GLOBAL PURCHASING

Supplier Technical Assistance

Global Phased PPAP Requirements Handbook

Edition 2.0
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Phased Production Part Approval Process

Global Phased PPAP Requirements Handbook

Supplier Technical Assistance
Edition 2.0, May 2008
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Global 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.

Global 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 (DPV) declared by the customer above the verified declared DPV 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 0 is a limited run-at-rate of parts for at least one production stream, not a demonstration that all PPAP requirements have been met for that production stream.

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 1 demonstrates that ***all PPAP requirements have been met for one production stream***

Phase 2: Production Verification

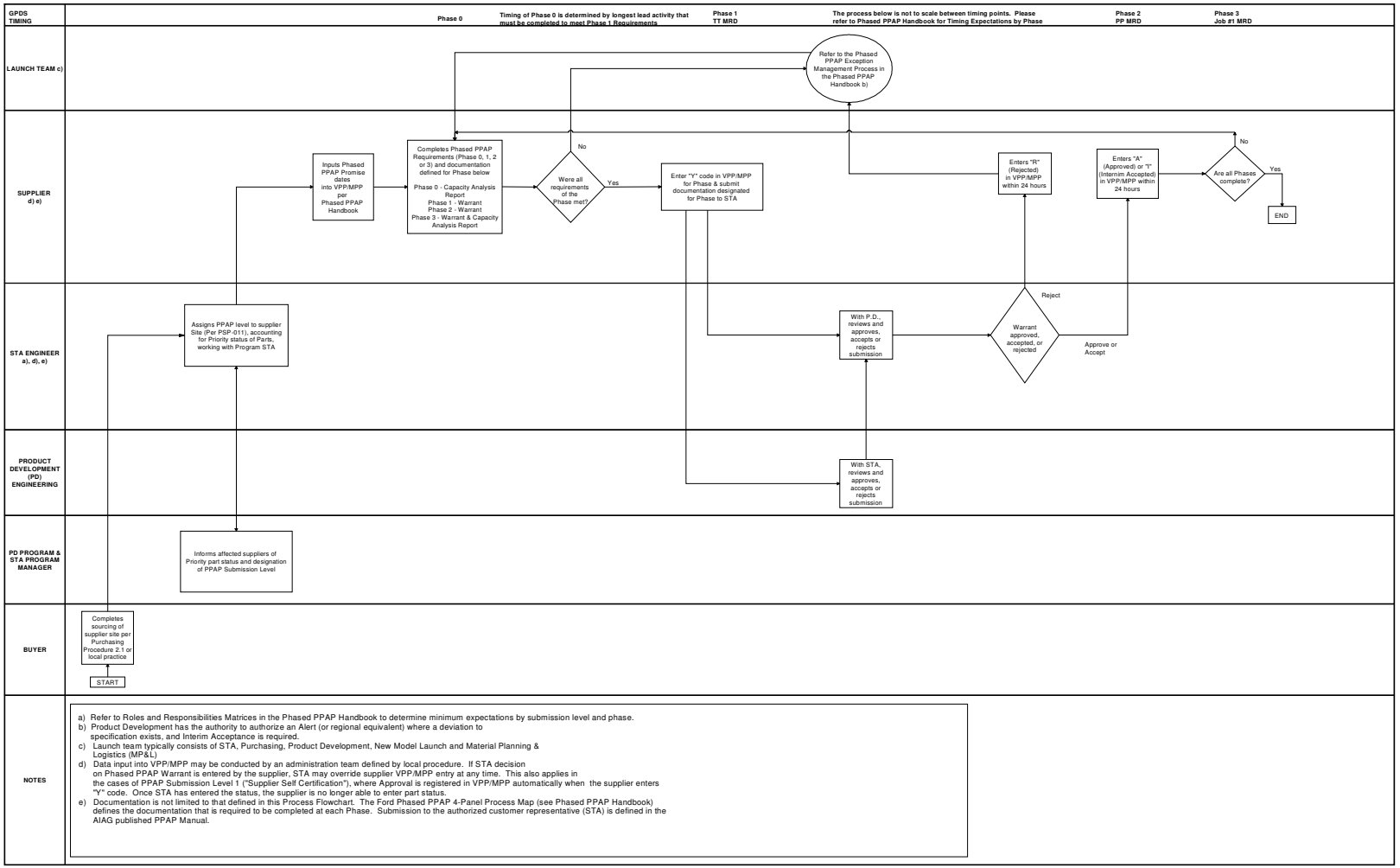
Objectives: To confirm all customer engineering design record and specification requirements are properly understood by the Supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate. Phase 2 ***demonstrates that all PPAP requirements are met for all production streams.***

Phase 3: Capacity Verification

Objective: Verify the Supplier's production system can support customer declared ***volume requirements*** 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 Global 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.

