

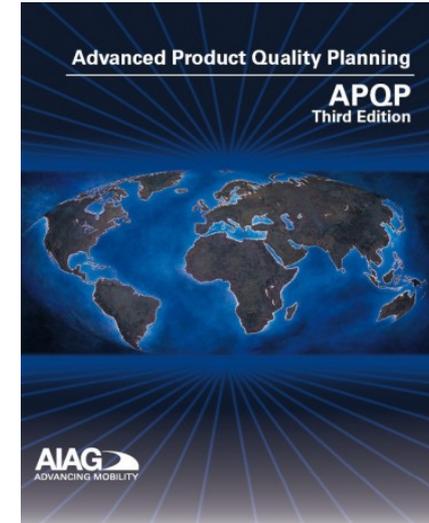
# New APQP and Control Plan Free Material



## Green Tqm Group

The visible of your success

Manufacturing and Service



Title  
New version APQP & CP

Release Date  
24-Apr-2024

Prepared By  
Green Tqm Group, QMS Team

Mail  
pt@greentqm.com

PPT Ref: GT 020, Ver: 16, 24-Apr-24

# GreenTqm's group company



1



Green Tqm Group

- Audit and consultancy  
ISO, IATF, CE, AS and CE mark
- Training and development
- In-plant training

2



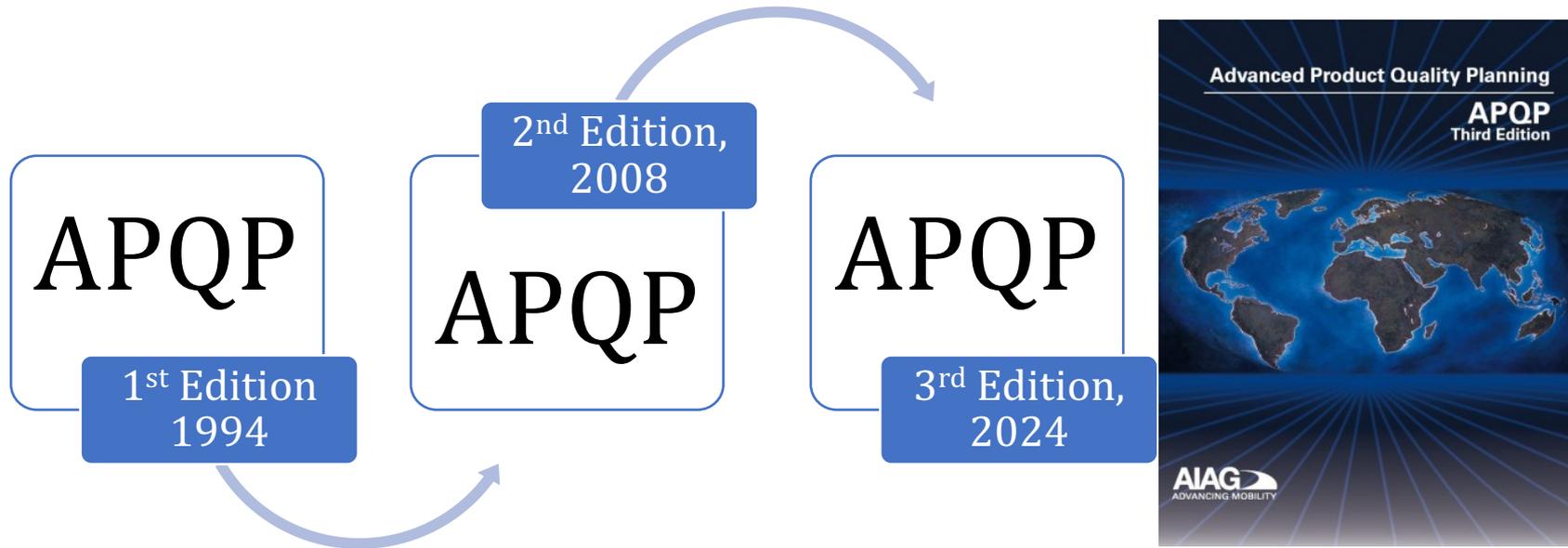
GreenPriyan



License number: 12421023001652

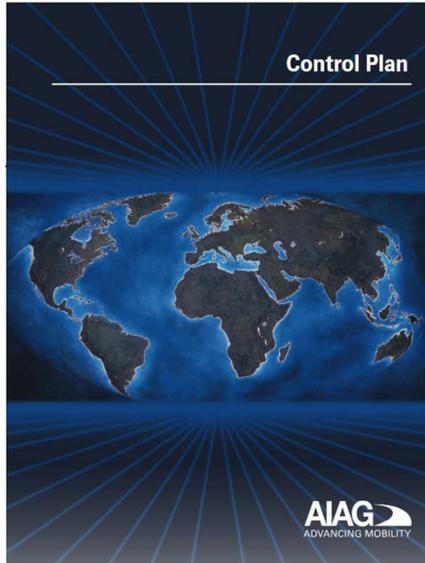
- Oil manufacturing
- Grocery repacking

# APQP Version



- Industry changes in program management cycles/methods
- Technology changes (Products and processes)
- Supply chain expansion (New to auto, cross-sector supplier)
- Opportunity to harmonize CSRs and suggest “best practices” Based on lessons learned from past programs
- Alignment to IATF 16949, Leverage related AIAG publications
