

GLOBAL PURCHASING

Supplier Technical Assistance

Phased PPAP Requirements Handbook

Phased Production Part Approval Process

Phased PPAP Requirements Handbook

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Supplier Technical Assistance
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Phased PPAP Introduction

In order to improve launch performance, Ford has structured the Production Part Approval Process (PPAP) into a phased approach that will require an organization to demonstrate manufacturing capability, product quality and production capacity prior to Job #1. Phased PPAP will provide Ford and the supplier with an improved understanding of supplier manufacturing process and part readiness.

Phased PPAP organizes the Production Part Approval Process into four phases:

- ❑ Phase 0: 'Run-at-Rate'
- ❑ Phase 1: 'Quality Verification'
- ❑ Phase 2: 'Production Verification'
- ❑ Phase 3: 'Capacity Verification'.

Benefits of Phased PPAP

Phased PPAP will benefit Ford and its Suppliers by:

- Dividing PPAP activities into more manageable segments
- Providing a structured approach aligned with manufacturing process development
- Providing a program team with earlier and additional measures to forecast program/product readiness
- Providing a consistent mechanism for a supplier to demonstrate their ability to support Ford production volume requirements/capacity

Teamwork

Ford Motor Company and its Suppliers must work together to deliver a quality part, produced on-time, that meets all Ford engineering requirements. To drive flawless execution in launching and delivering products that surpass customer expectations, Ford and its suppliers must place trust, integrity and accuracy above all else in the Production Part Approval Process.

What Phased PPAP Means to Ford Motor Company

Successful completion of Phased PPAP:

- Confirms that all customer engineering design record and specification requirements are properly understood by the supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

AND

- Verifies that the supplier's production system can support the Daily Production Volume declared by the customer.

Phased PPAP Overview

Scope

- Phased PPAP must be completed for any of the situations already specified by the current edition AIAG PPAP Manual. In addition, any increase in the Daily Production Volume declared by the customer above the verified declared DVP will require the supplier to re-complete any affected Phased PPAP phases.

Summary

Phase 0: Run-at-Rate

Objectives: To confirm that all production input requirements are available and understood, and can support a limited production run.

To provide an early indicator that the design of the process/tool/facility has the potential to produce at rate the required number of acceptable parts as determined by the pre-launch control plan.

Phase 1: Quality Verification

Utilizes parts produced during Phase 0.

Objectives: To confirm all customer design record and specification requirements are properly understood by the supplier.

To provide an early indicator that the design of the process/tool/facility has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate by operating a minimum of one selected production stream.

Phase 2: Production Verification

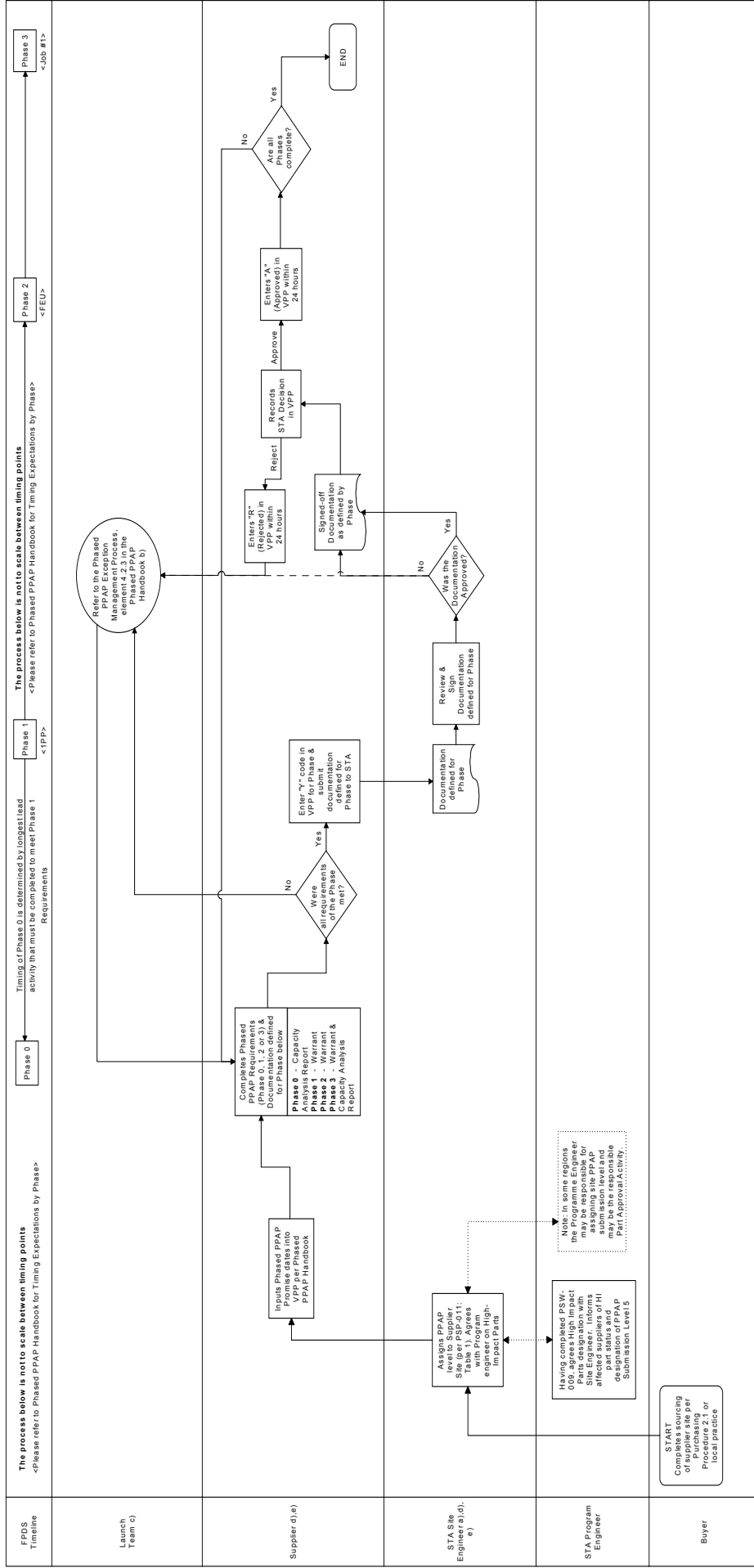
Objectives: To confirm all customer engineering design record and specification requirements are properly understood by the supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

Phase 3: Capacity Verification

Objective: Verify the supplier's production system can support customer declared DPV while meeting Phase 2 requirements.