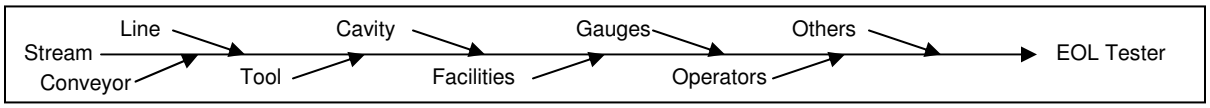


Definitions:

Production Stream

A single production stream is a sequence of a minimum of one line, machine, tool, cavity, facility, equipment, gauge, 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). ***See Capacity Analysis Report for details of capacity planning volume requirements*** ***https://web.gpr.ford.com/sta/Capacity_Analysis_Report.xls*** .



CPV (Capacity Planning Volumes)

Capacity Planning Volumes are the volumes for which Ford requires Suppliers to facilitize and tool-up for. CPVs are approximately 10 percent higher than "production planning volumes," in order to cover spares (service requirements) and volume spikes. Capacity Planning Volumes are available from the buyer.

CPV may be available from the CPV2 system for parts to North America, Ford of Europe VO plants starting at the GPDS <VP> (Verification Prototype) milestone.

CPVs are typically expressed as weekly volumes. Suppliers are expected to satisfy the production weekly demand based on a 5 day/3 shift manufacturing operating pattern unless cultural norms, laws, or work rules in Supplier's country of manufacture deem otherwise. ***Refer to the Global Terms and Conditions Capacity Planning Web Guide for details. https://web.fsp.ford.com/gtc/docs/capacityplan2008.pdf***

DPV (Daily Planning Volume)

DPVs are the maximum planned requirement for this part per day and are broken down by plant and Brand.

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 ***and meeting all PPAP requirements***.

Interim Acceptance

Part meets customer specifications, which include a valid Temporary Engineering Specification for temporary exception.

Temporary Engineering Specification

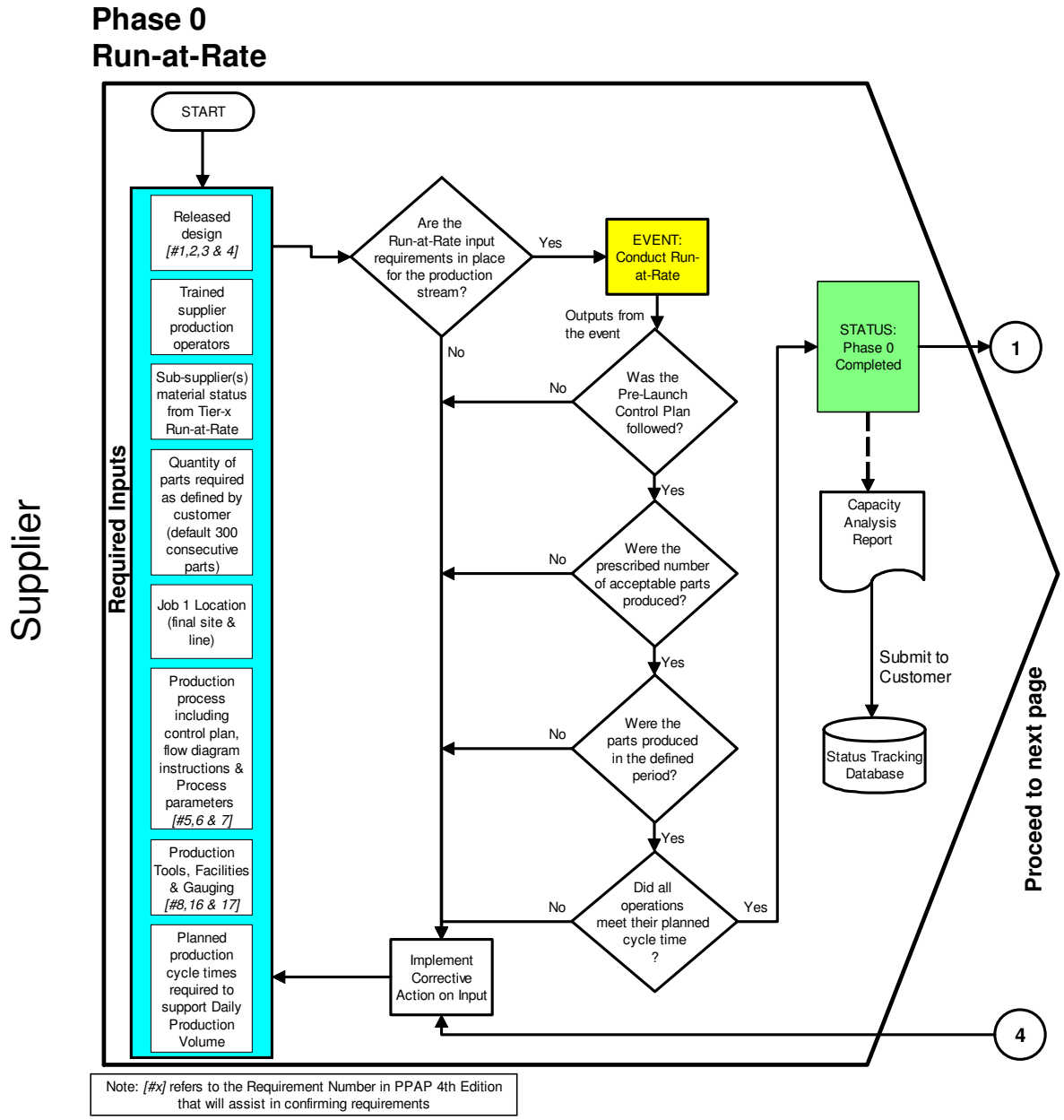
Temporary specification provided by the customer engineering release organization. The Ford Brand specific method for communicating these specifications is as follows:

- WERS Alert (Ford)
- Temporary Part Deviation (Volvo)
- ***Alert Report (Joint Venture Plants where the Engineering Releases Systems are different)***

Process Map Phase 0 Run-at-Rate

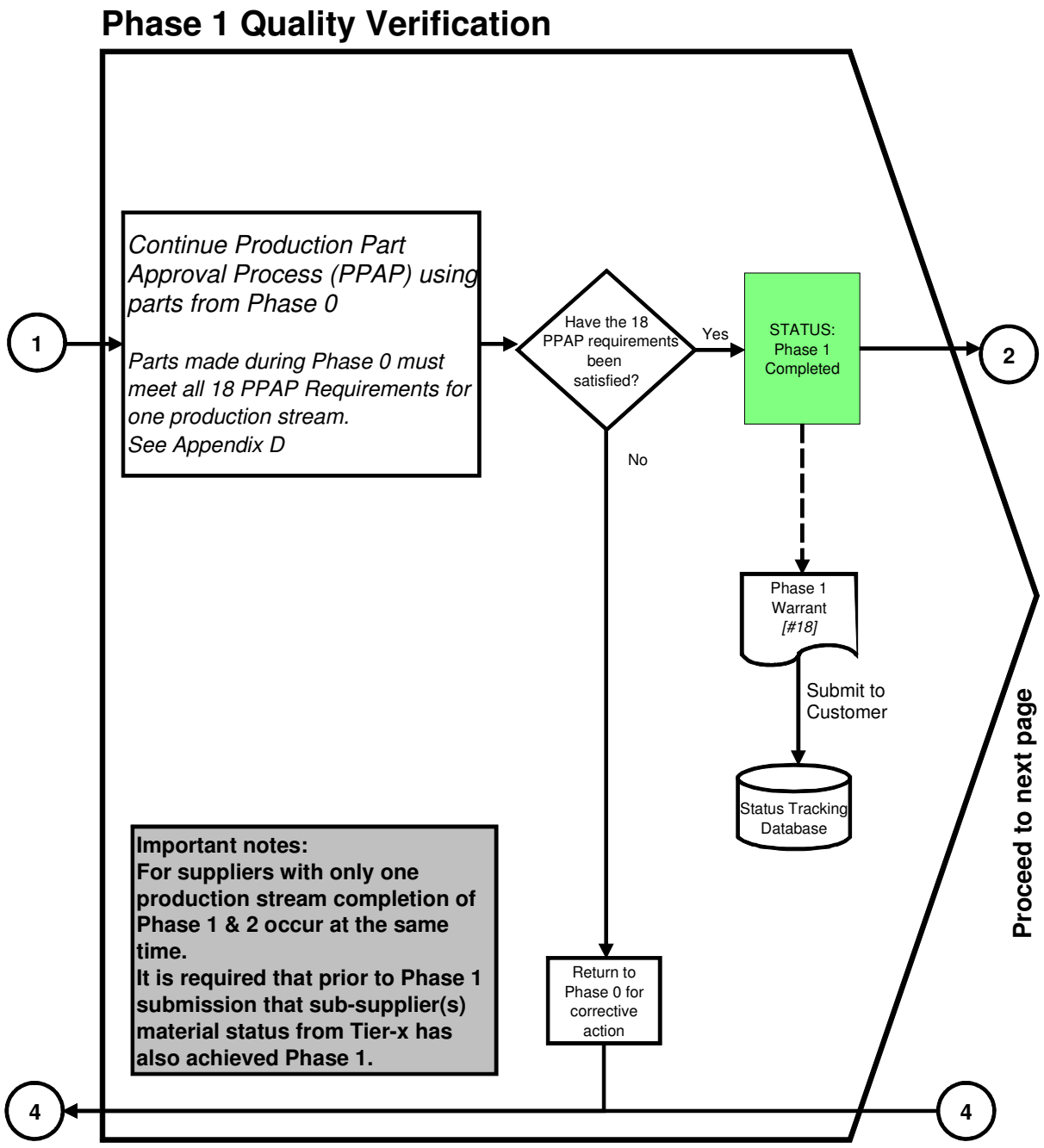
Objectives: To confirm that all production input requirements are available and understood, and can support a limited production run.
To provide an early indicator that the design of the process/tool/facility has the potential to produce at rate the required number of acceptable parts as determined by 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.



