

Delphi Customer Specific Requirements

*For Use with ISO/TS16949
and ISO 9001*

Effective August 8, 2016

Introduction

This document is structured as a companion requirements document to ISO/TS 16949. The paragraphs to this document are numbered to correspond with the paragraphs to ISO/TS 16949. The requirements of the normative reference documents listed below are applicable. In addition, certain other Delphi requirements of Suppliers are also set forth below.

Exceptions to any of these requirements must be approved in writing by the appropriate Delphi functional area contact. Contact your Delphi buyer with any questions regarding this document.

1. Scope

This document applies only to external automotive direct material Suppliers to Delphi.

The English language version of this document shall be the official version. Any translations of this document are for reference only.

Copies of this document are available at: www.delphi.com/suppliers.

Note: The Delphi Product & Service Solutions (DPSS) Customer Specific Requirements apply to Suppliers providing product or services to Delphi Product & Service Solutions (DPSS).

2. Normative Reference Documents

The following reference documents are vital to the development of a quality system that meets Delphi's standards. Therefore, the Supplier shall follow the requirements of the following documents:

- Production Part Approval Process, PPAP
- Statistical Process Control, SPC
- Potential Failure Mode and Effects Analysis, FMEA
- Advanced Product Quality Planning and Control Plan, APQP
- Measurement Systems Analysis, MSA
- AIAG CQI-8: Layered Process Audit Guideline
- AIAG CQI-9 Special Process: Heat Treat System Assessment
- AIAG CQI-11 Special Process: Plating System Assessment
- AIAG CQI-12 Special Process: Coating System Assessment
- AIAG CQI-14: Consumer-Centric Warranty Management
- AIAG CQI-15 Special Process: Welding System Assessment
- AIAG CQI-16: ISO/TS 16949 Guidance Manual
- AIAG CQI-17 Special Process: Soldering System Assessment
- AIAG CQI-18: Effective Error Proofing
- AIAG CQI-19: Sub-Tier Supplier Management Guideline
- AIAG CQI-20: Effective Problem Solving Practitioner Guide
- AIAG CQI-21: Effective Problem Solving Leader Guide
- AIAG CQI-22: The Cost of Poor Quality Guide
- AIAG CQI-23 Special Process: Molding System Assessment
- IATF Guidance to ISO/TS16949: AIAG Edition.
- Automotive Certification Scheme for ISO/TS 16949, Rules for Achieving IATF

Recognition.

Technical Specification ISO/TS 16949

Delphi Global Packaging and Shipping Manual located at the Delphi Supplier Portal

Delphi Global Container Label Requirements Standard located at the Delphi Supplier Portal

Delphi Supplier Containment Procedure located at the Delphi Supplier Portal

The latest edition of the reference documents listed above applies unless otherwise specified by Delphi. Copies of all reference documents except those specific to Delphi are available from the AIAG at the following link: www.aiag.org. Copies of ISO documents are also available from the American National Standards Institute (ANSI) at <http://www.iafglobaloversight.org/publications.aspx>.

3. Terms and Definitions

AIAG – Automotive Industry Action Group

APV – Annual purchase value of the products Supplier provides to Delphi.

AQE (Advanced Quality Engineering) - A group of engineers within Delphi responsible for assessing potential Suppliers and taking contracted Suppliers through the APQP process until the product is into production. In some regions, the SQE may perform this role.

ASN (Advanced Shipment Notification) - An Electronic Data Interchange (EDI) transaction that provides the receiving company with specific detailed information about the shipment in advance of delivery.

Capacity Verification - A verification methodology to demonstrate that a Supplier can meet the capacity planning volume requirements as defined in the Delphi Request for Quote (RFQ).

Covisint - A business-to-business company that provides services and tools in an online environment.

Delphi Problem Solver - A web-based system designed to quickly communicate problems to suppliers and to initiate fast, complete problem resolution.

DSP (Delphi Supplier Portal) – A web site that allows Suppliers to access information and interact with Delphi; the single point of e-contact between Delphi and its supply base:
www.delphi.com/suppliers.

Family Parts - Groups of parts processed on the same production line, using the same control plan, PFMEA and process equipment. The parts differ only in end item value. PPAP for the “family” is approved by using the extreme values of the “family” specification to define the “family” boundary.

FTQ (First Time Quality) - A measure of the number of pieces rejected in a manufacturing process versus the total number of pieces attempted. FTQ can be measured at any step in the manufacturing process where parts are rejected. FTQ is reported in parts per million (PPM) defective.

Problem Case - A Delphi Problem Solver document to track Supplier performance issues that impact a Supplier's Scorecard.

SCRR (Supplier Change Request / Review form) - Delphi's Supplier Suggestion/Change Request Program application located on the DSP, which Suppliers must use to notify Delphi of any design and process changes as defined in the PPAP manual.

Site - A specific Supplier physical location under one address, such as a manufacturing plant, that can be assigned or has a DUNS or User Block number.

SPDP (Supplier Performance Development Process) - Delphi's process for developing and managing Suppliers' quality.

SQ (Supplier Quality) - Global Delphi organization responsible for working with suppliers to manage the incoming quality of purchased parts and components.

SQE (Supplier Quality Engineer) - Group of engineers within Delphi responsible for managing current production quality issues and continuous improvement with Supplier.

Sub-supplier - Providers of production materials, production or service parts, assemblies, heat-treating, welding, painting, plating or other finishing services directly to any Delphi Supplier.

Supplier Suggestions for Cost Savings - Supplier cost savings suggestions and ideas to Delphi are also submitted via the SCRR.

