NPQP Category 3

Project Management

NISSAN
MOTOR CORPORATION

3 - Project Management

Category Purpose:

- **Identify** the requirements, risks and timing associated with managing a project through all phases of NPQP.

Activities:

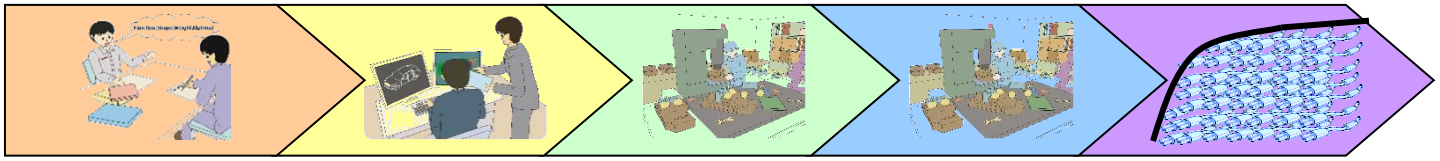
3.1 Identification of Project Team

3.2 Project Planning and Production Preparation Monitoring

3.3 Project Risk and Concern Management

3 - Project Management

Timing:



	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
3.1 Identification of Project Team					
3.2 Project Planning and Production Preparation Monitoring					
3.3 Project Risk and Concern Management					

3 - Project Management

3.1 Identification of Project Team

3.2 Project Planning and Production Preparation Monitoring

3.3 Project Risk and Concern Management

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3 – Project Management
3.1 – Identification of Project Team

Activity Purpose:

- Clarify the specific organizations required to achieve product realization



Head office



Manufacturing Plant



Project team



Development Department

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3 – Project Management
3.1 – Identification of Project Team

Output Documents & Submission Timing

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Supplier Contact Directory (SCD)				3	3	3									

3 – Project Management
『Supplier Contact Directory (SCD) 』

- **Document based on responsibilities and authorities in accordance with the company's product realization process.**

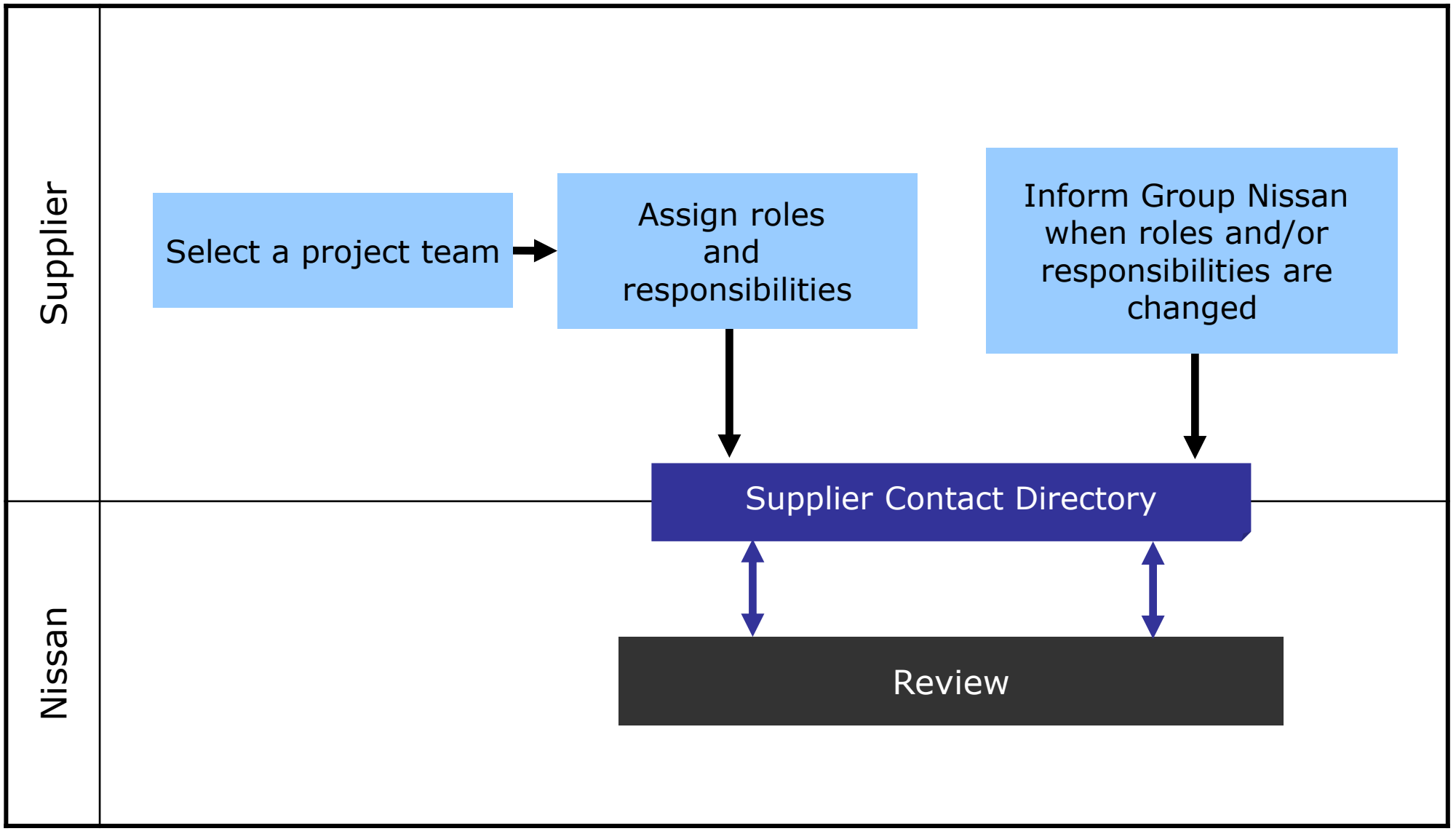
(Create based on the responsibility allocation table defined in quality manuals, such as the quality assurance system diagram or RACI chart.)

