

The logo for APQP 4 Wind features the text "APQP 4 Wind" in a white, sans-serif font. The number "4" is enclosed in a green circle, and several thin green lines radiate from the center of this circle. The logo is positioned on a dark blue background that slopes upwards from left to right, with a sky and clouds visible in the upper right corner.

APQP 4 Wind®

Introduction to APQP4Wind

Last edit: June 2023

History of APQP4Wind

2014-2017

2018-2020

2021-2022

- The idea of APQP4Wind was born
- Kick-Off Event hosted by Vestas, presenting the APQP4Wind framework to the wind industry for the first time
- Manual 1.1 and Workbook were published
- Bureau Veritas Certification and DNV held the first courses
- APQP4Wind became an independent organization with a Board of Directors
- The Analysis Tool was released
- GE Renewable Energy joined the Board of Directors
- The Company Membership was launched
- First Country Ambassadors were announced
- ZF and Goldwind joined the Board of Directors
- TÜV Rheinland became a Training Provider
- APQP4Wind Assessment Tool was introduced
- Refresher Training was offered for the first time
- GRI Renewable Industries joined the Board of Directors
- APQP4Wind became the hosting platform for Industry Standards
- APQP4Wind became the hosting platform for Technical Information Management (TIM Wind)
- Vattenfall and Ørsted joined the APQP4Wind Board of Directors as the first utility companies
- The APQP4Wind Community reached 110 Company Members

APQP4Wind in short

Vision

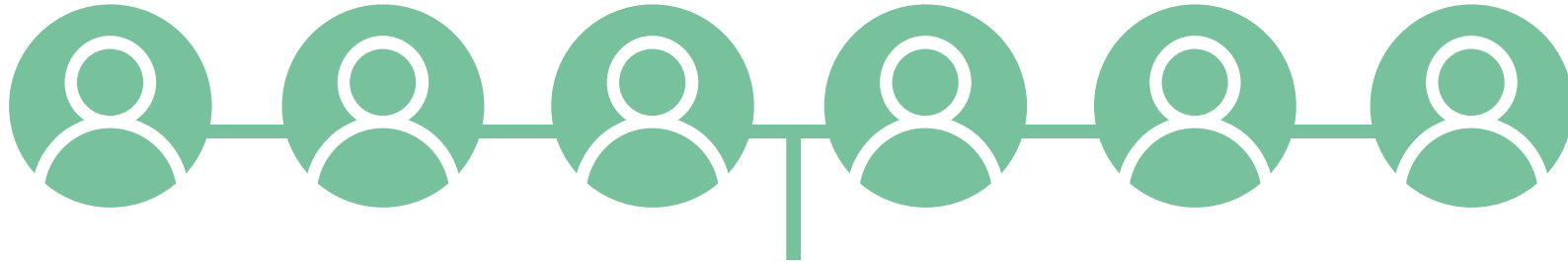
- Align and mature the global wind industry supply chain by lowering the cost of poor quality
- Be the quality assurance methodology used by the entire global wind industry supply chain from design to customer

Mission

- To provide standards, tools and methods for the global wind industry, based on commonly accepted and available APQP principles and guidelines
- To enable collaboration within the wind industry and to provide access to support, project management, training and the tools needed so stakeholders can continually improve the quality environment in which they operate and minimize risk