ISO/TS Clause/ Sub-clause #	
	4. <u>Quality Management System:</u>
4.1	<p>General Requirements. Supplier's entire facility shall be registered to the applicable standard. Delphi satisfies the goal of Supplier conformity to ISO/TS16949 as follows (also see Sections 4.2.2, 7.2.3 and 7.4.1.2):</p> <ul style="list-style-type: none"> a. Registration to ISO9001 (minimum) or TS16949 (preferred) applies to Suppliers that manufacture direct product or materials for Delphi. b. Delphi shall be added to the scope at Supplier's initial certification or recertification to TS16949. c. Only accredited certification bodies shall be used for registration to ISO9001 or TS16949. d. Every manufacturing site of a Supplier shall be individually registered either by single site or by corporate scheme. (See IATF Certification Reference or consult the certification body.) e. A clear summary definition of what product value added process shall be included in the registration scope (example: manufacturing, assembly, etc.) along with the address for each manufacturing site. <p>NOTE: When a Supplier to Delphi either: (i) provides less than \$100,000 APV, and may not have adequate resources to develop a system according to ISO/TS16949 or ISO 9001; or (ii) has automotive sales that are less than 10% of its total business, Delphi may waive the ISO/TS16949 or ISO9001 requirements. Delphi may also consider the type of product supplied, quality system, manufacturing and delivery systems capability, and any risk to Delphi prior to granting any waiver.</p>
4.2.2	<p>Quality Manual. All ISO/TS 16949 requirements and all of the requirements of this document shall be integrated into the Supplier's quality system.</p>
4.2.4	<p>Control of Records. Production part approvals, tooling records, purchase orders and amendments shall be maintained for the length of time that the part (or family of parts) is active for production and service requirements, plus one (1) calendar year, unless otherwise specified by Delphi for the respective products. This includes any Delphi owned tooling.</p> <p>Production inspection and test records (e.g., control charts, inspection and test results) shall be retained for one (1) calendar year after the year in which they were created. Records of inspection shall be maintained for each inspection or test performed. The actual test result (variable or attributes) shall be recorded. (Refer to Section 8.2.4.1)</p> <p>Records for internal quality audits and management review shall be retained for three (3) years.</p> <p>Some programs may require longer retention periods than specified above.</p>

	<p>Supplier may specify the longer retention period in its procedures or specifications.</p> <p>The above shall not supersede any regulatory requirements.</p>
	5. <u>Management Responsibility:</u>
5.6	Management Review. The Supplier management shall hold regularly scheduled quality/business operating system performance meetings to review the customer-focused metrics, objectives and performance trends. Quality and delivery metrics shall be included in the Supplier's management reviews and shall use zero defects and 100% on time as the goals.
	7. <u>Product Realization:</u>
	APQP:
7.1	<p>Planning of Product Realization. The Advanced Product Quality Planning (APQP) and Control Plan reference manuals shall be used to develop and report progress on new programs. For reporting of APQP status, Supplier shall utilize the forms associated with APQP and process flows unless otherwise identified or approved by the responsible Delphi AQE/SQE.</p> <p>SPDP contains the major standards for advanced quality planning and current production cycle. The Delphi Supplier Development documents are posted on the DSP. (Refer to Section 7.2.3) The Delphi AQE/SQE shall communicate any waivers from the SPDP.</p>
7.2.1.1	Delphi-designated Special Characteristics. Supplier shall use any specific symbols Delphi has defined for use on control plans, drawings or FMEAs. The AQE/SQE shall notify the Supplier of such requirements, if any.
7.2.2.2	Manufacturing Feasibility. Supplier shall perform manufacturing feasibility reviews and shall include Supplier and Delphi team members as appropriate. Requests from Delphi for volume changes of 20% or more over Supplier's previously verified volume capability shall require full volume feasibility studies. Supplier's capacity study shall include identification of the capacity constraints and evaluation of risk to Delphi. Supplier shall provide the results of this study to the Delphi SQE/AQE. The capacity information provided with the Supplier quote shall reflect its available daily capacity and operating plan (hrs./day, days/week). Supplier's operating plan shall meet Delphi's weekly volume requirements and current model service requirements and shall be 100 hours per week or less. Supplier shall notify the Delphi buyer for approval of any operating plan using more than 100 hours per week. Supplier shall have capability to provide 15% above its quoted volume without additional investment from Delphi.

<p>7.2.3</p>	<p>Customer Communication. Supplier shall register to the DSP through Covisint and register a Supplier Profile Administrator as required for its locations. Supplier shall have the appropriate hardware and software needed to access and use the applications within DSP. Supplier shall obtain and maintain Dun and Bradstreet DUNS number(s) to support the DSP system applications.</p> <p>All manufacturing locations are required to register to Delphi Problem Solver as a requirement for conducting business with Delphi. The Supplier shall periodically access Delphi Problem Solver.; Supplier shall monitor its Problem Cases as they are generated and respond as required.</p> <p>The Supplier shall have at least one person, and should have at least one back-up, who is familiar with the DSP supporting all of its locations. The Supplier shall utilize the Delphi help desk resource to help resolve DSP problems as needed.</p> <p>Quality Certification Documentation. Supplier should post its latest valid and complete quality management system certificate in the Supplier Profile application on the DSP. Supplier shall include all requested quality certification information in the specified fields of the Delphi RFQ notebook on all quotation submissions. Supplier quality certificates shall be in English or include an accurate English translation on them. Supplier shall ensure that its certificate name and address information matches the DUNS location that is in the Supplier Profile.</p> <p>Certification Body/Registrar Notification. Suppliers registered to ISO 9001 or ISO/TS 16949 shall notify Delphi of certificates that are revoked or placed on suspension. Supplier shall notify its Delphi SQE if it plans to change registrars.</p> <p>Manufacturing Site Change. Supplier shall not change manufacturing location without prior written approval from Delphi. Any request by Supplier to change manufacturing location shall be submitted through SCRR.</p> <p>Customer Representative Change. If Supplier’s customer representative changes, the Supplier shall update contact information in the Supplier Profile application on the DSP.</p> <p>Inquiries. Supplier shall respond to all inquiries from Delphi in writing or via E-mail on or before the due date stated on the inquiry.</p>
<p>7.3.4</p>	<p>Design and Development Review. When reviewing product design and development stages, the Supplier shall participate in and execute APQP requirements.</p>
<p>7.3.5</p>	<p>Design and Development Verification. The Supplier shall perform design verification to show conformance to Delphi design validation and</p>