Fax: _____ Job Title: _____	Fax: _____ Job Title: _____
Logistics Director Name: _____ Telephone: _____ Mobile: _____ E-mail: _____	Commercial Director Name: _____ Telephone: _____ Mobile: _____ E-mail: _____ Fax: _____ Job Title: _____
Purchasing Director Name: _____ Telephone: _____ Mobile: _____ E-mail: _____ Fax: _____ Job Title: _____	Production Control Director Name: _____ Telephone: _____ Mobile: _____ E-mail: _____ Fax: _____ Job Title: _____

Provide a contact that is available 24 hours a day.

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3 – Project Management
3.1 – Identification of Project Team



3 - Project Management

3.1 Identification of Project Team

3.2 Project Planning and Production Preparation Monitoring

3.3 Project Risk and Concern Management

Activity Purpose:

- **Plan** the project activities in line with Nissan milestones and **monitor** the progress.

Notes:

- In the case of modules/complex assemblies, the **tier 1** supplier shall **deploy** all Project Planning and Production Preparation Monitoring **requirements** to all sub-suppliers (including in-house sub-suppliers).

Output Documents & Submission Timing

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Supplier Master Schedule (SMS)				3	3	3									
Supplier Production Preparation Monitoring Plan / Status Report (SPPMP/SR)				4	4	4	3	3	3	3	3	3			
Production Capacity Plan (PCP)				1	1	1	(1)	(1)	(1)	(1)	(1)	(1)			

3.2 – Project Planning and Production Preparation Monitoring
『 Supplier Master Schedule 』

"Supplier Master Schedule" is a document used for the following purposes:

1.To clarify the timing of key design, development, and production preparation activities in order to achieve QCD targets.

2.To confirm the overall project plan and its progress during internal project meetings with supplier.

3.To check whether each management item is progressing according to plan.

3.2 – Project Planning and Production Preparation Monitoring

『 DCI for Supplier Master Schedule 』

NPQP - SUPPLIER MASTER SCHEDULE

MASTER PLAN

Project: ①		Safety ☐ Regulation ☐ Nissan Impt A ☐ Impt B ☐ Impt C ☐ OBD ☐ ②	
Supplier Name: ③ Supplier Plant Location:		Supplier Code: ④ Author:	E-mail: ⑤ Tel. No:
Part Name: ⑥ Part No. & Issue Level: Design Note No. / DEVO:			Doc Ref. No. / Ver.: Doc. Rev. Date: Doc. Origin Date:

a. Is this part Unique or Carryover / Carry Across (COCA)?	⑦	b. 1. Is additional tooling / equipment required? 2. Is design change required?		c. Is additional manpower or production shifts required to accommodate additional volume?	
				d. Is additional packaging required?	

e. Volume Requirement based on RFQ	f. Nissan Buyer	g. Vehicle Trial Production Requirements	h.	Trial	S / VC-Lot	ST-Lot	PT1	PT2	SOP	SOP + 90 days
			i.	MRD		⑧				
			j.	Quantities						
			k.	Tooling Status						
			l.	Commodity						

①Enter the project name. (e.g., PZ1A, P33B, XC2A, etc.)
②If the supplied parts are safety special characteristics or regulation special characteristics, check the applicable items.
③Enter the supplier name and the name of the factory manufacturing the parts.
④Enter the supplier code and the name of the creator.
⑤Enter the email address and phone number of the form creator.
⑥Enter the part name, part No., and the latest design note No. issued by Nissan Design.
⑦Select is this part unique or carryover or carry across from the dropdown box.
⑧Fill in based on forecast information. Select tooling status and commodity from the dropdown box.

3.2 – Project Planning and Production Preparation Monitoring

『 DCI for Supplier Master Schedule 』

No.	Project Items (Detail)	Responsible Person (Supplier)	Date (Month / Day / Year) START	Date (Month / Day / Year) END	Total Planned Days	% Actual Completion
#	Supplier Project Kick-Off			1900/1/0		
1	Project Milestone (Key MRD Milestone)					
2	Internal Project Review Meetings		00/01/00	00/01/00		
3	Detail Design / Drawing Preparation		00/01/00	00/01/00		
4	Testing		00/01/00	00/01/00		
5	FMEA		00/01/00	00/01/00		
6	Production Tooling		00/01/00	00/01/00		
7	Production Gauging		00/01/00	00/01/00		
8	Production Facilities / Equipment Installation		00/01/00	00/01/00		
9	Control Plans		00/01/00	00/01/00		
10	Floor Plan Layout / Process Flow Chart		00/01/00	00/01/00		
11	Operation Sheets / Work Instructions		00/01/00	00/01/00		
12	Operator Recruitment & Training		00/01/00	00/01/00		
13	Process Capability Study		00/01/00	00/01/00		
14	Packaging Development & Manufacture		00/01/00	00/01/00		
15	Logistics Systems Implementation		00/01/00	00/01/00		
16	Sub-Supplier Management		00/01/00	00/01/00		
17	Appearance Approval		00/01/00	00/01/00		
18	Parts Manufacture & Submission		00/01/00	00/01/00		
19	Supplier Process Audit		00/01/00	00/01/00		
20	PSW Sign Off		00/01/00	00/01/00		
21	Ramp-Up Activities		00/01/00	00/01/00		