APQP4Wind Organization

Board of Directors



Secretariat



Board of Directors



Henning B. Jokumsen
Chairman
Vestas Wind Systems



Kim Schmidt Petersen
Vice Chairman
KK Wind Solutions



Gert B. Kragh-Jakobsen
Vice Chairman
Ørsted



Carlos Eguiraun
GE Vernova



Chuang Yan
Goldwind



Susana A. Pereira
GRI Renewable Industries



Enrique E. Comonte
LM Wind Power



Jens Schulze-Wondrak
Siemens Gamesa
Renewable Energy

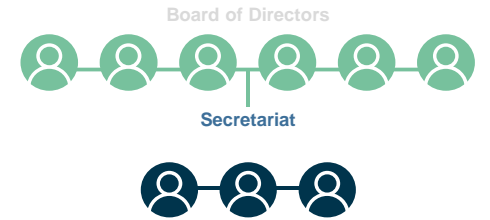


Sonny Gajhede
Vattenfall



Erik Dom
ZF Wind Power

APQP4Wind Secretariat



Kim Nedergaard Jacobsen
Chief Executive Officer



Sisse Vejen Storgaard
Head of Secretariat



Marie-Louise Köllner
Communications and
Marketing Consultant



Xi Jingchen (Christina)
Communication and
Administration Coordinator



Per Rasmussen
Project Quality Lead

APQP4Wind Community



Strengthens the cooperation between Customers, Manufacturers and Suppliers

As a member of APQP4Wind, you become part of a strong and wide networking platform with a growing number of members – both global Utility Companies, Wind Turbine Manufacturers, and Suppliers



See the full list on our website: www.apqp4wind.org/company-membership

Training Providers

- World-wide training setup
- Carefully selected Training Providers
- Mandatory training courses to become an approved APQP4Wind Supplier
- Seller of APQP4Wind Manual