	<p>qualification requirements. At component levels, the Supplier shall develop a qualification plan with the design engineering activity at Delphi. Verification methods shall be recorded with the test results. Go/No Go results should be avoided and, where available, the actual value for variables data shall be recorded.</p>
7.3.6.2	<p>Prototype Program. The Delphi buyer shall provide Supplier with relevant prototype requirements for any prototype programs.</p> <p>Supplier shall provide prototype control plans, FMEAs and other quality documents if requested by Delphi engineering or SQ.</p> <p>Prototype Parts. The Supplier shall submit inspection reports when delivering sample parts, as instructed by the Delphi receiving unit.</p> <p>If Delphi's review of the inspection report indicates that the parts do not agree with the prints, or examination of the parts discloses an unsatisfactory condition not covered by the inspection report, Supplier shall resolve all discrepancies with the Delphi Product Design Engineer and communicate the resolution in writing to the Delphi buyer or SQ.</p> <p>If resolution of the discrepancy results in a tooling, material or processing change, the Supplier shall correct the situation (at the Supplier's expense), resubmit an inspection report on the revised parts, and communicate the resolution in writing to the Delphi buyer and SQ as soon as possible.</p>
7.3.6.3	<p>Product Approval Process. The Supplier shall comply with the current edition of the AIAG PPAP manual unless otherwise specified by Delphi.</p> <p>Copies of Supplier PPAPs shall immediately be made available upon request from Delphi.</p>
	<p>Run at Rate: In accordance with Delphi's SPDP and APQP, Supplier shall conduct Run at Rate to verify production capacity and quality system effectiveness. Supplier shall develop and implement an FTQ improvement process, prioritizing FTQ issues, to achieve continuous FTQ improvement.</p>
7.3.7	<p>Control of design and development changes. The Supplier shall retain documentation of Delphi approval of all implemented changes for the life of the material. Supplier shall label shipments of new or revised material per instruction from the Delphi receiving location until notified by Delphi Production Control.</p> <p>Supplier Change Requests. Suppliers shall use SCRR for all change requests.</p>
7.4.1.1	<p>Statutory and Regulatory Conformity (Material Expectations). Supplier shall provide samples, testing, environmental and MSDS (Material Safety Data Sheet) information within the timeframe stated by Delphi. MSDS is required for bulk or raw materials, and for any rust preventative, grease, lubricating oil or other chemical material that is on a part or assembly</p>

	provided to Delphi.
	Substances of Concern and Recycled Content. Supplier shall disclose the composition of all parts supplied or proposed to be supplied, as detailed in the Delphi 10949001 Substances of Concern and Recycled Content specification on the DSP.
7.4.1.2	<p>Supplier Development of Specially Designated Small Sub-Suppliers of Direct Automotive Product and Materials. When a sub-supplier to Supplier is so small as to not have adequate resources to develop a system according to ISO/TS 16949 or ISO 9001, or supplies non-engineered products, certain specified elements may be waived by the Supplier. “Small” here may refer to the volume supplied to the automotive industry or to the sub-supplier’s annual sales volume. Supplier shall consistently apply the assessment criteria below to determine the specially designated sub-suppliers to which this provision may apply.</p> <p>At a minimum, Supplier shall assess the sub-supplier’s size, dollar value of the business, type of product supplied, quality system, manufacturing and delivery systems capability and any risk to Delphi caused by the sub-supplier’s failure to develop a quality system. In addition, Supplier shall ensure that sub-suppliers develop a quality management system that facilitates defect prevention, monitoring and improvement.</p>
7.4.3.1	<p>Incoming Product Quality. The Supplier shall ensure the quality of the parts it produces, its sub-supplier’s quality and delivery performance and subcontracted services, including that sub-suppliers directed by Delphi meet Delphi specifications and requirements. When the Supplier determines incoming inspection of sub-supplier material is necessary, this activity shall be consistent with the risk and quality impact of the Supplier on Delphi’s product quality. Such incoming inspections shall include variables data where appropriate and be used as a key indicator for sub-supplier quality management. Where high risk has been identified in the sub-contracted process, the Supplier shall ensure containment is in place to protect Delphi. For attribute data sampling, the acceptance level shall be zero defects.</p>
7.5.1.1	<p>FMEA and Control Plan Approvals. Delphi Design engineering and Supplier Quality approval is required for Supplier’s FMEAs and control plans for designated safety items regardless of the site PPAP level. Approval may take the form of a Part Submission Report (PSW) but the preferred method shall be by signature of Delphi Quality Engineer. Approval of changes to these documents after Delphi’s initial acceptance is also required.</p> <p>Furthermore, Delphi reserves the right to require approval of FMEA and/or control plans for any other part or process from any Supplier.</p>