Time Scale: Month / Year; Month from SOP; Week (1 2 3 4)

Actual / Planned

1ページ

1) Fill in the necessary information (planned schedule) based on the 21 management items on this form. Please ensure that the plan aligns with Nissan's milestones.
e.g. At least two trials must be conducted by the time of the VC lot.
2) Schedule detail of each item to be created by own form, if need.
3) You can use Schedule detail form on old version of NPQP, if you want.

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3.2 – Project Planning and Production Preparation Monitoring
『 DCI for Supplier Master Schedule(SMS) 』

①FMEA, Control Plan, and work instruction may involve measures for defects or changes in work methods, so be sure to fill in the revision plans at each milestone.

②VC: off-tool and PT: off-process, create SMS plans that can be achieved for each mold and equipment.

3.2 – Project Planning and Production Preparation Monitoring

『 Supplier Production Preparation Monitoring Plan/Status Report (SPPMP/SR)』

Production Preparation Influencing Factors (All numbers below are cumulative numbers)				Project Milestones					Comments
				S / VC-Lot	PT1	PT2	FVC/T2000	SOP	
MAN	Manning Requirement	Number of Personnel	Planned Target						
			Planned % of Personnel at SOP						
			Achievement						
			% of Planned Target						
			% of SOP Target						
	Skill Level	Number of Personnel Fully Trained	Planned Target						
			Planned % of Personnel at SOP						
			Achievement						
			% of Planned Target						
			% of SOP Target						
MATE	Test Achievement	Number of Tests Passed	Planned Target						
			Planned % of Supplier Test Plan at SOP						
			Achievement						
			% of Planned Target						
			% of SOP Target						
	Process Capability	Number of Features Capable	Planned Target						
			Planned % of Process Capability Study Pla						
			Achievement						
			% of Planned Target						
			% of SOP Target						
	Straight Through Ratio	% of Product Straight Through	Planned Target						
			Planned % of SOP Target						
			Achievement						
			% of Planned Target						
			% of SOP Target						
	OK Ratio	% of OK Product	Planned Target						
			Planned % of SOP Target						
			Achievement						

- **The "Supplier Production Preparation Monitoring Plan/Status Report (SPPMP/SR)" is a form that establishes the 4M (Man, Material, Machine, Method) goals at each stage of the project, allowing for the confirmation and reporting of the achievement levels of these goals at each milestone.**

• Production Capacity Plan

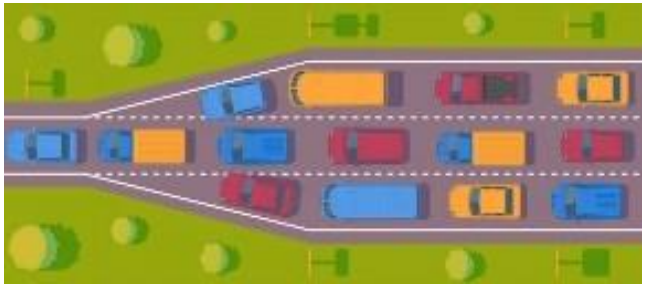
What is it?

- A series of 3 key worksheets (plus 2 optional worksheets) to provide evidence that your facilities have sufficient capacity to meet a new products demand



Why do I need it?

- To demonstrate that every process you use has enough capacity
- To identify which process is the bottleneck
- To identify your facilities unallocated (free) time