The concept of APQP4Wind

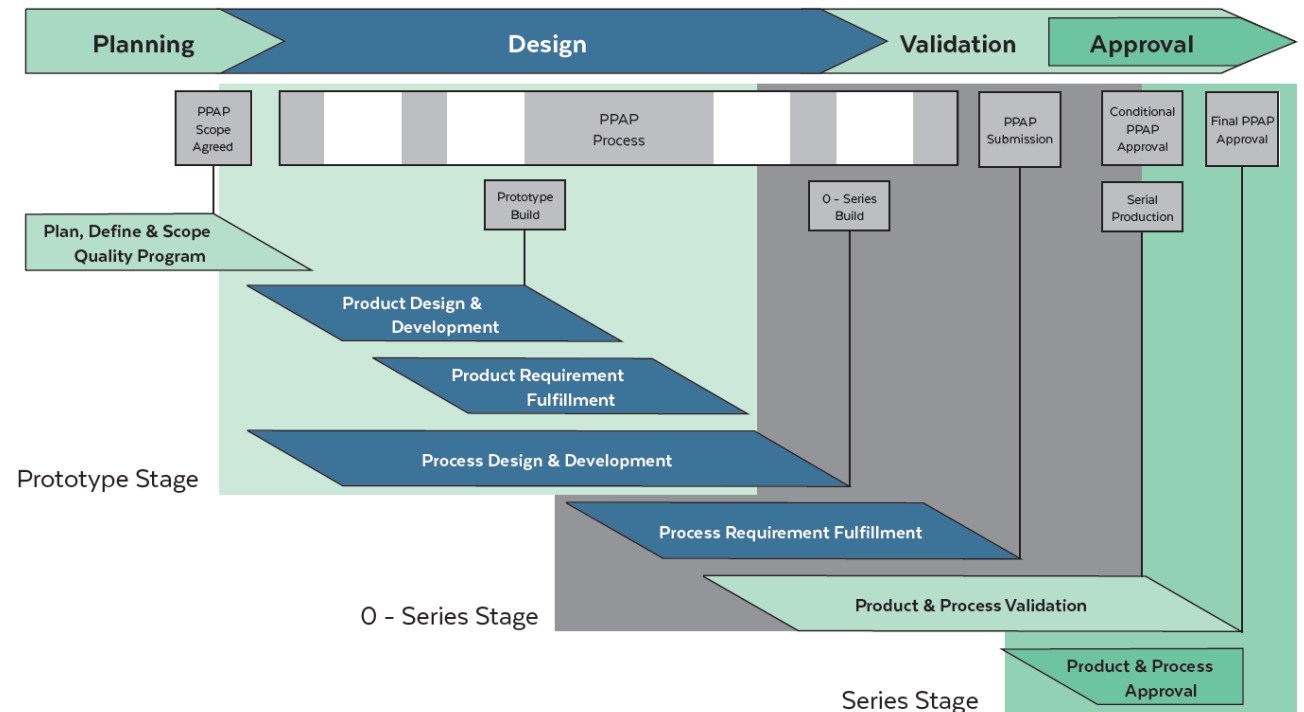
Courtesy of GE Renewable Energy

APQP4Wind®

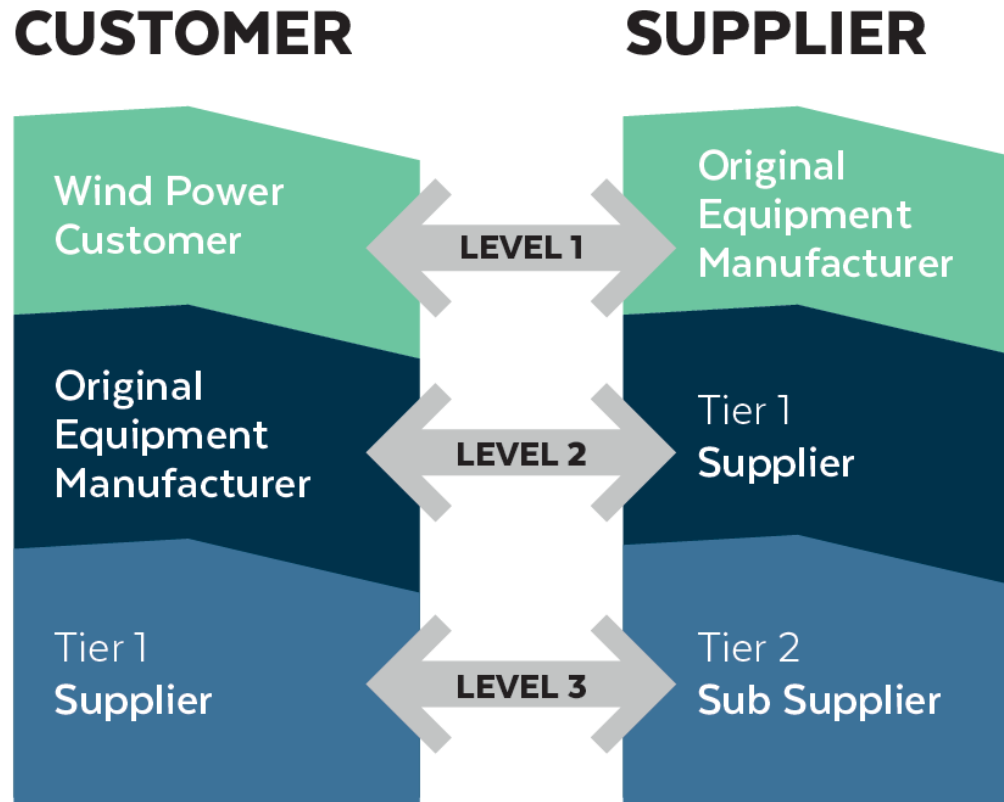
The APQP4Wind framework

APQP4Wind is...

- A **workstream** through all relevant departments for developing and manufacturing a product
- A **method** to organize interfaces between responsible stakeholders in the organization
- A **structure** to achieve effectiveness



APQP4Wind strengthens the cooperation



The standards made available in APQP4Wind have been created to **substitute company-specific procedures** and set **aligned methods and procedures for all Suppliers and Sub-Suppliers** operating in the wind industry