	<p>FMEAs. FMEAs shall be prepared using the AIAG Potential Failure Mode and Effects Analysis reference manual unless otherwise approved by Delphi Supplier Quality.</p> <p>FMEAs may be written for families of parts where batch processes and common tooling are used. Families shall be clearly defined and have a full part number listing of the family. Family designations must be approved by Delphi Engineering and Supplier Quality.</p> <p>Upon request by Delphi, the Supplier shall provide a copy of the family FMEA documents for review. If the document is considered proprietary, the Supplier may provide the applicable section, or provide qualified technical support and bring the FMEA to the Delphi requestor for review without retention of copies. A letter stating the proprietary nature of the FMEA shall be included in the Production Part Approval submission package.</p> <p>NOTES*:</p> <p>When developing PFMEA's for production parts or material supplied to Delphi, the Delphi rating tables for 'Severity', 'Occurrence' and 'Detection' shall be used in place of the rating tables referenced in AIAG FMEA Current Edition, unless otherwise approved by Supplier Quality, based on the specific part or program circumstances. Delphi's approval of Supplier's PPAP shall serve as the approval for the rating method utilized.</p> <p>Potential failure modes with a severity of seven or greater shall be continually improved to reduce the occurrence to a one or reduce the detection to a five or lower.</p>
	<p>Control Plans. The APQP manual, available from AIAG, shall be used as a guide in developing and maintaining control plans. Supplier shall maintain a change history as part of its control plan to document implementation of changes.</p> <p>Supplier shall have control plans for all parts supplied to Delphi. Family control plans may be used for parts with common processes. Supplier shall clearly define the family on the control plan so that applicability is defined. The control plan shall include, as a minimum, the elements specified in ISO/TS 16949, Annex A.</p> <p>Supplier's design and process controls shall focus on prevention rather than detection and correction. Special attention shall be placed on the identification of input control characteristics rather than post processing inspection and containment.</p> <p>Repaired, reworked or out-of-process product shall be re-inspected to all control plan requirements and documented procedures.</p>

7.5.1.3	Verification of Job Set-ups. Supplier’s set-up verification standards shall include exchanges of manual or hand-held tools.
7.5.1.6	<p>Production Scheduling. Supplier shall be certified by Delphi as a capable and compliant EDI trading partner. Supplier shall send ASNs to Delphi no later than thirty (30) minutes after Supplier ships products to Delphi. Supplier shall notify Delphi within the same working day if Supplier encounters any EDI transmission failures and call Delphi to resolve EDI issues.</p> <p>Delphi shall provide Supplier with rolling forecast information for Supplier’s planning purposes. Supplier shall make shipments adhering to Delphi’s current ship authorization (examples: DELJIT, Call-Off, pick-up sheet, kanban, etc.). Supplier shall deliver products as released, including fluctuations equal to +/- twenty percent (20%) of the scheduled amount. Supplier shall immediately contact its Delphi plant scheduler if unable to meet requirements or if there are questions. For contract issues, Supplier should contact its Delphi buyer.</p> <p>Scheduling Lead Time. For purposes of this Agreement, “lead time” is the amount of time in calendar days permitted between the Supplier’s receipt of Delphi’s firm schedule and when Supplier shall have products available for shipment. Standard lead time allotted to Supplier during regular production is one week. Any exceptions to this standard lead time shall be agreed upon by Delphi and Supplier during the quoting process and documented in the purchase order(s).</p> <p>Standard Fabrication Authorization is two (2) weeks and standard Material Authorization is two (2) additional weeks, for a total of four (4) weeks. All information provided by Delphi beyond four (4) weeks is for planning purposes only. Any exceptions to these time periods shall be agreed upon by Delphi and Supplier during the quoting process and documented in the purchase order(s).</p>
7.5.3	Identification and Traceability Labels. Supplier shall package and label products in accordance with Delphi’s written requirements (including, without limitation, Delphi Global Packaging and Shipping Manual, Delphi Global Container Label Requirements Standard and Delphi European Odette Label Requirements Standard) located on www.delphi.com .
7.5.4.1	<p>Tool Inventory/Disposal. The Supplier shall furnish a tool inventory of all Delphi-owned tools (active and inactive) in the Supplier’s possession. The tool inventory shall be submitted to the Delphi buyer annually by January 31st. The inventory shall contain the following information for each Delphi-owned tool:</p> <p style="padding-left: 40px;">Tool part number(s) (typed in numerical order)</p>

	<p>Current tool revision Description Date parts last ordered Total cost of tool Quantity of parts produced from tool Remaining tool life Previous part number if tool has been changed to produce a new part number Delphi Design Engineer name</p> <p>Delphi shall determine the disposition of all Delphi-owned tooling and such disposition shall be communicated to the Supplier in writing by Delphi and include a Return Material Authorization.</p> <p>If requested by Delphi, Supplier shall mark tooling Property of Delphi, or Property of Delphi's customer, as applicable.</p>
7.6.1	<p>Measurement System Analysis. Supplier shall perform a gauge study on each gauge used for checking a special characteristic (significant, critical or Supplier identified) in accordance with the methods and timing described in the latest AIAG Measurement Systems Analysis Manual (MSA) to determine measurement system capability. Supplier shall have a containment plan for gauges that do not meet the specification in the MSA (such as 100% inspection, gauge improvement or other means). Supplier shall maintain gauge study records. The above requirements apply to measurement systems referenced in the control plans</p>
8. Measurement, Analysis and Improvement:	
8.1.1	<p>Identification of Statistical Tools. The Supplier shall use the latest edition of AIAG SPC for manufacturing process controls and AIAG MSA for measurement system equipment management.</p>
8.2.1	<p>Customer Satisfaction. Delphi requires Supplier to establish processes and designs to achieve zero defects, 100% on time delivery and green quality and shipping scorecards.</p> <p>Scorecards. Delphi monitors Supplier quality and shipping performance and drives corrective actions for quality and shipping improvement through the Supplier Scorecards. Supplier shall review and verify this monthly update and ensure action plans are developed as applicable to achieve green quality and shipping scorecards.</p> <p>Scorecard Usage to Drive Improvement. If the scorecard has red indicators or quality/shipping scores, the Supplier shall establish aggressive plans to drive improvement to green.</p> <p>If Supplier has a yellow quality or shipping score, supplier shall develop and implement action plans to improve to green.</p>