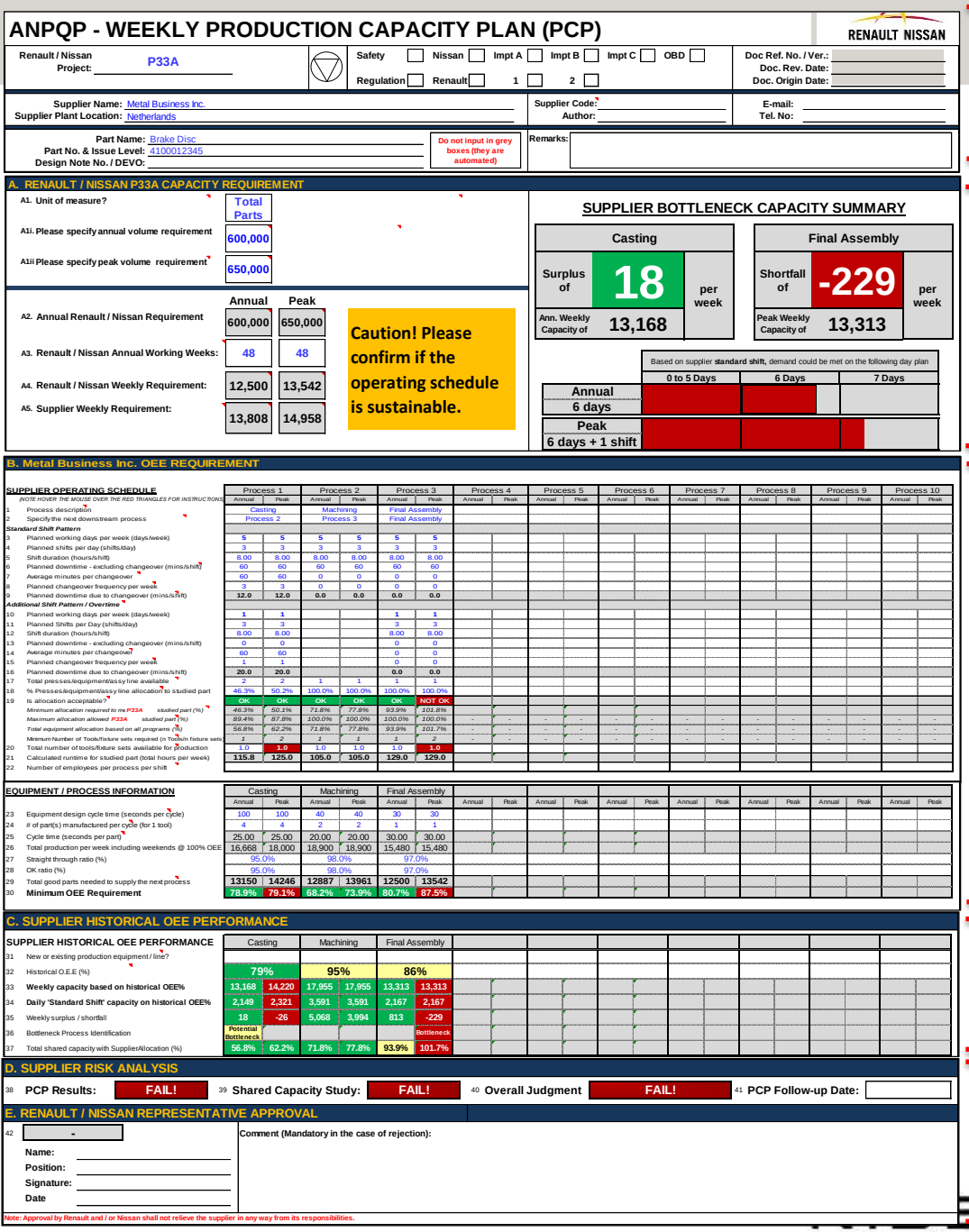




- To identify the constraints imposed by your product mix including making other customers products

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Worksheet 1) • Production Capacity Study



ANPQP - WEEKLY PRODUCTION CAPACITY PLAN (PCP)

RENAULT NISSAN

Renault / Nissan Project: P33A

Safety ☐ Nissan ☐ Impt A ☐ Impt B ☐ Impt C ☐ OBD ☐

Regulation ☐ Renault ☐ 1 ☐ 2 ☐

Doc Ref. No. / Ver.:
Doc. Rev. Date:
Doc. Origin Date:

Supplier Name: Metal Business Inc.
Supplier Plant Location: Netherlands
Supplier Code:
Author:
E-mail:
Tel. No:

Part Name: Brake Disc
Part No. & Issue Level: 4100012345
Design Note No. / DEVO:

Do not input in grey boxes (they are automated)

Remarks:

A. RENAULT / NISSAN P33A CAPACITY REQUIREMENT

		Annual	Peak
A1.	Unit of measure?	Total Parts	
A1i.	Please specify annual volume requirement	600,000	
A1ii	Please specify peak volume requirement	650,000	
A2.	Annual Renault / Nissan Requirement	600,000	650,000
A3.	Renault / Nissan Annual Working Weeks:	48	48
A4.	Renault / Nissan Weekly Requirement:	12,500	13,542
A5.	Supplier Weekly Requirement:	13,808	14,958

Caution! Please confirm if the operating schedule is sustainable.

SUPPLIER BOTTLENECK CAPACITY SUMMARY

Casting			Final Assembly		
Surplus of	18	per week	Shortfall of	-229	per week
Ann. Weekly Capacity of	13,168		Peak Weekly Capacity of	13,313	

Based on supplier **standard shift**, demand could be met on the following day plan

	0 to 5 Days	6 Days	7 Days
Annual 6 days			
Peak 6 days + 1 shift			

B. Metal Business Inc. OEE REQUIREMENT

SUPPLIER OPERATING SCHEDULE (NOTE HOVER THE MOUSE OVER THE RED TRIANGLES FOR INSTRUCTIONS)