Process Map Phase 1 Quality Verification

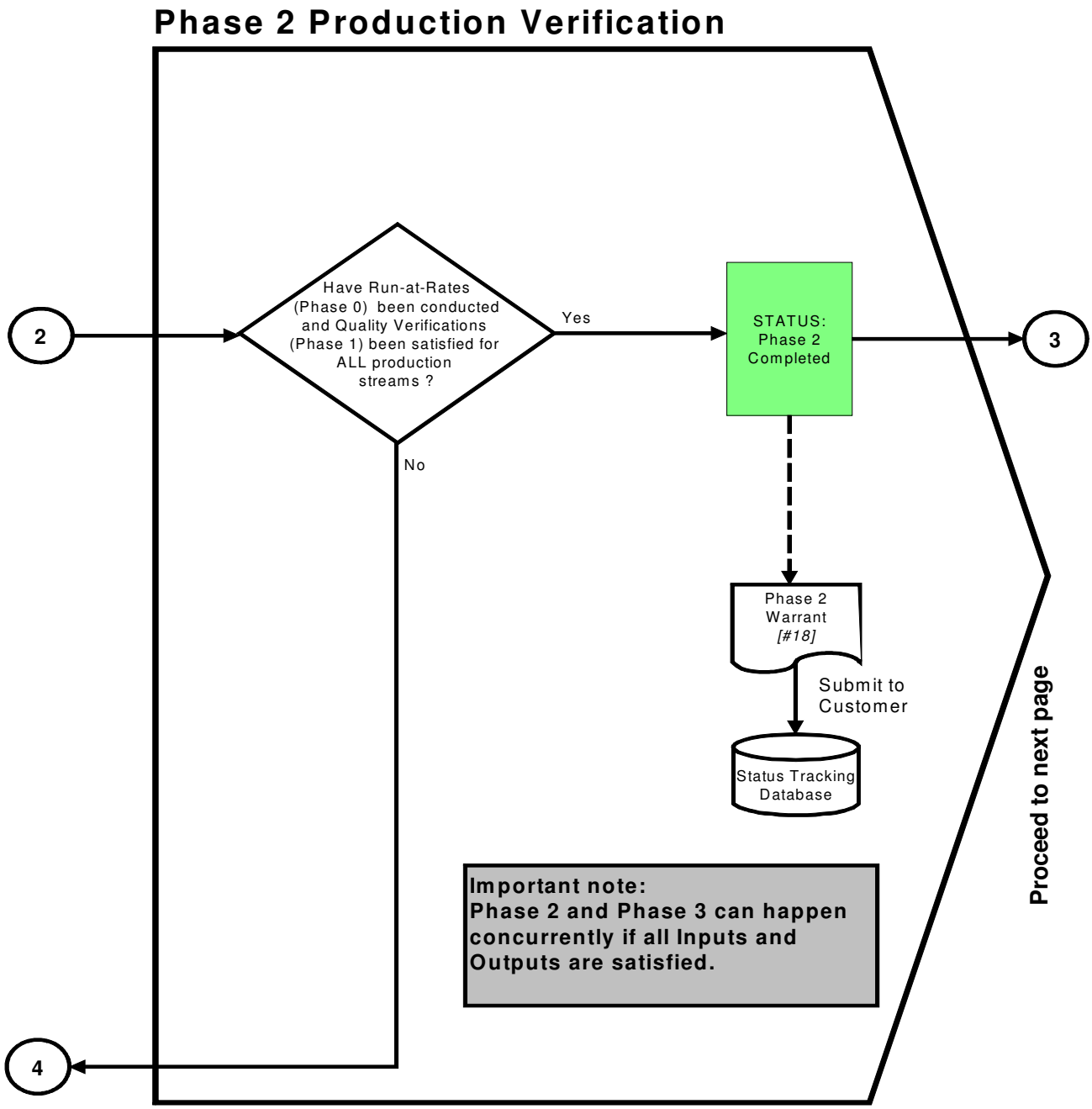
Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the Supplier. To provide an early indicator that the design of the process/tool/facility has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate by operating a minimum of one selected production stream. Phase 1 demonstrates that ***all PPAP requirements have been met for one production stream.***