	<p>If Supplier is in Controlled Ship Level 2, in New Business Hold or has a twelve (12) month average score of red on its quality and/or shipping scorecard, supplier shall expedite appropriate corrective action steps.</p> <p>In addition, supplier shall notify its registrar in writing within 5 working days of being placed on Controlled Shipping Level 2 and/or New Business Hold.</p>
8.2.2	<p>Internal Audit. Supplier’s internal auditors shall be qualified as recommended in ISO 19011 Guidelines for quality and/or environmental management systems auditing. In addition, its internal auditors shall be competent in understanding and applying the Process Approach of Auditing (see ISO/TS 16949) and the AIAG.</p>
8.2.4	<p>Engineering Specification (ES) Test Performance Requirements. The Supplier shall develop a plan to meet in process testing requirements and submit it for approval as part of its PPAP package. Supplier shall include reaction plans to failures in the IP test plan.</p>
8.2.4.1	<p>Layout Inspection and Functional Testing. Supplier shall annually perform a layout inspection and functional verification to all engineering material and performance requirements. If discrepancies are found, Supplier shall contact Delphi Supplier Quality for resolution. Supplier shall submit corrective action and communication of the updated layout inspection to Delphi Supplier Quality for approval.</p> <p>Supplier shall annually perform a raw material certification with updated laboratory scope of accreditation.</p>
8.3	<p>Control of Nonconforming Product. The Supplier shall have an internal containment procedure that integrates the requirements of the Delphi Supplier Containment Procedure.</p>
8.5.1	<p>Continual Improvement. The Supplier shall use the SCRR in conjunction with continual improvement activities.</p>
8.5.2	<p>Corrective Action. Problem Case Response: Supplier shall monitor and respond to all Problem Cases issued by Delphi. Supplier’s initial response to a problem is due within 24 hours. Final response (with verified root cause analysis) is due within 15 calendar days, unless additional time has been requested and approved by the Delphi problem owner. Supplier shall complete a 5-Why Analysis as a means of ascertaining and verifying root cause analysis.</p> <p>Delphi shall communicate any cost recovery to Supplier with a Problem Case and through a cost recovery notice in Delphi Problem Solver. Supplier shall respond to the cost recovery notices within seven (7) days.</p>

Other Delphi Requirements

Other Delphi requirements with which Supplier must comply are listed below.

Other Requirement Subject Title	Other Requirements
Payment	For North America, new Suppliers shall complete an Enterprise Activities Group “EFT Payment Authorization” to effect electronic funds transfer.
Tooling	Tools. If tooling will be paid by Delphi, Supplier shall be paid for tooling upon completion of; full PPAP approval of the parts produced by such tooling. Delphi may, from time to time, require additional documentation of supplier’s actual tooling cost before issuing payment for tooling. If the Supplier is tool design responsible, then Supplier shall complete reproducible tooling prints within six (6) weeks after PPAP approval (or at start of regular production, whichever comes first) on all new program tools, tools undergoing an engineering change and current tools that are revised. Supplier, upon request from Delphi, shall also provide reproducible tooling prints for existing tools.
Transportation	For premium freight for which Delphi is responsible, the Delphi receiving plant will assign a Premium Transportation Authorization (PTA) number. Supplier shall document the PTA on its bills of lading.
Shipping	<p>Delphi shall name the applicable Incoterms in its purchase order(s). For shipments paid by Delphi, it shall define the logistics routing, mode, and shipping frequency. At a minimum, Supplier shall be able to ship products daily. When required, Supplier shall utilize Delphi’s selected Transportation Management System. Supplier shall include proper documentation with all products shipped.</p> <p>Supplier shall ship products in standard pack quantities in the smallest shipping container approved by Delphi. Supplier shall ship quantities of less than one (1) standard pack only if agreed to in writing by Delphi; no minimum order quantities shall be accepted.</p> <p>Supplier shall allow the authorized carrier’s agent to verify the shipped quantities against the scheduled quantities at the time the products are delivered to, or placed at the disposal of, the authorized carrier.</p> <p>If Supplier’s ship window compliance metric is not 100%, Delphi may require Supplier to carry buffer stock as defined by Delphi (at Supplier’s facility or a Delphi approved facility) until Supplier’s twelve (12) month average compliance is 100% per its supplier scorecard.</p>
Product Safety Officer (PSO)	Supplier shall identify a Product Safety Officer (PSO) for the manufacturing site and enter that information into the Delphi Supplier Profile on the Delphi Supplier Portal. The PSO is the first point of contact for the product and

	<p>reports directly to and/or is a member of the management team.</p> <p>Please refer to the detailed information regarding the requirements and expectations of the PSO posted on the Delphi Supplier Portal at: https://delphi.portal.covisint.com/web/portal/home</p>