		Process 1		Process 2		Process 3		Process 4		Process 5		Process 6		Process 7		Process 8		Process 9		Process 10	
		Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
1	Process description	Casting		Machining		Final Assembly															
2	Specify the next downstream process	Process 2		Process 3		Final Assembly															
	Standard Shift Pattern																				
3	Planned working days per week (days/week)	5	5	5	5	5	5														
4	Planned shifts per day (shifts/day)	3	3	3	3	3	3														
5	Shift duration (hours/shift)	8.00	8.00	8.00	8.00	8.00	8.00														
6	Planned downtime - excluding changeover (mins/shift)	60	60	60	60	60	60														
7	Average minutes per changeover	60	60	0	0	0	0														
8	Planned changeover frequency per week	3	3	0	0	0	0														
9	Planned downtime due to changeover (mins/shift)	12.0	12.0	0.0	0.0	0.0	0.0														
	Additional Shift Pattern / Overtime																				
10	Planned working days per week (days/week)	1	1			1	1														
11	Planned Shifts per Day (shifts/day)	3	3			3	3														
12	Shift duration (hours/shift)	8.00	8.00			8.00	8.00														
13	Planned downtime - excluding changeover (mins/shift)	0	0			0	0														
14	Average minutes per changeover	60	60			0	0														
15	Planned changeover frequency per week	1	1			0	0														
16	Planned downtime due to changeover (mins/shift)	20.0	20.0			0.0	0.0														
17	Total presses/equipment/assy line available	2	2	1	1	1	1														
18	% Presses/equipment/assy line allocation to studied part	46.3%	50.2%	100.0%	100.0%	100.0%	100.0%														
19	Is allocation acceptable?	OK	OK	OK	OK	OK	NOT OK														
	Minimum allocation required to mx P33A studied part (%)	*46.3%*	*50.1%*	*71.8%*	*77.8%*	*93.9%*	*101.8%*														
	Maximum allocation allowed P33A studied part (%)	*89.4%*	*87.8%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*														
	Total equipment allocation based on all programs (%)	*56.8%*	*62.2%*	*71.8%*	*77.8%*	*93.9%*	*101.7%*														
	Minimum Number of Tools/fixture sets required (n Tooling fixture sets)	*1*	*2*	*1*	*1*	*1*	*2*														
20	Total number of tools/fixture sets available for production	1.0	1.0	1.0	1.0	1.0	1.0														
21	Calculated runtime for studied part (total hours per week)	115.8	125.0	105.0	105.0	129.0	129.0														
22	Number of employees per process per shift																				

EQUIPMENT / PROCESS INFORMATION

		Casting		Machining		Final Assembly															
		Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak	Annual	Peak
23	Equipment design cycle time (seconds per cycle)	100	100	40	40	30	30														
24	# of part(s) manufactured per cycle (for 1 tool)	4	4	2	2	1	1														
25	Cycle time (seconds per part)	25.00	25.00	20.00	20.00	30.00	30.00														
26	Total production per week including weekends @ 100% OEE	16,668	18,000	18,900	18,900	15,480	15,480														
27	Straight through ratio (%)	95.0%		98.0%		97.0%															
28	OK ratio (%)	95.0%		98.0%		97.0%															
29	Total good parts needed to supply the next process	13150	14246	12887	13961	12500	13542														
30	**Minimum OEE Requirement**	78.9%	79.1%	68.2%	73.9%	80.7%	87.5%														

C. SUPPLIER HISTORICAL OEE PERFORMANCE

SUPPLIER HISTORICAL OEE PERFORMANCE

		Casting		Machining		Final Assembly															
31	New or existing production equipment / line?																				
32	Historical O.E.E (%)	79%		95%		86%															
33	**Weekly capacity based on historical OEE%**	13,168	14,220	17,955	17,955	13,313	13,313														
34	**Daily 'Standard Shift' capacity on historical OEE%**	2,149	2,321	3,591	3,591	2,167	2,167														
35	Weekly surplus / shortfall	18	-26	5,068	3,994	813	-229														
36	Bottleneck Process Identification	Potential Bottleneck					Bottleneck														
37	Total shared capacity with Supplier/Allocation (%)	56.8%	62.2%	71.8%	77.8%	93.9%	101.7%														

D. SUPPLIER RISK ANALYSIS

38 PCP Results: FAIL! 39 Shared Capacity Study: FAIL! 40 Overall Judgment FAIL! 41 PCP Follow-up Date:

E. RENAULT / NISSAN REPRESENTATIVE APPROVAL

42 -

Name:
Position:
Signature:
Date

Comment (Mandatory in the case of rejection):

Note: Approval by Renault and / or Nissan shall not relieve the supplier in any way from its responsibilities.

- **Header**
  - ❑ Generic

Section A:

- ❑ **Customer demand (Left Hand Side)**
- ❑ **Result summary (Right Hand Side)**

Section B:

- ❑ **Suppliers operating schedule**
- ❑ **Suppliers process information**
- ❑ **Each column represents 1 process**

Section C:

- ❑ **Suppliers current OEE performance**
- ❑ **Identifies bottle neck process**
- ❑ **Predicted weekly output**

Section D & E

- ❑ **Judgment and approval**

NISSAN MOTOR CORPORATION

Sheet 1) Customer Volume Requirement

- **Select unit of measure - as specified in your RFQ:**
  - Parts volume (Europe & Asia)
  - Vehicle volume (NNA region only)

A. NISSAN CAPACITY REQUIREMENT

A1. Unit of measure?

