



PREMIUM  
SOUND SOLUTIONS

# Supplier Manual

*PSS Specific Requirements*



PSS-P-0005-030/01

## Document history

Version	Date	Change / Reason
01	23.07.2020	New version including PSB contact details

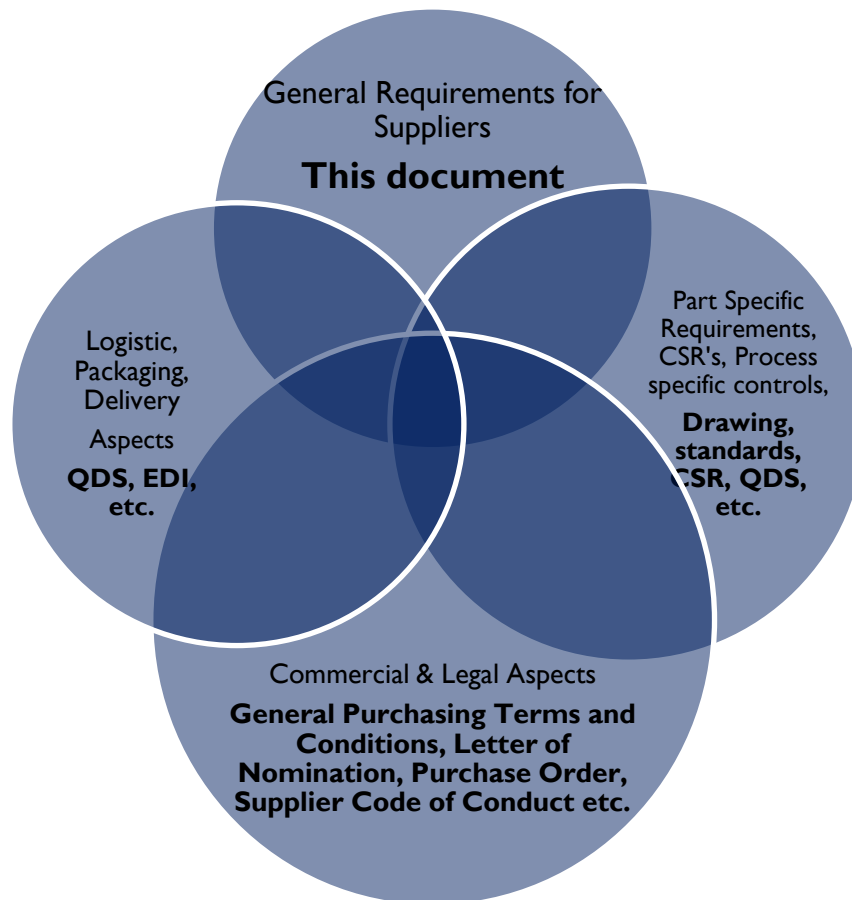
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## Relationship to Other Requirements



### 1. General

#### 1.1. Definitions

Capitalized terms used in this supplier manual ("Supplier Manual") shall have the meanings set forth in this section 1.1 or elsewhere in this Supplier Manual, and any capitalized terms used but not further described or defined in this Supplier Manual shall have the meanings set forth in the PSS General Purchasing Terms and Conditions ("GPTC") or elsewhere in the Contract.

In this Supplier Manual "include" or "including" means "including but not limited to".

- **Balance** means the quantity of overdue or over-shipped Products, or a combination thereof, shown in Call-offs resulting from nonfulfillment of previous Call-offs.
- **Call-off** means a Purchase Order issued by PSS to Supplier via the PSS SAP supplier portal that includes Forecast and Firm Orders.
- **Firm Order** means the part of a Call-off that defines required delivery quantities, place and time of delivery of Products.
- **Forecast** means the part of a Call-off that shows future Product demand estimations to be used by Supplier for planning purposes.
- **Material Number** means a number uniquely identifying a material reference in the PSS SAP supplier portal and in specifications, Purchase Orders and other documents of the Contract.

- **Premium Sound Solutions** means PSS BELGIUM NV and all of its subsidiaries and Affiliates.
- **PSS** means PSS BELGIUM NV and all of its subsidiaries and Affiliates.
- **JIT** means Just-in-Time.

## 1.2. Scope and Effectiveness

This edition of the Supplier Manual, which may be updated from time to time by PSS, supersedes and replaces any and all previous editions in print and digital formats, including but not limited to any editions of Supplier Requirements Manual, Supplier Quality Requirements Manual and Master Quality Agreement. The Supplier Manual sets forth general quality and other requirements applicable to Products and Supplier's entire contractual performance, and forms an integral part of the Contract as defined in the GPTC. The Supplier Manual will be accepted by Supplier and become effective immediately upon the first to occur of: (a) the date on which Supplier signs the Supplier Manual, (b) the date on which Supplier provides written acceptance to PSS (whether by electronic means or otherwise), or (c) Supplier's commencement of any work under the Contract.

Product specific requirements may be defined in a Quality Data Sheet ("QDS"). A new QDS shall be signed every time when new Product types are covered or when new Product targets and requirements are agreed between PSS and Supplier. In case of conflict between a QDS and the Supplier Manual, such QDS shall prevail, unless specified otherwise in writing by PSS.

For the avoidance of doubt, the Supplier Manual shall apply to Suppliers of production parts.

Requirements applicable to Suppliers of bulk materials may be specified in the respective QDS and other contractual documents.

Requirements applicable to Suppliers of indirect (i.e. Non-Product Related ("NPR")) materials may be specified in Purchase Orders and other contractual documents.

Requirements applicable to Suppliers of electronics and software may be specified in the respective QDS and other contractual documents.

## 1.3. Communication

All oral and written communication between PSS and Supplier shall be conducted in English and, if deemed necessary by PSS, in the official language of the country or local region where the respective PSS delivery plant is located.

Supplier ensures that all of its personnel interacting with PSS in connection with Supplier's contractual performance are fluent in spoken and written English.

## 1.4. Contact person

In view of doing business with PSS, Supplier must assign a main contact person within Supplier's organization who shall be reachable during and outside local regular business hours on a fixed mobile phone number. This person must be fluent in spoken and written English, and

must have extensive knowledge of the contractual quality and logistics requirements and the authority to immediately undertake any activity necessary within Supplier’s organization to comply with the requirements of this Supplier Manual.

Additionally, Supplier must assign in advance a competent back-up contact person with the same language skills and the same level of knowledge of the contractual quality and logistics requirements as the main contact person.

Supplier ensures to assign the main contact person and its back-up and to provide PSS Purchasing management staff with these persons’ contact information as soon as PSS and Supplier enter into a business relationship, and to keep PSS Purchasing management staff informed about any updates or relevant information in connection therewith.

### 1.5. Mission and vision

PSS’s mission is to manufacture and supply high-quality and innovative products that contribute to its Customers’ competitiveness and create value for PSS’s employees and shareholders. PSS’s performance is highly depending on the performance of its Suppliers. To achieve the Customers’ quality, cost and delivery objectives, PSS is determined to establish and develop close and long-term relationships with world class suppliers.

## 2. Quality Requirements

### 2.1. Overview





## 2.2. Standards

Suppliers are required to be at least ISO 9001 certified by a reputable 3<sup>rd</sup> party. Suppliers must be IATF 16949, ISO 14001 (environmental) and ISO 18001/ISO45001 (health and safety) certified by a reputable 3<sup>rd</sup> party or, in case Supplier is not properly certified, provide PSS with a development plan including a confirmed and detailed planning immediately after entering into a business relationship with PSS, to achieve all aforementioned certifications as soon as possible.

Proof of work in accordance with these standards must be demonstrated via internal or external Audit reports (traceable with objective evidence).

Suppliers of software or embedded software must work in accordance with Capability Maturity Model Integration (“CMMI”) or Automotive SPICE. These models will ensure that the appropriate procedures are in place to comply with the Product requirements. Moreover, these models will provide for the prevention and early detection of discrepancies and for timely corrective and preventive actions. Confirmation of work in accordance with aforementioned models must be proven via internal or external Audit reports.

## 2.3. Zero Defects

Both Supplier and PSS are committed to the principle of Zero-Defects, according to which all Product Defects as well as any other quality issues which may cause complaints, are to be considered unacceptable.

Supplier and PSS will actively co-operate to investigate the cause of Defects and to implement corrective as well as preventive actions, and will generally assist each other in the achievement of mutually beneficial opportunities for quality improvement.

## 2.4. Control of Records, Traceability

Supplier must maintain, during the mass production period of Products and for at least an additional 10 years thereafter, records of raw material and subcomponent batches, production and process controls and measurement data related to the data provided to PSS in connection with Product deliveries, preferably the SAP label or the expected date of arrival of the Products at PSS. This data must be immediately available to support the definition of containment actions in case of quality nonconformities, PSS complaints, Customer zero kilometer complaints or Warranty complaints.

## 2.5. Audits/Assessments

In accordance with the GPTC and/or the Supplier Audit chart defined hereunder, PSS and its Customers reserve the right, upon providing 4 hours’ notice, to conduct Audits and assessments to verify Supplier’s compliance with the requirements of this Supplier Manual. Any such Audits may include virtual tours via video conference, real-time screen sharing etc.

Additionally, PSS requires Supplier to verify its sub-suppliers’ and subcontractors’ compliance with the requirements of this Supplier Manual.

### 2.5.1. Supplier Self-Assessment

As part of Supplier's introduction process to PSS, Supplier shall be required to conduct a self-assessment according to the self-assessment template provided by PSS.

### 2.5.2. Process Audit

PSS shall be entitled, upon providing prior notification to Supplier, to perform a process Audit at Supplier's premises, based on, but not limited to, IATF 16949, VDA 6.3 requirements and Automotive SPICE. Process Audits may also be conducted in view of the release of a new component, Product or production process, or as a result of quality and/or logistic problems or major changes in Supplier's management staff, organization or process technology, etc.

Furthermore Supplier shall be required to perform at least yearly a complete process Audit with qualified auditors. Such auditors must be trained internally or externally according to VDA 6.3 process audit requirements.

Failure to perform internal Audits according to PSS's requirements will result in sanctions imposed by PSS, such as but not limited to invoicing to Supplier of Audit and travel costs incurred by PSS as a result of such failure, complaint costs, ineligibility of Supplier for new business, termination of existing business.

### 2.5.3. Product Audit

The purpose of Product Audits is to assess that Products are in compliance with the specifications and the QDS. Process variations tend to have a negative effect on Product quality and, consequently, compliance with Customer requirements. Therefore, Supplier must, as part of quality/process Audits, perform a Product Audit. The Product Audit serves as a management tool for the independent evaluation of Products from the Customer's point of view. Product Audits allow to detect deviations from the Customer requirements and to draw conclusions directly with regards to the influencing process.

Supplier must define the Product Audit in the control plan and ensure that the Product Audit is conducted by a qualified operator according VDA 6.5.

Supplier shall be responsible to implement suitable measures to promptly remedy any discrepancies identified during the Product Audit, and to verify their effectiveness and sustainability. Supplier guarantees that all Products that may be a concern following the conclusions of a negative Product Audit are contained to secure quality to the Customer. In case of a negative Product Audit, Supplier must inform the respective PSS buyer or PSS Purchasing management staff within two days from the completion of the Audit.

## 2.6. Project Management - APQP

Supplier must manage all contractual projects according to AIAG's Advanced Product Quality Planning ("APQP") manual or VDA's Maturity Level Assurance for New Parts manual and fulfil all project milestones and timing according to PSS's project requirements.

Maturity level assurance or APQP is a control method within project management. By applying these methods, both Supplier and PSS are involved at an early stage in the Product creation process.

Supplier’s management of contractual projects must take into account all aspects that may affect the progress and success of the projects, such as but not limited to PSS project milestones timing, Supplier’s infrastructure, Supplier’s production lines and industrialization, testing equipment, recruitment and proper training of skilled internal and external resources, risks and opportunities and management of sub-suppliers and service providers.

The following table specifies the documentation required from Supplier during the different phases of PSS projects.

Activity in PSS Project	Activity/Documentation from Supplier
Frame agreements	Confirm by signature of the PSS Requirements - General Purchasing Terms and Conditions; - Supplier Quality Manual; - Logistics agreements; - Non Disclosure Agreement - Other
Concept start	Early supplier involvement, early feasibility, Design for Manufacturing review
RFQ - Request for Quotation	Send Quotation package, including: - Part price and conditions; - Supplier Feasibility Commitment (towards drawing, QDS, Customer Specific Requirements, etc); - Description of the Packaging
Nomination	Confirm Letter Of Nomination by signing it
Feasibility step 2	-DFM confirmation (mold flow analysis, etc)
APQP planning	- Send Supplier APQP tracker updated weekly to PSQE - Send tool status report updated weekly to PSQE
Process/Part release	- Tool transfer report - PPRP documentation, IMDS submission - Safe launch plan integrated to Control Plan - Run at rate preparation, internal audits - Other
Product Life, Maintenance Controls, OQC reports etc	According to specific part and general requirements

The interfaces between the Supplier APQP and PSS Product Creation Process (“PCP”) milestones are elaborated in Annex I.

## 2.7. Qualification & Validation

The purpose of Product qualification is to assess that the Product is fulfilling the requirements of the specifications and the QDS. Supplier must provide PSS with a qualification program well in advance, which requires PSS’s approval. The Product must be released according to the planning agreed with the respective PSS Supplier Quality Engineer (“SQE”). Before Start of Production (“SOP”), the QDS must be signed by Supplier and the Product has to be qualified by PSS. Products cannot be released as long as the QDS is not signed. The qualification program must be executed according to Production Part Approval Process (“PPAP”) or VDA2 Production Process and Product Approval (“PPA”), as required by PSS.

Supplier must provide PSS with qualification samples which are representative (i.e. produced with the serial process and Tooling) of the Products to be delivered. The samples must be delivered together with all information necessary to demonstrate that the Product complies with the requirements defined in the qualification program. After qualification, Supplier must not introduce any changes to the Product, production Tooling, manufacturing process or manufacturing location without written approval from PSS.

Supplier's failure to successfully complete the qualification program and any other failure by Supplier to comply with this section 2.7, will automatically change Supplier's status into "on hold" and exclude Supplier from future business opportunities at PSS. Moreover, and in addition to any of PSS's other rights under the GPTC, PSS reserves the right to refuse deliveries without any liability and shall be entitled to restart the qualification program and charge all related costs to Supplier.

### 2.7.1. Production Part Release Process

Supplier must execute the Production Part Release Process ("PPRP") according to the Production Part Approval Process ("PPAP") or VDA2 Production Process and Product Approval ("PPA"), as required by PSS. Supplier must apply the same product approval process to its sub-suppliers.

PSS expects Supplier to work diligently when executing PPRP and to provide accurate and good quality documentation. In case Supplier fails twice in a row to successfully carry out PPRP, PSS will charge to Supplier all costs and expenses incurred by PSS to make PPRP successful.

Product requalification interval, measurement system analysis interval and any possible rework and repair must be included in the control plan submitted as a part of PPRP documentation.

Any suspect Products, or Products reworked or repaired under conditions not previously approved via PPRP, must only be delivered to PSS after approval by PSS of a concession request submitted by Supplier. Supplier ensures to submit the rework and repair instruction together with the concession request.

Furthermore, Supplier ensures to handle any concession request and any Products that are the subject of a concession request in accordance with section 2.11.4.