Change Log	Date
<i>Clarified scope limited to direct material suppliers; deleted GSM – Global Supply Management from Section 3. Terms and Definitions; modified Section 7.2.3 regarding supplier administration of Delphi Supplier Portal requirement; modified first paragraph of “Shipping” section</i>	8/8/2016
<i>Added CQI 8, 16 and 18-23 to Section 2; added Supplier Quality definition to Section 3; Added “SQ” in three places to Section 7.3.6.2; removed reference to SPDP Appendix 28 from Section 7.6.1; Added requirement to notify registrar to Section 8.2.1; Modified language regarding requirements for payment of tooling costs; Added Supplement Section Product Safety Officer (PSO) to the “Other Requirements.”</i>	12/1/2015
<i>Eliminated the following language from Section 7.6.1: The complete MSA shall be performed on critical characteristic features or dimensions (Bias, Linearity, Stability, Reproducibility and Repeatability) of the gauge or equipment used to evaluate the characteristic. (NOTE: A Supplier-defined adequate method may be used for evaluating Linearity.)</i>	12/1/2014
<i>Added language to section 7.2.3, Quality Certification Documentation, requiring inclusion of quality certification expiration date on all supplier quotations</i>	9/1/2014
<i>Introduction modified instructing supplier to direct questions to Delphi buyer and reference to AIAG CQI-13 deleted due to obsolescence; Section 7.5.1.6 modified to clarify requirement; Shipping section modified to include advance confirmation of ship quantity</i>	6/1/2014
<i>Added Change Log to July 1, 2013 document</i>	7/26/2013
<i>Cover: Removed reference to specific edition of ISO/TS-16949 and ISO-9001</i>	7/1/2013
<i>Introduction: Removed reference to specific edition of ISO/TS-16949 and ISO-9001</i>	7/1/2013
<i>Introduction: Removed Robert Todak and added “Delphi contact”</i>	7/1/2013
<i>Section 1: Removed reference to specific edition of ISO/TS-16949 and ISO-9001 and replaced with “current version”</i>	7/1/2013
<i>Section 2: Removed reference to specific edition of ISO/TS-16949 and ISO-9001</i>	7/1/2013
<i>Section 2: Added references to CQI-13, CQI-14, CQI-15 and CQI-17</i>	7/1/2013
<i>Section 3: Deleted Delphi division names</i>	7/1/2013
<i>Section 3: Deleted DUNS number definition</i>	7/1/2013
<i>Section 3: Deleted “External Direct Suppliers” definition</i>	7/1/2013
<i>Section 3: Deleted “Shall” definition</i>	7/1/2013

Section 3: Deleted "Should" definition	7/1/2013
Section 3: Deleted "Supplier" definition	7/1/2013
Section 4.1: Deleted redundant language regarding compliance with Delphi's Customer Specific Requirements; reference to suppliers of non-automotive product and superfluous language	7/1/2013
Section 5.5.1: Deleted in its entirety	7/1/2013
Section 5.5.2.1: Deleted in its entirety	7/1/2013
Section 6.2.2.2: Deleted in its entirety	7/1/2013
Section 6.3.1: Deleted in its entirety	7/1/2013
Section 6.3.2: Deleted in its entirety	7/1/2013
Section 7.2.3: Deleted redundant "DSP" definition, redundant reference to red compliance score card, redundant reference to Ownership Change, redundant reference to C-TPAT	7/1/2013
Section 7.2.3.1: Deleted in its entirety	7/1/2013
Section 7.3.1.1: Deleted in its entirety	7/1/2013
Section 7.3.2.3: Deleted in its entirety	7/1/2013
Section 7.3.3.2: Deleted in its entirety	7/1/2013
Section 7.3.6.2: Deleted redundant references to prototype control plans, ordering, identification and delivery	7/1/2013
Section 7.3.6.3: Deleted redundant reference to shipping authorization	7/1/2013
Section 7.3.7: Deleted non-requirement language	7/1/2013
Section 7.4.1.1: Deleted non-requirement language regarding common material	7/1/2013
Section 7.4.3.1: Deleted reference to supplier's selection of sub-suppliers	7/1/2013
Section 7.4.3.2: Deleted in its entirety	7/1/2013
Section 7.5.1.4: Deleted in its entirety	7/1/2013
Section 7.5.2: Deleted in its entirety and requirement moved to Section 2	7/1/2013
Section 7.5.3: Deleted redundant language and added reference to Labeling, Packaging and Shipping standards; incorporated 7.5.5	7/1/2013
Section 7.5.5: Deleted in its entirety and integrated into Section 7.5.3	7/1/2013
Section 7.6.3.1: Deleted in its entirety	7/1/2013
Section 7.6.3.2: Deleted in its entirety	7/1/2013
Section 8.2.1: Deleted non-requirement language	7/1/2013
Section 8.2.4.2: Deleted in its entirety	7/1/2013
"Commitment to Excellence": Deleted in its entirety	7/1/2013
"Pricing": Deleted in its entirety	7/1/2013
"Currency": Deleted in its entirety	7/1/2013
"Payment": Deleted redundant language	7/1/2013
"Equipment": Deleted redundant language	7/1/2013
"Transportation": Deleted redundant language	7/1/2013
"Shipping": Deleted redundant language	7/1/2013
"Sourcing": Deleted in its entirety	7/1/2013
"Improvement and Development Management": Deleted in its entirety	7/1/2013
Change Log: Replaced "verbiage" with "language" eighteen places	
Updated ISO/TS 16949:2002 to ISO/TS 16949:2009 and ISO 9001:2000 to ISO 9001:2008 and link to download AIAG documents	3/15/2010
Updated Section 7.5.5.1 reference to 7.5.5.1 from 7.4.3.2	3/15/2010
Updated Delphi Divisions to current organization	3/15/2010
Modified Cost Recover supplier response time from 15 to 7 days	3/15/2010
Updated AIAG FMEA from 3 rd edition to 4th	3/15/2010
Updated Transportation section to reflect new standard freight terms FCA	3/15/2010