Process Map Phase 2 Production Verification

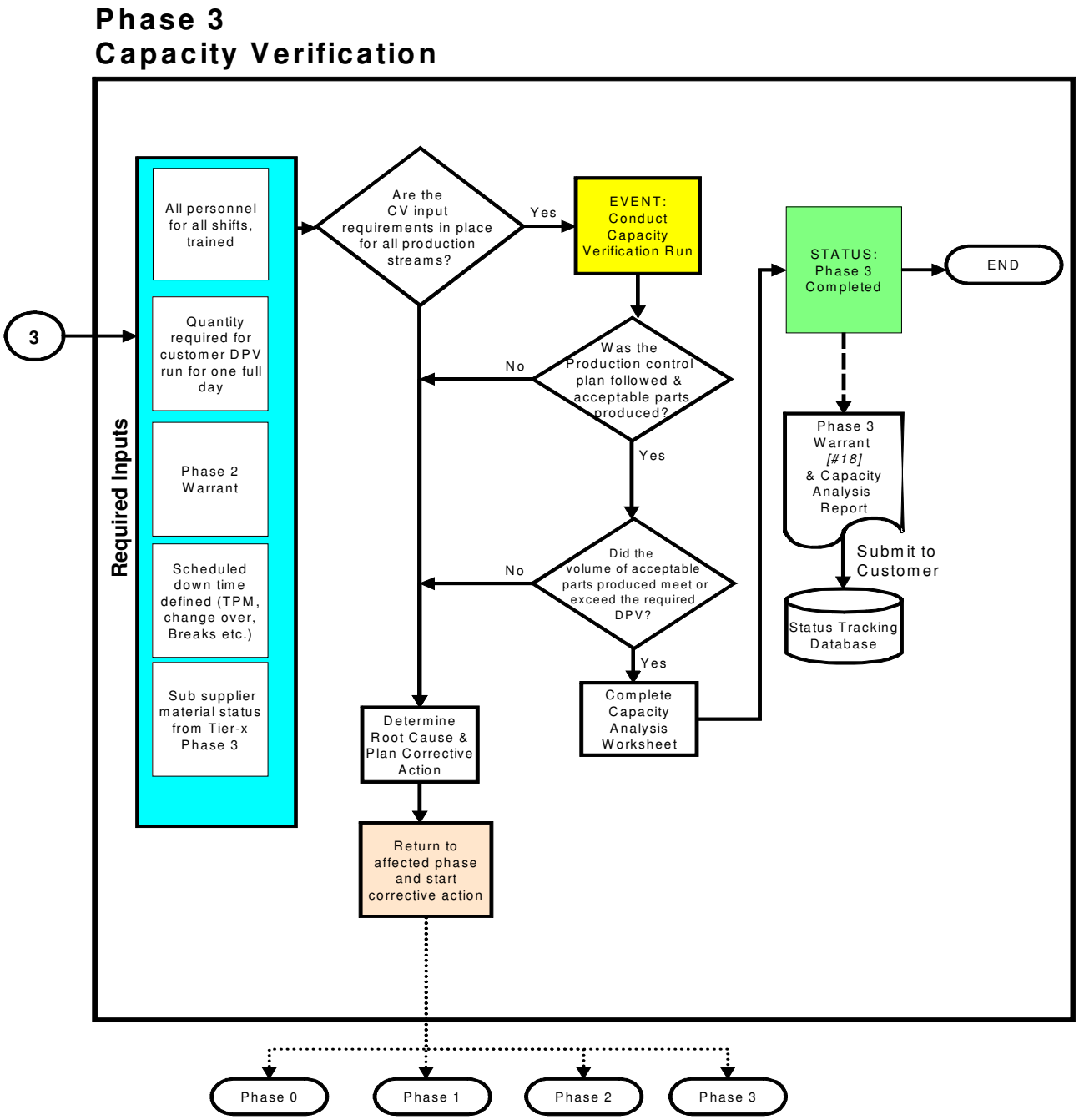
Objectives: To determine if all customer engineering design record and specification requirements are properly understood by the Supplier, and that ALL production streams have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate. ***Phase 2 demonstrates that all PPAP requirements are met for all production streams.***

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 ***volume requirements*** while meeting Phase 2 requirements.
Refer to web link https://web.qpr.ford.com/sta/Capacity_Analysis_Report.xls for Capacity Analysis Report and supporting documentation.



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 and signed by the Supplier. In addition, the Supplier should have results from Run-at-Rate readily available for STA Site Engineer review and approval where required (see roles & responsibilities section, appendix A).

Phases 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 ***Priority*** (High-Impact for FPDS), STA and ***PD**** will review and either approve, accept 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 ***for parts to Vehicle Operations (VO) plants or Manufacturing Parts Progress (MPP) for Powertrain (PTO)***. Once STA ***and PD*** have 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 ***for VO or Manufacturing Parts Progress (MPP) for PTO*** within 24 hours of receiving the STA and ***PD*** signed copy of the Warrant. Where these systems are not in use, local arrangements apply.

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.
- A Supplier is only ready to submit the Phase 1 Warrant if the Supplier can meet all PPAP Requirements for one stream. (Due no later than ***Tooling Trial Material Required Date - TT MRD).***
- In line with Global Phased PPAP methodology, the Supplier will only be ready to submit the Phase 2 Warrant when ***the Supplier is*** able to prove that the PPAP requirements have been met for all 4 production streams. (Due no later than ***PP MRD - Pilot Production Material Required Date – for GPDS programs)***.
- As ***Tooling Trial*** approaches the PPAP requirements for the second and third production streams have been satisfied, and the Supplier wants to supply parts for ***Tooling Trial*** 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.