Process Overview

This process flow (an extract from Ford Internal Procedure PSP-011) is intended to link the activities in Phased PPAP to include 4-Panel Process Flow, Roles & Responsibilities Matrices & Exception Management Process with the AIAG PPAP Reference Manual and any related Ford Internal procedures.



Notes

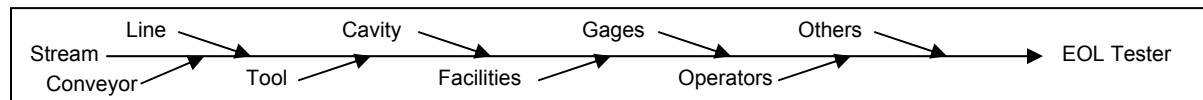
- Refer to Roles and Responsibilities Matrices to determine minimum expectations by submission level and phase.
- Product Development (Creation) have the authority to authorize an Alert (or regional equivalent) where a deviation to specification exists and Interim Approval is required.
- Launch team typically consists of STA, Purchasing, Product Development (Creation), New Model Launch and Material Planning & Logistics (MP&L).
- Launch team typically consists of STA, Purchasing, Product Development (Creation), New Model Launch and Material Planning & Logistics (MP&L). Interim Approval is entered by the supplier. STA may override supplier VPP entry at any time. This also applies in the case of PPAP Submission Level 1 ('Supplier Self Certification'), where Approval is registered in VPP automatically when the supplier enters "Y" code at each Phase. Submission to the Customer Approval Authority (STA) is defined in the AIAG PPAP Manual.
- Documentation is not limited to that defined in this Process Flowchart. The Ford Phased PPAP 4-Panel Process Map (see Phased PPAP Handbook) defines the documentation that is required to be completed at each Phase.

Definitions:

Production Stream

A single production stream is a sequence of a minimum of one line, machine, tool, cavity, facility, equipment, gage, operator and other required items at the intended location and with the intended layout that will be used to produce parts that meet Ford specifications.

All production streams must include any additional items not included in the single production stream that are required to meet the Ford Capacity Planning Volume (CPV) requirements of the intended program being launched (e.g. additional tools, cavities, lines, conveyors, machines)



CPV (Capacity Planning Volumes)

Capacity Planning Volumes are the volumes for which Ford requires suppliers to facilitate and tool-up for. CPV's are approximately 10 percent higher than "production planning volumes," in order to cover spares (service requirements) and volume spikes. The CPV is communicated to Suppliers on a part level basis through the Ford Purchasing "Request for Quotation" (RfQ).

CPV's are typically expressed as weekly volumes. Suppliers are expected to satisfy the production weekly demand based on a maximum 5 days/3 shifts manufacturing operating pattern.

DPV (Daily Planning Volume)

DPV's are the maximum planned requirement for this part per day and are broken down by plant and Brand (e.g. Volvo).

Acceptable Parts (referenced in Phase 0 objectives)

Acceptable Parts are defined as parts produced using the required PPAP inputs for Phase 0 as identified on the Process Map and manufactured in conformance with the relevant control plan, either Pre-Launch or Production.

Interim Accepted

Part meets customer specifications and includes valid Temporary Engineering Specification for temporary exception.

Temporary Engineering Specification

Temporary specification provided by the customer engineering release organization. The Ford Brand specific method for communicating these specifications is as follows:

- WERS Alert (Ford/Jaguar);
- Temporary Part Change Management (Land Rover);
- Temporary Part Deviation (Volvo).