Updated Transportation section to reflect Dangerous Goods requirements	3/15/2010
Updated Shipping section to reflect Dangerous Goods requirements	3/15/2010
Updated Equipment section to include tooling requirement for Customer Billable tooling	3/15/2010
Scope - Changed Company to Delphi - clarification	1/26/09
Introduction – Changed Lana Boor to Linda Nelson and added Tracy White	1/26/09
7.4.3.1 – removed “Initial and periodic assessment documents of sub-suppliers shall be available for Delphi’s review as requested”	1/26/09
Commitment to Excellence added “As part of doing business with Delphi, we encourage our suppliers to have a strong environmental management system. Suppliers are also expected to adhere to Delphi principles of “Social Responsibility” and “Foundation for Excellence.” And links to Social Responsibility and Foundation for Excellence.”	1/26/09
Deleted Table of Contents	11/1/2007
Introduction modified.	11/1/2007
Commitment to Excellence and Excellence in relationship moved to added section ‘Other Requirement Description’	11/1/2007
Scope modified – was Section IV – DPSS reference added – Direct Automotive Supplier application highlighted.	11/1/2007
Section 2 – Normative Reference combines Section II. And III. CQI manuals added. Added “Delphi Global Packaging and Shipping Manual”	11/1/2007
Terms and Definitions – terms added and was Section 5 in previous issue.	11/1/2007
Lean Enterprise references moved to 6.3.1.	11/1/2007
Contact name changed in Introduction to Lana Boor.	11/1/2007
Reference documents added in section 2.	11/1/2007
Language added in Section 2.	11/1/2007
Some term definitions changed, added or deleted in Section 3.	11/1/2007
Section 4.1 language reorganized to address supplier quality certification requirements. Language regarding the Delphi Supplier Portal moved to Section 7.2.3.	11/1/2007
Section 4.1.b “Suppliers shall” changed to “suppliers are responsible”.	11/1/2007
Language in Section 4.2.2., replaced “include” to “integrated into”.	11/1/2007
Section 5.1.1 language changed to refer back to ISO/TS16949:2009. Other sections changed similarly are 6.2.2.2, 7.4.3.2, 7.5.1.4, 7.5.5.1, 7.6.3.1, 7.6.3.2, 8.2.4.2.	11/1/2007
Section 5.5.2.1., reduced to definition of Primary Contact. Remainder of language moved to ‘Other Requirement Description’	11/1/2007
Section 5.6, language leaned and focused.	11/1/2007
PCL changed to Production Control in document.	11/1/2007
Section 6.3.2, supplier “shall” added and other minor language changes.	11/1/2007
Section 7.1 reorganized and language updated. APQP references directed to AIAG manuals. Other language moved to ‘Other Requirement Description’.	11/1/2007
Section 7.1.3 – moved to “Other Requirements”.	11/1/2007
Section 7.1.4 moved to Section 7.3.7	11/1/2007
Section 7.2 moved to Section 7.4.1.1	11/1/2007
Section 7.2 and 7.2.1., Assessment, Pricing, currency, and payment reworded and moved to ‘Other Delphi Requirements’ section.	11/1/2007

Section 7.2.1.1 – Note for bulk materials removed.	11/1/2007
Section 7.2.2.2, language changed from “shall” to “be responsible to have”.	11/1/2007
Section 7.2.3 added, Customer Communication. Added Delphi Supplier Portal, Quality certification information, and other additions. Added C-TPAT requirements.	11/1/2007
Section 7.2.3.1, language moved to Pricing in ‘Other Requirement Description’. Added document requirements for NAFTA, Certificate of Origin, Country of Origin, and Shipping Across Borders. Manufacturer’s Affidavit instructions and template.	11/1/2007
Section 7.3.1.1, language changed from “shall” to “it shall be the supplier’s responsibility”.	11/1/2007
Section 7.3.3.2, referenced to Technical Specification ISO/TS 16949:2009	11/1/2007
Section 7.3.4, language “as part of SPDP” removed.	11/1/2007
Section 7.3.5, added requirements for Heat Treated Products AIAG CQI-9, Plating System Assessment, CQI-11, Coating System Assessment, CQI-12. Section 7.3.5 and Normative Reference, added CQI-11 and CQI-12 Special Processes.	11/1/2007
Section 7.3.6.2, minor language changes.	11/1/2007
Section 7.3.6.3 – added Run at Rate – revised language.	11/1/2007
Section 7.3.7 added requirements for control of design and development changes, supplier change request process outlined.	11/1/2007
Section 7.4.1.1, language added regarding regulatory conformity, Substances of Concern, and recycled content.	11/1/2007
Section 7.4.1.2, reorganized language to address supplier responsibilities for sub-suppliers to Delphi. Semiconductor requirement removed – obsolete. Added “The supplier is responsible to manage production risk through sourcing to financially stable sub-suppliers and monitoring sub-supplier financial stability.”	11/1/2007
Section 7.4.3.1, minor language changes. References and links added.	11/1/2007
Section 7.4.3.2, major reorganization and deletion of language regarding the process Delphi follows regarding Scorecard. Some language moved to Section 8.2.1.	11/1/2007
Section 7.5.1.1 and 7.5.1.2., control plan detail deleted in CSR. Reference made to Annex A in Technical Specification ISO/TS 16949:2009.	11/1/2007
Section 7.5.1.6, moved most language to: ‘Other Delphi Requirement’s Section under ‘Shipping’.	11/1/2007
Section 7.5.4. Tools moved to ‘Other Delphi Requirements’ section under ‘Equipment’.	11/1/2007
Section 7.5.5 – changed language and added SPI after “Supplier Packaging Information”.	11/1/2007
Section 7.5.5 some elements moved to ‘Other Delphi Requirement’s including Transportation and others.	11/1/2007
Section 7.5.1.2. deleted	11/1/2007
Section 7.5.3 – List of ‘Packing Slip Label’ requirements replaced with a reference to the ‘Label Specifications’ links.	11/1/2007
Sections 7.6.3.1, 7.3.1.1, 6.2.2.2, 5.1.1 changed to a reference to Technical Specification ISO/TS 16949:2009	11/1/2007
Section 8.2.1, Language changes related to certification body notification, scorecard usage, compliance ratings, and driver of continual improvement. Notification to Delphi of ISO or TS suspension moved to Section 7.2.3.	11/1/2007
Section 8.2.1.1. moved under Section 8.2.1.	11/1/2007