See the Phased PPAP Warrant in Appendix C

GPDS Global Phased PPAP Achievement by Build Milestone

PPAP Phase	*Not later than:*
Phase 0 Run-at-Rate	*Timing must support Phase 1 at TT MRD*
Phase 1 PPAP (minimum 1 production stream)	*TT MRD*
Phase 2 PPAP (all production streams)	*PP/MRD*
Phase 3 PPAP	*MP1 MRD**

****Exceptions are to be approved by STA Program and Site Management***

FPDS Global Phased PPAP Achievement by Build Milestone

PPAP Phase	Not later than:
Phase 0 Run-at-Rate	Timing must support Phase 1 / 2 [a/] at 1PP MRD
Phase 1 PPAP (minimum 1 production stream)	1PP MRD
Phase 2 PPAP (all production streams)	FEU/IB/CB/MRD
Phase 3 PPAP	Job #1 MRD

[a/] **Europe requires Phase 1 at 1PP, Phase 2 at FEU. N.A. & APA requires Phase 2 at 1PP.**

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: Volvo build event timing 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) ***for VO and is Manufacturing Parts Progress (MPP) for PTO***.

Global Phased PPAP requires Suppliers to track and report on multiple promise dates. Suppliers operating in VPP/***MPP*** 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/***MPP*** 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 Phased PPAP Warrant documentation.

STA and ***PD*** will disposition the Supplier Phased PPAP submission and provide a copy of the signed Warrant to the Supplier. Once the Supplier has received the STA and ***PD*** signed Warrant, the Supplier or the Ford internal administrator acting on behalf of the Supplier, will input the ***Warrant status*** into the Vehicle Parts Progress (VPP) ***or Manufacturing Parts Progress (MPP)*** system.

Appendix A

STA Roles & Responsibilities

Minimum STA Review Requirements [a, b)]

Supplier Site Q1 Status	Part Status	PPAP Submission Level	Phase 0 Run-At-Rate	Phase 1 Quality Verification	Phase 2 Production Verification	Phase 3 Capacity Verification
Q1	*Non-Priority*	1	*Supplier Site self-certifies to Global Phased PPAP Requirements*			
Non Q1	*Non-Priority*	3	*STA desktop review of Supplier Site PPAP submission and accompanying documentation*			
Regardless of Q1 Status	*Priority*	5	*STA and PD On-Site review of Supplier Site PPAP submission and accompanying documentation*			
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 [c-d)]			Approve, Reject *or Interim Accept*			
Warrant requiring a Temporary Engineering Specification			No change to the review requirements as defined in table above.			

a) *For additional details on the alignment of Phased PPAP with GPDS requirements, refer to the GPDS Supplier Engagement Manual https://web.gpr.ford.com/sta/Supplier_APQP_PPAP_Readiness_Assessment_Template.xls.*

b) For on-going 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) Supplier Site may be designated Q1 or Non-Q1

d) Input into VPP *or MPP* (or local equivalent) is executed by the Supplier or their Ford internal administrator, upon receipt of a signed Warrant.

