



# Introduction to *MMOG/LE* Version 5 and the New Platform

Terry Onica

Director, Automotive

[tjo@qad.com](mailto:tjo@qad.com)

586-747-9495

# Agenda

- Global MMOG/LE overview
- MMOG/LE Version 5 changes
- MMOG/LE New Platform (MMOG.np)
- Next steps
- Q&A

## MMOG/LE Experience



**Terry Onica, QAD**  
**Director of Global Automotive**

- MMOG/LE Author, Trainer
- Lead MMOG/LE trainer for global team delivering training globally for AIAG/Odette
- Consultant to suppliers for Ford Q1
- Speaker at AIAG, Odette, and OEM supply chain events
- Faculty for AIAG/Wayne State Purchasing and Supply Chain Certificate
  - ERP and MMOG/LE session instructor
- AIAG SC Steering Committee Co-chair

Introduction to MMOG/LE Version 5 and the New Platform

# **Global MMOG/LE Overview**

Materials Management Operations Guideline/Logistic Evaluation

## What is MMOG/LE?

- **M**aterials
- **M**anagement
- **O**perations
- **G**uideline
- **L**ogistics
- **E**valuation

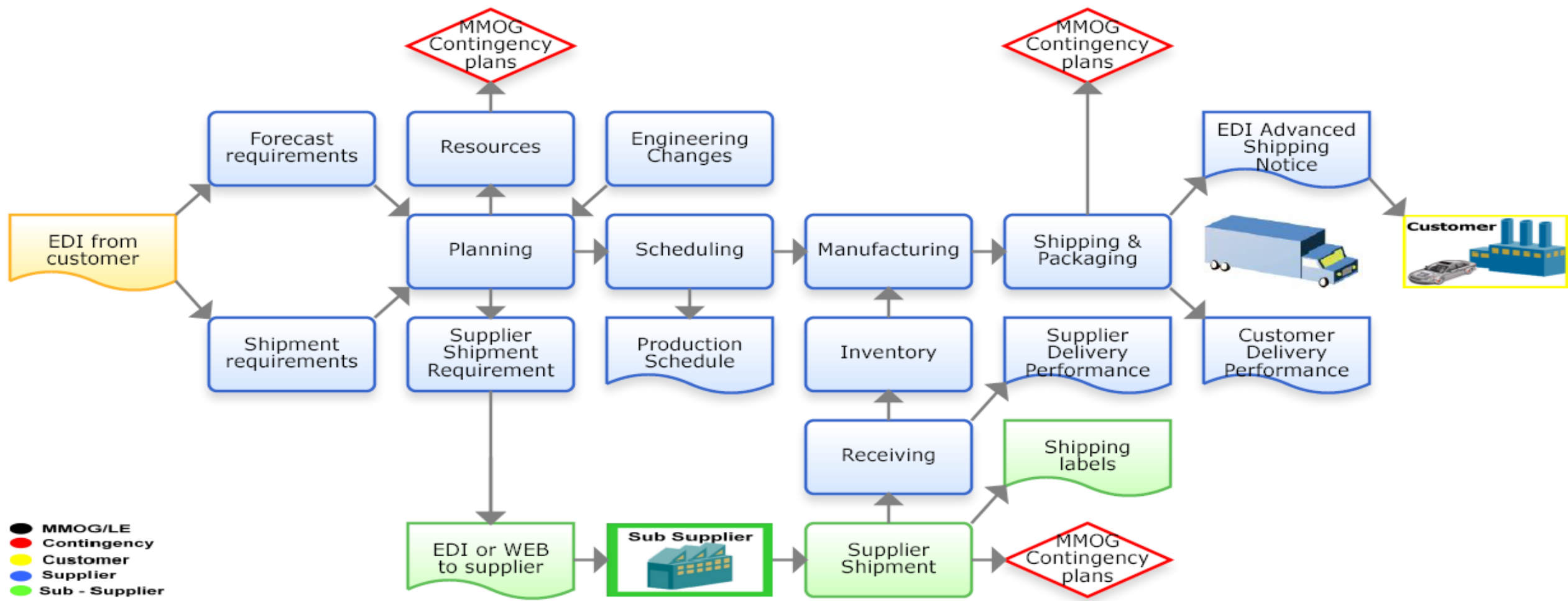
MMOG/LE = Delivery  
IATF 16949 = Quality