Supplier warrants not to use any alternative checking methods or process controls without PSS's written approval, and to describe these in the control plan included in the PPRP documentation.

**Supplier must define and submit a project timing plan in line with APQP and implement all PPAP and PPA related activities and documentation according to such plan. Supplier ensures to provide PSS with all PPAP and PPA related documentation either electronically or, if requested by PSS, in printed form, before any Audits are carried out.**

#### 2.7.1.1. PPAP

Product release according to PPAP refers to IATF 16949 reference manuals PPAP, APQP, CP, FMEA, MSA and SPC, which are made available on <http://www.aiag.org>.

The required standard PPAP submission level shall be level 3, unless otherwise specified by the respective PSS SQE based on risk classification and Customer Specific Requirements ("CSR").

The retention/submission requirements for PPAP level 3 are mentioned in the PPAP reference manual:

N°	Requirement	Level 1	Level 2	Level 3	Level 4	Level 5
1	Design Records	R	S	S	*	R
2	Engineering Change Documents, if any	R	S	S	*	R
3	Customer Engineering Approval, if required	R	R	S	*	R
4	Design FMEA	R	R	S	*	R
5	Process Flow Diagrams	R	R	S	*	R
6	Process FMEA	R	R	S	*	R
7	Control Plan	R	R	S	*	R
8	Measurement System Analysis Studies	R	R	S	*	R
9	Dimensional Results	R	S	S	*	R
10	Material, Performance Test Results	R	S	S	*	R
11	Initial Process Studies	R	R	S	*	R
12	Qualified Laboratory Documentation	R	S	S	*	R
13	Appearance Approval Report	S	S	S	*	R
14	Sample Product	R	S	S	*	R
15	Master Sample	R	R	R	*	R
16	Checking Aids	R	R	R	*	R
17	Records of compliance with customer specific requirements	R	R	S	*	R
18	Part submission warrant	S	S	S	S	R
	Bulk material checklist	S	S	S	S	R

- S : Submit and retain copy at location
- R : Retain at location and make available upon request
- \* : Retain at location and submit upon request

Important: Applicable quality controls must be included in the control plan and explain which parameters are controlled during the different phases of the Product life: prototype, pre-series, mass production and service.

Control plan number: 20160725		Contact Tel: 0579-8618338		Customer Engineering Approval Date:													
<del>Sample: 2 (sample production) (3 (pre-series) / 4 (mass production) / 5 (service))</del>		Core team: Zhang Xiaolong, Li Meixian, Du Junfeng, Ge Yuyang, Yehuaibo		Customer Quality Approval Date:													
Part Name Description: Ni5Wall Magnet		Vice president of production Approval Date: Ge Yuyang 2016/07/25		Other Approval Date:													
Supplier plant: Zhejiang Dongfang EMERG Raw Earth Magnet Co., Ltd		QC director approval Date: Li Meixian 2016/07/25		EDITION NO:A.0													
Process 工序	Process name 工序名称	Machine Device/Tools 机器设备	Characteristic 特性		Methods 控制方法								Reaction 反应	plan 计划	Sample 样品 ( )	This production 此批 ( )	Mass production 量产 ( )
			Product (Inspection item) 产品 (检验项目)	Process (Inspection condition) 过程 (检验条件)	Production Process/ Specification/Tolerance 生产过程/规格/公差	Measurement technique 测量方法/手段	Operator 操作者		QC 检验员		Control methods 控制方法						
							Size 数量	Freq 频率/时间	Size 数量	Freq 频率/时间	Operator 操作者	QC 检验员					
1	Increasing inspection of raw material 原材料进货检验	1	Component 成份	I	Raw material purchase with technology requirements 原材料采购技术要求	ICP plasma spectrograph ICP等离子光谱仪 Oxygen content tester 氧含量测定仪			5-50g	Once/batch 1次/批			Chemical Element Analysis Report 化学成分分析报告	Acceptance 接收			
			Appearance 外观	I	Raw material purchase with technology requirements 原材料采购技术要求	Visual (control picture) 目视			ALL	Once/batch 1次/批							

Unless otherwise specified, Supplier must use the following forms according to the PPAP reference manual:

- Part submission warrant: CFG-1001;
- Appearances approval report: CFG-1002;
- Dimensional results: CFG-1003;

- Production part approval - material test results: CFG-1004;
- Production part approval - performance test results: CFG-1005.

### 2.7.1.2. VDA2 - PPA

Supplier must carry out Product release according to VDA2 PPA.

The required standard submission level for PPA shall be level 2, unless otherwise specified by the respective PSS SQE based on risk classification and CSR. Further information is available via [www.vda-qmc.de](http://www.vda-qmc.de).

N°	Evidence required, if applicable to the Product	Submission Level 1	Submission Level 2	Submission Level 3	Submission Level 4
<b>Cover sheet to PPA Report</b>		V	V	V	V
1	Test results for Product approval	D	D	V	V
2	Samples	D	V	V	V
3	Technical Specifications	D	D	V	V
4	Product FMEA	D	D	D	D
5	Design/Development Approval, in case of design responsibility	D	D	V	V
6	Confirmation of compliance with legal requirements	NA	V	V	V
7	Material Data Sheet to IMDS, independent of contract agreements	V	V	V	V
8	Software Test Report	D	V	V	V
9	Process FMEA	D	D	D	D
10	Process Flow Chart (production and test/inspection operations)	D	D	D	V
11	Control Plan	D	D	D	D
12	Confirmation of Process Capability	D	D	V	V
13	Evidence of Compliance with special characteristics	NA	NA	V	V
14	List of test/inspection equipment (specific for Product)	D	D	D	V
15	Capability Study Testing Equipment	D	D	D	D
16	Tooling List (with quantities/number of cavities and information on tooling concept)	D	D	V	V
17	Confirmation of achievement of agreed capacity (process validation) – <b>Run at Rate</b>	D	D	V	V
18	Written self-assessment on the criteria as evaluation matrix of maturity of Product and process	D	D	V	V
19	Part history	D	V	V	V
20	Confirmation of suitability of the Products carrying units, incl. storage	D	D	V	V
21	PPA status of components in the supply chain (purchased parts, in-house parts, directed parts by PSS)	D	D	V	V

22	Approval of coating systems to customer requirements	D	D	V	V
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V : Submission

D : Execution, documentation and archiving at location

NA : Not applicable

## 2.8. Requalification

Supplier must perform a requalification of its Products in mass production (after project commercial release) at least every year (see IATF 16949 chapter 8.6.2 Layout inspection and functional testing).

Unless specified otherwise in the respective QDS, requirements for requalification of Products include, without limitation, submission by Supplier of a full dimensional report and approval thereof by PSS.

Supplier must use the same process for requalification as was used for initial qualification (i.e. PPAP or PPA).

In the event Supplier detects a noncompliance, Supplier must inform PSS immediately. The requalification results must be available at Supplier at all times for review by PSS and must be yearly sent electronically to the respective Operational PSS SQE at the respective PSS delivery plant.

Supplier must submit a yearly requalification schedule to the respective PSS SQE. This schedule must include all Products delivered to all PSS plants.

**Supplier guarantees to neither scrap any Tooling nor modify manufacturing means or manufacturing location during the mass production period and Service Part period without written agreement from PSS.**

## 2.9. Total Quality Commitment

Supplier must implement a working method on its shop floor according or similar to the seven basic tools of quality ("7 Basic Quality Tools"). If Supplier is not familiar with these quality tools, Supplier must promptly submit and execute an improvement plan to implement 7 Basic Quality Tools.

### 2.9.1. 3P OK before Production Starts

3P OK is a verification that the process, Product and poka-yoke are properly functioning before production starts.

All items listed in the visualized 3P check list (process, Product, poka-yoke) for each work station must be checked one by one, and the check list must be filled in before production starts.

3P indicator (OK/NOT OK) must always be in the state which is reflecting the latest status of the particular station.

The 3P check list and indicator for each work station must be visible, ergonomic and friendly to the users.





### 2.9.2. Safe environment and 5S

Supplier's work environment must be safe for operators in terms of facility (construction, floor, ceiling, lighting, ambient noise level, power supply system, airing system, ventilation system, conveyor, working table/chair, air conditioner, cooling/warming facilities and systems, oven, racks and trollies, etc.), and in terms of machinery, jig/tools, material stacking and chemical use.



Supplier must install and properly maintain a fire protection system.

PSS strongly recommends that Supplier's work environment is OHS18001 certified.

Supplier must use 8D as the standard way of working to resolve any safety issues. Supplier must install a visualized safety check sheet in the workshop, and implement daily safety reviews as a minimum requirement.

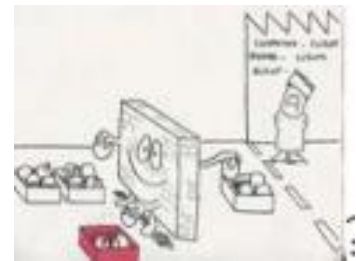
Supplier ensures that the workshop shall at all times be clean and well-organized, and that 5S working standards, a visualized check list and visualized cleaning program shall be in place in the workshop.

Supplier acknowledges and agrees that 5S scoring (based on the standard check list and rated by PSS) must be above 3.0.

### 2.9.3. Respect the Standardized Work Instruction

Supplier guarantees that a standardized work instruction shall be available and visible at each work station including:

- 1) Work step instructions (not operator related but divided into small operations).
- 2) Work chart that describes the moves for each hand and number of Products allowed between stations (if any).
- 3) Work combination table that measures the operations performed.



Basic requirements for the standardized work instruction:

- 1) Paper size must be big enough.
- 2) Pictures are mandatory. Text only is not acceptable. Pictures must take around 50% of the document size for work step instructions.
- 3) Zoom for finger movement, right position of the tool.  
Criteria identifying OK and NOT OK state must be illustrated when necessary to avoid undefined areas for quality control.

The following 3 steps are required to train operators according to the standardized work instruction:

- Step 1: Use the work instruction to train operators in a meeting room (what and how).
- Step 2: Follow the work instruction and show operators what to do and how on the work station.



Step 3: Ask operators to follow the work instruction to operate under trainer's monitoring.

#### 2.9.4. Stop the Defect at the First Time

“Stop the Defect at the first time” means that Supplier must stop production under any of the following situations (and undertake proper corrective action):

- 1) A Defect with safety concerns is detected.
- 2) A functional Defect (a particular function is inoperative) with intermittent symptom is detected.
- 3) A Defect with reliability concerns is detected.
- 4) The production process is not compliant with the defined specifications (for example, a process parameter out of spec).
- 5) A defective component, semi-finished good or finished good is missing.
- 6) An unknown Defect is detected.



For the most common Defects, Supplier must set a sensible threshold to trigger the production stop and the threshold must be challenged frequently to pursue continuous improvement. Supplier must also set a sensible threshold for total Defect rate to trigger a production stop.

Supplier must implement escalation methodology, such that each work station alerts Supplier's production management team in case of a production stop. All production stop situations must be properly recorded and documented.

#### 2.9.5. Control of the Rejects

Supplier must implement red indicator/tag/label/box/facility as a visual symbol for rejects to avoid the mixing of rejected and nonrejected Products. No other type of indicator/tag/label/box/facility shall be allowed to identify rejects.

Operators must be given easy access to the red box at each work station to separate the rejected Product/semi-product/finished Product.

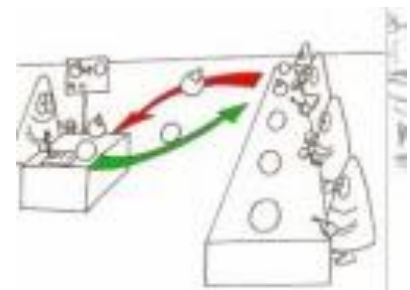
Supplier must label every rejected finished Product with a red label which clearly indicates the type and location of the Defect, and at what time and work station the Defect was detected.



#### 2.9.6. Repair under Control

Supplier shall only be allowed to perform repairs if all of the following conditions are met:

- 1) Repairs must be agreed with the respective PSS SQE. No repaired Products can be shipped to PSS without PSS's prior written consent. Repairs must be listed in the production control plan.
- 2) A physically separated repair area must be available at a far enough distance from the production line to avoid potential mixing of normal production activities and repair activities.
- 3) Repair facilities/tables/jigs/tools/machinery must be designed such that repaired Products and non-repaired Products shall not be mixed.



- 4) Repair facilities/tables/jigs/tools/machinery must be designed such that no additional Defects shall occur for the Product in repair.
- 5) Repair work instructions must be available and clearly visible at repair stations.
- 6) Qualification of repair operators must follow the most strict operator qualification process defined by PSS.
- 7) Traceability of the repaired Products must be in place to distinguish them from non-defective, non-repaired Products.
- 8) Records of repair operations must be saved in a database for the purpose of data collection and continuous improvement.
- 9) Reinsertion of repaired Products must occur at the 1<sup>st</sup> station of functional testing on the production line. This station must be easily identifiable and recognizable in the work shop.
- 10) Repair shall only be allowed for cosmetic Defects.

### 2.9.7. Quick Response Quality Control

Quick Response Quality Control (“QRQC”) is a tracking and problem solving tool to secure fast reaction and control of quality problems. Proper implementation of QRQC may reduce the amount of quality complaints by 30%.



Supplier must implement PSS’s QRQC process for every production line.

Supplier must install QRQC white boards conveniently at areas where quality problems occur.

The minimum scope for QRQC is the following:

- 1) Every problem found in the last quality inspection process conducted in Supplier’s factory.
- 2) Every problem detected on the production line that has a potential risk to slip through from Supplier’s factory to Customer.
- 3) Outstanding yield detractor on the production line.

The Ultimate scope for QRQC is to manage all quality incidents occurring in the workshop.

## 2.10. Outgoing Quality Inspection Report, Incoming Quality Control & Responsibilities Supply Chain

The responsibilities for quality control in the supply chain are shown in [Figure 1](#) ~~Figure 4~~.

PSS may execute Incoming Quality Control (“IQC”) or incoming inspection on 1<sup>st</sup> tier Supplier’s Products, while 1<sup>st</sup> tier Supplier must perform the Outgoing Quality Control (“OQC”).

Supplier acknowledges and agrees that the execution of IQC on 2<sup>nd</sup> tier supplier’s products is the responsibility of 1<sup>st</sup> tier Supplier and that IQC & OQC criteria and methods must be managed by 1<sup>st</sup> tier Supplier.

The same principle applies to product quality and process release (PPAP/VDA2). 1<sup>st</sup> tier Supplier must secure the product quality and perform process release of its own production, as

well as the production of 2<sup>nd</sup>, 3<sup>rd</sup> ... tier suppliers, while PSS shall be responsible for its own products and processes and 1<sup>st</sup> tier Supplier process release confirmation (PPAP/VDA2 approval).

With respect to PSS-mandated 2<sup>nd</sup> tier suppliers (“directed buy”), selected by PSS based on Product design or commercial preference, Supplier acknowledges and agrees that product and process release shall be the responsibility of 1<sup>st</sup> tier Supplier.

