Theme/idea proposal sheet		Reg. No.				
Theme *	Company	Proposer			Date	
WBS Nomenclature or name		Phase to examine				
		Effect phase				
1 . Theme (draft)/idea (Sketch as necessary)						
2 . What is the purpose or expected effect ? *						
3 . What conditions must be satisfied to implement proposal ?						
4 . What led you to create this proposal ? *						
Result of investigation and/or examination					Theme accepted	
					Idea accepted	
					Pending(up to)	
					Not adopted	
Note 1 . No need to complete all columns. (*marked columns must be filled) 2 . Do not hesitate to propose the idea or theme even if it is already being considered or has been proposed before. 3 . Proposal must be forwarded to (). 4 . This proposal will be processed according to "DTC proposal and investigation/examination practice".					Follow-up	
					. .	
					. .	
					. .	

Form 8 WBS/Theme Phasing management sheet (WBS, phased theme list table to reach the target cost

WBS phased theme list table to reach the objective target

Note1 . Mark the item which will be examined with a .
 Mark the item which will be adopted with a .
 Mark the item which will not be examined or has been rejected with an x .

Note2 . Reduced or increased effect in unit production cost.

WBS		Image / Sketch	Conceptual design phase (/)		Plan drawing phase (/)		Mfg. dwg. / Planning phase (/)		Prod./Test/Review phase (/)		For each WBS
Name (WBS No)	Name (WBS No)		No.	Expected effect (T.Yen)	No.	Expected effect (T.Yen)	No.	Expected effect (T.Yen)	No.	Expected effect (T.Yen)	Total of Expected effect (T.Yen)
Nomenclature()			Company()		Note1)		Note2)				
			(PHASE)	(PHASE)	(PHASE)	(PHASE)	(PHASE)	(PHASE)	(PHASE)	(PHASE)	
		Total expected effect									

Form 9 Theme/idea registration and promotion sheet

WBS	Item	Reg. No.		Theme/idea	Expected effect	Who proposed	Phase to exam.	Go exam. date	Who assigned	Necessary conditions to implement proposal	Result of adjusted conditions	Completion date	Resultant effect

Form 10 Theme/idea promotion table to reach the target cost (For unit production cost)

(For DTC unit production cost)

List of measures to reach the target cost			WBS No.	Nomenclature	Company name	(/)		
WBS	Theme	Details of implementation or concrete contents	Expected effect (T.Yen / AC)	Promoter	Necessary conditions to implement the theme	Result of adjusted conditions	Estimated completion date	Resultant of effect

Form 11 Theme/Idea Promotion Table to reach the target cost (For development cost)

(For Design-To-Development-Cost)

<u>List of measures to reach the target cost</u>	Phase to examine	Objective WBS	Activity No.	Nomenclature	Company / Dept.	Assigned person	(/)

Item No.	WBS	Measure	Implementation details or concrete contents	Expected effect		Assigned person	Necessary conditions to implement the measure	Result of adjusted conditions	Date of adoption	Resultant	
				Phase	Effect					Phase	Effect

When it is difficult to predict the measurable effect in a numerical value, it is OK to put

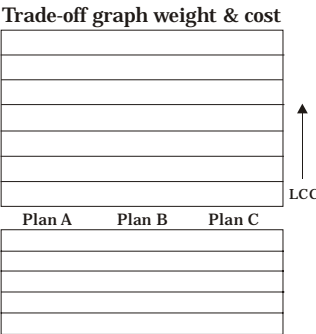
Extra large	Large	Medium	Small	Extra small
A	B	C	D	E

 into the effect column.

Form 12 Example of DTC worksheet (For computer)

DTC WORK SHEET		R'qt Check	Basic Func.	Ideas creation	Ideas comparison	Evaluation	Judge	Agree			Approval			Person in charge	Revision			Page								
								Leader	Cost Gp.	Chief	Planning	Purchasing					Drafted									
								Sch.Plan													Reviewed					
		Act.Date												Control No.				Approved								
<u>WBS Name</u>			<u>WBS No.</u>			<u>Theme</u>						Basic Function														
Target cost		Idea matrix					Plan A	Title		Plan B	Title		Plan C	Title		Sign column										
		Type	Components	Materials	Mfg. ways	Sub-con etc.																				
Cost	Mfg.	M/H																								
	Material																									
	Total																									
	Weight	Kg																								
	Reliability																									
Maintainability																										
(Other Requirement)						Explanation of contents and its distinctive character																				
<u>Notice on estimations</u> The estimated value of differences only is acceptable.						Cost Estimation (Average evaluation cost per XXX A/C)		Mfg.M/H (H)		Material		Mfg.M/H (H)		Material		Mfg.M/H (H)		Material		Drafted						
						Eval.Item	Wt.Coef.	Estimation	Ranking	Point	Wt. * Point	Estimation	Ranking	Point	Wt. * Point	Estimation	Ranking	Point	Wt. * Point	Estimation	Ranking	Point	Wt. * Point			
						Cost		\$				\$				\$						\$				
						Weight		Kg				Kg				Kg						Kg				
						Total														Agreed						
						Schedule & Comment																				
						Evaluation, Comment																				
						Total ranking																				
						Selected Idea		General comment & Conditions of selection								Sign		Chief Eng.		Sub-Chief		DTC suport				

