

ANPQP Revision Version 3.0

ANPQP Maintenance Committee

April, 2015



New Revision Summary (1/2)

Main request

- Study and improve commonization to support optimized joint procurement.
- Collect all requirements deployed after V2.3 publication and incorporate the new revision.
- Make the requirement (process/output) understandable.

Alliance

1. Commonized processes/output below;

- ✓ Design Review (Full Process DR/Quick DR)
- ✓ PSW (Part Submission Warrant)
- ✓ Non-Conforming Product Management
- ✓ Design Change Management
- ✓ Environmental Requirement
- ✓ Special Characteristics Management
- (Certificate of Certification (COC)/Conformity of Product (COP))
- ✓ Others

2. Added examples/key-points below;

- ✓ Floor Layout Planning, Control Plan, Work Instruction etc.

New Revision Summary (2/2)

3. Make the requirements understandable such as below;

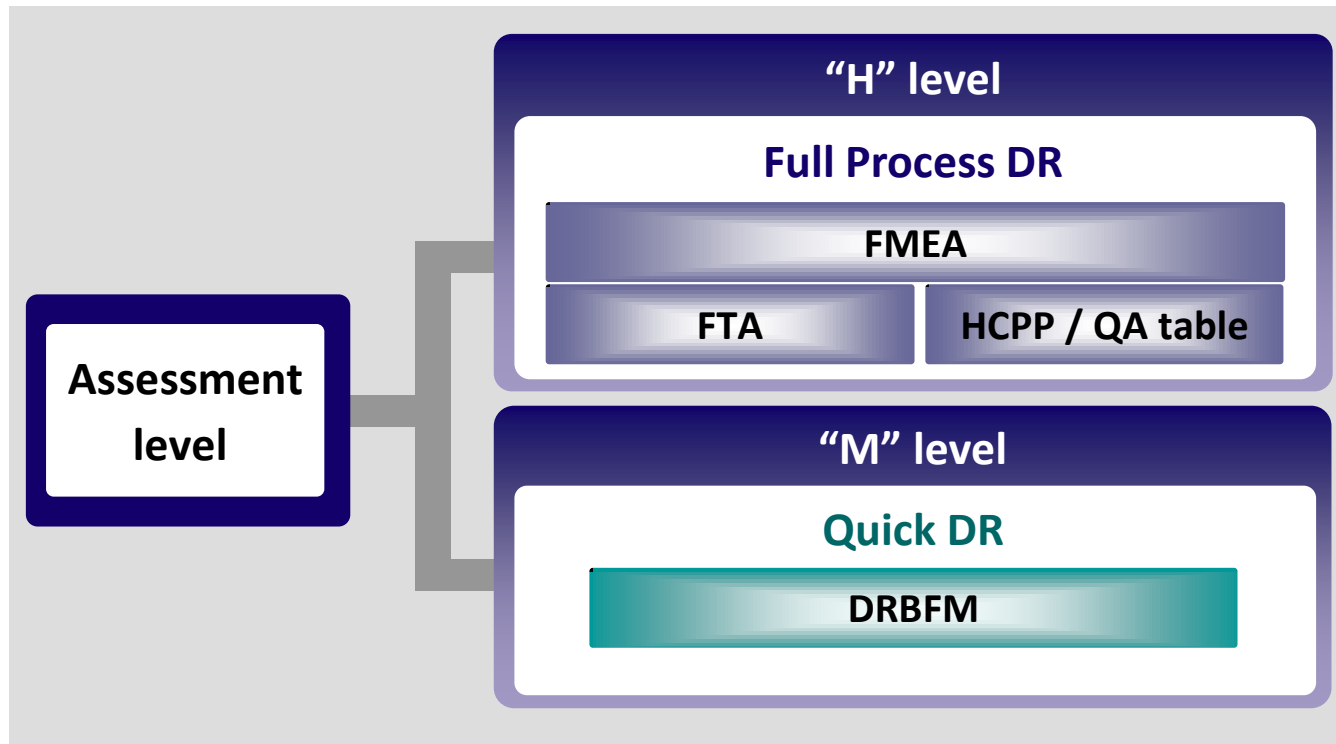
- ✓ Logistics and packaging requirements should be required through other documents. (Renault: Suppliers Logistics Guidebook, Nissan: Other Supply Requirement)
- ✓ Organize the identification and traceability requirements
- ✓ Organize the appearance approval requirements

Appendix

1. Commonized processes/outputs

DR (Design Review) process

- Commonize Full Process DR/Quick DR process.