A1i.. Please complete section A1, Unit of measure

Vehicle
Total Parts

	Annual	Peak
A2. Annual Nissan Requirement	0	0
A3. Nissan Annual Working Weeks:		
A4. Nissan Weekly Requirement:	0	0
A5. Supplier Weekly Requirement:	0	0

NISSAN MOTOR CORPORATION

Sheet 1) Specify your processes

B. Metal Business Inc. OEE REQUIREMENT

SUPPLIER OPERATING SCHEDULE

(NOTE HOVER THE MOUSE OVER THE RED TRIANGLES FOR INSTRUCTIONS

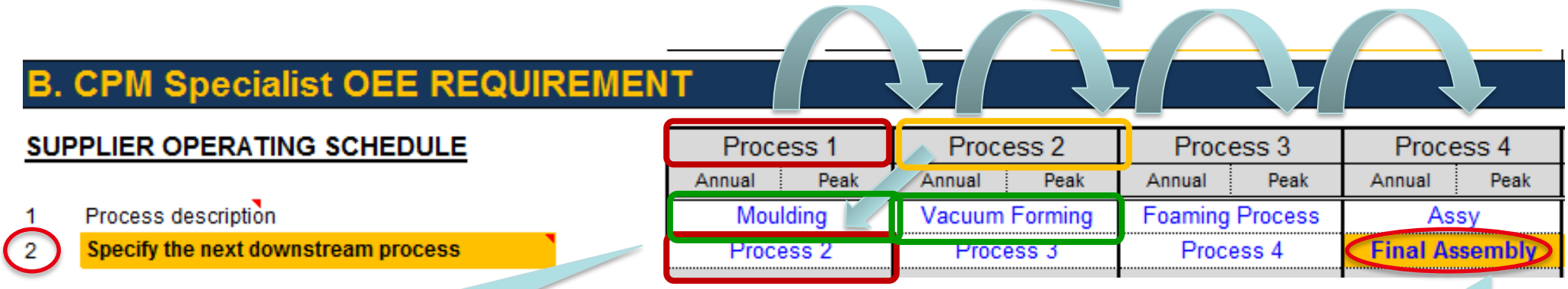
		Process 1		Process 2		Process 3		
		Annual	Peak	Annual	Peak	Annual	Peak	An
1	Process description	Casting		Machining		Final Assembly		
2	Specify the next downstream process	Process 2		Process 3		Final Assembly		
	Standard							
3	P	**5**	**5**	**5**	**5**	**5**	**5**	
4	P	3	3	3	3	3	3	
5	S	8.00	8.00	8.00	8.00	8.00	8.00	
6	P	60	60	60	60	60	60	
7	A	60	60	0	0	0	0	
8	P	3	3	0	0	0	0	
9	P	**12.0**	**12.0**	**0.0**	**0.0**	**0.0**	**0.0**	
	Additional Shift Pattern / Overtime							
10	Planned working days per week (days/week)	**1**	**1**					
11	Planned Shifts per Day (shifts/day)	3	3					
12	Shift duration (hours/shift)	8.00	8.00					
13	Planned downtime - excluding changeover (mins/shift)	0	0					
14	Average minutes per changeover	60	60					
15	Planned changeover frequency per week	1	1					
16	Planned downtime due to changeover (mins/shift)	**20.0**	**20.0**			**0.0**	**0.0**	
17	Total presses/equipment/assy line available	2	2	1	1	1	1	
18	% Presses/equipment/assy line allocation to studied part	46.3%	50.2%	100.0%	100.0%	100.0%	100.0%	
19	Is allocation acceptable?	OK	OK	OK	OK	OK	NOT OK	
	Minimum allocation required to me ***P33A*** *studied part (%)*	*46.3%*	*50.1%*	*71.8%*	*77.8%*	*93.9%*	*101.8%*	
	Maximum allocation allowed ***P33A*** *studied part (%)*	*89.4%*	*87.8%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	
	Total equipment allocation based on all programs (%)	*56.8%*	*62.2%*	*71.8%*	*77.8%*	*93.9%*	*101.7%*	
	Minimum Number of Tools/fixture sets required (n Tools/n fixture sets)	*1*	*2*	*1*	*1*	*1*	*2*	
20	Total number of tools/fixture sets available for production	1.0	**1.0**	1.0	1.0	1.0	**1.0**	
21	Calculated runtime for studied part (total hours per week)	**115.8**	**125.0**	**105.0**	**105.0**	**129.0**	**129.0**	
22	Number of employees per process per shift							

Input ALL the process names in the order shown in the process flow diagram

Enter data for each process in a unique column

Sheet 1) Linking Downstream Processes

Follow this logic with each process



Link each process to the next downstream process. Use the drop down menu to link the 'process number'

e.g. if molding feeds vacuum forming

Link process 1 to process 2

The last process should always be set to show Final Assembly (even if its not actually assembly, it just tells the sheet the part is ready for dispatch)