Form 12A Example of DTC worksheet (For computer system)

DTC WORK SHEET	Sch. Plan	R'qt Check	Basic Func.	Ideas creation	Ideas comparison	Evaluation	Judge	Agree			Approval			Person in charge	Revision			Page								
	Act. Date							Leader	Cost Gp.	Chief	Planning	Purchasing		Drafted												
														Control No.	Reviewed				Approved							
WBS Name		WBS No.			Theme			Basic Function																		
Target cost		Idea matrix					Plan A		Title			Plan B		Title			Plan C		Title		Sign column					
Cost	Mfg.	M/H					(Sketch)		(Sketch)			(Sketch)					Drafted									
	Material																									
	Total																									
	Response																Checked									
	Reliability	e.g. MTBF															Approved									
Maintainability	Time to restore																									
Operability																										
(Other Requirement)						Explanation of contents and its distinctive character												Agreed								
<u>Notice on estimations</u> The estimated value of differences only is acceptable.						Cost Estimation (Average evaluation cost per XXX A/C)		Mfg. M/H (H)		Material			Mfg. M/H (H)		Material			Mfg. M/H (H)		Material		Drafted				
Trade-off graph weight & cost 						Eval. Item	Wt. Coef.	Estimation	Ranking	Point	Wt. * Point	Estimation	Ranking	Point	Wt. * Point	Estimation	Ranking	Point	Wt. * Point							
						Cost		\$				\$				\$										
						Weight		Kg				Kg				Kg										Checked
						Total																				
						Schedule & Comment																				
						Evaluation, Comment																				
						Total ranking																				
						Selected Idea		General comment & Conditions of selection								Chief Eng.		Sub-Chief		DTC suport						
																Sign										

Form 13 Theme/idea action expediting list

Action expediting list WBS() Phase () Assigned person ()

Reg. No.	Sub. No.	Cl	Theme/idea	Proposer	GO-A-HEAD date to examine	Conditions and notes	Action	Need date	Est. completion date

Form 13A Process expediting list

Process expediting list

Item No.	Reg. No.	Class	Item or part No.	Originated date	Date originally needed	Serial No.	Conditions or notes	Action process	Need date	Est. Completion date
Model	Promoter/Coordinator		Promoter / Coordinator							

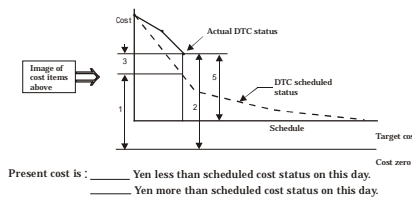
Form 14 Report on prospects of reaching the final target cost

Summary of prospect report to reach the target cost

Scheduled date for reporting on DTC scheduled curve

WBS No. _____ WBS name _____ Company _____ Date _____

	Item	Contents																														
1	Scheduled value on DTC scheduled curve	How much more cost reduction is obtained than the scheduled cost reduction value on the DTC scheduled curve ? More Less _____ \$																														
2	Present cost status	How much cost reduction must be done before reaching to the target cost? _____ \$																														
3	State the reason why	(Answer if the cost reduction scheduled on DTC scheduled curve was not obtained)																														
4	Cost reduction needs to reach target	_____ KS																														
5	Prospected effect by created theme/idea up to this date	<p style="text-align: center;">* 1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>No. of items</th> <th>Possible Effects</th> <th>Realization %</th> <th>Possible effects × Realization %</th> </tr> </thead> <tbody> <tr> <td>Unadopted items</td> <td></td> <td></td> <td>0 %</td> <td></td> </tr> <tr> <td>Adopted items</td> <td></td> <td>\$</td> <td>%</td> <td>\$</td> </tr> <tr> <td>Hopeful Items</td> <td></td> <td>\$</td> <td>%</td> <td>\$</td> </tr> <tr> <td>Before examination</td> <td></td> <td>\$</td> <td>%</td> <td>\$</td> </tr> <tr> <td>Total</td> <td></td> <td>\$</td> <td>%</td> <td>\$</td> </tr> </tbody> </table> <p>Note1. Prospected value must be report including G.C.I.P(In the case of in-house net value) Note2. The hopeful item must include all prospected items, prospected value must not include risk cost.</p>		No. of items	Possible Effects	Realization %	Possible effects × Realization %	Unadopted items			0 %		Adopted items		\$	%	\$	Hopeful Items		\$	%	\$	Before examination		\$	%	\$	Total		\$	%	\$
	No. of items	Possible Effects	Realization %	Possible effects × Realization %																												
Unadopted items			0 %																													
Adopted items		\$	%	\$																												
Hopeful Items		\$	%	\$																												
Before examination		\$	%	\$																												
Total		\$	%	\$																												
6	Positive key action and schedule to reach the target cost and schedule																															