# What is MMOG/LE?

- Developed by AIAG/ Odette
  - OEMs
  - Suppliers
  - QAD
- Assessment tool to evaluate/select suppliers
  - Completed at the site level
  - Compare logistics capabilities against best practice
  - Used for production and after sales
- Determines level of plant performance
  - A, B, C (Full) or ZA, ZB, ZC (Basic)

The screenshot displays the ODETTE web application interface. At the top, there is a navigation bar with the ODETTE logo, a 'Log out (GG\_Cadmin\_1)' button, and links for 'Home', 'View', 'Assessment', 'Help', and 'Language'. The main content area shows a breadcrumb trail: 'Home » Assessments » GG Koln for Colossal Car Company 2018 (Individual)'. The title is 'GG Koln for Colossal Car Company 2018'. Below this, the section '1 STRATEGY AND IMPROVEMENT' is expanded to show '1.1 Vision and Strategy', which is further expanded to '1.1.1 Requirement'. A text box explains that the organization has a documented Supply Chain Management (SCM) vision and strategy. Below this, two requirement items are listed: 'F2 1.1.1.1' with a 'rejected' status and 'F2 1.1.1.2' with an 'accepted' status. The interface also includes a 'Toolbox' on the right with 'Basic Filters' and 'Advanced Filters' sections, and a summary section for 'Assessment for Colossal Car Company from Great Gearboxes - Koln' showing workflow progression and counts for 'Fully addressed criteria', 'Non-scoring answers', and 'Rejected answers'.

- 1 MMOG/LE Strategy & Improvement
- 2 MMOG/LE Work Organization
- 3 MMOG/LE Production Capacity Planning
- 4 MMOG/LE Customer Interface
- 5 MMOG/LE Production & Product Control
- 6 MMOG/LE Supplier Interface



- MMOG/LE
- Contingency
- Customer
- Supplier
- Sub - Supplier

Copyright © 2011 By QAD Inc. All rights reserved



# Who Should Be Involved?

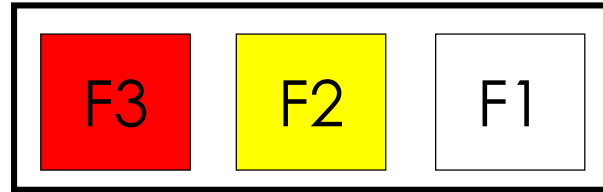
- ✓ Top Management
- ✓ Supply Chain
- ✓ Purchasing
- ✓ Production
- ✓ Engineering
- ✓ Program Manager
- ✓ Human Resources
- ✓ Quality
- ✓ IT
- ✓ Logistics
- ✓ Sales





# MMOG/LE v5 Highlights

- Six chapters, **187** criteria
- Full and Basic assessment
- Answer responses: Yes, No, N/A
- Criteria weighting:



← **Very important in v5!**

- Scoring and classification Level A, B,C (Full) Level ZA, ZB, ZC (Basic)
- Translated into 11 languages
- **Nine new F3** questions added
- Overall score must be **95%** (from 90%)
- **84%** of the **F3 questions** are centered around ERP, EDI/Web, bar coding, and complementary QMS processes (e.g. correction actions, risk management, sub supplier management)

## Two Assessments

### Full

- **187** criteria
- Six Chapters
- **Used by OEM with Tier 1**
- A,B and C Levels
- **World Class**
- 43 F3 questions

### Basic

- **102** criteria
- Six Chapters
- **Used with Tier 2-N**
- ZA, ZB and ZC Levels
- **SC fundamentals in place**
- 43 F3 questions

	F3	F2	F1	Total
Full	43	79	65	187
Basic	43	50	9	102

# MMOG/LE Customer Usage with Suppliers

OEMs Using	Tier 1 Using	Tier 1 Using
Fiat Chrysler	Autoliv	Selzer Automotive
CNH – Latin America	Benteler	SNOP
FAW-VW	Beru	Valeo
Ford	Bosch	WABCO
GM (GM 1700)	Brose	ZF
Iveco	Continental	<b>Governments Promoting</b>
Jaguar/Land Rover	Faurecia	Korean Government
PSA	Gates	Mexican Government
Qoros	Johnson Controls	
Renault	Lear	<b>Under Review</b>
Tofas Fiat (Turkey)	Magna Powertrain	Fiat
Volvo Car	MGI Coutier	Honda, Toyota, Nissan NA
Volvo Truck	Pierburg	VW, BMW