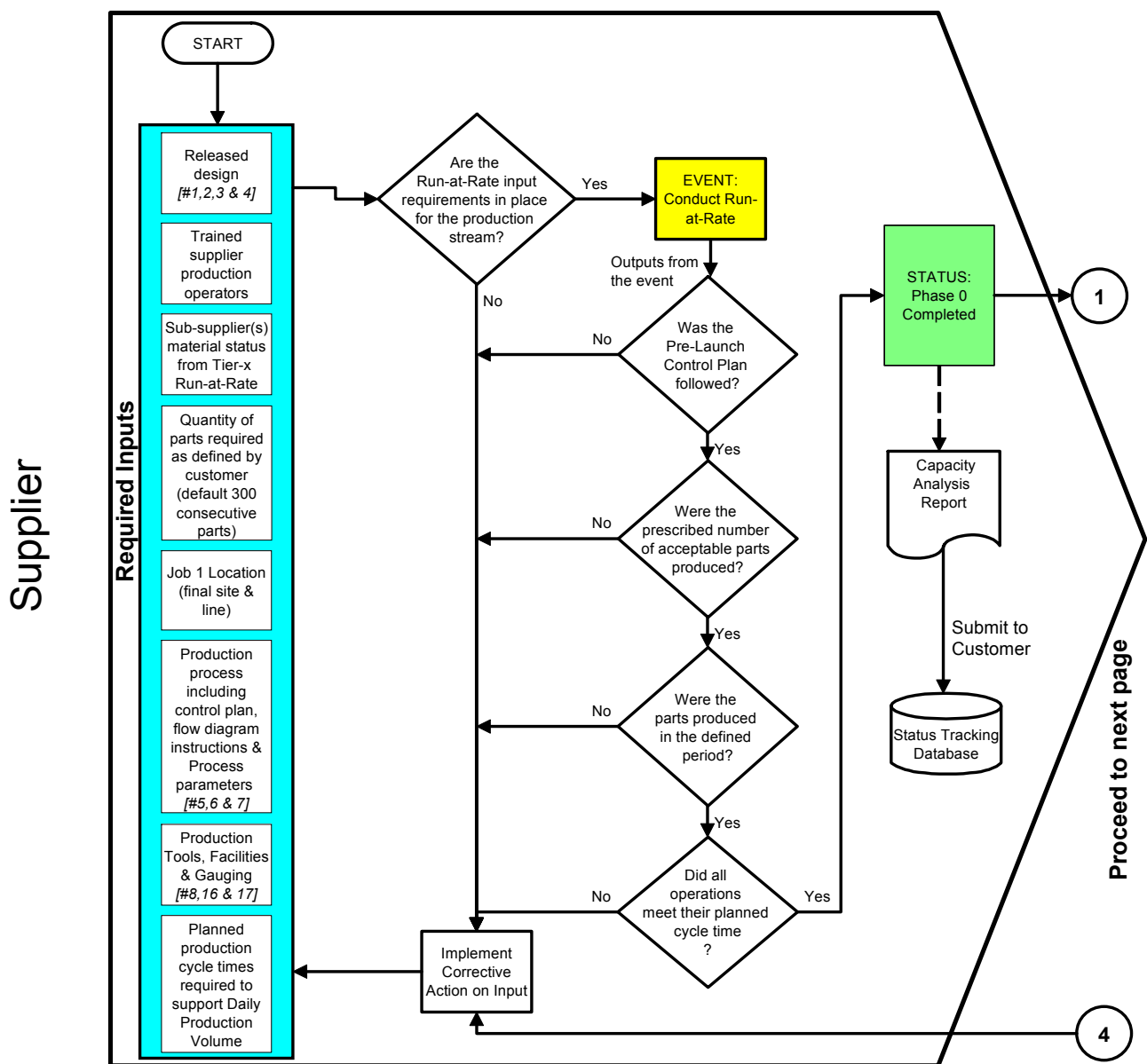
Process Map Phase 0 Run-at-Rate

Objectives: To confirm that all production input requirements are available and understood, and can support a limited production run.

To provide an early indicator that the design of the process/tool/facility has the potential to produce at rate the required number of acceptable parts as determined by the Pre-Launch control plan.

Refer to web link https://web.qpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation.

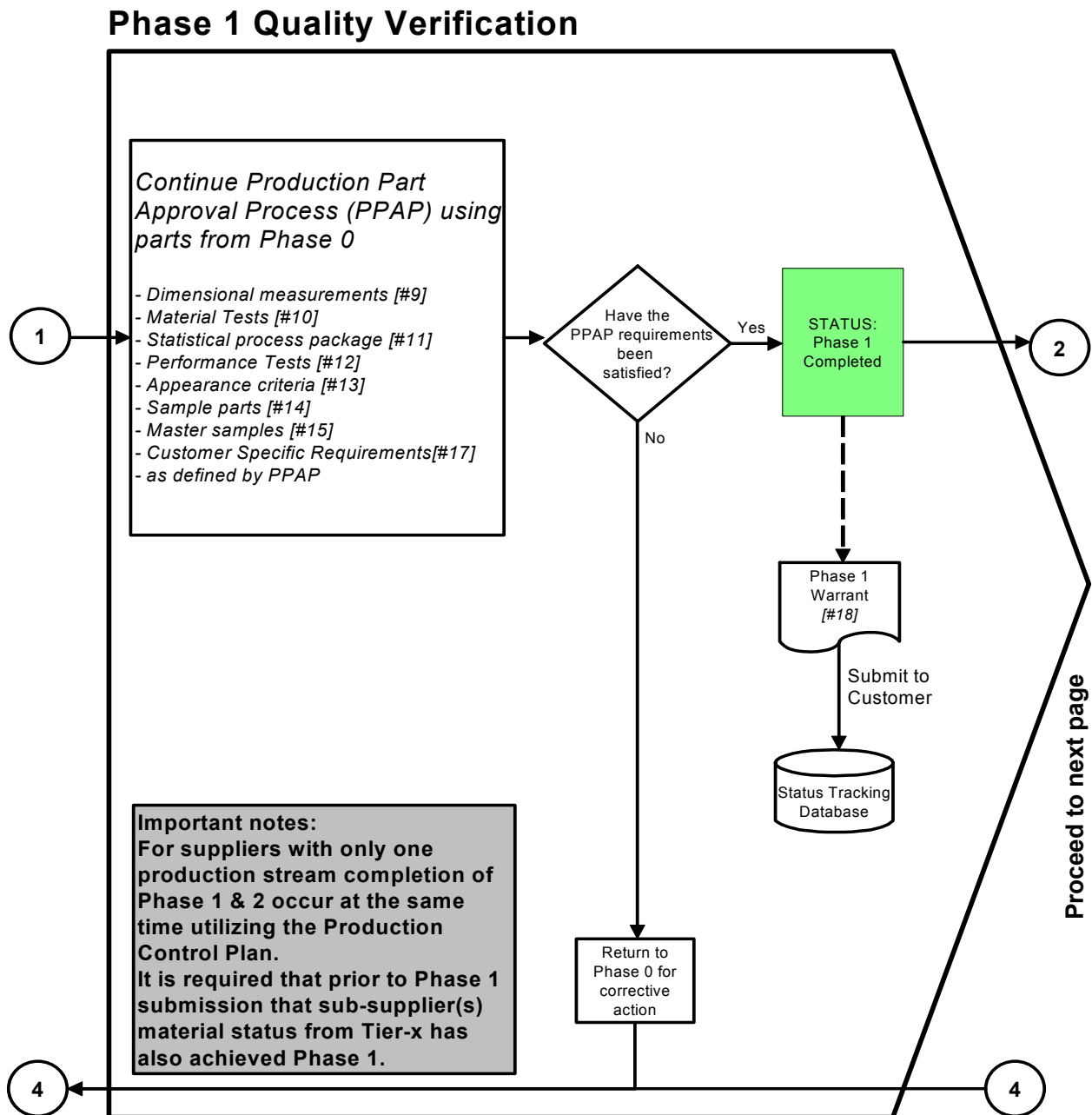
Phase 0 Run-at-Rate



Note: refer to Appendix D which lists the PPAP requirements number (#x) noted in the 4-Panel Process Map