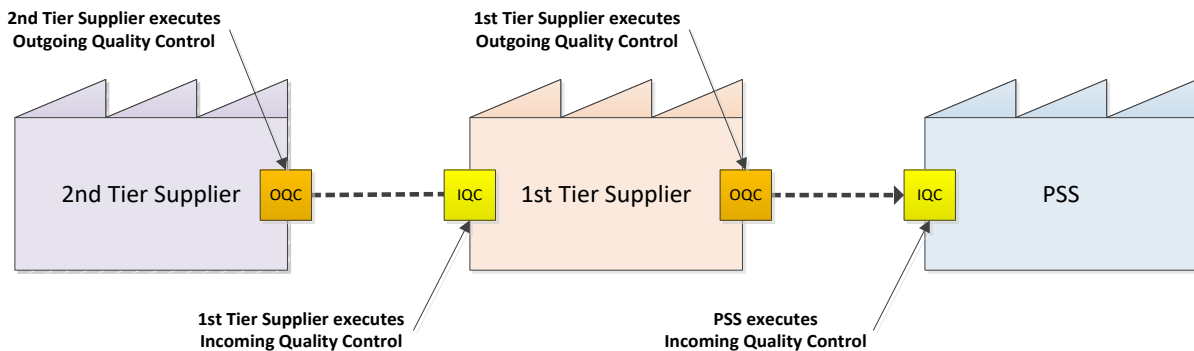


Figure 1: Supplier Quality Control

Supplier must send OQC reports electronically to the respective PSS SQE, via e-mail or via any other transfer system agreed between PSS and Supplier, latest at the day of shipment of the Products concerned, in accordance with the following:

When the OQC report must be submitted:
- PCP (before part final release)
- Pre-serial deliveries - Mass Production (after final release)
- Mass production parts under special control (Quality Wall or similar) - Yearly requalification plan and reports

If a standard report template is applicable, such template will be provided by the respective PSS SQE and described in the QDS.

- Mandatory information to be included by Supplier in OQC reports:
  - Material Number.
  - Batch number(s) or batch production date(s) = the same number/date used on the box labels of the shipment.
  - Total quantity per Material Number included in the shipment.
  - End results (Batch ‘ok’ or ‘not ok’). In case the batch is not ok, Supplier must notify the respective PSS SQE immediately. Not ok batches can never be shipped to PSS without PSS’s prior written approval.
  - SPC/Critical Characteristics: critical and special characteristics indicated on drawing, QDS and process requirements, selected by Supplier and agreed upon with PSS based on experience and risk mapping. Results must be presented as an X-Bar graph.

- Internal production scrap rates per type of Defect.

The PSS IQC operator will verify OQC reports submitted by Supplier. **Missing reports will result in complaints, and Supplier shall be liable for any resulting costs.**

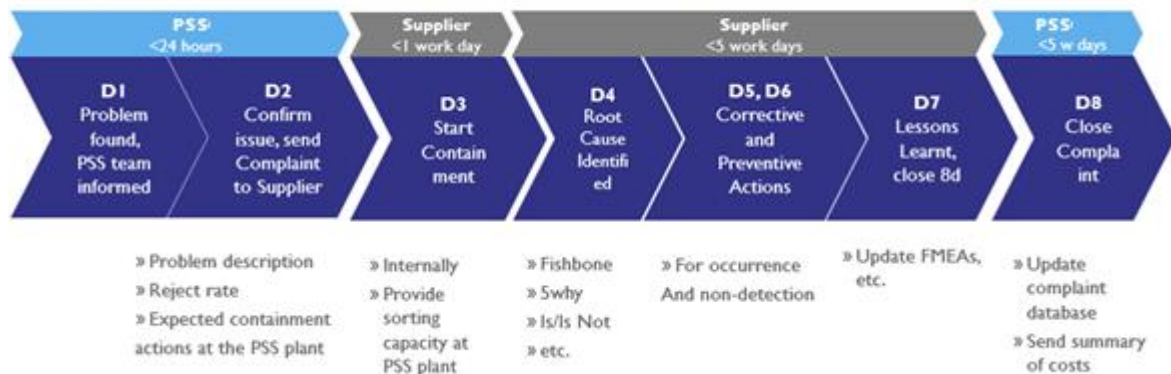
## 2.11. Control of non-conforming Product

### 2.11.1. Complaint handling

Type of Issue	PSS/ Customer containment	Supplier containment	8D report
Incoming Inspection/ Production/ Customer Complaint / Major logistic complaints (wrong Products, incorrect QTY, incorrect packaging,..)	Started / required	Required	Required
Administrative or Logistic Complaint = pallet issues, etc	Defined on each case	Required	Required

- Supplier must immediately notify PSS upon detection of potential problems. Verbal notifications must be confirmed in writing and supported by regular status reports until corrective and preventive actions are in place and the effectiveness is checked positively. The detection of a potential safety hazard by either PSS or Supplier will be cause for immediate joint notification and action.
- Supplier must immediately, and in any case before the delivery of Products, inform PSS in case any batches with deviating or uncontrolled quality have been shipped.

### Complaint process and timing (14 days total time)



- Zero hour - detection of the issue:

- If a complaint is initiated, Supplier will be informed with details of the issue and the estimated cost for sorting or rework. Supplier shall have the option to organize the recontrol himself.
- PSS will start with the recontrol/sorting/rework at Supplier's cost.
- Within the first 24 hours - close 8D steps D1-D3:
  - Supplier must arrange complete containment to protect PSS against the issue.
  - PSS will continue recontrol/sorting/rework of the suspected Products at Supplier's cost, until Supplier has replaced the rejected batch with verified stock or has taken over recontrol.
  - Every box containing the first deliveries of verified Products or Products produced after implementation of corrective actions must be marked with the label 'NEW', 'REWORKED' or 'SORTED' and the complaint number. Supplier and PSS will define together how many deliveries need to be marked like this.
- Within 7 calendar days - close 8D steps D4-D6:
  - Supplier must identify the root cause(s) of occurrence.
  - Supplier must identify the root cause(s) of non-detection.
  - Supplier must define proper corrective actions to eliminate the root cause(s) of occurrence and the root cause(s) of non-detection.
  - Supplier must submit the corrective actions including effectiveness check
- Within 14 calendar days - close 8D steps D7-D8:
  - Supplier provides PSS with the updates of the control plan, FMEA, work instructions and measurement report (if applicable).

**Supplier must resolve all complaints within 14 calendar days from the date of notification by PSS, unless explicitly agreed otherwise in writing by the respective PSS SQE.**

**Rejected complaints:** in case Supplier does not agree with a complaint, Supplier must explain its grounds for rejection using the 8D report format. A mere statement of rejection without investigation and technical analysis will not be accepted. As a minimum, the fishbone (ishikawa) analysis is required.

### 2.11.2. Warranty Complaints Management

Supplier must manage Warranty claims according to the 8D principle, with the following exceptions:

- **Acceptance**

Upon receipt of a Warranty claim, Supplier must respond within the specified time limits, utilizing only the array of available responses as set forth below:

- Category 1: Responsibility of Supplier
- Category 2: No Trouble Found ("NTF")
- Category 3: Responsibility of Dealer and/or Customer

- **Way of working**

**Category 1: Responsibility of Supplier**

Warranty Product analysis results and actions must be documented using PSS's standard 8D format. This format must also be utilized to monitor the effectiveness of corrective actions over time for each component.

The Customer requires PSS and its suppliers to implement a testing process in order to verify the actual root cause of and determine corrective actions for dealer claims. As a consequence, Supplier must implement this testing process as well.

Supplier must keep all Products that are the subject of a Warranty claim for a period of 6 weeks from the Warranty claim notification date.

**Category 2: NTF**

If Supplier declares NTF status in the 8D process, Supplier must clearly describe and substantiate its declaration with data. In other words, NTF status in the Warranty analysis process must follow systematic elimination of potential root cause factors. NTF typically describes a scenario whereby testing **indicates that the returned Product meets PSS's and/or the Customer's Product and performance requirements as defined in Purchase Orders, PPAP, QDS and this Supplier Manual.**

Examples of data to substantiate Supplier's NTF status declaration include, without limitation, additional levels of testing, development of new test procedures, simulation of Customer usage, and verification with all applicable specifications.

In the event that PSS accepts Supplier's NTF status declaration and that the actual cause of the Defect and the corresponding category of who is responsible cannot be ascertained, the Product concerned shall be (finally) categorised under "NTF". In that case PSS and Supplier shall share the costs.

**Category 3: Responsibility of Dealer and/or Customer**

In case Supplier's investigation has determined that a Defect is due to a dealer or Customer, Supplier must provide PSS with all supporting documentation for approval of this category.

In the event that PSS disagrees with Supplier's response, PSS will give timely notice of its objection. Should PSS decline a submitted response, Supplier will be asked to amend it.

A rejected Supplier response shall in no event be binding upon PSS.

Supplier must retain the affected Products until all related root cause and corrective action analyses by Supplier, including supporting documentation, are accepted by the involved Customer and the Warranty case is resolved.

**Warranty Analysis Resources**

Supplier ensures to have all proper equipment (commensurate with Products, services and processes provided to PSS) and resources available as required for Warranty Product conformance testing. This applies to all components, systems and vehicle requirements relative to the Warranty issue under investigation.



At Supplier's cost, Supplier must conduct all components level testing (inside/outside laboratories) and analysis of returned Warranty Products within the time frame defined by PSS. For system level testing, PSS and Supplier shall work together in good faith to determine the best testing method. Each party will absorb their own testing costs.

**Implementation of Lessons Learned**

Supplier must incorporate lessons learned from Warranty analysis into their processes.

Supplier must define and implement a process/procedure outlining the use of lessons learned in the development of new Products. The procedure must include problem resolution, reporting of current issues, and how they are captured for future Product development.

All lessons learned must be included in the 8D report (according to the Customer's and/or PSS's 8D & LL format)

PSS recommends Supplier to establish a lessons learned database.

**Technical Support**

Supplier must provide, at Supplier's cost, technical expertise for the reviewing of Warranty service manuals, Warranty service bulletins, Warranty service repair tips, Warranty repair catalogues etc.

Supplier must assist in the development of service fixes as needed for Warranty issue resolution/closure.

**Specific Warranty Terms and Conditions & Recovery Cost – Chargeback to Suppliers**

All Warranty claim costs arising from or in connection with category 1 failures as described above will be debited to the responsible Supplier.

The terms of Supplier Warranty granted to PSS must not be less than the coverage provided by Customers to their end customers.

In the event of an extension of the contractual Warranty provided by PSS to its Customer, Supplier must grant the same corresponding extension to PSS.

**Warranty Terms and Conditions**

The data included in below table is indicative only. Supplier shall at all times be responsible to obtain the latest applicable Warranty terms and conditions from PSS.

Customer	Period of Time	Coverage in Miles	Warranty Cost	Charge-back Agreement by Customer	Warranty Requirements by Customer
BMW USA, Canada and Puerto Rico	5 years	70,000 miles	Monthly and Year-end deductions by the Customer	14x Factor for the US markets	BMW GS-95004
BMW Europe and (Non US, Canada and Puerto Rico)	3 Years	100,000 Km	Monthly and Year-end deductions by the Customer	28x Factor for the US markets	BMW GS-95004
Chrysler / Fiat	3 years	36,000 miles	Monthly Deductions	Technical Factor	Chrysler ADP
Ford	3 Years	36,000 miles	Monthly Deductions	Technical Factor	Ford SIMS
General Motors	3 years	36,000 miles	Monthly Deductions	Technical Factor	GM Warranty
Mercedes Benz	4 years	50,000 Miles	Monthly Deductions	Technical Factor	Mercedes Benz Warranty
Nissan	3 Years	36,000 miles	Monthly Deductions	Technical Factor	R-M Warranty
Renault	3 Years	36,000 miles	Monthly Deductions	Technical Factor	R-M Warranty
Volkswagen (USA & Canada)	4 years	70,000 miles	Monthly Deductions	Technical Factor	VW Warranty
Volkswagen (Non US & Canada)	3 years	100,000 Km.	Monthly Deductions	Technical Factor	VW Warranty

### Warranty Cost

The warranty provisions set forth herein supplement the GPTC.

In the event that Supplier delivers defective Products to PSS, Supplier shall be liable for and defend, indemnify and hold harmless PSS and its respective officers, directors, employees and agents from and against any and all liabilities, damages, losses, costs, expenses (including reasonable attorneys' fees and other expenses of litigation and arbitration), claims, demands, suits, penalties, judgments or administrative or judicial orders incurred by PSS, to the extent the Defect is attributable to Supplier's acts or omissions, including but not limited to the costs and expenses defined in the Cost Recovery Policy.

In addition to any of PSS's rights under the Contract, PSS reserves the right to set off against its payment obligations, any amount which might be owed by the Supplier, on any grounds and of any nature whatsoever, including any amounts relating to penalties and quality claims.

In the event that Products do not conform to the contractual Warranty requirements, PSS may, without prejudice to PSS's rights under the Contract, including but not limited to PSS's right to claim for damages, charge the Supplier with, and the Supplier undertakes to bear, all and any repair or replacement costs incurred by PSS or the Customers.

PSS shall make available to the Supplier the charge-back warranty data provided by the Customer.

PSS Warranty claims typically include, but are not limited to, the following cost elements:

- (a) Labor: cost for repair or replacement of defective Products.
- (b) Products: cost of replacement Products purchased by dealerships at dealership price.
- (c) Product handling: cost of administration, shipping and handling of defective Products.
- (d) Sublet: repairs or services provided by 3<sup>rd</sup> parties, including, without limitation, machine shops and paint shops.
- (e) Damages: damages caused to other components as a result of defective Products. For clarification, damages shall also include indirect costs, including, without limitation, costs of mobility (loaner cars).

The foregoing cost elements do not constitute an exhaustive list but rather serve as examples of costs related to the repair and replacement of defective Products, and shall be in addition to



any warranty related costs and expenses defined in the Cost Recovery Policy and the GPTC.

### 2.11.3.8D Reports

Supplier must use the PSS Supplier 8D format for complaint handling. The 8D reports used for handling complaints must answer at least the following questions (Supplier must use 5WHY or other reputable analysis techniques, such as Ishikawa diagram):

- Impact analyses:
  - Is the defective Product used by other customers?
  - Does the Defect have a possible impact on other Products?
  - Does the Defect have a possible impact on another process?
  - Does the Defect have a possible impact on components?
- Root cause on occurrence:
  - What is the root cause (5WHY)?
  - What is the root cause verification result (show evidence of the root cause)?
- Possible corrective actions:
  - What are the possible corrective actions?
  - What is the corrective action verification result on short notice (for example result on first batch after introduction of the action)?
  - When will Supplier implement the corrective actions?
  - What is the final verification result on longer notice (for example result after several batches)?
- Root cause on non-detection:
  - Why did the defective Product pass Supplier's test and inspections (5WHY)?
  - What is the root cause?
  - What is the root cause verification result (show evidence of the root cause)?
- Possible corrective actions:
  - How will Supplier prevent defective Products from passing the tests and inspections?
  - What is the corrective action verification result on short notice (for example result first batch after introduction of the action)?
  - When will Supplier implement this?
  - What is the final verification result on longer notice (for example result after several batches)?
- Prevent reoccurrence:
  - How will Supplier ensure that the Defect will not happen again?
  - Are actions secured in changes or updates in related documents, including but not limited to FMEA's, design rules, control plans, maintenance reports, work instructions, measuring systems and flowcharts.
- Recognize the team
  - Does Supplier recognize the collected efforts of the team?
- Lessons learned
  - What are the lessons learned from the team?