## **Three Reasons OEMs Perform an MMOG/LE Audit**

1. New business
2. Poor performing suppliers
3. New product launches

## MMOG/LE Benefits

### Customer Satisfaction

- Increased supplier rating by 8-20%
- Doubled sales in 2-3 years

### Inventory

- Reduced inventory by 17-60%
- Increased available floor space

### Collaboration with Tier 2

- Better aligned to customer demand
- Reduced premium freight by 18%

### Operational Efficiencies

- Grew without adding inventory/people
- Reduced training by 50%

Introduction to MMOG/LE Version 5 and the New Platform

# **MMOG/LE v5 Changes**

Materials Management Operations Guideline/Logistic Evaluation



# MMOG/LE Six Chapters

## CHAPTER 1 - STRATEGY AND IMPROVEMENT

- 1.1 Vision & Strategy
- 1.2 Objectives
- 1.3 Measurement, Analysis, and Action Plans
- 1.4 Continual Improvement
- 1.5 Supply Chain Development

## CHAPTER 2 - WORK ORGANIZATION

- 2.1 Organizational Processes
- 2.2 Operating Procedures and Work Instructions
- 2.3 Resource Planning
- 2.4 Work Environment & Human Resources
- 2.5 Risk Assessment and Management

## CHAPTER 3 – CAPACITY & PRODUCTION PLANNING

- 3.1 Product Realization
- 3.2 Capacity Planning
- 3.3 Production Planning
- 3.4 Systems Integration

## CHAPTER 4 – CUSTOMER INTERFACE

- 4.1 Communication
- 4.2 Packaging & Labeling
- 4.3 Shipping
- 4.4 Transportation
- 4.5 Customer Satisfaction & Feedback

## CHAPTER 5 – PRODUCTION & PRODUCT CONTROL

- 5.1 Material Identification
- 5.2 Inventory
- 5.3 Engineering Change Control
- 5.4 Traceability

## CHAPTER 6 – SUPPLIER INTERFACE

- 6.1 Supplier Selection
- 6.2 Supply Chain Management Agreement
- 6.3 Communication
- 6.4 Packaging & Labeling
- 6.5 Transportation
- 6.6 Material Receipt
- 6.7 Supplier Assessment

# MMOG/LE Chapters

## CHAPTER 1 - STRATEGY AND IMPROVEMENT

- 1.1 Vision & Strategy
- 1.2 Objectives
- 1.3 Measurement, Analysis, and Action Plans
- 1.4 Continual Improvement
- 1.5 Supply Chain Development

- Aligning vision, strategy, objectives (promoted to F3)
- Corrective actions aligned to IATF 16949 (promoted to F3)
- Continuous improvement (promoted to F2)
- Process for continual improvement with all supply chain partners (promoted to F2)
- The organization leverages an advanced technology (e.g., IoT, machine learning, data lakes, augmented reality, blockchain) supply chain project (new F1)

# MMOG/LE Chapters

## CHAPTER 2 - WORK ORGANIZATION

2.1 Organizational Processes

2.2 Operating Procedures and Work Instructions

2.3 Resource Planning

2.4 Work Environment & Human Resources

2.5 Risk Assessment and Management

- Job descriptions for all SCM department members (promoted to F2)
- Standardized work sheets are made available for all SCM personnel
- Training management process in place
- Cybersecurity policy is in place (new F3)
- Prioritizing Risk using analytical tools (promoted to F2)
- Mapping of supply base (new F2)

# MMOG/LE Chapters

## CHAPTER 3 – CAPACITY & PRODUCTION PLANNING

- 3.1 Product Realization
- 3.2 Capacity Planning
- 3.3 Production Planning
- 3.4 Systems Integration

- Planning system integration (**no spreadsheets**)
  - The production planning and scheduling system shall **automatically integrate customer requirements when generating production schedules**.
  - **Operational parameters** (e.g. transport time, lead times, inventory levels, packaging) and internal production requirements (e.g. supplier constraints, scrap rates, set-up times) shall be **integrated** into the planning and production schedules.
  - **Impact of requirement changes on the production plan is reviewed in a timely manner.**  
(New F2)