Process Map Phase 1 Quality Verification

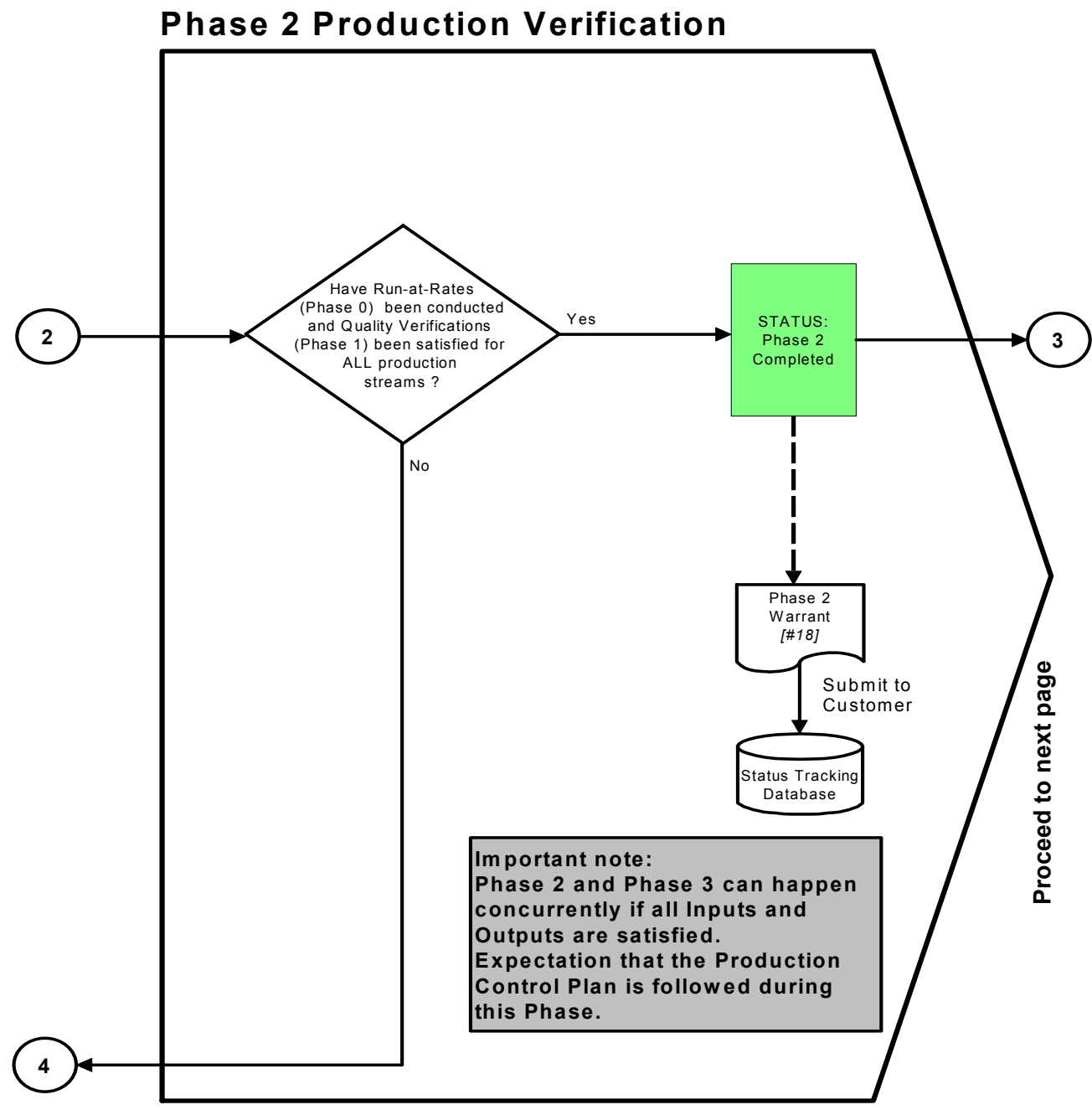
Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the supplier. To provide an early indicator that the design of the process/tool/facility has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate by operating a minimum of one selected production stream.



Process Map Phase 2 Production Verification

Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

Note: The approach adopted for PPAP of multiple production streams is scenario-specific and must be agreed between the Supplier and STA. In general terms each production stream should be assessed for Run-at-Rate and Quality Verification separately. Consideration should also be given to the risk that the introduction of further production streams may impact the validity of the Phase 1 approval. (e.g. Phase 1 achieved on cavity #1 of a four cavity tool - the introduction of cavity #2, 3 & 4 may impact the cavity #1 part and it may no longer be to specification).



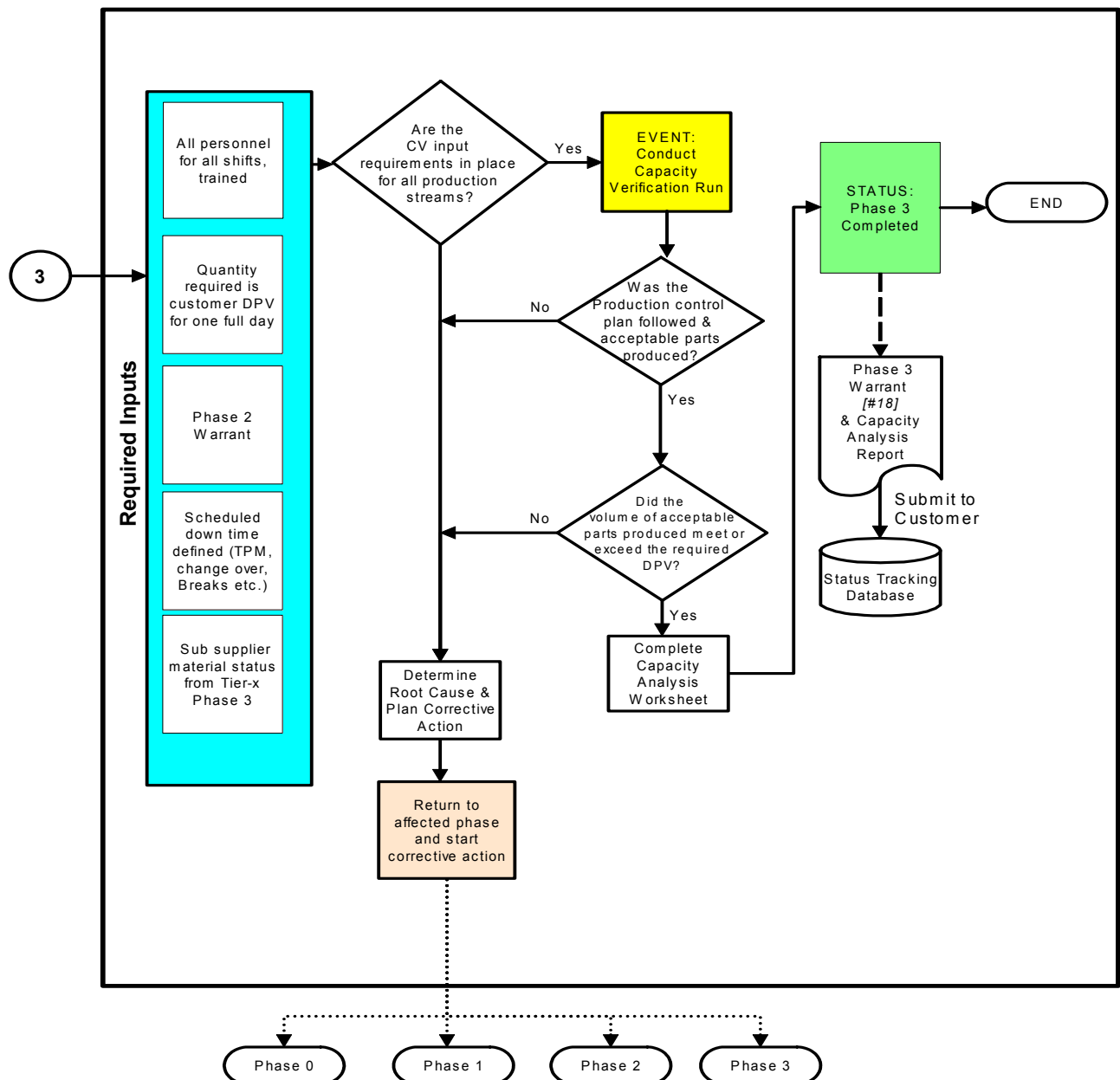
Process Map Phase 3 Capacity Verification