- Commonized support tools for each DR process.
 - ✓ Full Process DR:
Full Process DR Record, System Structure Diagram, Function Block Diagram
 - ✓ Quick DR: Quick DR Record, Change List

- Reinforce the process to validate suppliers' production capability and commonize Full Volume Confirmation Audit & Production Capacity Plan.

- Cover sheet: All suppliers shall submit. (Phase 2)
- Other sheets:
Suppliers with assessment level “H” & “M” shall submit.
(Phase 4)

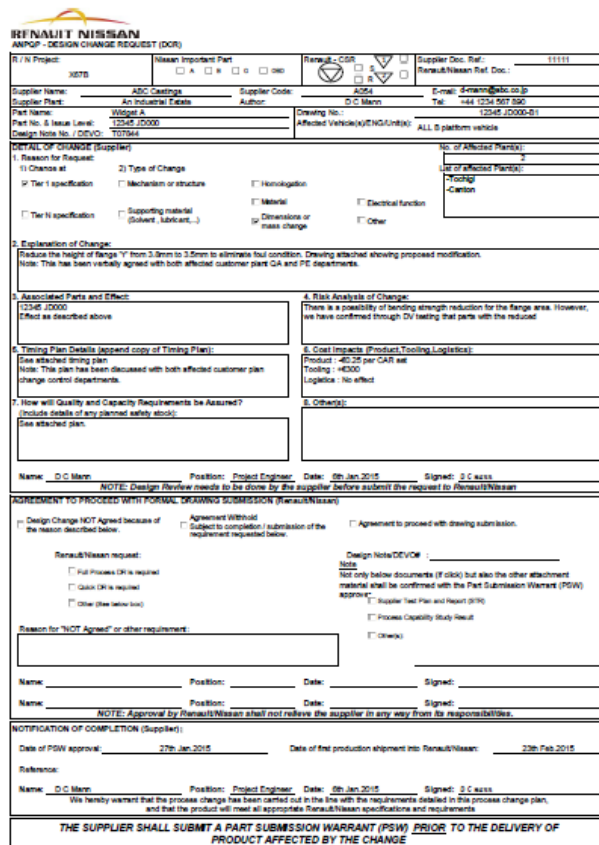
[illegible]

1. Commonized processes/outputs

Design Change Management

- Commonize the process and unique outputs.

Design Change Request



RENAULT NISSAN
ANPP - DESIGN CHANGE REQUEST (DCR)

R/N Project: 1575 Nissan Important Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K ☐ L ☐ M ☐ N ☐ O ☐ P ☐ Q ☐ R ☐ S ☐ T ☐ U ☐ V ☐ W ☐ X ☐ Y ☐ Z ☐ Other

Supplier Name: ABC Castings Supplier Code: 1234 Supplier Doc. Ref.: 12345
Supplier Part: An Industrial Estate Author: D.C. Mann E-mail: d.mann@abc.co.uk
Part Name: Wheel A Drawing No.: 123456789 Tel: +44 (0)1234 567 890
Part No. & Issue Level: 12345 2000 Affected Vehicle(s)/ENGINE(s): 12345 2000-01
Design Note No. / DEV: 123456 ALL 5 platform vehicle

DETAIL OF CHANGE (Supplier)

1. Reason for Request:
(i) Change of: ☐ Tier 1 specification ☐ Mechanism or structure ☐ Investigation ☐ Electrical function
☐ Tier 2 specification ☐ Supporting material (Substr., Adhesive, ...) ☐ Material ☐ Dimensions or mass change ☐ Other

2. Type of Change:
☐ No. of Affected Parts: 2
☐ Tooling
☐ Cation

3. Explanation of Change:
Reduce the height of flange 'Y' from 3.0mm to 2.5mm to eliminate foul condition. Drawing attached showing proposed modification.
Note: This has been verbally agreed with both affected customer plant QA and TC departments.