## CHAPTER 3 – CAPACITY & PRODUCTION PLANNING (continued)

- Planning system integration (no spreadsheets!)
  - The organization **automatically integrates delivery forecasts** into the planning system, The automatic integration includes all sites involved in the manufacturing and shipping process to the customer, including warehousing and 3rd party facilities.
  - The organization **automatically integrates shipping schedules** into the planning system, The automatic integration includes all sites involved in the manufacturing and shipping process to the customer, including warehousing and 3rd party facilities.
  - The production planning system **automatically generates supplier schedules**. (F2)
  - The organization sets the timing and frequency of the Material Requirements Planning (MRP) system process to **ensure most recent/optimum** customer requirements are used. (new F3)

# MMOG/LE Chapters

## CHAPTER 4 – CUSTOMER INTERFACE

- 4.1 Communication
- 4.2 Packaging & Labeling
- 4.3 Shipping
- 4.4 Transportation
- 4.5 Customer Satisfaction & Feedback

- Procedures and/or work instructions in place to notify the customer immediately to any situation that could negatively impact (aligned to IATF 16949)



# MMOG/LE Chapters

## CHAPTER 5 – PRODUCTION & PRODUCT CONTROL

- 5.1 Material Identification
- 5.2 Inventory
- 5.3 Engineering Change Control
- 5.4 Traceability

- The disposal of material and any claims shall be in accordance with customer requirements (new F2)
- Documented information describing the results of the review a PPAP deviation are retained, including person(s) authorizing the deviation, and any necessary actions arising from the review (added to existing F3)

# MMOG/LE Chapters

## CHAPTER 6 – SUPPLIER INTERFACE

- 6.1 Supplier Selection
- 6.2 Supply Chain Management Agreement
- 6.3 Communication
- 6.4 Packaging & Labeling
- 6.5 Transportation
- 6.6 Material Receipt
- 6.7 Supplier Assessment

- Process for selecting suppliers (promoted to F3)
- Supplier metrics are a part of the selection process (promoted to F3)
- Organization requires suppliers to have a risk assessment process (promoted to F3)
- Organization requires suppliers to have contingency plans (promoted to F3)

## CHAPTER 6 – SUPPLIER INTERFACE (continued)

- The SCM agreement includes procurement and inventory policies based on customer requirements for long lead time and critical components (new F2)
- Suppliers have procedures and/or work instructions in place to notify the organization immediately to any situation that could negatively impact (aligned to IATF 16949 and promoted to F3)
- The organization shall **strive to achieve electronic data exchange with 100%** of its' supply base and shall be in compliance with the customer's requirements (added to existing F3)
- Process to regularly measure and review supply chain performance of suppliers by the use of tools such as supplier scorecards, **risks, supplier assessments**, etc. The performance is regularly communicated to all relevant parties (e.g. suppliers, management, purchasing) and **considered in risk assessment**. (promoted to F3)

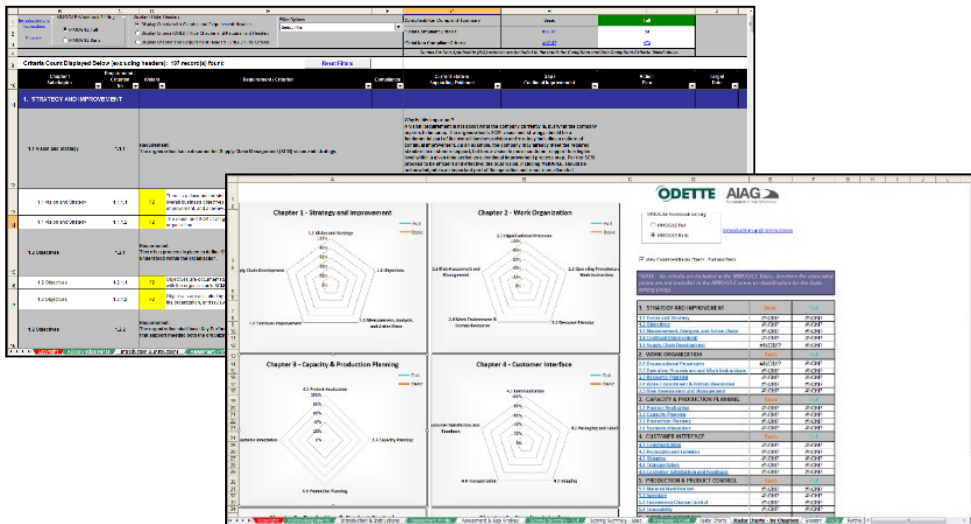
Introduction to MMOG/LE Version 5 and the New Platform