- Customer expectations evolving

# Control Plan Version



- The Control Plan 1st edition manual provides clarification on various requirements.
- Further explanation on linkages to APQP processes, and detailed guidance on how to develop control plans, along with industry best practices for effectively using these plans.
- Additional updates include the introduction of a "Safe Launch" requirement to control plan phases, examples of developing plans for highly automated manufacturing applications, guidance on using software to develop and manage control plans, and revised examples, tables, forms, and checklists for additional support.

Control  
Plan

1<sup>st</sup> Edition  
Mar-24

# Why Separate Control plan manual?



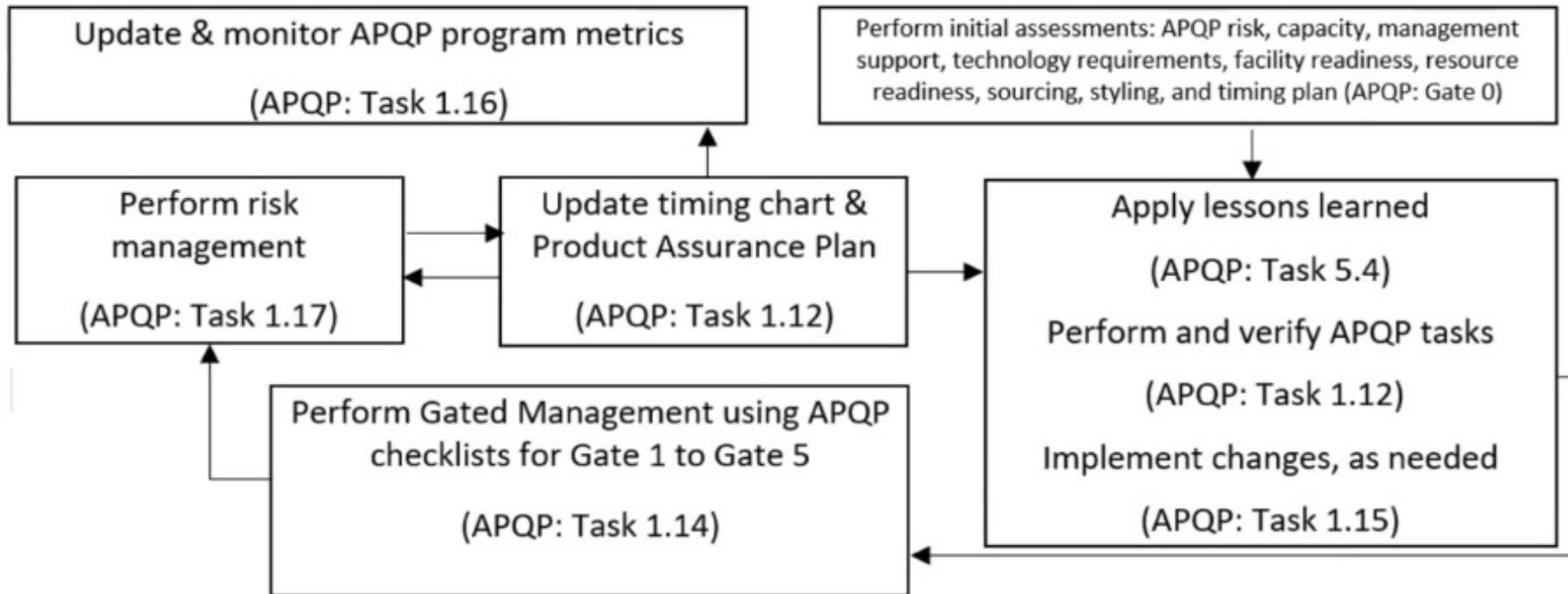
## Flexibility and Agility

- Anticipate more frequent updates than APQP as technologies evolve
- Flexibility to revise/upgrade based on lessons learned, best practices, and alignment to other standards and harmonized expectations