Objective: Verify the supplier's production system can support customer declared DPV while meeting Phase 2 requirements.

Update process flow with latest version to include nomenclature 'Capacity Analysis Report'

Refer to web link https://web.qpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation.

Phase 3 Capacity Verification



Customer Approval of Phased PPAP

Phased PPAP Approval

Phase 0 does not require a Phased PPAP Submission Warrant, however a Capacity Analysis Report (Refer to web link https://web.qpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation) must be submitted with the Run-at-Rate box ticked indicating Phase 0. In addition, the supplier should have results from Run-at-Rate readily available for STA Engineer review and approval where required (see roles & responsibilities section, appendix A).

Phase 1, 2 and 3 each require a Phased PPAP Submission Warrant and customer approval in line with the AIAG PPAP submission level requirements or as otherwise specified by STA (see roles & responsibilities section, appendix A).

Phase 3 requires Suppliers to complete the Capacity Analysis Report in addition to the Phased PPAP Submission Warrant.

Suppliers to Ford and its affiliates will utilize the Phased PPAP warrant (Appendix C). For suppliers designated as non-Q1 and suppliers/parts identified as High-Impact, STA will review and either approve or reject the PPAP submission warrant within 48 hours of the supplier indicating the PPAP is "Ready-for-STA-Inspection" in the Vehicle Parts Progress (VPP) database. Once STA has determined the PPAP status and signed the Warrant (Phase 1, 2 and 3) and Capacity Analysis Report (Phase 0 and 3), the supplier or STA's designate will enter the PPAP decision status in the Vehicle Parts Progress (VPP) database within 24 hours of receiving a STA's signed copy of the warrant.

Any temporary exception due to non-compliance with a PPAP element or build timing requirement is handled in line with the Exception Management Process (refer to Appendix B).

Transition: Phase 1 Approval to Phase 2 Approval - Status and Part Supply

In cases where more than two production streams are to be used to support Ford's capacity requirements, the degree of complexity regarding the declaration of Phased PPAP Status and the ability to supply parts during the transition from Phase 1 to Phase 2 inevitably increases. In order to illustrate how this should be managed please consider the following example:

- A supplier will be introducing a total of four production streams. In line with Phased PPAP methodology, the supplier will only be ready to submit the Phase 2 Warrant when they are able to prove that the PPAP requirements have been met for all 4 production streams.
- 3 months prior to 1PP the supplier has achieved Phase 1 Warrant approval for one production stream.
- As 1PP approaches the PPAP requirements for the second and third production streams have been satisfied, and the supplier wants to supply parts for 1PP from the three streams.
- In order to supply these parts the supplier must have an approved, updated, Phase 1 Warrant, that declares that the PPAP requirements for the 3 production streams have been met (plus supporting data as per submission level requirements). The date for which Phase 1 requirements were achieved is not affected in reporting metrics.

Expectations

Phased PPAP Achievement by Build Milestone

1PP (PV1)	Phase 1	100% Completed
FEU (PV2)	Phase 2	100% Completed
Job #1	Phase 3	100% Completed

The decision to progress through the FPDS Milestones is determined by the Global Launch QOS; refer to New Model Launch Team for latest version. Note: Phased PPAP achievement by Volvo build event is Phase 1: Tryout, Phase 2 and Phase 3: Job 1.

Phased PPAP Reporting Expectations

The preferred system to track and report Phased PPAP is VPP (Vehicle Parts Progress in CMMS3).

Phased PPAP now requires suppliers to track and report on multiple promise dates. Suppliers operating in VPP must enter any remaining open Phased PPAP promise dates (Phase 0 – 3) within one full working day of the part appearing in the supplier work queue. Supplier's Approval submission via VPP is the electronic equivalent to a signed PPAP Warrant.

Tier 1 Suppliers shipping to Ford must use a production part approval process for their sub-suppliers. Additionally, suppliers are required to verify their sub-supplier can meet required volumes at the required time; suppliers and/or sub-suppliers may use the Ford Capacity Analysis Report and documentation.

STA Phased PPAP Roles & Responsibilities

Minimum STA Review Requirements ^{a, b)}

Site Status	Part Status	PPAP Submission Level ^{c)}	Phase 0 Run-At-Rate	Phase 1 Quality Verification	Phase 2 Production Verification	Phase 3 Capacity Verification
Regardless of Site Status ^{d)}	High-Impact	5	Review must be on site	At least a desktop review		Review must be on site
Non-Q1 Site	Non High-Impact	3	Phase 0, 1, 2 and 3 must be at least a desktop review			
Q1 Site ^{f)}	Non High-Impact	1	None			
Documentation			Capacity Analysis Report	PPAP submission Warrant (Phase 1), Supporting Documentation and Sample Parts	PPAP submission Warrant (Phase 2), Supporting Documentation and Sample Parts	Capacity Analysis Report and PPAP Submission Warrant (Phase 3)
PPAP Outcome ^{d, e)}			Approve or Reject			
Warrant requiring an Temporary Engineering Specification			No change to the assessment requirements as defined in table above.			