Form 15 2 page plan of development activities estimate (1/2)

Development test/theme examination work estimate sheet (Company:)

Work No.	Test item name	Category		Approval		Assigned person	
WBS No. and its name	Purpose	Essence target	DTC rough trade	Estimate the realization of DTC	Detailed	Decided	
1. Purpose and measure of development test or activity to be itemized(FMD can be used).							
2. Input and output sequence of contents of test.							
3. Write test result to be used							

Expected results		
Expected effect		
Necessary conditions to realize the expected effect		
Schedule	Year	
	Test body and facility design	
	Test body and facility prep.	
	Test implementation	
	Including work of test report	
Contents of test		
Where to implement	Schedule of facility, equip. to be used	

Form 15 2 page plan of development activities estimate (2/2)

Format 15(2) 3-phase plan and estimation of development cost

Image sketch		Cost item	Man-hour		Cost		Scheduled year			Contents	Note		
			MH	Day	MH	T.Yen	T.Yen	T.Yen	Man-hour		Year	Year	
1. Test body	Bag cost	Calculation				(Yen)	(Yen)			rate			
		Drawing				(Yen)	(Yen)						
		Engineering work				(Yen)	(Yen)			Engineering	Yen	Yen	
		Adjust. of test facility				(Yen)	(Yen)			A Dept.	Yen	Yen	
		Test implementation				(Yen)	(Yen)						
		Total				(Yen)	(Yen)						
	Test body cost	Fabrication cost	I				(Yen)	(Yen)					
		Jig cost	J				(Yen)	(Yen)					
		Assembly cost	E				(Yen)	(Yen)					
		Material cost											
Purchased parts cost													
2 Test method	Test facility cost	Total											
		Fabrication cost	N			(T Yen)	(T Yen)						
		Material cost											
		Purchased parts cost											
3 Test facility	Other expenses	Total											
		Final assembly and adjustment	V			(Yen)	(Yen)						
		Test implementation				(Yen)	(Yen)						
		After treatment of test				(Yen)	(Yen)						
		Man-hour total				(Yen)	(Yen)						
		Material total											
		Drawing cost											
		Travel costs								General facility equipment			
		Parking and transport								1			
		Cost of renting computer								2			
Total								3					
Material and expense total								4					
Total	G.C.P							5					
T.Yen		T.Yen						6					
								7					
Challenging target cost													

Form 16 Engineering link sheet
Format 16 Engineering sheet

<u>Engineering sheet</u>		Reg. Serial No.		
		Date; / /		
(To)	(From) Department: Group: Section:	P r o j e c t Section Manager	Leader	A s s i g n e d. person
(Title) Information		Answer before Year month day		No. of attached documents
Query Request				
(Memo.)				
Copy Distributi on	x x x x x x x x x x x x			
Total				
(Answer)				
Your distribution	x x x x x x x x x			
Total				
<input type="radio"/> Please write answer on this sheet and return with responsible person's signature to (). <input type="radio"/> Please use your distribution column for your purpose.		Date; / /		
				Assigned person
		Number of attached documents		

Form 18 Implementation Plan Sheet

Date: . . .

Implementation Plan

Subject		Dept. Chief	Manager	Co-ordinator	
					Division

Details of process items and/or contents	Scheduled Serial or Lot No.	Target	Implementation Schedule	Personnel Concerned/Assigned

Necessary conditions and notes to attain the target	Result of adjusted conditions
---	-------------------------------

Form 19 Work summary sheet

Work summary sheet

				Approval .	Leader .	Created by .		
WBS No. Name		Master schedule date		Implementation schedule		Group	Assigned person	
		Start	Complete	Start	Complete			
Output of work								
Input of work								
Work item and content (as concrete as possible)								
Note						Group related to this work Mark		
						Group	Input	Output
						Plan/cont.		
						Cost		
						Aerodyn.		
						Structure		
						Equipment		
						Electrical		
Software								