APQP4Wind supports profitable growth and reduces risks

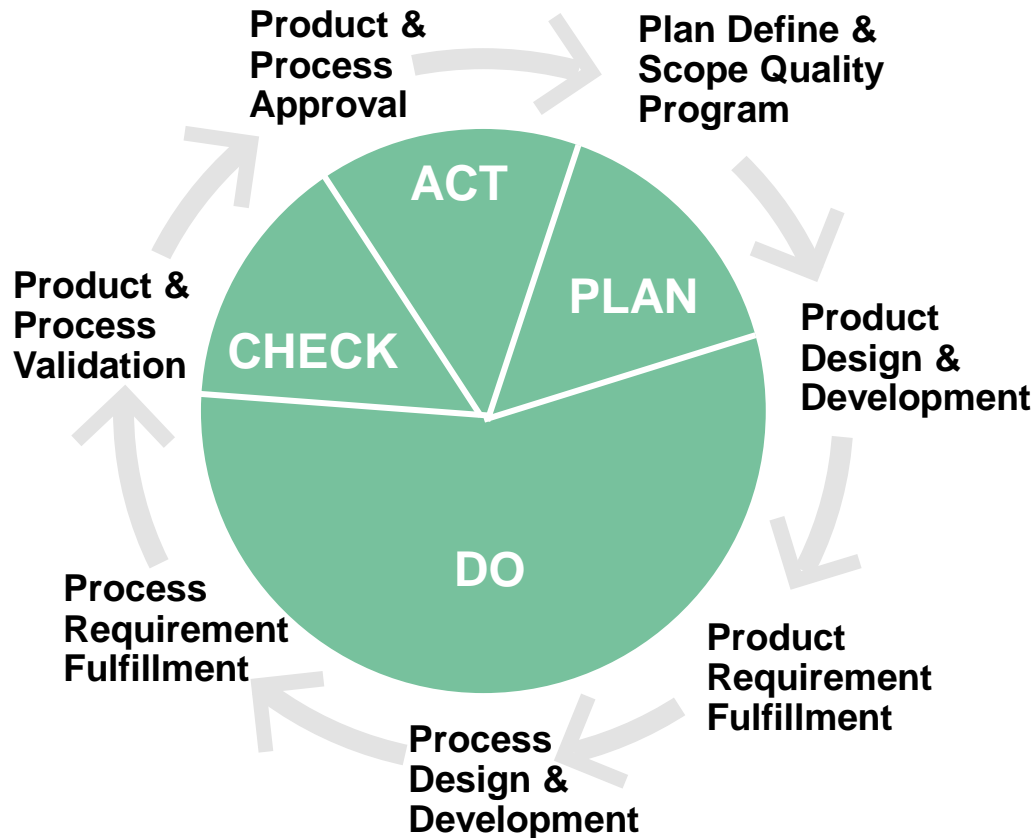
Our most important mission is to **provide standards, tools and methods for the global wind industry**, based on commonly accepted and available APQP principles and guidelines

Together with **supporting collaboration within the wind industry** and to provide access to **support, training and tools needed** so stakeholders can continually improve the quality environment in which they operate and minimize risk

The **key benefits** for the wind industry of using the approach described in the APQP4Wind Manual are:

- Preventive approach to quality
- Shift from quality control to quality assurance
- Enables maturing of the supplier base globally
- Supports standardization and simplification of processes to reduce time to market and increase efficiency
- Full end-to-end calibration of the use and meaning of the APQP4Wind vocabulary
- Supports profitable growth and reduces risk

Advanced Product Quality Planning



The APQP methodology sets a **clear path for planning, implementing, and verifying the product conformance** through quality assurance activities:

- To secure effective and on-time implementation and completion of quality assurance activities
- To enable suppliers and sub-suppliers to deliver products with the required quality and quantity, right the first time and on time

APQP4Wind vs. APQP AIAG

APQP4Wind

- Developed by Vestas, Siemens Gamesa Renewable Energy, KK Wind Solutions and LM Wind Power
- APQP manual specific to suppliers in wind industry
- Explains product quality planning in 7 phases:
 - Interim approvals
 - Option to apply validation prior to approval
- Every phase in the planning cycle defines minimum requirements to be fulfilled
- Different levels of PPAP approvals described and aligned to the APQP framework to suit wind-specific business needs (interim approval)

APQP

- Developed by Ford, Chrysler and GM
- APQP manual for suppliers in automotive industry
- Product quality planning in 5 phases
- Clarity on phase-wise minimum requirements does not exist
- PPAP not scoped in APQP manual

A man with short brown hair and a beard, wearing a light blue button-down shirt, is looking intently at a group of people in a meeting. He is holding a green pen. The background is a blurred crowd of people in a professional setting.