4. Associated Parts and Effects:
12345 2000
Effect as described above

5. Risk Analysis of Change:
There is a possibility of bending strength reduction for the flange area. However, we have confirmed through DV testing that parts with the reduced

6. Cost Impacts (Product/Tooling/Logistics):
Product -45.25 per CAR unit
Tooling -+€300
Logistics - No effect

7. How will Quality and Capacity Requirements be Assured?
(Include details of any planned safety stock)
(See attached plan)

8. Other(s):

Name: D.C. Mann Position: Project Engineer Date: 08 Jan 2015 Signed: D.C. Mann
NOTE: Design Review needs to be done by the supplier before submit the request to Renault/Nissan

AGREEMENT TO PROCEED WITH FORMAL DRAWING SUBMISSION (Renault/Nissan)

☐ Design Change NOT Agreed because of the reason described below:
☐ Agreement Without Subject to completion / submission of the required requested below:
☐ Agreement to proceed with drawing submission.

Renault/Nissan request:
☐ Full Process DR is required
☐ Quick DR is required
☐ Other (see below box)

Design Note/DEV: _____
Notes:
Not only below documents (if ticked) but also the other attachment materials shall be confirmed with the Part Submission Warrant (PSW)
Approve: ☐ Supplier Part Plan and Report (PPR)
☐ Process Capability Study Result
☐ Other(s):

Reason for "NOT Agreed" or other requirement:

Name: _____ Position: _____ Date: _____ Signed: _____
Name: _____ Position: _____ Date: _____ Signed: _____
NOTE: Approval by Renault/Nissan shall not relieve the supplier in any way from its responsibilities.

NOTIFICATION OF COMPLETION (Supplier):

Date of PSW approval: 27th Jan 2015 Date of first production shipment into Renault/Nissan: 23rd Feb 2015
Reference:
Name: D.C. Mann Position: Project Engineer Date: 08 Jan 2015 Signed: D.C. Mann
We hereby warrant that the process change has been carried out in the line with the requirements detailed in this process change plan, and that the product will meet all appropriate Renault/Nissan specifications and requirements.

THE SUPPLIER SHALL SUBMIT A PART SUBMISSION WARRANT (PSW) PRIOR TO THE DELIVERY OF PRODUCT AFFECTED BY THE CHANGE

<New>

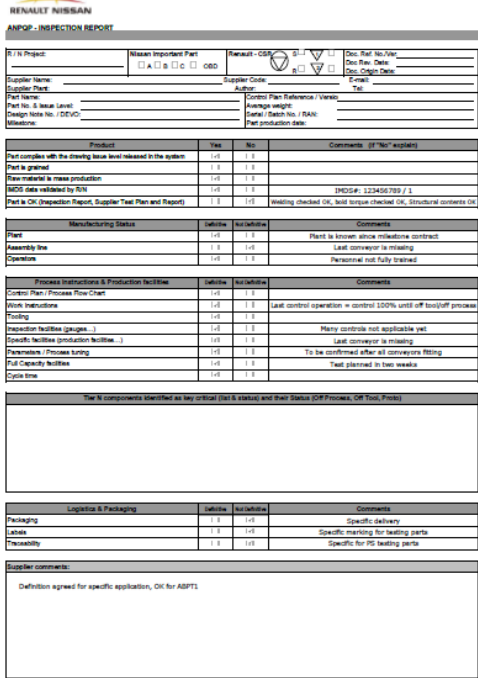
- Renault/Nissan may request to comply with below;
 - ✓ Full Process/Quick DR requirement
 - ✓ PSW (Part Submission Warrant) attachment
- Suppliers shall report a date of first production shipment to Renault/Nissan.

1. Commonized processes/outputs

Environmental Requirements

- Commonize process and output (IMDS data input) after sorting the elements of requirements.
- Delete Material Investigation Report (Nissan) and request to report IMDS number with Inspection Report (6.1).