NISSAN MOTOR CORPORATION

Sheet 1) Your Operating Schedule

B. Metal Business Inc. OEE REQUIREMENT

SUPPLIER OPERATING SCHEDULE

(NOTE HOVER THE MOUSE OVER THE RED TRIANGLES FOR INSTRUCTIONS

		Process 1		Process 2	
		Annual	Peak	Annual	Peak
1	Process description	Casting		Machining	
2	Specify the next downstream process	Process 2		Process 3	
	Standard Shift Pattern				
3	Planned working days per week (days/week)	**5**	**5**	**5**	**5**
4	Planned shifts per day (shifts/day)	3	3	3	3
5	Shift duration (hours/shift)	8.00	8.00	8.00	8.00
6	Planned downtime - excluding changeover (mins/shift)	60	60	60	60
7	Average minutes per changeover	60	60	0	0
8	Planned changeover frequency per week	3	3	0	0
9	Planned downtime due to changeover (mins/shift)	**12.0**	**12.0**	**0.0**	**0.0**
	Additional Shift Pattern / Overtime				
10	Planned working days per week (days/week)	**1**	**1**		
11	Planned Shifts per Day (shifts/day)	3	3		
12	Shift duration (hours/shift)	8.00	8.00		
13	Planned downtime - excluding changeover (mins/shift)	0	0		
14	Average minutes per changeover	60	60		
15	Planned changeover frequency per week	1	1		
16	Planned downtime due to changeover (mins/shift)	**20.0**	**20.0**		
17	Total presses/equipment/assy line available	2	2	1	1
18	% Presses/equipment/assy line allocation to studied part	46.3%	50.2%	100.0%	100.0%
19	Is allocation acceptable?	OK	OK	OK	OK
	Minimum allocation required to me **P33A** *studied part (%)*	*46.3%*	*50.1%*	*71.8%*	*77.8%*
	Maximum allocation allowed **P33A** *studied part (%)*	*89.4%*	*87.8%*	*100.0%*	*100.0%*
	Total equipment allocation based on all programs (%)	*56.8%*	*62.2%*	*71.8%*	*77.8%*
	Minimum Number of Tools/fixture sets required (n Tools/n fixture sets)	*1*	*2*	*1*	*1*
20	Total number of tools/fixture sets available for production	1.0	1.0	1.0	1.0
21	Calculated runtime for studied part (total hours per week)	**115.8**	**125.0**	**105.0**	**105.0**
22	Number of employees per process per shift	1		1	

- Input your **standard** shift pattern & planned downtime for each process in the 'Annual' column
- Input alternative shift pattern to support **peak** volume in the 'Peak' column
- Where peak proposal requires **irregular** shifts/overtime, open the 'hidden' cells to allow flexible input
- Product/tool changeover time is treated as **planned downtime**. Its deducted automatically from available runtime

MOTOR CORPORATION

Sheet 1) Equipment allocation



JAGUAR LAND ROVER + NISSAN

B. Metal Business Inc. OEE REQUIREMENT

	SUPPLIER OPERATING SCHEDULE	Process 1		Process 2	
	(NOTE HOVER THE MOUSE OVER THE RED TRIANGLES FOR INSTRUCTIONS)	Annual	Peak	Annual	Peak
1	Process description	Casting		Machining	
2	Specify the next downstream process	Process 2		Process 3	
	Standard Shift Pattern				
3	Planned working days per week (days/week)	**5**	**5**	**5**	**5**
4	Planned shifts per day (shifts/day)	3	3	3	3
5	Shift duration (hours/shift)	8.00	8.00	8.00	8.00
6	Planned downtime - excluding changeover (mins/shift)	60	60	60	60
7	Average minutes per changeover	60	60	0	0
8	Planned changeover frequency per week	3	3	0	0
9	Planned downtime due to changeover (mins/shift)	**12.0**	**12.0**	**0.0**	**0.0**
17	~~Total presses/equipment/assy line available~~	~~2~~	~~2~~	~~1~~	~~1~~
18	% Presses/equipment/assy line allocation to studied part	100.0%	100.0%	100.0%	100.0%
19	Is allocation acceptable?	NOT OK	NOT OK	OK	OK
20	Total number of tools/fixture sets available for production	1.0	**1.0**	1.0	1.0
21	Calculated runtime for studied part (total hours per week)	**125.0**	**125.0**	**105.0**	**105.0**
22	Number of employees per process per shift	1		1	

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- **Later the PCP will study capacity for lines shared with other OEMs**
- **However to populate the formulas, a temporary figure is needed**
- **Always input 100% allocation initially, even if a line is shared**
- **All cells must be complete before the data is passed to the shared capacity sheet for auto populating**
- **You have to re-visit this data after completing worksheet 3**

Worksheet #3: • Shared Capacity Study



What is it?

- Validates % of a facilities available capacity allocated to making a new product

Why do I need it?

- To identify the constraints imposed from other customers products
- To identify the lines 'free' (unallocated) time

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Worksheet #3: Shared Capacity Study

Grey cells are formulas (no input necessary)

NPQP - SUPPLIER SHARED

Studied (new) part application is automatically populated into row 1

Process 1	Casting	Supplier Available Time per Week	
		Average	Peak
1. Total Equipment Available		2	2
2. Total Machine Runtime Available (Minutes / Week)		15000	15000
3. OEE% Assumption		79%	
4. Actual SFVC OEE%			

Part	5a. Program Code	5b. Part Number / Name		%		Required Parts Requirement / Week		Time (seconds)		8. Historical OEE%	9. Runtime Required per Week (minutes) @ OEE Assumption		10. % Allocation Required / Equipment or Process	
						Annual	Peak	Annual	Peak		Annual	Peak	Annual	Peak
1	P33A	41000 RR00A	600,000			13,150	14,246	25	25	79.0%	6936	7514	46.2%	50.1%
2	L42P	41000-xxxxx	400,000	15%										
3														
28														
29						0	0				-	-	-	-
30											-	-	-	-
Max Weekly Capacity:											Equipment Utilization:		75.5%	83.8%
If Total													nd Process Fails.	