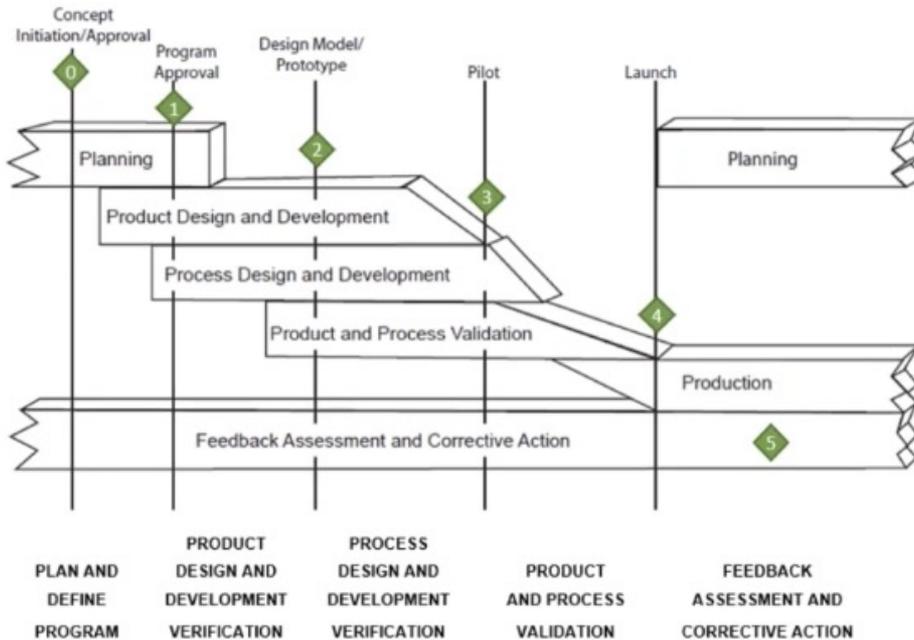
## Continual improvements

- Fords, General motor and stellates collaboration to list frequent week points and how to address
  - Harmonized CSRs
  - Clear Requirements related to top opportunities for improvements
  - Increased guidance on process to develop and manage control plans

# APQP - Governance framework



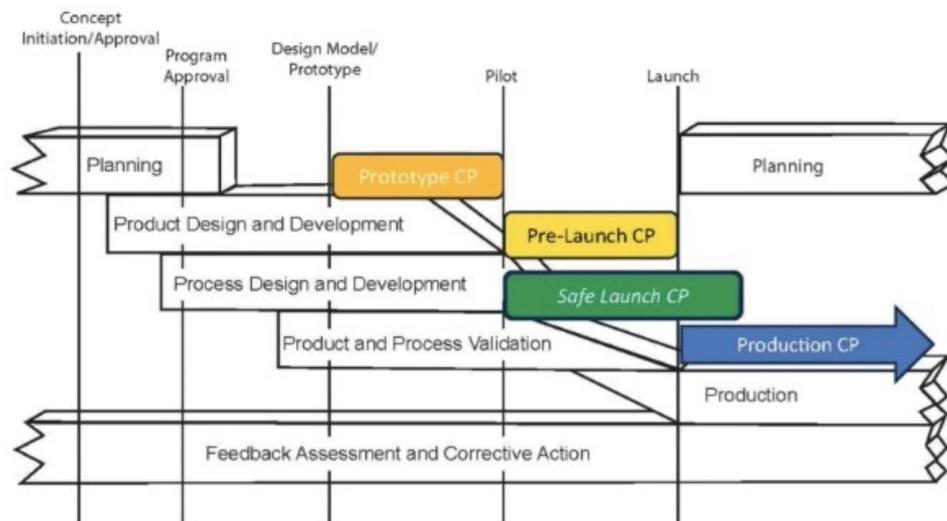
# APQP Gated Management (App-B)



## New Gated Management Section

- Suggested documentation checklists for each “gate” review
- Aligned to typical Program milestones
- Supports expectation for “gate review” in 1.14 Leadership Support
- Includes review of Supplier (sub-tier) APQP activity, not just Organization’s

# Control plan Chapter-3



Typical application of Safe Launch Control Plan

## Control Plan Stages

- Addition of “Safe Launch” requirements
  - Typical Application (figure 3.1)
  - Pre-Launch: Customer may require during Pilot Stage and continued into launch; how to document
  - Production: Start of Production WILL include Safe Launch
  - Must establish judgment criteria to exit Safe Launch - typically 90 days no problems to customer and no problems identified by Safe Launch additional/enhanced controls/containment