# **MMOG/LE New Platform (MMOG.np)**

Materials Management Operations Guideline/Logistic Evaluation

# Introduction

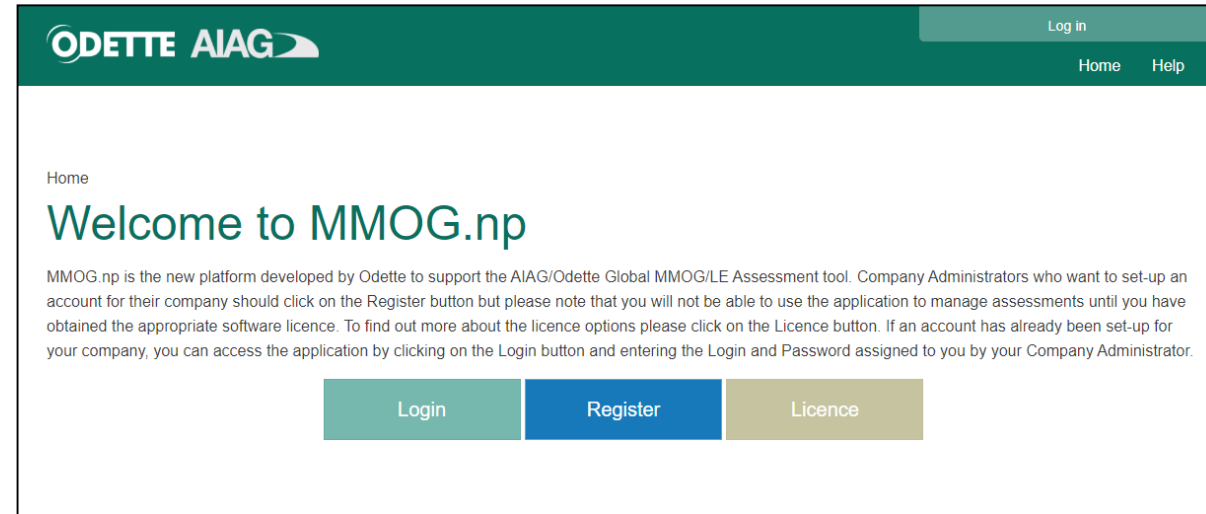
- Replaces the current Excel based workbook
- Covers the complete prior Global MMOG/LE assessment workflow and more
- Allows the organization to manage assessments at a corporate level



The figure displays the ODETTE software interface. It features a sidebar with a navigation menu, a main content area showing assessment details for 'STRATEGY AND IMPROVEMENT', and a right-hand panel with a calendar and other assessment information. The main content area lists requirements and sub-requirements, such as 'Requirement 1.1.1' and 'Requirement 1.1.2', with associated scores and status indicators.

# Global MMOG/LE v5 and NP Timing

- Version 4 is the last assessment in Excel
- MMOG.np offers version 4 and 5
- Version 5 is offered only on MMOG.np
- Check customer bulletins/announcements for due dates on version 5 and MMOG.np
- Most OEMs will require it on your submission in 2020
- AIAG/Odette members receive discounted pricing
- Register at [www.mmogle.com](http://www.mmogle.com)



[www.mmogle.com](http://www.mmogle.com)



Introduction to MMOG/LE Version 5 and the New Platform

# Next Steps

Materials Management Operations Guideline/Logistic Evaluation

## In Summary: Steps for Suppliers

- Review changes between version 4 and version 5
- Register your organization on [mmogle.com](http://mmogle.com)
  - Determine corporate level or site level
- Obtain customer-specific requirements
- Attend AIAG/Odette MMOG/LE training (optional)
- Complete MMOG/LE v5 assessment on [mmogle.com](http://mmogle.com)
- Submit/complete annual MMOG/LE assessment to customer
- OEM audit (based on triggers)



[www.qad.com](http://www.qad.com)

© QAD Inc