For common parts, specify annual volume for other models from latest data (or RFQ)

List all other parts that run on the same equipment / process

Up to 30 processes can be specified

We don't need part numbers for competitor parts. Part names or a code is enough

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Adjusting the PCP front worksheet

	SUPPLIER OPERATING SCHEDULE	Process 1		Process 2	
	(NOTE HOVER THE MOUSE OVER THE RED TRIANGLES FOR INSTRUCTIONS)	Annual	Peak	Annual	Peak
1	Process description	Casting		Machining	
2	Specify the next downstream process	Process 2		Process 3	
	Standard Shift Pattern				
3	Planned working days per week (days/week)	**5**	**5**	**5**	**5**
4	Planned shifts per day (shifts/day)	3	3	3	3
5	Shift duration (hours/shift)	8.00	8.00	8.00	8.00
6	Planned downtime - excluding changeover (mins/shift)	60	60	60	60
7	Average minutes per changeover	60	60	0	0
8	Planned changeover frequency per week	3	3	0	0
9	Planned downtime due to changeover (mins/shift)	**12.0**	**12.0**	**0.0**	**0.0**
	Additional Shift Pattern / Overtime				
10	Planned working days per week (days/week)	**1**	**1**		
11	Planned Shifts per Day (shifts/day)	3	3		
12	Shift duration (hours/shift)	8.00	8.00		
13	Planned downtime - excluding changeover (mins/shift)	0	0		
14	Average minutes per changeover	60	60		
15	Planned changeover frequency per week	1	1		
16	Planned downtime due to changeover (mins/shift)	**20.0**	**20.0**		
17	Total presses/equipment/assy line available	2	2	1	1
18	% Presses/equipment/assy line allocation to studied part	47.0%	50.0%	100.0%	100.0%
19	Is allocation acceptable?	OK	REVIEW	OK	OK
	Minimum allocation required to me ***P33A*** *studied part (%)*	*46.3%*	*50.1%*	*71.8%*	*77.8%*
	Maximum allocation allowed ***P33A*** *studied part (%)*	*70.6%*	*66.3%*	*100.0%*	*100.0%*
	Total equipment allocation based on all programs (%)	*75.5%*	*83.8%*	*71.8%*	*77.8%*
	Minimum Number of Tools/fixture sets required (n Tools/n fixture sets)	*1*	*2*	*1*	*1*
20	Total number of tools/fixture sets available for production	1.0	**1.0**	1.0	1.0
21	Calculated runtime for studied part (total hours per week)	**117.5**	**125.0**	**105.0**	**105.0**
22	Number of employees per process per shift	1		1	

- After you have populated the **shared** facility worksheet, you need to correct the **initial PCP worksheet** 1 with the shared data result
- Remove the temporary 100% figure and replace it with the shared allocation % from the shared worksheet
- The PCP worksheet will automatically repopulate & make a judgement using the new shared data

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3 - Project Management

3.1 Identification of Project Team

3.2 Project Planning and Production Preparation Monitoring

3.3 Project Risk and Concern Management

3 - Project Management
3.3 – Project Risk and Concern Management

Activity Purpose:

- **Identify** all project risks and concerns. **Manage** corrective and preventative actions during design and product / process development.

Output Documents & Submission Timing:

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Project Development Record (PDR)				3	3	3	3	3	3	3	3	3			

NPQP Activities
3.3 – Project Risk and Concern Management

Project Development Record (PDR)

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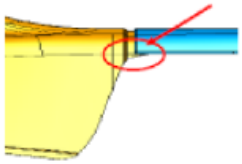
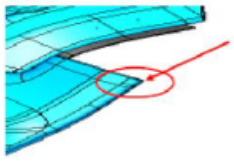
NPQP - PROJECT DEVELOPMENT RECORD

① **Include cases where Nissan has made design changes.**

② **Provide an overview with illustrations to explain.**

③ **Include the discovery department and prototyping.**

R / N Project:	X123	Safety☑ Regulation☑	Nissan Impt A ☐ Impt B ☐ Impt C ☐ OBD ☐ Renault 1 ☑ 2 ☑	Doc. Rev. Date:	Sep.20th 2018
Supplier Name:	ABC Corporation Ltd.	Supplier Code:	A999	Doc. Origin Date:	Jun. 23th
Supplier Plant Name:	Yokohama plant	Author:	Takumi Nissan	E-mail:	Taro@mail.co.jp
Part Name:	Kick Plate Inner			Tel. No:	+81-(0)46-270-1874
Part No. & Issue Level:	12345 XX123				
Design Note No. / DEVO:	TQ2345				

No.	Detail									
Report No.	Gap to finisher. Dimensional error, part NG to specification. Concern identified during T0 off-tool trial inspection activity  Raised by: NISSAN Date: 6/22/2018 Build: T0 Trial	Root cause	Injection tooling incorrect accuracy							
		Countermeasure	Tool modification will be finished by 20/08/2018, to confirm OK at T1 trial, planned 25/08/2018							
			Design Note: TQ1234 Date: 22/06/2018 Judgement: NG	Design Note: Date: 22/06/2018 Judgement: OK	Design Note: TQ1234 Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:			
		Confirmation	NG-22/06/18 (J Smith, NEPQE)	OK-26/06/18 (J Smith, NEPQE)						
Report No.	Sharp edge identified during T1 trial. Design mismatch, design note (TQ-2345 issued for VC-LOT adoption)  Raised by: NISSAN Date: 26/08/2018 Build: T1 Trial	Root cause								
		Countermeasure	Design Note: Date: Judgement:							
		Confirmation								

Consolidate all outstanding issues and development problems that became clear during the product development and production preparation stages into a single document.

3 – Project Management
3.3 – Project Risk and Concern Management