Inspection Report



<New>

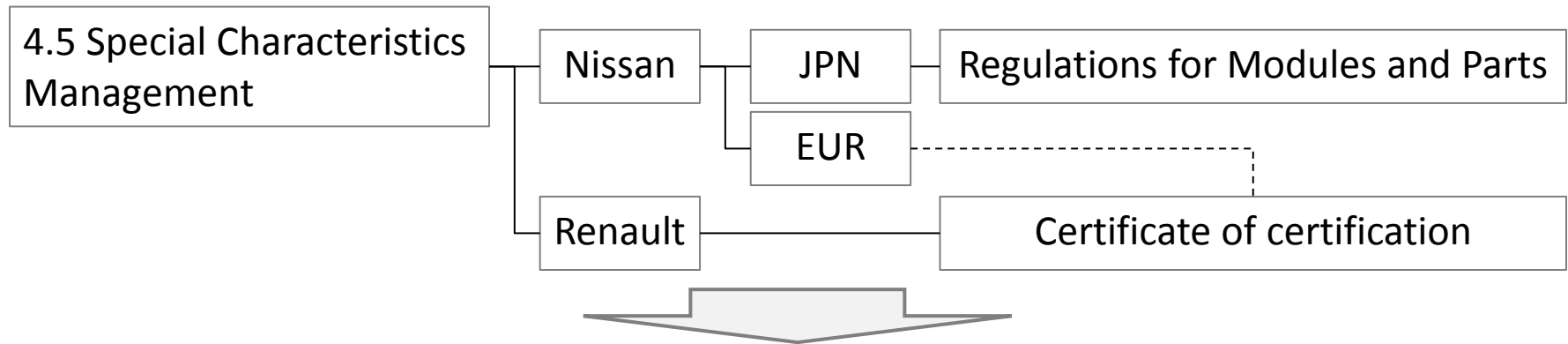
- Supplier shall report IMDS number. (Input IMDS number)

1. Commonized processes/outputs

4.5 Certificate of Certification/Conformity of Product

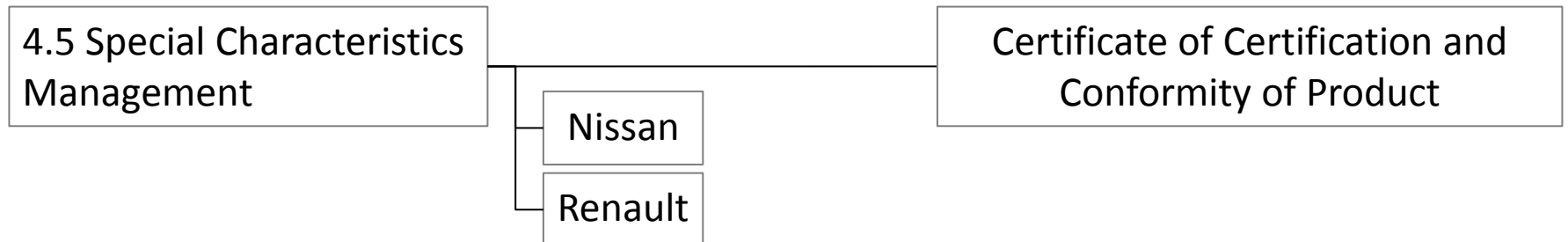
<Current>

- Each company requests to comply with own certificate of certification and conformity of product requirement.



<New>

- Clarify request process and commonize output document.



1. Commonized processes/outputs

Category #	Process (Element activity)	Current	New
9.2	Process Change Request	Nissan unique process is written.	Common process is written.

Category #	Output document	Current	New
1.1	Product & Process Concept Proposal	Renault may request to comply with unique requirement.	Common requirement
1.2	Product Reliability Targets Study Plan	Different document submission level and timing	Regardless of any assessment level, submit document in Phase 2.
2.1	Component Supply Chain Chart	Renault may request to comply with unique requirement	Common requirement
2.1	Sub-supplier PSW or equivalent	Renault unique output	Common requirement
3.2	Design Assurance Plan	Nissan unique output	Delete (Use Supplier Master Schedule)
3.2	Supplier Master Schedule	Different document submission level and timing	Regardless of any assessment level, submit document in Phase 2.
3.3	Project Development Record	Nissan unique output	Common requirement

2. Added examples/key-points

- Added based on the root cause analysis results.

Example; Work Instruction (WI)