- a) For Programs utilizing Supply Base launch Teams (SBLT's) 100% of STA Tier 1 reviews will be conducted On Site for a minimum of 3 of 4 Phases. Any deviation from the minimum requirements listed above must receive STA management authorization.
- b) For ongoing running changes, MCR, or resourcing action: Phase 0 (Run-at-Rate), Phase 1 (Quality Verification), Phase 2 (Production Verification) and Phase 3 (Capacity Verification) will follow the minimum STA review requirements stated in the table.
- c) PPAP submission level is assigned per STA procedure PSP-011.
- d) Site may be designated Q1 or Non-Q1.
- e) Input into VPP is executed by the Supplier, or their Ford internal administrator, upon receipt of a signed warrant.
- f) Submission Level 1 suppliers self approve submission

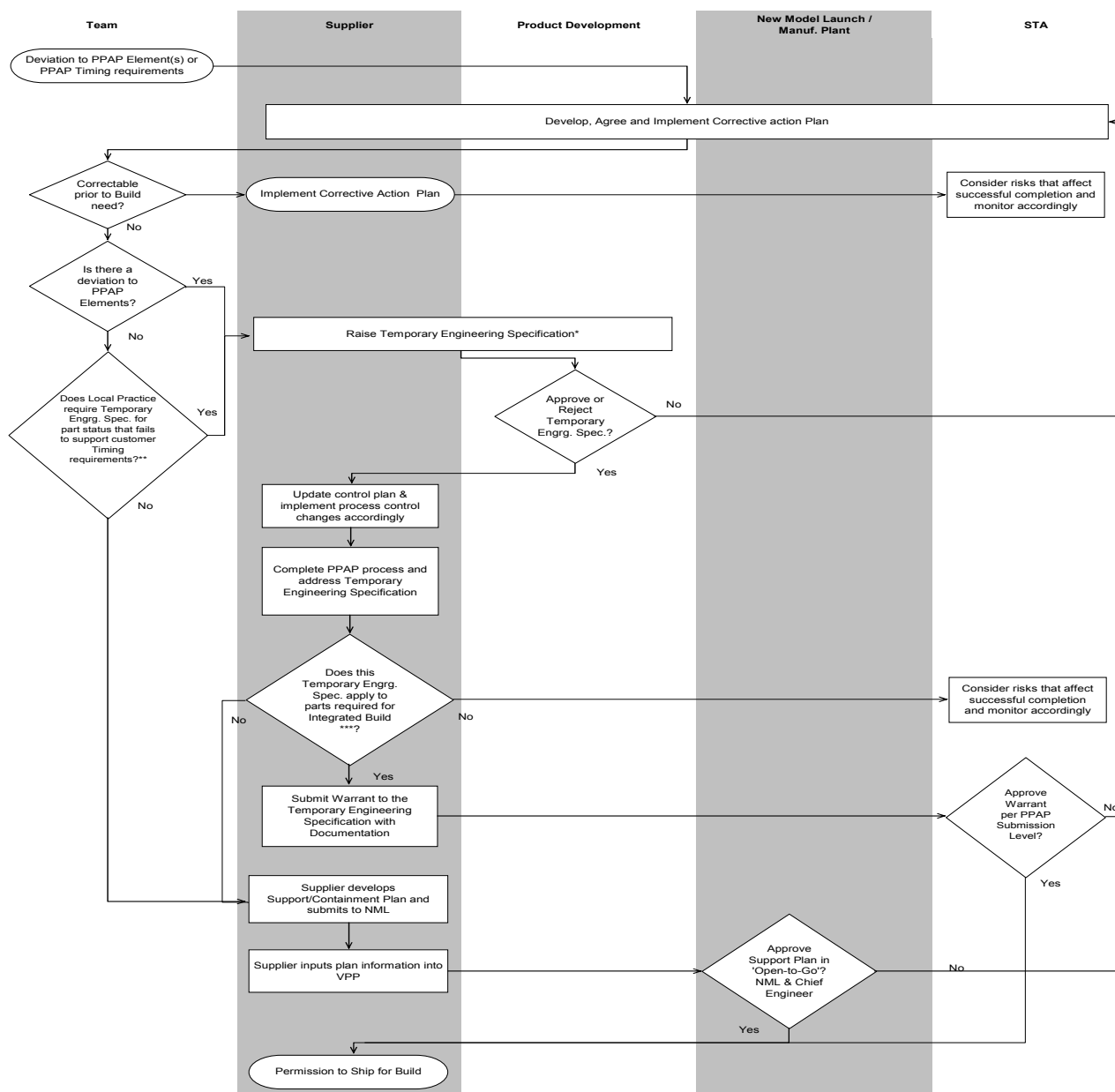
Appendix B

Exception Process

Purpose

The purpose of this instruction is to identify the supplier and customer responsibilities when PPAP is not complete and approved material is required to support customer manufacturing. Also, this instruction defines the process steps for achieving Interim Accepted of a part with a valid Temporary Engineering Specification.

Process Flow – Deviations to PPAP Element(s) or Timing



* Notes: Temporary Engineering Specification: Ford = WERS Alert
 Land Rover = Temporary PCM
 Volvo = Temporary Part Deviation
 **Notes: If Phased PPAP timing has not been achieved as per customer requirements (normally specified in the Launch QOS) refer to NML Team for clarification on requirement for Temporary Engineering Specification.
 ***Notes: For programs following FPDS this refers to IB build and after.

Refer to web-link: https://web.qpr.ford.com/sta/Exception_Management.pdf

Appendix B

Definitions

"Approved Material" – parts with Warrant declaring "Approved" in the customer use block of the PPAP Warrant.

"Temporary Engineering Specification" – temporary specification provided by the customer engineering release organization. The Ford Brand specific method for communicating these specifications is as follows:

- WERS Alert (Ford/Jaguar);
- Temporary Part Change Management (Land Rover);
- Temporary Part Deviation (Volvo).

"Full Approval" – part meets all customer specifications and requirements.

"Interim Accepted" – part meets customer specifications and includes valid Temporary Engineering Specification for deviation.