#### 2.11.4. Concession

A request for authorization to deliver non-compliant Products must be submitted by Supplier **prior to shipment of any Products** for any deviation from the specifications, including during project/Product development phase.

**Products not fulfilling 100% of the specifications must never be shipped to PSS without prior written concession/deviation approval by PSS, or alternatively approval via PPRP.**

A concession request must always include a short description of the said deviation and the amount of Products to be delivered under concession as well as the delivery dates. The packaging of the Products must be labelled accordingly. Supplier must keep records of the quantity of Products delivered under concession as well as the delivery dates.

Any suspect Products, or Products reworked or repaired under conditions not previously approved via PPRP, must only be delivered to PSS after approval by PSS of a concession request submitted by Supplier. Supplier ensures to submit the rework and repair instruction together with the concession request.

Supplier guarantees that all Products waiting for concession approval by PSS shall be contained as suspect Products in a separated area at Supplier (“quarantined”) and that each pallet shall be clearly identified until written approval for delivery is given by PSS.

**IMPORTANT:** Supplier must request temporary changes of production controls, including but not limited to use of alternative checking methods, in advance via PPRP approval package. With respect to Products in mass production, such changes must be notified via a concession request.

All information provided by Supplier in concession requests must be in accordance with template *PSS-F-03.04-005/04 B*.

#### 2.11.5. Failure to meet Specifications

Supplier warrants that all Products shall be manufactured and delivered according to the agreed Product specifications and shall be free of contamination and Defects. In the event that Supplier fails to meet the agreed Product specifications, Supplier shall be liable for and defend, indemnify and hold harmless PSS and its respective officers, directors, employees and agents from and against any and all liabilities, damages, losses, costs, expenses (including reasonable attorneys' fees and other expenses of litigation and arbitration), claims, demands, suits, penalties, judgments or administrative or judicial orders incurred by PSS as a result of such failure, including but not limited to scrap costs, sorting costs, repair costs, emergency repacking costs, priority transportation costs, external testing costs, any charges from the Customers, including but not limited to replacement costs, recall costs, warranty repair costs, and any other costs and expenses specified in the GPTC and Cost Recovery Policy.

### 2.11.6. Non-conforming Product Disposition

Supplier must document any disposal (scrapping) of rejected Products and define an instruction specifying how to destroy rejected Products, such that they are no longer repairable or usable by accident or incident. Supplier ensures to timely provide PSS with such instruction.

## 2.12. Management Control

Supplier must implement a management control system as described below or similar. In case Supplier is not familiar with these principles, Supplier must immediately submit an improvement plan to PSS in order to implement a management control system as soon as possible.

### 2.12.1. What's Management Control

Management control is much more than just the follow-up of performances and includes:

- Daily team meetings
- Daily factory tours
- Daily management meeting
- Daily auditing
- Communication
- Coaching
- Motivation of employees
- ....

The final goal of the management control system is to ensure that at any time any critical deviation is detected and that the right corrective action is taken to return as soon as possible to the required standard.

Major activities in management control are:

- Preparation: daily factory tour
- Alignment: face-to-face meeting
- Actions: top 5 meeting

### 2.12.2. Role of Managers

The role of managers in the management control system includes the following:

- Develop people: help and coach operators and other employees to understand the current situation and to take the appropriate decisions.
- Link process and results: ensure that employees focus on the relevant process which will impact the expected results. Review the link permanently.
- Level up the expectation: challenge the standards and increase expectations. Challenge employees to improve and learn.
- Manage risks and opportunities.
- Motivate employees and maintain a strong, successful team.
- Drive action plans and guide Supplier with leadership towards excellence.

### 2.12.3. Daily Team Meetings

The team level is the lowest level of the management control system. It must be implemented in each team, in each shift (production and warehouse/logistics).

The teamleader must audit the activities and collect during each shift all relevant data, including any abnormalities. The teamleader must complete the required registrations at the end of the shift, including without limitation output, line stops, scrap, accidents, incidents, any corrective actions undertaken, update of running corrective actions and escalations.



PSS recommends Supplier to implement a special Audit tour checklist/form to support the team leader. This checklist may describe the minimum tour frequency, the areas to be visited, the activities to be checked etc.

At the start of each shift, the team leader must organize a short daily team meeting ( $\pm 5$  to 10 minutes) with his/her operators and employees, during which the registrations and other topics shall be discussed.

#### 2.12.4. Daily Face-to-Face Meeting

The next level of the management control system are the daily face-to-face meetings ( $\pm 5$  to 10 minutes).

Face-to-face meetings must be organized on multiple levels. Depending on the organization of Supplier, Supplier must organize the following meetings:

- The production line responsible with the team leader, or the warehouse/logistic responsible with the team leader of the warehouse/logistic department.
- The production manager with each production line responsible, or the logistic manager with the warehouse/logistic responsible.
- The general manager with the production manager and afterwards with the logistic manager.

The face-to-face meetings must be preceded by an Audit tour carried out by Supplier's management staff as further described in section 2.12.5.

During the face-to-face meetings, the lower level and the results of the Audit tour must be reviewed etc.

To support and facilitate face-to-face meetings, Supplier is recommended to implement checklists/forms that describe, a.o., the route of the tour, the areas to be visited, the activities to be checked, escalations, and to mark the conclusions of the tour in terms of OK / NOK.

**2.12.5. Audit Tour**

The Audit tour must be conducted in the entire production area by the production manager and the general manager, and in each logistic area (incoming, warehouse, outgoing etc.) by the logistic manager and the general manager.

The objective of the Audit tour is to:

- observe factors which impact performance results;
- understand the situation;
- verify if the right decisions are taken;
- detect coaching needs.

During the Audit tour, at least the following must be reviewed: 5S, accidents, results and action status, correct use of 3P and QRQC, Total Preventive Maintenance (“TPM”).

To support and facilitate the Audit tour, Supplier is recommended to implement, a.o., the route of the tour (including timing) and inspection points with pictures regarding 5S.



**2.12.6. Top 5 Meeting**

Top 5 meeting is the final meeting of the management control system. It is held daily with Supplier’s management team and led by the general manager.

Top 5 meeting must demonstrate the following transition/goal:

FROM	TO
<ul style="list-style-type: none"> <li>• A detailed review of each yesterday KPI result per department, production line</li> </ul>	<ul style="list-style-type: none"> <li>• A review of the plant situation per output KPI with only a zoom on red situations</li> </ul>
<ul style="list-style-type: none"> <li>• Addition of single discussion between general manager and each department manager</li> </ul>	<ul style="list-style-type: none"> <li>• A share of decisions taken</li> </ul>
<ul style="list-style-type: none"> <li>• An information meeting for the general manager</li> </ul>	<ul style="list-style-type: none"> <li>• An information meeting for the whole management team</li> </ul>
<ul style="list-style-type: none"> <li>• A non interest of most of the tasks for the audience</li> </ul>	<ul style="list-style-type: none"> <li>• A stronger involvement of support services</li> </ul>
<ul style="list-style-type: none"> <li>• Endless discussions</li> </ul>	<ul style="list-style-type: none"> <li>• Short and efficient meeting with clear conclusions and actions</li> </ul>

To support and facilitate the top 5 meeting, Supplier is recommended to organize a special area where specific data is prepared and made available in view of the meeting, such as but not limited to Customer feedback, Supplier issues, escalations and action plan.



**2.13. Layered Process Audits**

The purpose of layered process Audits is to:

- verify compliance with the documented process;
- instill discipline;
- improve communication;

- improve overall performance quality.

Layered process Audits must be owned by Supplier’s manufacturing management team.

Supplier’s quality management and other functions must participate in and support layered process Audits.

Layered process Audits are intended to supplement ongoing control plan, job instruction checks and other controls.

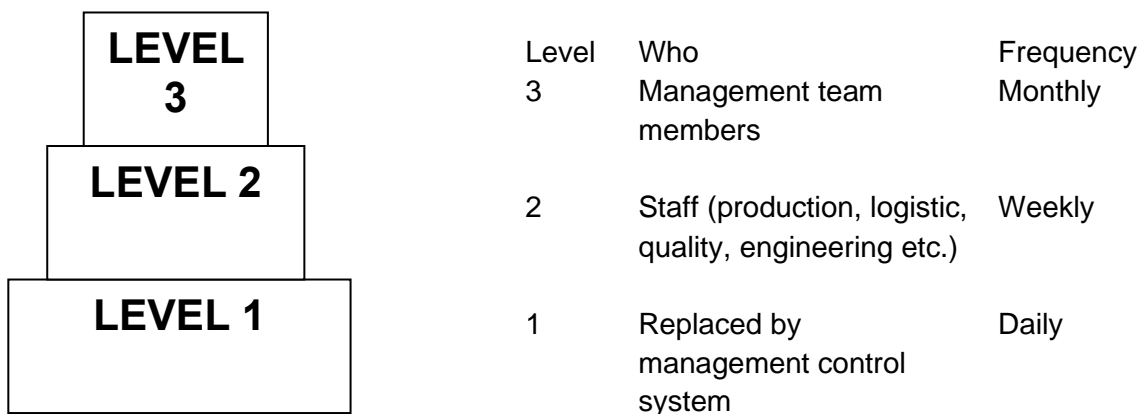
Layered process Audit is a standardized Audit that must be frequently performed by all layers of Supplier’s organization, and must verify Supplier’s adherence to operational standards and consistently reinforce Supplier’s focus on quality.

Layered process Audits must ensure consistent application and execution by Supplier of applicable standards, improved build-in-quality and increase of Supplier operator/employee awareness facilitated by coaching and training for improved communication between Supplier management and its operators/employees.

### 2.13.1. Planning and executing Layered Process Audits

Layered process Audits are applicable for all production lines and logistic areas (incoming, warehouse, outgoing etc.)

Layered process Audits must be defined on 3 levels:



Supplier must schedule layered process Audits for each level according to above mentioned frequencies and functions/areas.

To support and facilitate the execution of layered process Audits, Supplier is recommended to implement specific questionnaires/checklists for the different areas and levels which shall also serve as the layered process Audit reports.

The questionnaires/checklists shall include at least:

- Basic checks applicable to all work stations.
- Checks specific to operations and developed by the respective plant based on quality feedback, process knowledge and problem solving.
- Basic checks applicable to all work stations regarding the production system.



Suggestions to be included in the questionnaires/checklists:

- Functioning of gages and calibration confirmation.
- Stacking/packing techniques.
- Visual aids presence and content.
- Process parameters.
- Work instructions.
- Product identification.
- Torque monitoring (if applicable).
- Documentation/record completion.
- Compliance with control plan.
- Proper use of Andom system.
- Effective problem solving and countermeasure implementation.
- ...

In case NOK items are detected or improvements are needed, Supplier must install and maintain a system for proper follow-up and management of the deviations and improvements (PDCA principle).

Supplier ensures that the results of layered process Audits are communicated to the responsible of the audited area.

The production and logistic manager shall be responsible for the proper follow-up in their respective area. The production and logistic manager must make a global overview to analyse results, re-occurrences etc. These analyses will be used as input for the yearly Supplier management review.

#### **2.14. Extended Factory Shut Down – Start-Up Audit (applicable for Suppliers delivering components with paper, cloth, foam or organic ingredients)**

Suppliers delivering Products that incorporate organic raw material, such as but not limited to paper cones, paper dustcaps, paper high tone cones, textile dust cloths, textile domes or textile dampers must:

- Inform the respective PSS buyer, PSS Purchasing management staff and all the PSS facilities concerned in writing prior to an extended production shutdown.  
An extended production shut down means the period during which production is stopped for 5 or more days.  
Examples of extended production shut down periods include but are not limited to customer change over, preventive maintenance for Tooling, machinery or processes, or holidays.
- Have a factory shutdown procedure in place which addresses the cleanness of workshop and warehouse.
- Have the work instructions in place to support cleaning jobs before and after factory shutdown. Supplier ensures to maintain and validate records for the cleaning work done before and after factory shutdown.

- Include in the factory shutdown procedure the requirements for chemicals in workshop so that they are well sealed, handled, and returned to the chemical warehouse in clean state before factory shutdown.
- Include in the factory shutdown procedure the requirements for wet saturations so that they are completely clean and dry (facilities, machines, tools, fixtures) before factory shutdown.
- Include in the factory shutdown procedure the requirements for concrete rain-proof, moisture-proof for storing of semi-finished goods, finished goods, machines, tools, fixtures before factory shutdown.
- Have a 5S management system in place to guarantee that:
  - all workstations shall be clean (no dirt, water or chemicals spilled on the machine, work table, tools, fixtures or floor);
  - all transferring boxes/containers shall be clean (note: no recycle carton boxes shall be allowed);
  - all line stock (for components and semi-finished goods) shall be clean and rain-proof;
  - the warehouse (for components, semi-finished goods and finished goods) shall be clean, rain-proof and shall have moisture control for stored components, semi-finished goods and finished goods;
  - all regular cleaning and checks for work stations, facilities, machines, tools, fixtures and the workshop/warehouse shall be performed according to the applicable procedure and work instructions, such as but limited to transferring boxes/containers, tanks, barrels, pipes, forming machines and ovens;
  - all the cleaning jobs shall be clearly defined by and/or with the right personnel;
  - all regular mold concentration tests shall be in place.
- Include the factory shutdown and start-up requirements in layered process Audits.

The purpose of an extended factory shut down and start-up Audit is to ensure that and check whether, in the event of a shut down:

- the processes are well-secured, to avoid that the quality of Products, sub-assemblies or finished Products may be impacted at start-up;
- the processes are ready and released to start up again;
- operators are applying standardized work correctly, that the control plan is executed well and that produced parts are fulfilling all requirements.

To support and facilitate factory shut down and start-up Audits, Supplier must use a dedicated Audit checklist/form in accordance with *PREMIUM SOUND SOLUTIONS-F-0005-009* “*Extended shut down and start up audit form*”.

Supplier must, no later than two days after start-up, provide the respective PSS SQE, PSS Purchasing management staff, and all PSS facilities concerned with the completed Audit form.

### **2.15. Process Requirements (only for Suppliers delivering dipped Products)**

It is mandatory for Suppliers that deliver dipping Products, such as but not limited to cones, dustcaps, high tone cones, dustcloths and similar dipping Products, to implement the following process requirements:



- Baking process for dipping 2 hours at 130°C.

Supplier must verify compliance with this special process requirement during layered process Audits.

### **2.16. Mildew test (only for Suppliers delivering Products including organic ingredients)**

Suppliers that deliver Products including organic ingredients, such as but not limited to textile Products ( dust clothes, textile domes, dampers etc.) or paper Products (cones, dustcaps, high tone cones, domes etc.) must carry out a Mildew test.

The Mildew test must be executed according to the standard *PREMIUM SOUND SOLUTIONS-P-00.03-030 "Mildew Test"*. This standard will be made available upon request to the respective PSS SQE or buyer.

Supplier must verify the execution of the Mildew test during layered process Audits.