Example for outputs

Process No. Operation Name		No.xx Final inspection for Mouse Assembly		Revise (Create) day		Jul-14																												
Protective equipment		Safety Glass		Review		Manager		Line leader																										
Tools		Torque driver		Create																														
Parts etc.		Mouse																																
No.	Main Step	Main steps	1	Time (Sec)	2	Key Point (Reason)	3	Operation step, Instructions etc.														4												
1	Conduct appearance check visually. (Upper side)					2	Along with an arrow, a wheel and a right-and-left switch should appear from the upper surface. (Easy to find burr and Foreign substance)	1	Inspect along the dotted lines in the direction of the arrows	2	Inspect along the dotted lines																							
2	Conduct appearance check visually. (Tail side)					2	Remove the burr and assure no foreign substance along dotted line. (It is easy to find burr and Foreign substance on switch and wheel.)																											
3-1	Conduct appearance check visually. (Left side-side)					2	Remove the burr and assure no foreign substance along dotted line. (It is easy to find burr and Foreign substance on Dimple)	3-1	Inspect along the dotted lines	3-2	Shake the main assembly in the direction of the arrow. Check for unusual sound and inspect along dotted line																							
3-2	Conduct appearance check visually for contamination. (Right side-side)					1.5	A main part is shaken in the direction of an arrow. Checks that there is not unusual sound. Remove the burr and assure no foreign substance along dotted line. (Easy to find burr on this side.)																											
4	Push and check the operation button on both sides.					2	Click When there is not sound, put it into a red box. Switch may broken.																											
5	Rotate and check the operation wheel.					2	Wheel shall Rotate smoothly. When rotate is not smooth, put mouse into the red box. Assure no presence of contamination in the wheel.	4-1	Check that it clicks twice and operates smoothly.	4-2	Check that it clicks twice and operates smoothly.																							
								5	Confirm wheel rotation smoothly 2																									
								[Sampling] Sampling for first part of 1 Carton (12 Parts) The rotation torque of a wheel is recorded as measurement with an exclusive torque meter.																										
								<table border="1"><thead><tr><th colspan="2">Parts</th><th colspan="2">Wheel</th></tr><tr><th>Torque</th><th></th><th>0.01~0.02 Nm</th><th></th></tr><tr><th>Method</th><th>1/ 10KPa (12parts)</th><th>Torque meter</th><th>Control Charts</th></tr></thead></table>														Parts		Wheel		Torque		0.01~0.02 Nm		Method	1/ 10KPa (12parts)	Torque meter	Control Charts	
Parts		Wheel																																
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Method	1/ 10KPa (12parts)	Torque meter	Control Charts																															
Special note 5																																		
When it does not sound click at the time of attachment, fail and abnormalities occur on parts, stop work immediately, report to the assistant manager or a leader, and wait for directions. Stop work immediately, report to the assistant manager or a leader, and wait for directions.																																		
Total						11.6																												

Key points for each column

No	Items	Potential risk (if not specified)
1	Main steps	Even if a worker changes, the turn and the methods of work, such as how to move hand and foot so that the same work result may be brought, are described.
2	Time (Sec)	Work and inspection time required in order to secure the production capacity and quality which were set up. <Omission of standard work operation Time> · If the planned cycle time is insufficient, then it is impossible to attain plan production volumes · Insufficient inspection time leads to poor product quality. · <Even if time is indicated, sometimes there is a big deviation between the planned and actual operation inspection times>. · When operation time is insufficient, incorrect parts flow happens by omitting a part of inspection and work.
3	Key Point (Reason)	Explains the point (main point) for working correctly, and it must always be protected. Explained why Key point must be observed.
4	Operation step, Instructions etc	To make the contents of work easier to understand by figure, photo and etc. If only explanation by text only, · When educating new worker, it is harder for a new worker to understand operation correctly. · Judgment is mistaken when a worker is unclear about the judgement. · When a superintendent does work observation, it is hard to judge whether work is done correctly and easily.
5	Special note	Describes for being specially careful for a operator. There are many written examples of correspondence of trouble shooting.

Key points on following processes/outputs added:

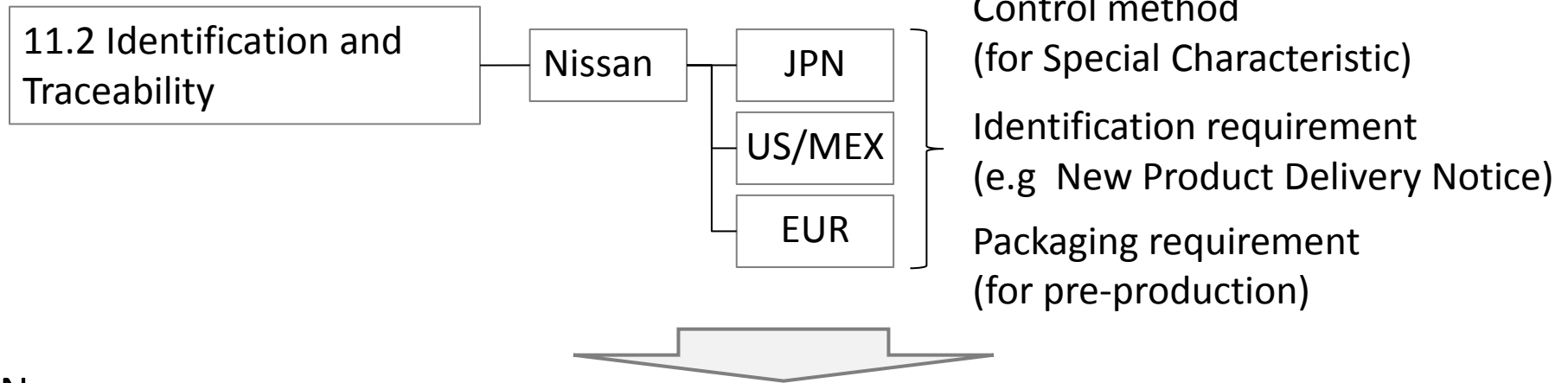
- Processes:
 - ✓ 5.3 Tooling, Gauges and Facility Management
 - ✓ 8.1 Non-conforming product management
- Outputs:
 - Supplier Master Schedule, Floor Plan Layout, Control Plan

3. Make the requirement understandable

5.7 Identification & Traceability

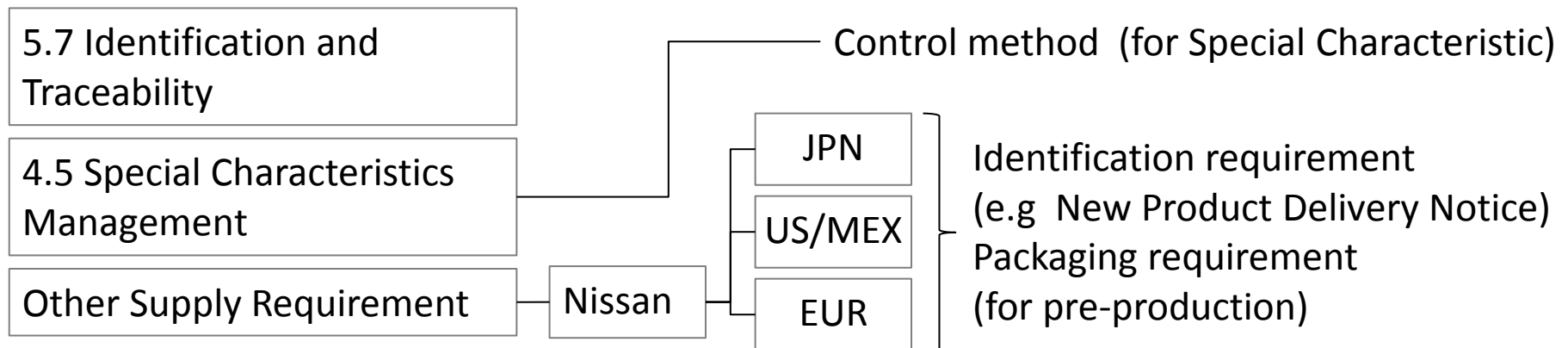
<Current>

- Different processes at Nissan are required.



<New>

- Organize requirements for better understanding.