"Process Flow Diagram" – Deviation to PPAP Element(s) or Timing

Process Flow Description

Deviation to PPAP Requirements:

It is the responsibility of the supplier to complete the 19 requirements of PPAP prior to the date when the customer requires approved material. Typically, there are four situations that prohibit PPAP completion:

- Incomplete PPAP Element – e.g. PV testing not complete;
- Deviation to requirement – e.g. dimension out of tolerance;
- Parts not produced using intended production flow – e.g. rework due to urgent change, use of temporary tooling/facility, not all equipment on home-line.
- Deviation to required cycle time.

The team should develop, agree and implement a corrective action plan. If this plan is not complete prior to the build requirements then a Temporary Engineering Specification is needed.

Deviation from PPAP Timing:

It is the responsibility of the supplier to complete the appropriate Phase by the required timing as determined by the customer. If this timing is not achieved then the team should develop, agree and implement a Corrective action plan.

If this plan is not complete prior to the build requirement then a support plan should be developed. Local practice determines whether a Temporary Engineering Specification is required for Deviations to PPAP Timing.

Corrective Action Plan:

It is the responsibility of the supplier to develop a corrective action plan that achieves Approved Material status by the required part submission date. The supplier should seek input from the customer's product development, manufacturing, and launch management to assure their concurrence with the planned corrective actions.

Support Plan:

If the PPAP is not complete on time a Support Plan must be developed that identifies how the supplier will support the build volume requirements, as well as, the activities to support Full Approval

Appendix B

Temporary Engineering Specification:

Shipment of production level parts with an incomplete PPAP requires a supplier's PPAP Warrant consistent with the requirements stated in a Temporary Engineering Specification. The Temporary Engineering Specification must describe the specific PPAP Element(s) (or timing deviations per local practice) that are not completed, the modified specification(s) that the part satisfies and the justification why the modified specification is acceptable.

Additionally, the Temporary Engineering Specification shall describe how the supplier will assure quality of parts (e.g. extra ordinary controls/inspection process and robust measurement system) to the modified specification. The Temporary Engineering Specification is effective for a limited period of time, typically reflected in terms of days, quantity, or specific launch build event.

Examples of Temporary Engineering Specifications:

- Geometry – expanded tolerance or mean shift
- PV Testing – partial completion
- Functional Testing - Use of surrogate test results

The Temporary Engineering Specification processes and originators differ by brand as follows:

Brand	Process	Originator
Ford	Worldwide Engineering Release System (WERS) Alert	Ford Product Development or Supplier with WERS access
Jaguar	Worldwide Engineering Release System (WERS) Alert	Ford Product Development or Supplier with WERS access
Land Rover	Temporary Product Change Management (Temporary PCM)	Land Rover Product Development
Volvo	Temporary Part Deviation (TPD)	Volvo Research & Development, Purchasing, or Manufacturing

Approve/Release Temporary Engineering Specification:

The customer is responsible to approve and release engineering deviations. Typically, the customer's Product Development, Launch Management, and Manufacturing will (electronically) sign-off on the deviation, and it will be approved by the releasing activity. This approval is authorization to the supplier to proceed with the corrective actions necessary to achieve Approved Material status on a time-limited basis.

Update quality control documents:

Upon receiving the approved Temporary Engineering Specification from the customer, the supplier is responsible to update all affected quality control documents. The PFMEA shall be updated to determine if there are any new or changed failure modes. Additionally, items such as Gage R&R, Controls Plans, Operator Instructions and Visual Aids shall be reviewed.

Appendix B

Provide PPAP Warrant:

It is the responsibility of the supplier to complete a PPAP Warrant per the specifications provided in the Temporary Engineering Specification. The purpose of this Warrant is for the supplier to declare that inspections and tests on production parts show conformance to customer specifications including the Temporary Engineering Specification.

The supplier must indicate the following on the PPAP Warrant section addressing Interim Status:

- In the Interim Status section, check the box indicating Interim Submission
- Enter the Temporary Engineering Specification number against Engineering Authorization
- Provide a brief description of the reason(s) for the Temporary Engineering Specification

Approve or Reject Warrant:

If the Temporary Engineering Specification applies to parts to parts required for Integrated Build and subsequent builds (or Brand equivalent Build Phase) then the customer approval authority is required to either Approve or Reject the submission. Prior to this build phase the customer approval authority may choose to review the documentation at their discretion. Approval of the Warrant is the supplier's permission to ship products for a specified time period or quantity. Rejection of the Warrant means customer requirements were not fulfilled and requires the supplier to make corrections and submit a new warrant.

Upon review of the Warrant and supporting evidence, the Customer Part Approval Activity completes the Customer Use section of the Warrant.

- If Interim Accepted, check Interim Accepted against Phased Part Warrant Status
- If Reject, check Reject against Part Warrant Disposition

Warrant disposition is communicated by local practice.

If a submission at any phase is due to be, or has been, rejected the STA Program Manager should be notified. The STA Program Manager may choose to utilize this Exception Management process to gain approval for the submission

Actions to achieve Full Approval:

The supplier is responsible to implement the corrective actions necessary to achieve a Full Approval. If Full Approval is not complete by the next launch build event, the customer should process a new or updated Temporary Engineering Specification. If the conditions within the Temporary Engineering Specification are changed, a new Warrant is required from the supplier.

Timing

Approved material requirements vary based upon customer as follows:

- Ford, Jaguar, and Land Rover vehicle programs by the 1PP build event.
- Ford, Jaguar, and Land Rover Powertrain programs by the PV (or "Powertrain 1PP") build event.
- Volvo Vehicle and Powertrain programs by Try-out.