Requirements for the Mildew test:

- The test sample collection must be representative of serial production according to the defined specifications and must always be consistent.
- Hygiene control is an essential part of the preparation process (Supplier must clean vessels/glasses, and use fresh gloves to handle cones and samples).
- Cones, specimens and vessels must be properly identified to prevent mixing of different samples.
- All conditions of the test chambers must comply with the applicable specifications (temperature setting, inside cleanness). Supplier must frequently perform temperature checks and make available calibration records.
- All test records must be available and validated.
- The operator/supervisor must be qualified to properly and consistently deal with test failures.
- All test specimen/samples must be saved properly and in good conditions, allowing for easy selection of specific samples, and in accordance with PSS's requirements, including but not limited to the obligation for Supplier to keep samples at least 6 months.

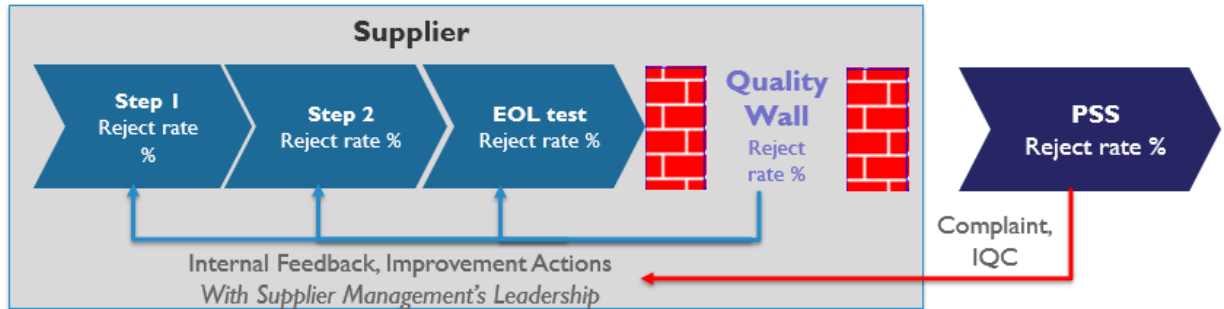
### **2.17. Quality Wall**

For Supplier production process(es) which do not meet the required output quality levels defined in the agreements between PSS and Supplier, including but not limited to LON or QDS, Supplier must implement a quality wall ("Quality Wall", "Firewall" or "GP12") at its facilities to secure that all Products delivered to PSS shall meet PSS's requirements.

Supplier's senior management must continuously review the effectiveness and efficiency of the Quality Wall via internal Audits and immediately undertake all actions necessary if PSS's requirements are not met.

The Quality Wall must be planned by Supplier as a temporary additional control, and Supplier must update the control plan accordingly. Supplier's quality management must

promptly define and implement all actions required to phase out the Quality Wall and resume production controls in normal circumstances.



### 2.18. Contingency Plans

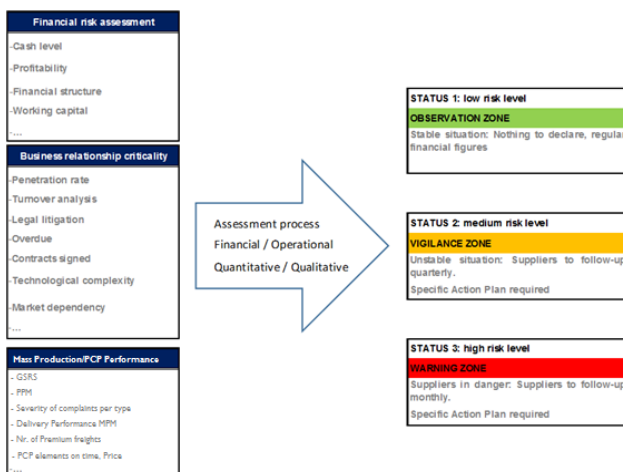
Supplier must define a contingency plan that specifies all actions necessary to avoid delivery stops and to resume deliveries as soon as possible in case of Force Majeure.

Supplier must provide the respective PSS buyer or PSS Purchasing management staff yearly with all contingency plans.

### 2.19. Risk Management

Supplier must review, plan, document and execute all actions necessary to address risks and opportunities related to internal processes and external partners (customers, sub-suppliers, services, etc). The actions defined in this plan must be part of the Supplier management review.

Supplier will be reviewed on a yearly basis according to the following risk assessment:



### 2.20. Statutory and Regulatory Requirements

Supplier warrants that all Products, including without limitation serial production Products and Service Parts, shall comply with all statutory and regulatory requirements in force in the country where the Products shall be produced, transferred, sold, delivered or used, and that all related Supplier processes, including without limitation all outsourced

activities, shall comply with all statutory and regulatory requirements in force in the country where the processes shall be performed, including but not limited to the requirements defined in the Supplier Code of Conduct and the requirements defined in the GPTC.

### **2.21. Sub-supplier/Service Provider Selection Process**

Supplier must select sub-suppliers and service providers in accordance with item 8.4 of IATF 16949:2016. This process must include a selection process for sub-suppliers indicated by PSS, and sub-suppliers of software components or Products with embedded software.

### **2.22. Software Development Process**

Supplier must implement and maintain a process for software quality assurance of its software components or software-embedded Products. Supplier must use a reputable software development assessment methodology to assess the software development process (for example CMMI or Automotive SPICE/ISO 15504).

### **2.23. Sub-supplier Monitoring**

Supplier must frequently monitor and evaluate at least the following aspects of performance of its sub-suppliers, including but not limited to any sub-suppliers indicated by PSS:

- Quality performance (PPM or quality complaints).
- Delivery.
- Premium freights.
- Warranty returns.

### **2.24. Lean, Efficiency, Waste Reduction**

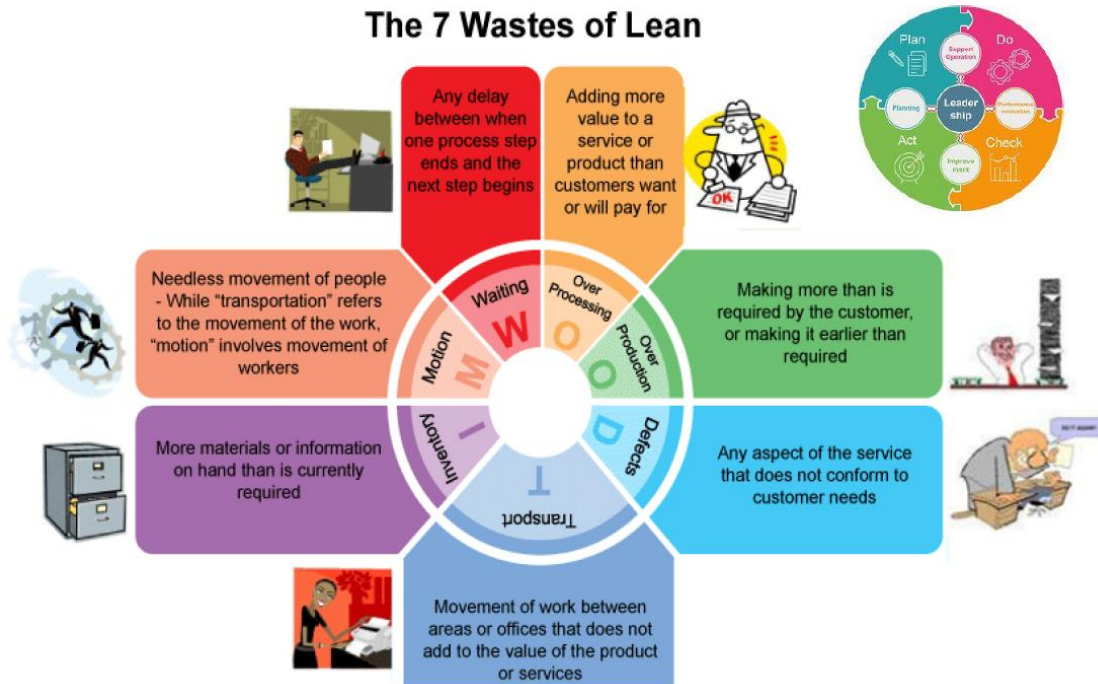
Supplier's management staff must monitor the efficiency of its internal processes, production, quality controls, structure, etc., taking into account use of human resources, use of energy, production time, production cost, packaging cost, etc.

Supplier ensures that any actions taken to optimize efficiency shall target improvement of quality and shall have no negative impact on Product quality.

Supplier must include waste elimination (time, reduction of scrap, reduction of buffers, etc.) in its company management targets.

Supplier is recommended to appoint and maintain a Lean Green Belt certified employee in each of its production sites.

Supplier must frequently verify its production efficiency.



### 2.25. Conflict Minerals – Responsible Sourcing

Supplier must manage conflict minerals and responsible sourcing in line with the most recent edition of OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

### 2.26. PSS Requirements: Application in Supplier Management System

Supplier must maintain a list of PSS's requirements including their link and applicability to Supplier's internal documentation and processes. This relation must be clarified via a documents list, in accordance with the following example:

PSS requirements	Supplier internal reference documentation
Drawing	Production control plan
QDS	Production control plan
General Purchasing terms and Conditions	.....
S/M - I. General	.....
---	.....
---	.....
Confidentiality, code of conduct	.....
---	.....

### 2.27. Customer Specific Requirements

Supplier must comply with all CSR, even if not expressly specified or referenced in this Supplier Manual or elsewhere in the Contract, including but not limited to the CSR made available under <http://www.iatfglobaloversight.org/oem-requirements/>

[www.iatfglobaloversight.org/oem-requirements/customer-specific-requirements/](http://www.iatfglobaloversight.org/oem-requirements/customer-specific-requirements/)

[Home](#) > OEM Requirements > Customer Specific Requirements

### Customer Specific Requirements

**BMW Group**

- [BMW Group Customer Specific Requirements for IATF 16949:2016 – September 2017](#)

**Daimler AG**

- [Daimler AG Customer Specific Requirements for IATF 16949:2016 – September 2017](#)

**FCA US LLC**

- [FCA US LLC Customer Specific Requirements for IATF 16949:2016 – June 08, 2018](#)
- [Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers for IATF 16949 – Requirements for FCA US LLC, FCA Italy SpA and Ford Motor Company – September 2017](#)
- [FCA US LLC Customer Specific Requirements for PPAP 4th Edition and Service PPAP 1st Edition – October 17, 2016](#)

**FCA Italy SpA**

- [FCA Italy SpA Customer Specific Requirements for IATF 16949:2016 – March 1, 2018](#)
- [Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers for IATF 16949 – Requirements for FCA US LLC, FCA Italy SpA and Ford Motor Company – September 2017](#)

**Ford Motor Company**

- [Ford Motor Company Customer Specific Requirements for IATF 16949:2016 – effective May 2017](#)
- [Launch of Ford Customer Specific Requirements for IATF 16949 Cascade Letter](#)
- [Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers for IATF 16949 – Requirements for FCA US LLC, FCA Italy SpA and Ford Motor Company – September 2017](#)
- [Ford Motor Company Customer Specifics for PPAP 4th Edition – June 2018](#)

**General Motors**

- [General Motors Customer Specific Requirements for IATF 16949:2016 – Effective Nov.1, 2017](#)
- [General Motors Customer Specific Requirements for IATF 16949:2016 – Effective Jan 2017](#)

**Groupe PSA - Opel Vauxhall**

- [Opel/Vauxhall Customer Specific Requirements for use with IATF 16949:2016 – Effective May 1, 2018](#)
- [Information about Groupe PSA CSR applicability](#)

**Groupe PSA - Peugeot Citroen DS**

- [PSA Group Customer Specific Requirements for use with IATF 16949:2016 – Effective Feb 15, 2017](#)
- [Group PSA Customer Specific Requirements for use with IATF 16949:2016 – Effective May 1, 2018](#)
- [Information about Groupe PSA CSR applicability](#)

**Renault Group**

- [Renault Group Customer Specific Requirements for IATF 16949 – July 2017](#)

**Volkswagen Group**

- [Volkswagen Group Customer Specific Requirements for use with IATF 16949:2016 – January 2018](#)

## 2.28. Financial Stability

PSS expects its Suppliers to meet all financial obligations.

PSS may frequently review Supplier's financial condition. Supplier must promptly provide all financial information relating to Supplier and its sub-suppliers upon request of PSS.

Supplier ensures to inform PSS immediately of any changes to Supplier's legal registration and of any other matters that may affect Supplier's financial condition.

## 3. Other Requirements

### 3.1. Document Requirements

Documents and records as defined according to IATF 16949 must be maintained for a minimum period of 15 years after end of serial production.

### 3.2. Environmental Regulations and Requests

Supplier must assign 1 person in the company as contact person and responsible for all International Material Data System ("IMDS") related issues and questions. This person must be fluent in spoken and written English. Supplier must provide PSS's purchasing management staff with this person's contact information as soon as PSS and Supplier enter into a business relationship.

Supplier must complete IMDS declarations on the official IMDS platform. Supplier ensures that when entering Material Numbers in the IMDS platform, it shall not leave any empty spaces nor any characters between the numbers.

Example: **430407814371** – OK

Example: 4304-078 14371 – not OK

Supplier must submit IMDS declarations for the first delivered Products after project nomination or, at the latest, 1 month before the planned submission date of the PPAP/VDA2 (PPRP) documentation.

Supplier warrants that all Products and materials supplied to PSS shall not contain any banned substances and shall strictly comply with the requirements specified in the documents *PREMIUM SOUND SOLUTIONS-P-02.01-025 Product Compliance legal requirements and customer demands*, and *PREMIUM SOUND SOLUTIONS-F-0005-019 Environmental certificate*.

Supplier further warrants that dangerous goods, if any, shall be transported in accordance with all applicable health, safety, environmental and legal requirements, and that it shall strictly abide by any Customer Specific Requirements relating to risk assessments and activity planning to reduce the risk of accidents and injuries.

Supplier must mark its contractual deliveries with appropriate recycle symbols in accordance with the following:

- cardboard primary packaging and paper (instructions) for consumer articles: according to DIN 6120 (3 folded arrows), from 50 grams on;
- plastic primary packaging for consumer articles: according to DIN 6120 (appropriate number within 3 closed arrows, plastic type abbreviation underneath), from 5 grams on or bags > 3 dm<sup>2</sup>;
- other plastic parts (not packaging): according to ISO 11469 (3 closed arrows with plastic type abbreviation underneath between > <), from 25 grams on. If only small areas are available, the arrows can be omitted.

PSS strives for continuous improvement with respect to environmental aspects and frequently defines and reviews organizational targets and objectives in connection therewith. PSS considers ISO 14001 as the minimum environmental requirement to comply with and uses ISO 14001 as the standard for its global environmental management system.

PSS therefore expects that all its business partners shall implement a suitable environmental management system in their professional activities and obtain ISO14001:2015 certification from a reputable third-party.

As a minimum requirement, Supplier must implement an environmental policy in line with the standard PSS and statutory requirements. This policy must at least cover and refer to all parties concerned (a.o. customers), compliance obligations, continuous improvements, management involvement and total lifecycle assessment.

In case Supplier is not ISO14001:2015 certified at the time of entering into a business relationship with PSS, Supplier must immediately submit to PSS and implement an action plan

to achieve certification by the end of the calendar year in which Supplier and PSS entered into a business relationship.