3. Make the requirement understandable

6.1 Appearance Approval

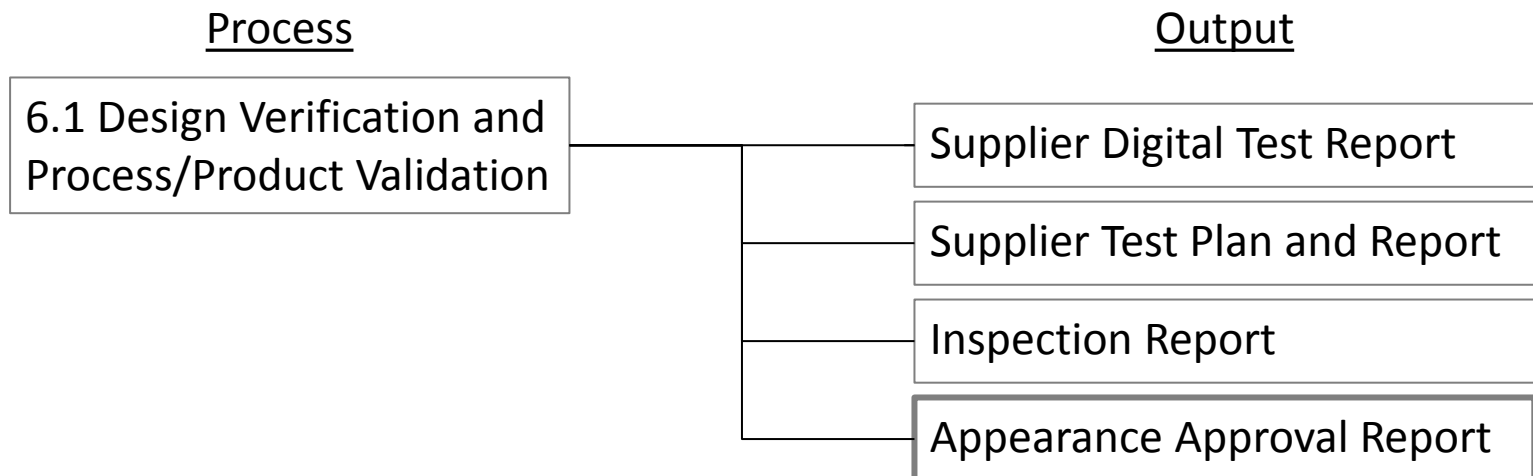
<Current>

- Appearance Approval Report as Nissan's unique output is required without any process requirement.



<New>

- Appearance Approval Report (Nissan's unique output) is added in “6.1 Design Verification and Product/Process Validation” to clarify the process/product validation.



3. Make the requirement understandable

10.1 Logistics & Packaging

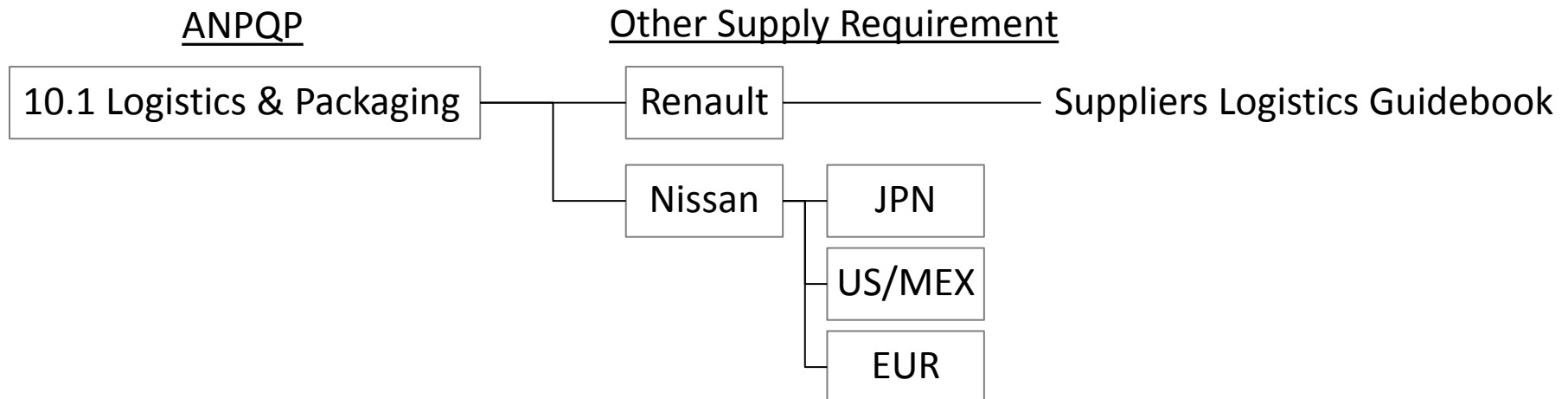
<Current>

- Unique process & output (Renault) are written.



<New>

- Specific requirements of logistics and packaging are moved and defined out of ANPQP. (ANPQP is the common requirements for ISO/TS 16949, Quality Management Systems.)



APPENDIX

ANPQP application guide



1. Effective

- from Apr '15
(New revision deployment in Mar '15)

2. Application policy

- Progresses of the new projects are;
 - 1) Before “Start Supplier Sourcing” :
from ANPQP-Phase 1 (Green)
 - 2) Between “Start Supplier Sourcing” and “Tooling Release”:
from ANPQP-Phase 3 (Yellow)
 - 3) After “Tooling Release”:
from ANPQP-Phase 5 (Orange)

3. Remark

- Each responsible department will identify version of ANPQP with equivalent document.