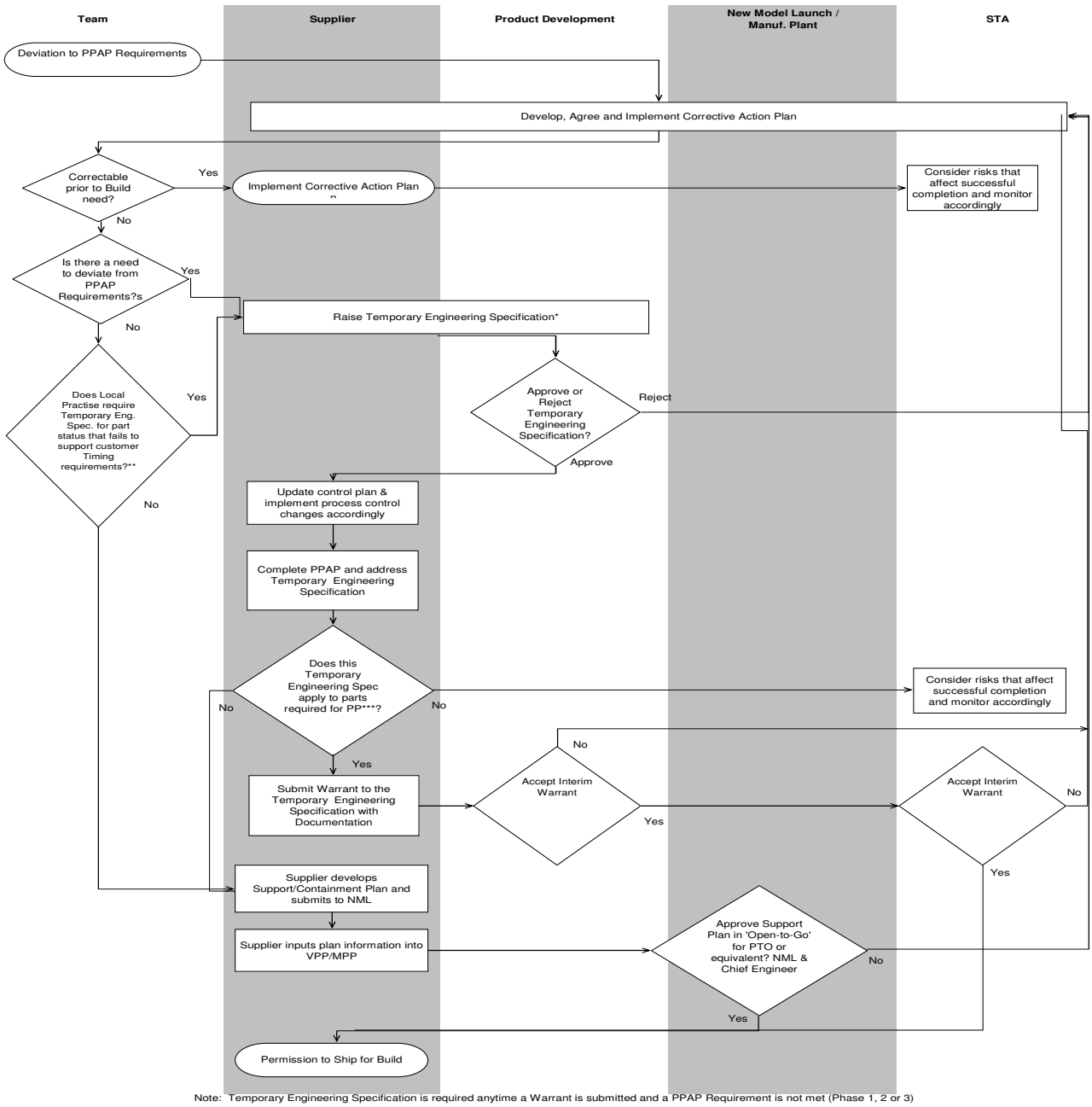
Appendix B

Exception Management 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 Acceptance of a part with a valid Temporary Engineering Specification.

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



Note: Temporary Engineering Specification is required anytime a Warrant is submitted and a PPAP Requirement is not met (Phase 1, 2 or 3)

* Notes: Temporary Engineering Specification: WERS Alert (Ford)
Temporary Part Deviation (Volvo) Alert Report (Joint Venture plants where the Engineering Release Systems are different)

**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 specific methods for communicating these specifications are as follows:

- WERS Alert (Ford)
- Temporary Part Deviation (Volvo)
- ***Alert Report (Joint Venture Plants where the Engineering Releases Systems are different)***

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

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

***Exception Management* Process Flow Description**

Deviation to PPAP Elements:

It is the responsibility of the Supplier to complete the 1***8*** requirement***s*** of PPAP prior to the date when the customer requires approved material. Examples of a PPAP requirement not being met include:

- PV testing not complete;
- 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 submission is not complete at the required timing a Support Plan must be developed that identifies how the Supplier will support the build volume requirements as well as the activities to ***support 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, if the part is saleable 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. extraordinary 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 ***of parts***, 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/Application	Process	Originator
Ford	Worldwide Engineering Release System (WERS) Alert	Ford Product Development or Supplier with WERS access
Joint Venture Plants	Alert Reports	Where the Joint Venture Engineering Release Systems are different
Volvo	Temporary Part Deviation (TPD)	Volvo Research & Development, Purchasing, or Manufacturing

Approve/Release Temporary Engineering Specification:
The customer is responsible to approve and release Temporary Engineering Specifications. Typically, the customer's Product Development, Launch Management, and Manufacturing will ***concur with*** the Temporary Engineering Specification, 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 Acceptable Material status on a time- ***or part quantity-*** 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 appropriately.*** Additionally, items such as Gauge R&R, Controls Plans, Operator Instructions and Visual Aids shall be reviewed. ***Note: quality control document review is a required for the development of the Temporary Engineering Specification.***

Appendix B

Provide *Phased* PPAP Warrant:
It is the responsibility of the Supplier to complete a Phased 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 Phased PPAP Warrant:

- In the Submission Results section, check the box indicating that results do not meet drawing and specification requirements.
- In the Interim status / Engineering Authorization section, enter the Temporary Engineering Specification number
- On the document header, select "Interim".

Accept or Reject Warrant :
Acceptance 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 Part Approval Activity (STA and ***Product Development***) completes the Customer Use section of the Warrant.

- If Accept, check (Interim Accept) for Part Warrant Disposition
- If Reject, check Reject for 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 acceptance for the submission

Actions to achieve Approval:
The Supplier is responsible to implement the corrective actions necessary to achieve an Approval. If 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.