Supplier must take into account the following factors in the development, production and life-cycle of Products:

- In view of the choice of raw materials, Supplier must evaluate the total lifecycle of raw materials. This includes but is not limited to:
  - the carbon footprint of the production process;
  - the chemical content and emissions of harmful volatile components during the lifetime of the Product; and
  - recycling possibilities at End of Life.
- The use of resources such as water and energy during the production process of Products.
- The energy efficiency during lifetime of Products.
- Supplier must implement environmentally-friendly waste management during the development, production and life-cycle of Products, and during the development and implementation of production processes and other contractual activities and aspects, including but not limited to packaging used internally by Supplier, its sub-suppliers and any delivered packaging. Such environmentally-friendly waste management must in particular focus on
  - + prevention of waste;
  - + reuse;
  - + recycling; and
  - + correct disposal of residual waste.
- Supplier acknowledges and agrees that in order to achieve successful implementation of environmental protection in its daily company operations, it must frequently train, motivate and inform its employees.

### 3.3. Special Characteristics

PSS has introduced a new system to define and mark special characteristics. As a consequence, PSS may temporarily issue drawings to Supplier that include either the old or new system.

#### 3.3.1. Old System to Define Special Characteristics

Very important dimensions are marked on a drawing with a '\*', '\*\*' or '☒'.

- A '\*' indication on the drawing: indicates a critical measurement that influences the PSS manufacturing process. This must be managed as a SC, as defined in the new system.
- A '\*\*' indication on the drawing: indicates an important measurement that has direct influence on PSS's Customer build-in application. This must be managed as a SC, as defined in the new system.




- A '☒' indication on the drawing means that the related dimension is a Cpk dimension; Statistical Process Control ("SPC") is required on these dimensions. This must be managed as a special characteristic, as defined in the new system.

The QDS will specify what actions, analysis and reports are expected for each type of these measurements.

### 3.3.2. NEW System to Define Special Characteristics

PSS drawings may include three types of characteristics, it being noted that Customers may use terms such as but not limited to "key characteristic", "critical characteristic" or "safety characteristic".


- Critical characteristic ("CC")

Symbol: 

Definition: means a characteristic that affects Customer and/or operator safety and/or may result in non-compliance with government regulations, and thus requires special attention to ensure 100% compliance.

x = follow number of that type of characteristic on the drawing (PPAP follow-up reasons)

- Significant characteristic ("SC")

Symbol: 

Definition: means a characteristic that significantly affects Customer satisfaction, Product function, fit or appearance, or process performance, and thus requires special attention to ensure acceptable levels of capability.

x = follow number of that type of characteristic on the drawing (PPAP follow-up reasons)

- Normal characteristic

Symbol: no symbol used.

Definition: means all other characteristics.

Supplier and PSS shall manage special characteristics via the document Special Characteristic Tracking Sheet. This Special characteristic Tracking Sheet shall be part of the product approval process.

### 3.3.3. Management of CC's and SC's

Supplier must prove compliance with CC's and SC's:

- 1) During PRRP process:
  - via process capability studies included in the PRRP package.
- 2) During mass production of the part (in accordance with the Product's production control plan)
  - via SPC;
  - via 100% inspection;
  - via product and process design (poka yoke tool); or
  - via test & validation reports



PSS recommends Supplier to use poka yoke inspection jigs for quality and process efficiency (less need for measurements).

For each SC and CC the method must be documented in the Special Characteristic Tracking Sheet.

Management of SC's and CC's must be agreed upon with the respective PSS SQE prior to process control planning. Supplier must measure SC and CC dimensions with appropriate devices and in accordance with reputable industrial studies, such as MSA.

### 3.3.3.1. Process Capability Studies

#### 3.3.3.1.1. General

All data generated by Supplier in connection with process capability study must meet all Customer requirements. If no requirements are specified by PSS, a Ppk value  $\geq 1.67$  must be achieved for preliminary results. Long term capability must be achieved by Cpk value  $\geq 1.33$ , unless otherwise specified by PSS.

Preliminary process studies are short-term and will not predict the effects of time and variation on people, materials, methods, equipment, measuring systems and environment. Even for these short-term studies, Supplier must collect and analyze the data in the order the data is produced, by using control charts in accordance with AIAG Manual – Statistical Process Control (SPC).

Supplier must also perform a measurement system analysis in accordance with AIAG MSA Reference manual and/or VDA 5, to understand how measurement errors affect study measurements.

For those characteristics that can be studied using X-R control charts, Supplier must perform a short-term study based on 25 or more subgroups of data containing at least a total of 100 individual readings.

Any other quantity shall not be allowed, except if specifically agreed in written with the respective PSS SQE. As best practice, the following quantities must be followed:

- **Short term capability sampling Ppk (for PCP/before final process release): minimum of 30 samples from each individual production cavity** (for molding/stamping/forming), divided in 6 subgroups of 5 pieces each. Example: Tooling with 4 production cavities => total of 120 samples to be measured.
- **Long term capability sampling Cpk (mass production): minimum of 125 samples from each individual production cavity (for molding/stamping/forming)**, divided in 25 subgroups of 5 pieces each. Example: Tooling with 4 production cavities => total of 500 samples to be measured.

Supplier must provide PSS with the results of process capability studies in a histogram and control chart format or by using PSS's template for capability studies.

Supplier must examine the control chart for signs of instability. In the event of signs of instability, Supplier must immediately undertake the appropriate corrective action.

For certain processes, Supplier may need to use alternative analytical tools such as individual and moving range to carry out the capability study.

### **3.3.3.1.2. Analysing the Result**

#### **3.3.3.1.2.1. Process that appears to be Stable**

$P_p$  and  $P_{pk} > = 1.67$ :

The process probably meets all Customer requirements. After approval by PSS, Supplier must start production and follow the approved control plan.

$1.33 \leq P_{pk} < 1.67$  :

The process may not meet all Customer requirements. After Product approval by PSS, Supplier must start production, provided that Supplier pays additional attention to the characteristic until an ongoing  $P_{pk} \geq 1.33$  is achieved.

$P_{pk} < 1.33$

The process fails to meet all Customer requirements. Supplier must submit and execute a corrective action plan to achieve process improvements as soon as possible. 100% inspection or testing is required until an ongoing  $C_{pk} > 1.33$  is demonstrated. Supplier must submit a revised control plan for these interim actions, which must be reviewed and approved by PSS.

#### **3.3.3.1.2.2. Process that appears to be Unstable**

In case of an instability, the process may, depending on the nature of the instability, not meet all Customer requirements. Supplier must identify, evaluate and, to the maximum extent possible, eliminated any causes of the instability and carry out 100% inspection until ongoing stability with a  $C_{pk} > 1.33$  is demonstrated. Supplier must submit and execute a corrective action plan to achieve process improvements as soon as possible. Supplier must submit a revised control plan for these interim actions, which must be reviewed and approved by the Customer.

In case Supplier fails to achieve acceptable process capability by the required part submission date, Supplier must immediately submit a corrective action plan and an interim revised control plan (aiming for 100% inspection), and execute such plans after approval by the respective PSS SQE. Typical corrective actions include without limitation process improvements, Tooling changes and changes to the Customer engineering requirements. Supplier must undertake all actions necessary to meet the agreed Product requirements, including but not limited to Design of Experiment (“DOE”) tests, laboratory tests and evaluations with third parties until acceptable process capability is achieved.

## **3.4. Feasibility Study**

The feasibility study is a very important investigation of Product specifications to determine whether Supplier is capable to meet the requirements which were submitted with the respective Request for Quotation (“RFQ”).

In the event Supplier is provided with Product specifications or a change request, Supplier must submit a feasibility study report in which all issues relating to tolerances, special characteristics, way of illustration, suggestions for DFX (as defined in \* hereunder) , etc. are assessed and documented. Several iterations may be necessary to come to the final Product design. In case

Supplier and PSS reach an agreement on the final Product specifications, Supplier must sign the respective QDS.

\* DFX = Design for Excellence ( X = manufacturability, testability, cost-effectiveness)

### 3.5. Change Management

Supplier must notify PSS in advance of any intended changes according to the GPTC and the trigger matrix included in VDA2. The notification must include a detailed explanation of the reason for the change and all information necessary to demonstrate that the Product shall meet all requirements.

Supplier guarantees to not implement any change without PSS's prior written approval.

Supplier must notify PSS well in advance of any intended location change of its premises to allow for on-site process verification by PSS, such as but not limited to run at rates and process Audits.

Any changes, including but not limited to location change, which require delivery of Products produced outside of the approved process (listed on the PPAP/VDA2), must be requested by Supplier via a concession request in accordance with this Supplier Manual.

VDA change trigger matrix:

1) Is it a change?				If customer-specific requirements exist, the agreement is obligatory!	Row	
2) Does it affect customer's significant characteristics?						
3) Is the technical interface to the customer affected?						
4) Type of change?						
5) Does it affect contract documents (e.g., specifications, customer's drawing, data-sets, ...)? *						
6) Affect fitment, form, function, performance, reliability affected?						
y	y/n	All	y/n	Change to significant characteristics agreed with the customer for the product, sub-assy., component (electrical/mechanical), process, ... ?	Z	1
y	All	y/n	y/n	Change to significant characteristics agreed with the customer for the product, sub-assy., component (electrical/mechanical), process, ... ?	Z	2
Electronic components (see VDA Product/Process Change Notifications - Guideline for Automotive Electronic Components)						
Design Mc	y	n	n	e.g. change to design, tooling	Z	3
				e.g. change to product software (parameters, architecture)	Z	4
				e.g. change to bearing material, change to EMC capacitor	Z	5
				e.g. change to a dimension not included in the customer's drawing	Z	6
				Change to materials	Z	7
				Change to internal specification or tolerances outside customer's specification	Z	8
				Change to internal specification or tolerances but still within customer's specification	n	9
				Change to identification of parts/materials but with unchanged composition	n	10
				Change in early manuf'g stages (e.g., pre-drilled dimension for a shaft, wafer location, ...)	n	11
				e.g. change in process chain (inc. supplier, duplicated production lines, ...)	y/n	n
Process Mc	y	n	n	e.g. change in checks, checking sequence or other reasons	Z	13
				e.g. change in hardening parameters, injection temperature	Z	14
				e.g. change in process chain (inc. supplier, duplicated production lines, ...)	Z	15
				Change in no. of cavities in tool, progression tools, incremental tools	n	16
				Duplication of production and checking equipment within an existing line	n	17
				New type of machine obtained and installed	n	18
				Change to an existing tool, new equipment, new Poka Yoke	n	19
				Change to process, inc. early manufacturing stages (e.g. as No. 11)	n	20
				Change to setting parameters, production facilities, injection temperature	n	21
				Changes in checks, worsened RPN	n	n
Testing	y	n	n	Change to checking method, RPN unchanged/improved, same process	n	23
				Extended checks with no change to method (e.g., target sample size)	n	24
				Reduction/elimination of check not relevant to the customer (e.g., random sample check)	n	25
				Tools moved from one line to another, lines are the same	n	26
				Transfer of / Movement of equipment in a production plant with no change to the process	n	27
				Location change, equipment, parallel prod'n (not early mtg stages as No. 11)	Z	28
				Supplier change, new 2nd supplier, supplier has changed sub-supplier	Z	29
				New carrier or ESP, SLC	n	30
				Customer packing, shipping, invoicing	Z	31
				Internal packing (e.g., plant to plant, within the plant, ...) and suppliers	n	32
Doc Mc	y	n	n	Documents adjusted to status of approved/released product	Z	33
				Change to documents not product-related (e.g., work instructions, ...)	n	34
Re-use of tools following 12 or months out of use						
Maintenance/overhaul of existing tools/ tools subject to rapid wear (e.g., turning tool, honing tools)						
Change of compiler version, software tool change affecting customer software (debugger change not relevant here)						

### 3.6. Safety

Safety product means any product for which safety certification by one or more institutions, such as but not limited to BSI, VDE, Femko/Demko/Nemko/Semko, UL or CSA is required.

Supplier shall be responsible for acquisition and distribution to PSS of any required safety certifications.

Safety Defects will be considered as critical Defects. Supplier must inspect every Product for critical Defects during Supplier's manufacturing process.

Supplier must immediately notify PSS upon detection of any critical Defect and/or risk that Products containing a critical Defect have been or may be delivered to PSS. In such an event, Supplier must immediately initiate a joint action plan.

In the event any safety Defect is identified by PSS, Supplier will be notified and a joint action plan will be initiated.

### **3.6.1. Product Safety Representative**

In accordance with CSR, PSS and its suppliers must each assign within their respective organization a person who shall be responsible for product safety. This assignment is required independently of whether the respective products have safety features or not. Any such on-site Product Safety Representative ("PSB" or "Produktsicherheitsbeauftragten") must be appointed for each stage of the supply chain.

Supplier must assign its own PSB and provide PSS with such person's/persons' contact credentials as soon as Supplier enters into a business relationship with PSS. Supplier ensures that the assigned PSB shall be competent to fulfill the requirements of the function. Supplier must provide PSS annually, or more frequently upon request from PSS, with an up-to-date list of the assigned PSB contact credentials.

Supplier shall further comply with all PSB function and training requirements defined on the VDA QMC website.

### **3.7. FIFO**

Both Supplier and PSS will apply the principle of First-in, First-out ("FIFO") to stock rotation. The respective shelf life will be specified in the QDS, if applicable.

Notwithstanding the foregoing, as PSS wants to benefit to the maximum extent possible of Supplier's continuous improvement program, Supplier must deliver Products that are new i.e. the production date of Products delivered to PSS must not be older than the time period specified in the respective QDS.

In case Supplier delivers Products that are older than the time specified in the respective QDS, PSS shall be entitled to return such Products at Supplier's cost. Supplier must replace such returned Products with new Products and bear all costs and expenses in connection therewith.

### **3.8. Logistics Requirements**

### 3.8.1. Ordering

#### 3.8.1.1. Supplier Portal

All delivery quantities, place and time of delivery, and applicable incoterms shall be communicated exclusively via the PSS SAP supplier portal (“Supplier Portal”).

When using the Supplier Portal, Supplier must at all times comply with the provisions of the Supplier Portal instruction, reference number *PSS-P-0303-026* (“Supplier Portal Instruction”).

Supplier shall be liable for any costs, expenses, damages and losses incurred by PSS as a result of Supplier’s failure to comply with the Supplier Portal Instruction, or any use of the Supplier Portal by Supplier that is not authorized or that is otherwise inconsistent with the terms and conditions of the Contract.

PSS may frequently issue Call-offs. Supplier must inform PSS immediately if Supplier suspects it has not received any anticipated Call-off.

Each Call-off shall be deemed accepted by Supplier unless the respective Call-off is rejected by Supplier within 1 business day from the issue date of the Call-off.

Supplier guarantees, at all times, to meet all quantities, delivery dates and other requirements set forth in Call-offs, and to undertake all efforts necessary to anticipate any events that may affect delivery schedules, including but not limited to holidays and driving bans.

Supplier must not deliver any quantity of Products in excess of those specified in Call-offs, unless otherwise defined by PSS.

Supplier must timely and correctly notify all shipments via the Supplier Portal.

#### 3.8.1.2. Land Freight Ordering

Firm Orders shall specify delivery quantities for 1 week at most, provided that Firm Orders issued to JIT Suppliers shall specify delivery quantities for 3 days at most.

Delivery dates specified in Firm Orders or Forecast shall refer to Estimated Time of Departure (“ETD”) or Estimated Time of Arrival (“ETA”), as the case may be, in accordance with the applicable incoterm.