Section 8.2.2.1 moved to Section 8.2.1.	11/1/2007
Section 8.2.2.2, language deleted and reference to Technical Specification ISO/TS 16949:2009.	11/1/2007
Section 8.2.4.1, "shall" changed to "supplier's responsibility".	11/1/2007
Section 8.3, added requirement to have an internal Containment Procedure that integrates into the Delphi procedure.	11/1/2007
Section 8.5.1, added requirement to use the Supplier Suggestion Change Request program.	11/1/2007
Section 8.5.2, minor language deleted to eliminate redundancies.	11/1/2007
Transportation, "freight collect, title transfer our plant (FOB/FC TTOP)". Entire section moved to "Other Requirements".	11/1/2007
Section 7.2.1 removed, some language placed under "Other Requirements"	6/28/07
Section 7.1 - Strike "Task 37", leave the heading "Layered Audits". Correction.	6/28/06
Section 7.4.1.2, added "Suppliers shall provide their registrar with evidence of aggressive corrective action plans in place, confirmed by the customer, for their next third party audit, in the event they are still on NBH or CS Level 2. Otherwise, the supplier will be considered to have a minor non-conformance during the third party audit."	6/28/06
Section 7.4.1.2, based on language added to the GM Cust. Spec. Req. March 2006 revision. GM's language is "Small may also refer to volume supplied to automotive". Included language for small supplier, "Supplier's automotive business is less than 10% of their total business".	6/28/06
Section 7.4.3.1, removed 59-2 and 58-2 reference. Also added CQI-9 assessment option for supplier use with sub-suppliers. Added "or AIAG" comment.	6/28/06
Section 7.5.4.1, added statement "If requested by Delphi, supplier is to mark tooling Property of Delphi, or Property of Delphi's customer, as applicable." in response to Fords Directive E-108.	6/28/06
Section 8.2.2.2 added.	6/28/06
Section 7.4.3.1 changed language to "initial and periodic assessments of sub-suppliers shall be available for Delphi's review as requested.	6/28/06
Section IV Scope added new division names	6/28/06
Section 6.3.2 added language "or from performing/submitting any APQP event or task that would impact program launch or timing."	6/28/06
Section 7.1 added language "to help identify management and process gaps and to develop appropriate corrective actions."	6/28/06
Section 7.2 changed language of entire section.	6/28/06
Section 6.3.2 added language, "or from performing/submitting any APQP event or task that would impact program launch or timing. (i.e. R@R or PPAP)"	6/28/06
Added supplier responsibility to match certificate information to Supplier Profile prior to uploading of certificate.	6/20/05
Section 7.4.1.3, Incoming Product Quality	6/20/05
Emphasized supplier responsibility for sub-suppliers quality and performance throughout the life of the product.	6/20/05
Suggested Delphi documents for suppliers to use for sub-suppliers.	6/20/05
Added need for containment of high-risk sub-supplier issues.	6/20/05
Section 7.4.3.2, Supplier Monitoring	6/20/05
Added reference to quality section of the Supplier Scorecard to monitor supplier quality performance and drive corrective actions for quality improvement.	6/20/05

<i>Added Delphi expectations of suppliers to establish processes and designs with the ultimate goal of achieving zero defects and 100% on time delivery.</i>	<i>6/20/05</i>
<i>Added expectations of all suppliers at the manufacturing site level to achieve and maintain a green rating status on their scorecards. In the event the scorecard is not green; the supplier is required to establish aggressive plans to drive improvement.</i>	<i>6/20/05</i>
<i>Added warning that suppliers with a 12-month average score of RED on their quality scorecard will be considered to have a major non-conformance during a third party audit.</i>	<i>6/20/05</i>
<i>Section 7.5.1.1, FMEAS</i>	<i>6/20/05</i>
<i>Changed wording for PFMEAs to “When developing PFMEAs for production parts or material supplied to Delphi, the Delphi rating tables for 'Severity', 'Occurrence' and Detection shall be used in place of the rating tables referenced in AIAG FMEA 3rd edition, unless otherwise approved by Supplier Quality, based on the specific part or program circumstances. Approval by Delphi of a supplier’s PPAP will serve as the approval for the rating method utilized.”</i>	<i>6/20/05</i>
<i>Reworded “and” to “or” for “Potential failure modes with a severity of seven or greater shall be continually improved to reduce the occurrence to a one or reduce the detection to a five or lower.”</i>	<i>6/20/05</i>
<i>Section 7.6.1, Measurement System Analysis</i>	<i>6/20/05</i>
<i>Added note for linearity, “Note: A supplier defined adequate method may be used for evaluating Linearity.”</i>	<i>6/20/05</i>
<i>Section 7.6.3.1, Internal Laboratory. Added entire section from the TS16949: 2002 standard.</i>	<i>6/20/05</i>
<i>Section 8.2.1.1, Customer Satisfaction Supplemental – Specified Scorecard as a measure of Customer Satisfaction that suppliers must review monthly. Problem cases to be addressed as they happen</i>	<i>6/20/05</i>
<i>Section 8.5.2, Corrective Action – Minor non-conformance for suppliers that are RED in their Compliance Scorecard for Problem Solver registration.</i>	<i>6/20/05</i>