The core of APQP4Wind

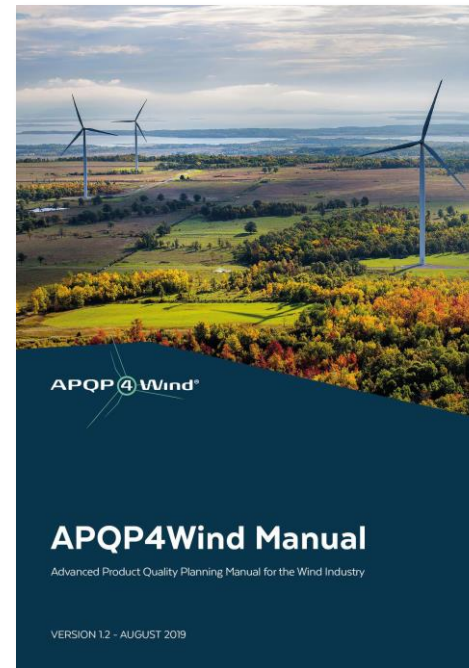
APQP4Wind Manual

The Manual is made to fit the entire wind industry and set the standard and best practices for the entire value chain, from Utilities to Suppliers of components

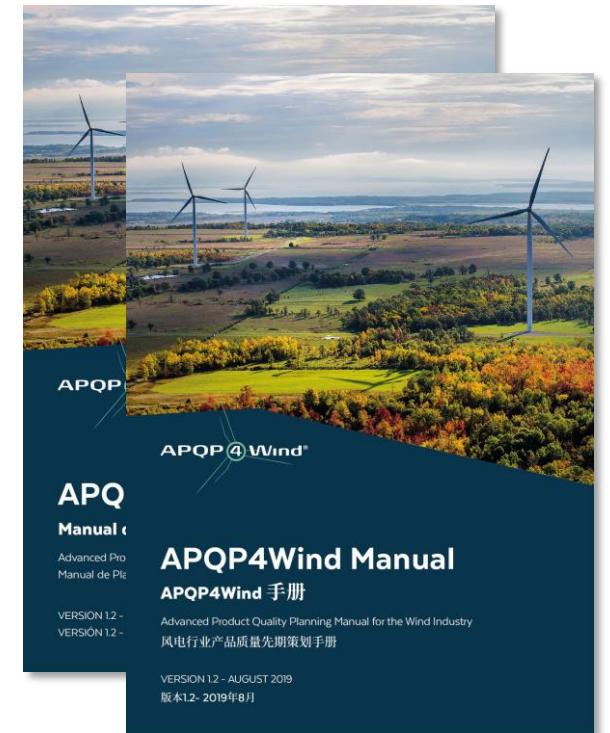
Our training providers sell the APQP4Wind Manual as a protected e-manual or hardcopy. Contact them to learn more about how to purchase the APQP4Wind Manual

Read more about the APQP4Wind Manual on our website:
www.apqp4wind.org/manual-and-toolbox

English version



Bilingual version (EN/CN + EN/ES)



APQP4Wind Toolbox

The Toolbox contains:

APQP4Wind Workbook

- Represents the core structure of how to comply with the activities described in the APQP4Wind Manual
- *Download the Workbook on www.apqp4wind.org*

APQP4Wind Analysis Tool

- Supports the Workbook to ensure that the MSA and Capability study can be documented in a flexible manner
- *Download the Analysis Tool on www.apqp4wind.org*

APQP4Wind Assessment Tool

- Tool to help measure and improve compliance with the APQP4Wind Manual
- *Available for purchase via the APQP4Wind Secretariat*