# Implementation Timing targets



# AIAG - current version



AIAG	Standard Description	Old Ver.	Current Ver.
APQP	Advanced Product Quality Planning and Control Plan	2 <sup>nd</sup> Edition July-2008	APQP → 3 <sup>rd</sup> Edition, Mar' 2024 Control Plan → 1 <sup>st</sup> Edition, Mar' 2024



## New Changes Brief Summary

### Applicability to EV Industry

Considering the evolving framework and conditions, the 3rd edition is also applicable to the electric vehicle (EV) industry

### Part Traceability

- The 3rd edition gives greater importance to **part traceability**.
- This enhancement ensures that traceability requirements are met, even in complex automotive systems.

### Sourcing Enhancements

The new manual incorporates a Sourcing section along with a **Sourcing Checklist**.

### Separation of Control Plan:

- In the past, the APQP manual included both APQP and Control Plan content.
- Control Plan 1st Edition: **Dedicated to control plan methodology**

# AIAG - current version



AIAG	Standard Description	Old Ver.	Current Ver.
APQP	Advanced Product Quality Planning and Control Plan	2 <sup>nd</sup> Edition July-2008	APQP → 3 <sup>rd</sup> Edition, Mar' 2024 Control Plan → 1 <sup>st</sup> Edition, Mar' 2024



## New Changes Brief Summary

**Gate Management System:** Implementing gate reviews at critical project milestones.

**Review of Lessons Learned and Best Practices:** Incorporating insights from previous projects.

**Risk Analysis and Mitigation:** A thorough assessment of potential risks associated with the product development process.

**Change Management:** Improved methods for handling changes during development

**APQP Program Metrics:** Metrics to measure the effectiveness of the APQP process

**Leadership Support and Involvement:** Ensuring top management actively participates in quality planning

# 1<sup>st</sup> Version Control Plan Sample format



## CONTROL PLAN

<input type="checkbox"/> Prototype <input type="checkbox"/> Prelaunch <input type="checkbox"/> Production <input checked="" type="checkbox"/> <b>Safe Launch</b>		Key Contact/Phone				Date(Orig)		Date (Rev.)				
Control Plan Number			Core Team			Customer Eng. Approval/Date						
Part Number/Latest Change Level			<div style="color: red; font-weight: bold;">↗ New</div>									
Part Name/Description			Organization/Plant Approval/Date			Customer Quality Approval/Date (if Req'd)						
Organization/Plant		Organization Code	Other Approval/Date (If Req'd)			Other Approval/Date (If Req'd)						
Part/ Process Number	Process Name/ Operation Description	Machine, Device, Jig, Tools, for Mfg.	Characteristics			Special Char. Class	Methods					Owner / Responsibility
			No.	Product	Process		Product/Process Specification/ Tolerance	Evaluation/ Measurement Technique	Size	Freq.	Control Method	

# Control Plan (1st Edition)



## Chapter 1: Control Plan Requirements and Guidelines

Chapter 1:

1. Control Plan Format (Update)
2. Special Characteristics
3. Pass-Through Characteristics (PTC) (NEW)
4. Error-Proofing Confirmation
5. Families of Control Plans
6. Interdependent Process and/or Control Plans
7. Rework and Repair Processes
8. Reaction Plan Details
9. 100% Visual Inspection
10. Black Box Processes (New)
11. Non-Design Responsible Organizations
12. Directed Supply (NEW)
13. Use of Software to Develop Manage Control Plans (New)



## Chapter 2: Control Plan Development

1. Getting Started
2. Timing and Coordination between APQP and CP Teams
3. Inputs
4. Outputs
5. Form Fields (Update)

## Chapter 3: Control Plan Phases

1. Prototype Control Plan
2. Pre-Launch Control Plan
3. Save-Launch Control Plan (NEW)
4. Production Control Plan



## Chapter 4: Effective Use of Control Plan

1. Reverse PFMEA (New)
2. Using Software to Develop and Manage Control Plans and Related Documents (New)
3. Layered Process Audits as Control Plan Verification (New)
4. Control Plans in Highly Automated Processes (New)
5. Using Family and Foundation FMEAs (New)
6. Control of Storage and Handling Related Risk (New)
7. Abnormality Management in Relation to Control Plans (New)