#### 3.8.1.3. Sea Freight Ordering

Firm Orders shall specify delivery quantities for 3 weeks at most.

Firm Orders and Forecast shall specify delivery dates per FOB incoterms, whereby FOB refers to the ETD date of the respective vessel.

Supplier must immediately inform PSS in writing of any change to the ETD.

Supplier must at its sole responsibility place shipment bookings at the designated forwarder and copy PSS on all related communication.

Supplier ensures that any booking approval shall include at least

- quantity per Material Number;
- gross weight and total volume;
- readiness date of the Products for dispatch;
- other miscellaneous information if needed.

#### **3.8.1.4. Overdue**

In case of nonfulfillment of a Call-off, the resulting overdue shall be automatically calculated by the Supplier Portal and reflected in the Balance Quantity of future Call-offs.

Supplier must provide PSS with a remedy plan within 2 working days from the issue date of the Call-off that includes the respective overdue.

At the request of PSS, Supplier must organise, at Supplier's sole cost and expense, express shipment for overdue quantities.

#### **3.8.1.5. Call-off quantities**

Notwithstanding any other provision in the Contract, PSS shall be entitled to increase, decrease, reschedule or cancel any and all quantities of Call-offs in writing without a statement of grounds and without any liability at any time, provided that in the event PSS terminates all or any part of Call-offs for convenience, PSS will pay to Supplier only the following amounts, without duplication:

- (i) the Contract price for all Products that have been completed in accordance with Firm Orders of Call-offs labelled with the status "released", "phase-out" or "service" and not previously paid for;
- (ii) the Contract price for remaining safety stock installed, managed, restored and consumed by Supplier in strict accordance with section 3.8.7 of this Supplier Manual and not previously paid for; and
- (iii) the actual costs of raw materials purchased by Supplier within their individual lead times no earlier than necessary to meet the requirements of the first 2 months of Forecast of Call-offs labelled with the status "released", to the extent such costs are reasonable in amount and are properly allocable or apportionable under generally accepted accounting principles to the terminated portion of the Call-off; less, however, 1) the sum of the reasonable value or cost (whichever is higher) of any Products or raw materials used or sold by Supplier with PSS's written consent, 2) the sum of the reasonable value or cost (whichever is higher) of any Products or raw materials that are in Supplier's standard stock, are readily marketable or can be reused or redirected to Supplier's other customers, and 3) the cost of any damaged or destroyed Products or raw materials.

### **3.8.2. Shipping Multiples**

With respect to Products that have status "released", PSS shall order a multiple of a box, a pallet layer or a pallet.

The order multiple for Products that have status "phase-out" or "service" shall always be 1.

Product quantities per box must be aligned with PSS, at least 2 weeks prior to shipment of serial deliveries.

### 3.8.3. Packaging and Labelling

#### 3.8.3.1. Packaging

PSS and Supplier shall agree on Product packaging at least 2 weeks prior to shipment of serial deliveries.

Supplier ensures to communicate at least the following packaging information by e-mail to the designated PSS buyer:

- amount of Products per box;
- amount of boxes per pallet layer;
- amount of layers per pallet;
- dimensions and weight of a standard pallet

In case of discrepancies between the amount of Products per box defined in the Supplier Portal and the amount of Products per box communicated earlier by Supplier to PSS, Supplier must inform PSS immediately in writing.

In the event PSS orders a multiple of a pallet or a pallet layer, Supplier must use homogeneous pallets (i.e. 1 Material Number per pallet).

In case Supplier does not have sufficient Product quantities to fulfil a Call-off, Supplier must ship all available Product quantities by using full pallets and pallets with multiple layers. Remaining boxes shall only be shipped upon PSS's authorization.

In the event PSS orders a multiple of a box, Supplier must use mixed pallets. Mixed pallets must be stowed to the maximum extent possible on top of full pallets and pallets with full layers to optimize storage consumption.

Supplier guarantees to inform PSS immediately in writing in the event Supplier intends to change packaging or suspects that available packaging may prevent Supplier from fulfilling a delivery. Any changes not expressly approved by PSS shall be rejected and rendered void, and Supplier shall be liable for any costs and expenses resulting from any such unapproved change.

Supplier ensures that all Product packaging instructions shall be submitted together with the PPAP/VDA2 documentation and that all such packaging instructions shall comply with all PSS packaging requirements.

#### 3.8.3.2. Labelling

Supplier must label all deliveries with labels that include the corresponding barcodes generated in the Supplier Portal.

Each pallet shall have a master label and each box shall have a box label.

The master label must be attached on the right corner of the short side of the respective pallet.

A master label and any underlying box labels are connected with one another and must be attached to the corresponding specific pallet.

### 3.8.4. Loading



#### 3.8.4.1. Truck Loading FCA incoterm

PSS shall determine the delivery frequency in its sole discretion based on delivery volumes.

In case delivery volumes exceed 1 truck delivery per day, PSS may plan multiple deliveries per day evenly spread over the day.

PSS shall be entitled to pick up multiple times per day at JIT Suppliers even if the delivery volume is less than 1 truck delivery per day.

In case PSS instructs Supplier to ship full trucks, Supplier must undertake all efforts necessary to comply with such instructions, provided that in the event the delivery volume is less than 1 truck delivery per day, Supplier must fill up any resulting empty truck space only by using delivery volumes of the next shipment.

Target loading shall be 95%, which shall, unless defined otherwise by PSS, be deemed full truck loading.

Target loading shall not apply to shipments by JIT Suppliers.

In the event Supplier suspects that available packaging may prevent Supplier from reaching the loading target, Supplier must immediately propose a written solution to PSS.

In case Supplier fails to achieve target loading without approval from PSS, PSS shall charge to Supplier, and Supplier shall pay to PSS

- (i) a penalty for any unutilized storage space, which shall be calculated as follows:  
(95% - actual loading in %) \* truck cost + administrative cost; and
- (ii) all other resulting costs, expenses, damages and losses incurred by PSS.

#### 3.8.4.2. Truck Loading DAP/DPP incoterm

PSS shall determine the delivery frequency and delivery times in its sole discretion based on delivery volumes.

In case delivery volumes exceed 1 truck delivery per day, PSS may plan multiple deliveries per day evenly spread over the day.

#### 3.8.4.3. Container Loading FOB incoterm

The standard delivery frequency shall be once per week, provided that PSS may decide in its sole discretion to lower the delivery frequency.

In case PSS instructs Supplier to ship in full containers, Supplier must undertake all efforts necessary to comply with such instructions, provided that in the event the delivery volume is less than a full container, Supplier must fill up any resulting empty container space only by using delivery volumes of the next shipment.

Target weight for a 20" container shall be 18000 kg net.

Target volume shall be

- 25m<sup>3</sup> for a 20" container; and
- 50m<sup>3</sup> for a 40" container.

In the event Supplier suspects that available packaging may prevent Supplier from reaching the target weight or volume, Supplier must immediately submit a written solution to PSS.

Pallets with boxes that are in addition to full pallets and pallets with multiple layers, must be stacked on top of the full pallets and pallets with multiple layers.

The heaviest pallets must always be placed at the bottom of the respective container.

In case Supplier fails to achieve target volume or weight without approval from PSS, PSS shall charge to Supplier, and Supplier shall pay to PSS

- (i) a penalty for any unutilized storage space, which shall be calculated as follows: (target kg or cbm - actual loading in kg or cbm) \* container cost + administrative cost; and
- (ii) all other resulting costs, expenses, damages and losses incurred by PSS.

Supplier ensures to stow containers, such that Products are not damaged during transport, loading processes, or storage.

In case PSS instructs Supplier to ship Less-than-Container-Load (“LCL”) or in PSS consolidation containers, Supplier must inform PSS at least 2 weeks before the departure date about the volume and weight of the container concerned.

### **3.8.5. Invoicing**

Supplier shall invoice in strict compliance with the provisions of the GPTC.

Supplier shall issue 1 invoice per shipment, provided that if a shipment consists of sea freight containers, separate invoices per sea freight container shall be required.

### **3.8.6. Capacity**

Supplier ensures to install sufficient equipment, machine, tooling and operator capacity to fulfil the maximum Contract requirements.

Supplier must have this capacity in place for each Product and without interruption, such that Supplier shall be able to fulfil all Contract requirements by working 5 days per week as a maximum.

In case Supplier suspects it may be necessary to install shifts on Saturdays or Sundays to meet the Contract requirements, Supplier must immediately provide prior written notice to PSS. Any such notice must include a detailed description of the capacity constraint and an action plan to increase capacity, such that Supplier shall be able to meet the Contract requirements during regular working days again as soon as possible.

Supplier guarantees to undertake all efforts necessary to anticipate any holidays of Supplier that may differ from PSS’s holidays.

Every second Tuesday of each quarter, Supplier must confirm in writing to PSS the implementation of all capacity to meet the Contract requirements of the next 6 months. Any such written confirmation must include Supplier’s work schedule to meet these Contract requirements.

### **3.8.7. Safety Stock**

Supplier must install, manage and secure a safety stock of 7 calendar days at its premises to cover the standard Contract requirements of the next 6 weeks.

The safety stock is part of the contingency plan as per IATF requirement and must be available for immediate shipment in case of any supply disruption to PSS.

Supplier shall be entitled to consume the safety stock to meet increases in Firm Order quantities.

In the event that safety stock availability is less than 3 calendar days, Supplier must immediately notify PSS in writing and submit a written plan to restore the safety stock.

The safety stock must be continuously restored, until 3 months before to the last delivery date defined in Forecast of the respective Call-off labelled with the status “phase-out” (“End of Safety Stock Requirement”). As from End of Safety Stock Requirement, Supplier must consume the safety stock, such that all remaining safety stock shall be depleted by the last delivery date defined in Forecast of the respective Call-off labelled with the status “phase-out”.

JIT Suppliers must at all times lock 1 day of safety stock that must only be used at the request of PSS in case of supply disruption to PSS. This 1 day safety stock shall not be subject to FIFO and shall be refreshed every 6 months.

## 4. Supplier Scorecard

PSS may measure Supplier’s mass production performance on a monthly, quarterly or yearly basis and will communicate about this through a scorecard.

### 4.1. Evaluation criteria

Supplier’s performance may be measured taking into account the criteria listed below. These criteria may be scored on a monthly, quarterly or yearly basis.

Criteria	Frequency
Quality	monthly, quarterly or yearly evaluation and rating
Logistics	monthly, quarterly or yearly evaluation and rating
Purchasing	quarterly or yearly evaluation and rating
Project, R&D	quarterly or yearly evaluation and rating

### 4.2. Scoring

The total score shall be presented per the following status:

Supplier Rating
Green = OK
Red = Not OK

### 4.3. Acceptance of Scorecard

Generally, Supplier will receive a scorecard via e-mail after the 12<sup>th</sup> workday of the month following measurement by PSS of Supplier’s performance. In the event that Supplier suspects that a scorecard does not reflect Supplier’s performance, Supplier must provide PSS in writing with a request for revision within **5 working days** after receiving the scorecard. In case Supplier fails to react within such 5 working days period, the scorecard will be considered accepted.

#### **4.4. Review and Use of the Scorecard by Supplier**

Scorecards constitute a customer satisfaction feedback from PSS.

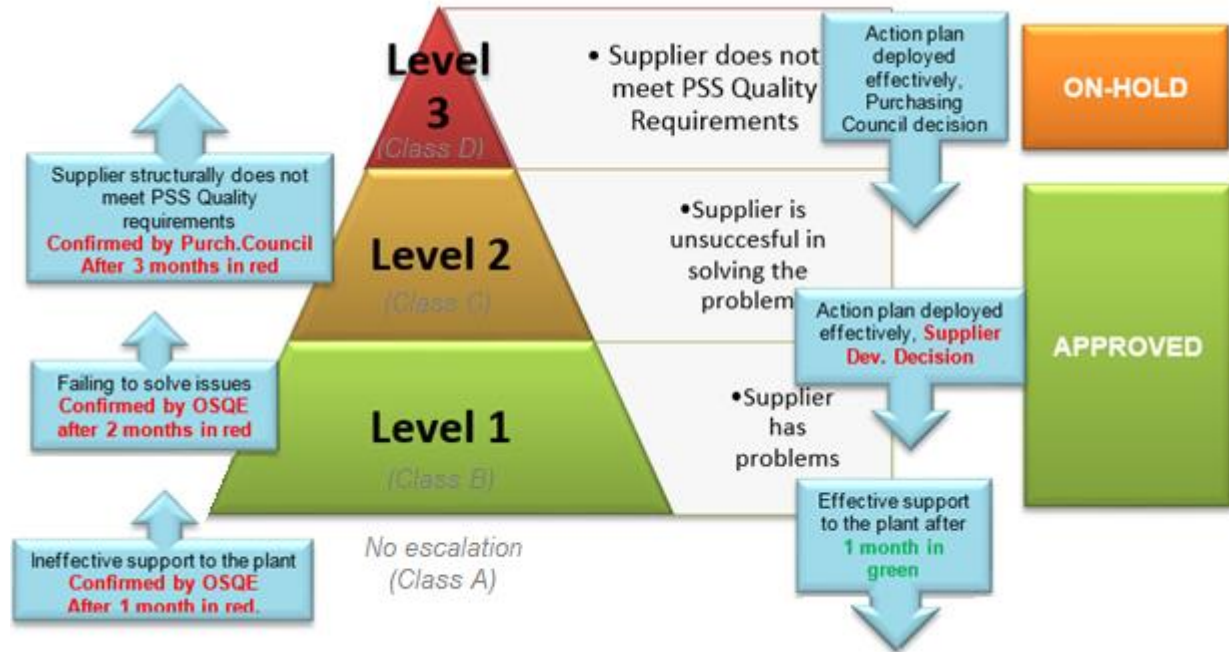
Supplier, in particular its quality, logistics and sales departments, must use scorecards to perform monthly performance reviews. In case Supplier's performance does not meet the acceptable level (i.e. Green = OK), Supplier must define and implement an action plan for improvement until the acceptable level is reached. In the event that Supplier fails to achieve timely improvement, PSS shall be entitled, without any liability, to exclude Supplier from future business opportunities and to terminate existing business with Supplier.

## 5. Escalation Program

In the event that Supplier fails to adhere to the contractual requirements, including but not limited to quality of goods supplied, Product and production approval, field complaints or Audit results, PSS may launch an escalation program.

**Escalation due to poor complaint handling: see foregoing provisions about complaint management.**

**Escalation due to low Supplier performance:**



The program consists of 3 escalation levels:

- Level 0 (default level or class A): Supplier's performance doesn't experience problems and is therefore not subject to escalation.
- Level 1 (or class B): Supplier experiences problems but is working on solving the problems together with PSS. Escalation Flag will be raised by the respective regional PSS buyer if Supplier remains 1 month in red status and the respective Operational PSS SQE will decide about further escalation.
- Level 2 (or class C): Supplier is unsuccessful in solving its problems. Escalation Flag will be raised by the respective regional PSS buyer if Supplier remains 2 months in red and the respective Operational PSS SQE SQE will decide about further escalation.
- Level 3 (or class D): Supplier does not meet PSS's requirements structurally. Corrective actions will be discussed between Supplier and PSS, for example in a face-to-face meeting organized with Supplier's management staff. Escalation Flag will be raised by the respective regional PSS buyer if Supplier remains 3 months in red status and PSS's purchasing management staff will decide on further actions.