APQP4Wind online

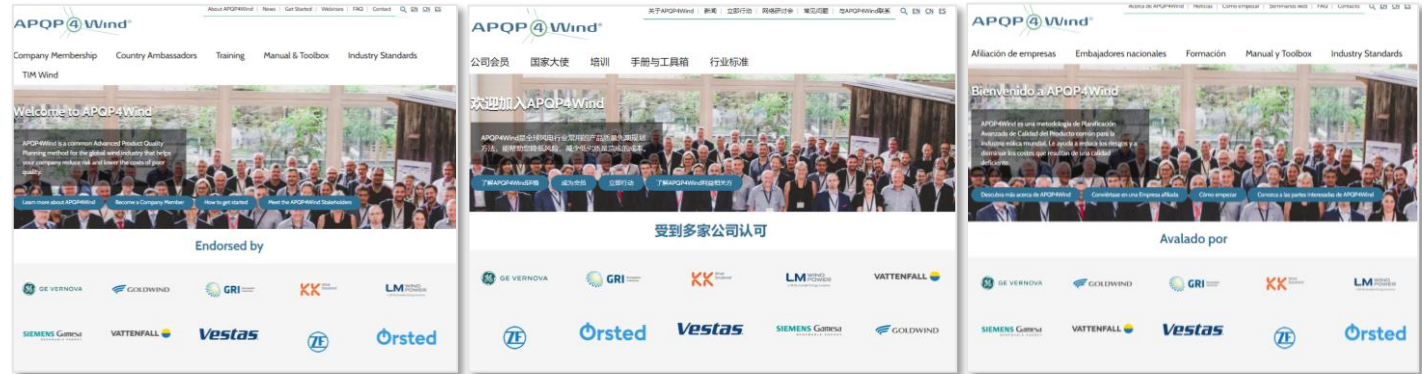
Stay updated on news and get all information about APQP4Wind online:

Website:

- English: www.apqp4wind.org
- Chinese: www.apqp4wind.cn
- Spanish: www.apqp4wind.es

LinkedIn:

www.linkedin.com/company/apqp4wind



APQP4Wind Training

- [APQP4Wind Management Awareness Training](#)
- [APQP4Wind Management Awareness Refresher Training](#)
- [APQP4Wind Specialist Training](#)
- [APQP4Wind Specialist Refresher Training](#)
- [APQP4Wind Awareness Training for all Employees](#)
- [APQP4Wind Train-the-Trainer Course](#)
- [APQP4Wind Internal Auditor Training](#)
- [APQP4Wind Assessment Tool Training](#)

APQP4Wind Management Awareness Training

- For top management, managers and quality managers working in companies delivering to the wind industry
- Basic understanding of the APQP4Wind processes, incl. PPAP
- Combination of lectures and reflection exercises
- 7 hours, excluding meals and breaks
- Completed with examination and certificate

APQP4Wind Management Awareness Refresher Training

- For all previous APQP4Wind Management Awareness course participants
- Refresh the competences achieved in earlier APQP4Wind trainings and prepare the participant for re-examination to maintain the APQP4Wind Management role
- Inform about significant updates done to the APQP4Wind Manual and/or Workbook
- 3-4 hours, including meals and breaks
- Combination of lectures, workshop and practical exercises
- Completed with examination and certificate

APQP4Wind Specialist Training

- For quality management, coordinators, experts, system people and others involved in the APQP4Wind process
- The APQP4Wind, PPAP, FMEA and MSA processes
- Understanding, use and communication of capability
- 4 days
- Combination of lectures, workshop and practical exercises
- Completed with examination and certificate

APQP4Wind Specialist Refresher Training

- For all previous APQP4Wind Specialist course participants
- Refresh the competences achieved in earlier APQP4Wind trainings and prepare the participant for re-examination to maintain the APQP4Wind Specialist role
- Inform about significant updates done to the APQP4Wind Manual and/or Workbook
- 7 hours, excluding meals and breaks
- Combination of lectures, workshop and practical exercises
- Completed with examination and certificate

APQP4Wind

Awareness Training for All Employees

- For all employees in the wind industry
- Basic understanding of your role in the APQP4Wind process
- Introduction to the framework, requirements and tools
- Interactive training with combinations of lectures and reflection exercises
- 1,5 hours - no certificate

APQP4Wind Train-the-Trainer Course

- For all employees in the wind industry
- Training of selected employees in providing awareness training for all employees to colleagues
- Understanding of core processes and tools
- Interactive training with combinations of lectures and reflection exercises
- 2 hours, including test and breaks