# Control Plan (1st Edition) Appendix

---



## Appendix A

A-1 General Example

A-2 Process Dependent Examples

## Appendix B

B-1 Control Plan Form

B-2 Control Plan Checklist

B-3 Special Characteristic Worksheet

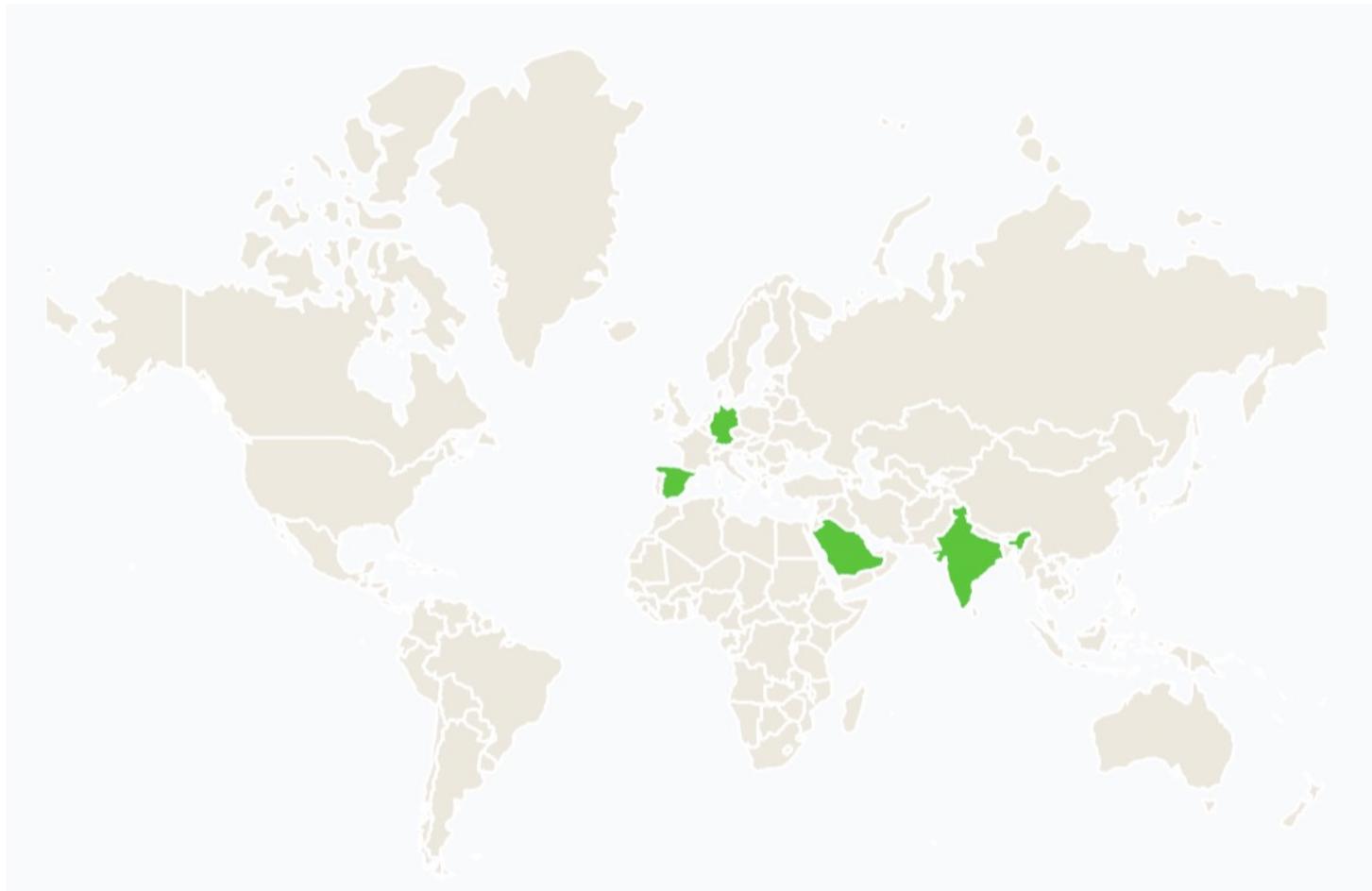
Appendix C – Reference Material

Appendix D – Sector Specific Guidance

Appendix E – Glossary

Appendix F – Index

# Green Tqm's Service Covered



**India**  
**Saudi Arabia**  
**Germany**  
**Spain**  
**Singapore**



**800 + clients**  
**Did IATF 16949:2016 consultancy**



## Its Beginning

P. THANGAMANI

+91 9095232223

pt@greentqm.com

www.greentqm.com



#GreenPriyan

## For Training Registration