Appendix C

Phased PPAP Submission Warrant [1/]

Phase and submission type
O Phase 1 O Phase 2 O Phase 3 O Interim (Non-PPAP)

PPAP Submission Warrant

PART INFORMATION

Part Name _____ Cust. Part Number _____
Shown on Drawing Number _____ Organization Part Number _____
Engineering Change Level _____ Dated _____
Additional Engineering Changes _____ Dated _____
Safety and/or Government Regulation O Yes O No Purchase Order No. _____ Weight (kg) _____
Checking Aid Number _____ Checking Aid Engineering Change Level _____ Dated _____

ORGANIZATION MANUFACTURING INFORMATION

Organization Name and Supplier/Vendor Code
Street Address
City Region Postal code Country

CUSTOMER SUBMITTAL INFORMATION

Customer Name/Division
Buyer/Buyer Code
Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? O Yes O No
Submitted by IMDS or other customer format: _____
If submitted by IMDS, enter Module ID number, version and date transmitted _____
Are polymeric parts identified with appropriate ISO marking codes? O Yes O No O n/a

REASON FOR SUBMISSION (Check at least one)

☐ Initial submission
☐ Engineering Change(s)
☐ Tooling: Transfer, Replacement, Refurbishment, or additional
☐ Correction of Discrepancy
☐ Tooling Inactive > than 1 year
☐ Change to Optional Construction or Material
☐ Supplier or Material Source Change
☐ Change in Part Processing
☐ Parts produced at Additional Location
☐ Other - please specify below _____

REQUESTED SUBMISSION LEVEL (Check one)

O Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
O Level 2 - Warrant with product samples and limited supporting data submitted to customer.
O Level 3 - Warrant with product samples and complete supporting data submitted to customer.
O Level 4 - Warrant and other requirements as defined by customer.
O Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☐ dimensional measurements, ☐ material and functional tests ☐ appearance criteria ☐ statistical process package
These results meet all design requirements ☐ Yes ☐ No. (If "No" - Explanation Required).
Mold / Cavity / Production Process(es) _____

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts which were made by a process which meets all Production Part Approval Process Manual 4th Edition 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.

EXPLANATION/COMMENTS _____

Organization Authorized Signature _____ Print Name _____ Date _____
Title _____ Phone No. _____ Fax: _____
Is each Customer Tool properly tagged and numbered? O Yes O No O n/a Email _____

FOR FORD USE ONLY

	PPAP	Non-PPAP [a/]		
Phased PPAP Warrant Status:	O Approved	O Rejected	O Interim Accepted	
STA Signature		Name		
		e-mail		
Date				
P.D. Signature [b/]		Name		
		e-mail		
Date				

a/ Non-PPAP indicates the part does not satisfy one or more PPAP requirements and is incomplete
b/ P.D. signature for Priority suppliers on GPDS programs

Interim Status
(to be completed by the Organization)

Engineering Authorization _____ Alert, Temp. PCM, TPD Number

Description: (Incomplete PPAP Requirements) _____

Ford GPPSS1
April 2008

The original copy of this document shall remain at the supplier's location while the part is active

Letter paper size format

Customer Tracking Number (optional) _____

[1/] Refer to web-link: https://web.qpr.ford.com/sta/Phased_PPAP_Warrant.xls

Appendix D

PPAP Requirements

#	Requirement
1	Design Record
2	Engineering Change Documents
3	Customer Engineering Approval
4	Design FMEA
5	Process Flow Diagrams
6	Process FMEA
7	Control Plan
8	Measure 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

Bulk Material expectations are not addressed within Global Phased PPAP requirements

Appendix E

Acronym List

- **AIAG** - **A**utomotive **I**ndustry **A**ction **G**roup
- **CPV** - **C**apacity **P**lanning **V**olume
- **DPV** - **D**aily **P**roduction **V**olume
- **EOL** - **E**nd **o**f **L**ine
- **FEU** - **F**ield **E**valuation **U**nits (at customer plant)
- **FPDS** - **F**ord **P**roduct **D**evelopment **S**ystem
- **GPDS** - **G**lobal **P**roduct **D**evelopment **S**ystem
- **IB** - **I**ntegrated **B**uild (at customer plant)
- ***MPP*** - ***Manufacturing Parts Progress***
- **MRD** - **M**aterial **R**equired **D**ate
- ***PD*** - ***Ford Production Development (Design and Release Engineering)***
- **PP** - **P**ilot **P**roduction
- **PPAP** - **P**roduction **P**art **A**pproval **P**rocess
- **PSW** - **P**art **S**ubmission **W**arrant
- **STA** - **S**upplier **T**echnical **A**ssistance
- **SALEABLE PRODUCT/PART** - Refers to the product/part specified on the contract between the customer and organization.
- **TT** - **T**ooling **T**rial
- **VPP** - **V**ehicle **P**arts **P**rogress
- **WERS** - **W**orldwide **E**ngineering **R**elease **S**ystem
- **1PP** - **1st P**roduction **P**rove-Out **U**nits (at customer plant)