APQP4Wind Internal Auditor

- For internal auditors, quality coordinators, experts, system-people and others involved in the internal audit process
- Understanding of APQP4Wind processes
- Planning, conducting and reporting of audits
- Interactive training with combinations of lectures and reflection exercises
- 2 days
- Combination of lectures, workshop and practical exercises
- Completed with examination and certificate

APQP4Wind Assessment Tool Training

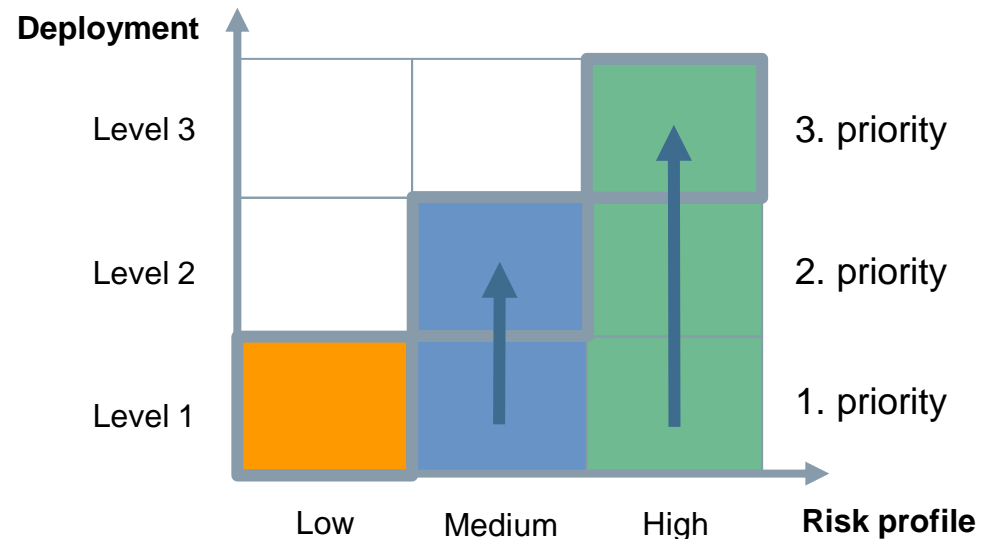
- For quality managers and -engineers, system-, product- and/or process engineers, project managers and -engineers, specialists, auditors and others involved in the APQP process
- Understanding the Assessment Tool and knowledge on how to use the tool in practice
- 3-5 hours, excluding breaks
- Completed with certificate of attendance

Expectations towards suppliers

OEM expectations towards suppliers

OEM's have agreed on the following requirements for the deployment of their suppliers' minimum competences:

- As a start, main suppliers are expected to build/develop competences at Level 1, where both specialists and management are trained within the APQP4Wind framework
- All key functions within Design, Source, Make, Deliver, Quality and Sales must be covered by managers and specialists trained in APQP4Wind
- The number of managers and specialists to be trained depends on whether the supplier is dealing with design and production, manufacture to specification, or material processing
- PPAP can only be signed by an employee who has attended APQP4Wind Specialist Training



All Company sites:
multiple managers +
multiple specialists
per key function

All Company sites:
1 manager +
1 specialist
per key function

Per Company:
1 manager +
1 specialist

Design and production supplier →	DESIGN	SOURCE	MAKE	DELIVER	QUALITY	SALES
Manufacture to specification supplier →		SOURCE	MAKE	DELIVER	QUALITY	SALES
Material processing supplier →			MAKE	DELIVER	QUALITY	SALES

Status on Implementation



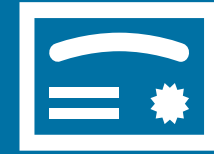
Status on implementation (2017-2023)



6600+
course
participants



8300+
Manuals
sold
worldwide



1400+
companies
with certified
employees



Training in
50+
countries



3
Global
Training
Providers



120+
Company
Members

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APQP4Wind

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