Escalation levels will be communicated via scorecards and/or via written notification.

PSS's purchasing management staff reserves the right to immediately assign a Level 3 rating if PSS concludes in its reasonable discretion that the circumstances warrant this measure. Decisions are documented in Supplier score card database based on the team meetings in the plant concerned.

In case escalation or de-escalation concerns a Supplier assigned by the Customer, PSS may ask the Customer to assist in solving the related issues.

## 6. Approved Vendor List

Supplier's overall status shall be shown in the Approved Vendor List ("AVL") issued and maintained by PSS, taking into account the risk analysis of Supplier and Supplier's mass production performance.

The status included in the AVL are the following:

<b>VENDOR LIST</b>	<b>P</b>	<b>PANEL</b> Fully approved supplier Only suppliers who fulfil all criteria are considered within this status. All criteria are in accordance with PSS policy.
	<b>IP</b>	<b>INVESTIGATION PANEL</b> Supplier in the Vendor List but with <b>some criteria not fulfilled</b> (financial, development ...). For these suppliers, ACTION PLANS have to be set up in order to meet these criteria. Suppliers that can be assigned new business under commodity control.
	<b>H</b>	<b>ON HOLD FOR NEW BUSINESS</b> <b>No consultation</b> for new development or <b>no new business</b> (unless waiver from purchasing council), but production orders maintained.
	<b>E</b>	<b>TO ELIMINATE</b> Not acceptable suppliers. Set up ACTION PLANS to suppress them within one year.
Out of scope	<b>T</b>	<b>POTENTIAL</b> Supplier which passed a first screening (under market screening process) and can receive a prospect RFQ No award possible under this Status
	<b>INP</b>	<b>INVESTIGATION NON PANEL</b> <b>New supplier with some criteria not yet assessed</b> (e.g., pre-assessment or assessment not yet done or expecting action plan positive results) <b>and other criteria fulfilled</b> . Suppliers that can be assigned new business to agreed / committed actions with the Supplier.
	<b>S</b>	<b>SUPPRESSED</b> Suppliers which have been eliminated No business award

## 7. References

### External

VDA 6.3 - Quality Management in the Automotive Industry  
AIAG Manual – APQP Advanced Product Quality Planning (Project Planning)  
IATF 16949 - Automotive Quality System Management  
ISO 9001 - Quality System Management  
ISO 14001 - Environmental System Management  
OHSAS 18001/ISO 45001 - Occupational health and safety Management systems  
OECD Due Diligence Guidance for Responsible Supply Chains of Minerals  
OEM requirements/Customer specific requirements: <https://www.iatfglobaloversight.org/oem-requirements/>

CQI,11,12,23,27 - Production Process Assessment (Plating, Coating, Injection Molding, Casting)  
CMMI - Software Capability Maturity Model Integration  
Automotive SPICE/ ISO 15504 - Software Process Improvement and Capability Determination

AIAG Manual – Production Part Approval Process (PPAP)  
VDA2 – Production Part Approval (German OEM)  
AIAG Manual – Measurement System Analysis MSA (GRR)  
AIAG Manual – Statistical Process Control SPC

### Premium Sound Solutions

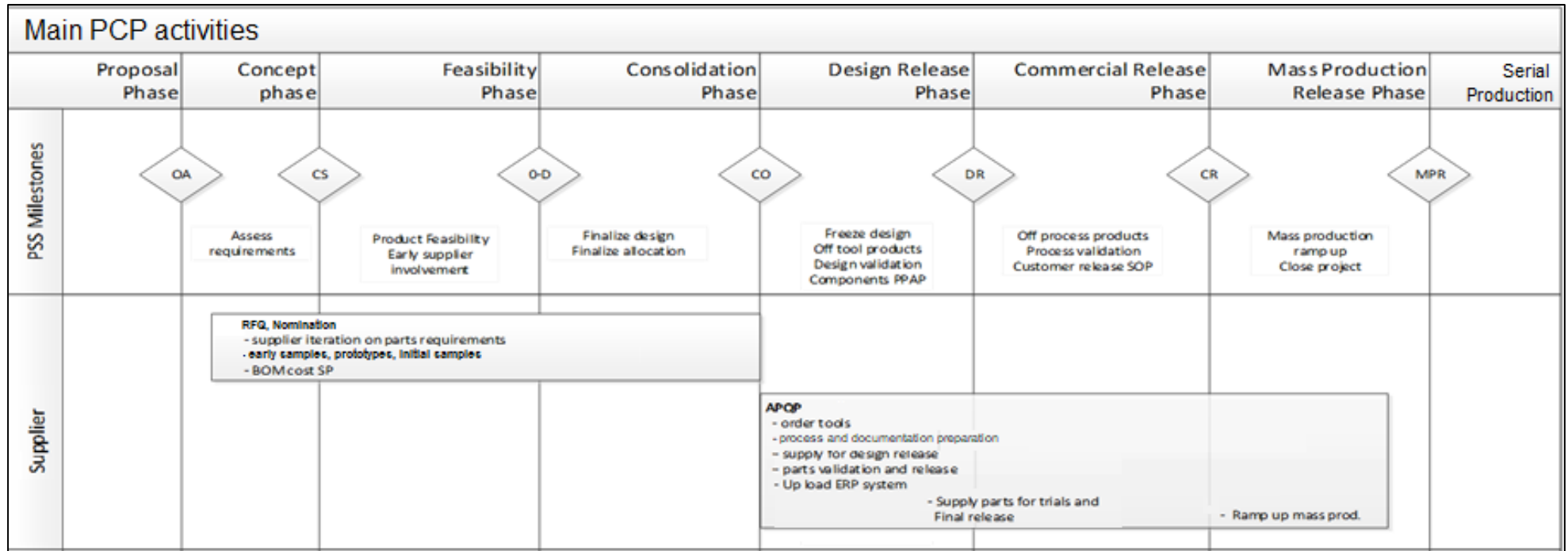
PSS-P-0005-016 - General Purchasing Terms and Conditions  
PSS-P-0005-004 - Supplier Code of Conduct  
PSS-F-0005-047 – Supplier Manual Annex 2 - GAP analysis  
PSS-P-0201-022 - Outlook requirements  
PSS-P-0201-025 - Product compliancy: Legal requirements and customer demands  
PSS-F-0005-042 - Letter of Nomination  
PSS-F-0005-035 - Request for quotation  
PSS-F-0005-036 - Supplier cost breakdown  
PSS-F-0005-040 - Tool and tooling modification cost breakdown  
PSS-F-0005-037 - Supplier Feasibility commitment  
PSS-F-0005-009 - Extended shut down and start up audit form  
PSS-F-0005-038 - Tool release report (for acceptance of production tools)  
PSS-F-0005-039 - Tool construction status report  
PSS-F-0304-005 – Concession (Deviation) Request



### Annex 1 : Product Introduction Planning – PCP Milestones (PSS APQP Process)

Overview of the activities of PSS Purchasing staff and Supplier during the Product creation process.

#### New Product Introduction Planning



## Annex 2: Supplier Gap Analysis, IATF 16949 Reference Matrix

The below gap analysis (to be done electronically using MS-Excel, NOT ON PAPER) must be delivered to the respective PSS buyer or PSS Purchasing management staff together with the signed copy of the present document within the requested timing.

Annex 2 - Supplier Quality Req. Manual - Gap Analysis Matrix (Supplier) and IATF reference					Supplier self-assessment results					
Requirements PSS					Supplier self-assessment results					
PSS requirements	IATF 16949:2016 reference (or other)	Requirement for production part supplier? (Y/N)	Requirement for bulk material (glues, resins, etc) and packaging supplier? (Y/N)	Requirement for Non-BOM (NPR)/Service supplier? (Y/N)	Supplier code SAP (if available)	Supplier name + City	Date of verification + Name and signature	Is your company currently 100% compliant to this SRM section of requirements?	If not compliant, planned date for 100% compliance (YYYY-MM-DD), OR inform that you choose to not comply	Deviation agreed with PSS? (Y/N, Inform PSS Name and date)
Relationship to other requirements	8.2.1 / 8.1.2	Y	Y							
1. General	8.2.1 / 8.1.2	Y	Y	Y						
1.1. Purpose, scope	8.2.1 / 8.1.2	Y	Y	Y						
1.2. Communication, confidentiality, code of conduct	8.2.1 / 8.1.2	Y	Y							
1.3. Contact person	8.2.1 / 8.1.2	Y	Y							
1.4. Mission and vision	8.2.1 / 8.1.2	Y	Y							
1.5. SCRIM, QDS	8.2.1 / 8.1.2	Y	Y							
2. Quality Requirements	8.2.1 / 8.1.2	Y	Y							
2.1. Overview	8.2.1 / 8.1.2	Y	Y							
2.2. Standards	4.4. OHSAS18001, ISO14001	Y	Y							
2.3. Zero defects	6.2/ 10.3	Y	Y							
2.4. Control of records, Traceability	7.5	Y	Y							
2.5. Audits/Assessments	9.2.2/ 8.3.2.3	Y	Y							
2.5.1. Supplier Self-Assessment	9.2.2/ 8.3.2.3	Y	Y							
2.5.2. Process Audit	9.2.2/ 8.3.2.3	Y	Y							
2.5.3. Product Audit	9.2.2/ 8.3.2.3	Y	Y							
2.6. Project Management - APQP	7.1/ 8.3	Y	Y							
2.7. Qualification & Validation	8.3.4.4 / 8.5.6.1.1 / 8.7.1 / 8.6.2	Y	Y							
2.7.1. Production Part Release Process (PPRP)	8.3.4.4 / 8.5.6.1.1 / 8.7.1 / 8.6.2	Y	Y							
2.7.1.1. PPAP	8.3.4.4 / 8.5.6.1.1 / 8.7.1 / 8.6.2	Y	Y							
2.7.1.2. VDA2 - FPA	8.3.4.4 / 8.5.6.1.1 / 8.7.1 / 8.6.2	Y	Y							
2.8. Requalification	8.3.4.4 / 8.5.6.1.1 / 8.7.1 / 8.6.2	Y	Y							
2.9. Total Quality commitment	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.1. 3P OK before production starts	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.2. Safe environment and 5S	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y	Y						
2.9.3. Respect the standardized work instruction	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.4. Stop the defect at the first time	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.5. Control of the rejects	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.6. Repair under control	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.9.7. GRQC = Quick Response Quality Control	8.5.1 / 8.7 / 7.1.3.1 / 7.1.4	Y	Y							
2.10. Outgoing Quality Inspection Report, Incoming Quality Control & Responsibilities Supply Chain	8.6.4	Y	Y							
2.11. Control of non-conforming product	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.1. Complaint handling	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.2. Warranty Complaints Management	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.3. 8D Reports	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.4. Concessions	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.5. Supplier-caused costs because of poor quality	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.11.6. Nonconforming product disposition	10.2/ 8.7.1 / 8.5.6.1.1	Y	Y							
2.12. Management Control	several, OHSAS18001, ISO14001	Y	Y							
2.12.1. What's Management Control	several, OHSAS18001, ISO14001	Y	Y							
2.12.2. Role of Managers	several, OHSAS18001, ISO14001	Y	Y	Y						
2.12.3. Daily Team Meetings	several, OHSAS18001, ISO14001	Y	Y							
2.12.4. Daily Face to Face meeting	several, OHSAS18001, ISO14001	Y	Y							
2.12.5. Audit Tour	several, OHSAS18001, ISO14001	Y	Y							
2.12.6. TOP 5 Meeting	several, OHSAS18001, ISO14001	Y	Y							
2.13. Layered Process Audit	9.2 / 7.2	Y	Y							
2.13.1. Planning and execution of Process Audits	9.2 / 7.2	Y	Y							
2.14. Extended Factory Site Audit, Milrow audit (applic. delivering components with foam or organic ingredients)	9.2 / 7.2	Y	Y							
2.15. Process requirements for suppliers delivering dipped parts		Y	Y							
2.16. Milrow test (only for supplier delivering parts with organic ingredients)		Y	Y							
2.17. Quality Wall ("Firewall" or "GP")	9.2.2 / 8.3.2.3	Y	Y							
2.18. Contingency Plans	6.1.2.3	Y	Y	Y						
2.19. Risk Management	6.1	Y	Y	Y						
2.20. Statutory and regulatory requirements	8.4.2.2	Y	Y	Y						
2.21. Subsupplier/subtier/service selection process	8.4.1.2	Y	Y	Y						
2.22. Software development process	8.4.2.3.1, CMMI, A-SPICE	Y	Y	Y						
2.23. Subsupplier monitoring	8.4.2.4	Y	Y	Y						
2.24. Corporate responsibility	5.1.1.1	Y	Y	Y						
2.25. LEAN, Efficiency, Waste reduction	5.1.1.2	Y	Y	Y						
2.26. Conflict minerals – responsible sourcing	OECD Due Diligence Guide	Y	Y	Y						
2.27. PREMIUM SOUND SOLUTIONS requirements application in the supplier Quality Management System	4.3.2	Y	Y	Y						
2.27 Customer Specific Requirements	OEM IATF Global oversight, others	Y	Y	Y						
3.1. Document requirements	7.5.3.2.1	Y	Y	Y						
3.2. Environmental regulations and requests	8.2.2, ISO 14001	Y	Y	Y						
3.3. Special characteristics	8.2.3.1 / 9.1.1.1	Y	Y	Y						
3.3.1. Old way of defining special characteristics	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.2. NEW way of defining special characteristics	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3. Management of CCs and SC's	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3.1. Process capability Studies	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3.1.1. General	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3.1.2. Analysing the result	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3.1.2.1. Process that appear to be stable	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.3.3.1.2.2. Process that appear unstable	8.2.3.1.1 / 9.1.1.1	Y	Y	Y						
3.4. Feasibility Study	8.3.3.1 / 9.3.2.1	Y	Y	Y						
3.5. Change management	8.3.6 / 8.3	Y	Y	Y						
3.6. Safety	8.2.2	Y	Y	Y						
3.7. FIFO	8.5.4	Y	Y	Y						
3.8. Logistics	8.5.2 / 8.5.4	Y	Y	Y						
3.8.1. Transport requirements	8.5.2 / 8.5.4	Y	Y	Y						
3.8.2. Other Logistics requirements	8.5.2 / 8.5.4	Y	Y	Y						
4. Supplier Scorecard	8.2.1	Y	Y	Y						
4.1. Evaluation criteria	8.2.1	Y	Y	Y						
4.2. Scoring	8.2.1	Y	Y	Y						
4.3. Timely request revision of rating	8.2.1	Y	Y	Y						
4.3. Review and use of the scorecard by the supplier	8.2.1	Y	Y	Y						
5. Escalation model	8.2.1	Y	Y	Y						
6. Supplier AVL Commodity Panel Status	8.2.1	Y	Y	Y						
Annex 1: Product Introduction Planning – PCP Milestones (PREMIUM SOUND SOLUTIONS APQP Process) 47		Y	Y	Y						
Annex 2: Supplier Gap Analysis and IATF 16949 Reference Matrix		Y	Y	Y						
Annex 3: Applicable requirements for bulk materials' suppliers (glue, solder, raw materials, resins, etc)		Y	Y	Y						
Annex 4: Applicable requirements for Non-BOM suppliers		Y	Y	Y						