Appendix C

Phased PPAP Submission Warrant ^{1/}

<input type="checkbox"/> Phase 1 <input type="checkbox"/> Phase 2 <input type="checkbox"/> Phase 3	PPAP Submission Warrant Status												
<u>PART INFORMATION</u>													
Part Name _____	Customer Part Number _____												
Shown on Drawing Number _____	Organization Part Number _____												
Engineering Change Level _____	Date _____												
Additional Engineering Changes _____	Date _____												
Optional Tracking Number _____													
Safety and/or Government Regulation <input type="checkbox"/> Yes <input type="checkbox"/> No	Purchase Order No. _____ Weight (kg) _____												
Checking Aid Number _____	Checking Aid Change Level _____ Dated _____												
<u>ORGANIZATION MANUFACTURING INFORMATION</u>													
Organization Name and Supplier Code _____	Customer Name/Division _____												
Street Address _____	Buyer/Buyer Code _____												
City _____ State/County/Province _____ Zip _____ Country _____	Application _____												
<u>REASON FOR SUBMISSION</u>													
<input type="checkbox"/> Initial submission	<input type="checkbox"/> Change to Optional Construction or Material												
<input type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Sub-Supplier or Material Source Change												
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing												
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts produced at Additional Location												
<input type="checkbox"/> Tooling Inactive > than 1 year	<input type="checkbox"/> Other - please specify below												
<u>REQUESTED SUBMISSION LEVEL (Check one)</u>													
<input type="checkbox"/> Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.													
<input type="checkbox"/> Level 2 - Warrant with product samples and limited supporting data submitted to customer.													
<input type="checkbox"/> Level 3 - Warrant with product samples and complete supporting data submitted to customer.													
<input type="checkbox"/> Level 4 - Warrant and other requirements as defined by customer.													
<input type="checkbox"/> Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.													
<u>DECLARATION and SUBMISSION RESULTS</u>													
I affirm that the samples represented by this warrant are representative of our parts which were made by a process which meets all current edition Production Part Approval Process Manual requirements including all Ford-specific requirements. I further affirm that these samples were produced at the production rate of _____ / _____ hours using _____ production streams. I also certify that documented evidence of such compliance is on file and is available for review. I have noted any exceptions from this declaration below.													
<u>EXPLANATION/COMMENTS</u> _____													
List Molds / Cavities / Production Processes: _____ (Attach a separate page if additional space is necessary)													
Supplier Authorized Signature _____	Date _____												
Print Name _____	Phone No. _____ Fax _____												
Title _____	Email _____												
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center; padding: 5px;">FOR FORD USE ONLY</td> </tr> <tr> <td style="width:50%; padding: 5px;"> <table style="width:100%;"> <tr> <td style="width:50%; text-align: center; padding: 5px;">PPAP</td> <td style="width:50%; text-align: center; padding: 5px;">Non-PPAP ^{a/}</td> </tr> <tr> <td style="padding: 5px;"> Phased PPAP Warrant Status: <input type="checkbox"/> Approved </td> <td style="padding: 5px;"> <input type="checkbox"/> Rejected <input type="checkbox"/> Interim Accepted </td> </tr> <tr> <td style="padding: 5px;">Customer Signature _____</td> <td style="padding: 5px;">Date _____</td> </tr> <tr> <td style="padding: 5px;">Print Name _____</td> <td></td> </tr> </table> </td> <td style="width:50%; padding: 5px;"> <u>Interim Status</u> (to be completed by Supplier) Interim Submission: <input type="checkbox"/> Engineering Authorization: _____ Alert, Temp. PCM, TPD Number Description: (Open Issues) _____ </td> </tr> </table>		FOR FORD USE ONLY		<table style="width:100%;"> <tr> <td style="width:50%; text-align: center; padding: 5px;">PPAP</td> <td style="width:50%; text-align: center; padding: 5px;">Non-PPAP ^{a/}</td> </tr> <tr> <td style="padding: 5px;"> Phased PPAP Warrant Status: <input type="checkbox"/> Approved </td> <td style="padding: 5px;"> <input type="checkbox"/> Rejected <input type="checkbox"/> Interim Accepted </td> </tr> <tr> <td style="padding: 5px;">Customer Signature _____</td> <td style="padding: 5px;">Date _____</td> </tr> <tr> <td style="padding: 5px;">Print Name _____</td> <td></td> </tr> </table>	PPAP	Non-PPAP ^{a/}	Phased PPAP Warrant Status: <input type="checkbox"/> Approved	<input type="checkbox"/> Rejected <input type="checkbox"/> Interim Accepted	Customer Signature _____	Date _____	Print Name _____		<u>Interim Status</u> (to be completed by Supplier) Interim Submission: <input type="checkbox"/> Engineering Authorization: _____ Alert, Temp. PCM, TPD Number Description: (Open Issues) _____
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PPAP	Non-PPAP ^{a/}												
Phased PPAP Warrant Status: <input type="checkbox"/> Approved	<input type="checkbox"/> Rejected <input type="checkbox"/> Interim Accepted												
Customer Signature _____	Date _____												
Print Name _____													
^{a/} Non-PPAP indicates the part does not satisfy one or more PPAP requirements and is considered <i>incomplete</i> until all PPAP requirements are satisfied.													

^{1/} Refer to web-link: https://web.gpr.ford.com/sta/Phased_PPAP_Warrant.xls

PPAP Requirements as Noted in the Phased PPAP Process Map ^{1/}

#	<u>Requirement</u>
1	Design Records
2	Engineering Change Documents
3	Customer engineering Approval
4	Design FMEA
5	Process Flow Diagrams
6	Process FMEA
7	Control Plans
8	Measurement System Analysis Studies
9	Dimensional Results
10	Records of Material/Performance Test Results
11	Initial Process Studies
12	Qualified Laboratory Documentation
13	Appearance Approval Reports
14	Sample Production Parts
15	Master Sample
16	Checking Aids
17	Customer-Specific Requirements
18	PPAP Warrant

^{1/} Bulk Material expectations are not addressed within Global Phased PPAP requirements.

Appendix E**Acronym List**

- **STA** - **S**upplier **T**echnical **A**ssistance
- **PPAP** - **P**roduction **P**art **A**pproval **P**rocess
- **PSW** - **P**PPAP **S**ubmission **W**arrant
- **TACT** - **T**otal **A**ctual **C**ycle **T**ime
- **EOL** - **E**nd of **L**ine
- **DPV** - **D**aily **P**roduction **V**olume
- **CPV** - **C**apacity **P**lanning **V**olume
- **IPD** - **I**n **P**lant **D**ate (to a program build event)
- **1PP** - **1**st **P**roduction **P**rove-Out **U**nits (at customer plant)
- **FEU** - **F**ield **E**valuation **U**nits (at customer plant)
- **VPP** - **V**ehicle **P**arts **P**rogress
- **AIAG** - **A**utomotive **I**ndustry **A**ction **G**roup
- **FPDS** - **F**ord **P**roduct **D**evelopment **S**ystem
- **WERS** - **W**orldwide **E**ngineering **R**elease **S**ystem
- **PM Parts** - **P**art **P**rocess **M**odification
- **TIKO** - **T**ids**I**nformation**K**öp**O**rder (Part Information and Order System)
- **PTIS** - **P**art **T**racking **I**nformation **S**ystem