



# Supplier Quality Management System Manual

**A Corporate Overview**

GLOBAL QUALITY

## Table of Contents

- ***Introduction***..... 3
- ***Company Overview***..... 3
- ***GPC Global Supplier Quality Mission***..... 4
- ***Supplier Quality Management System***..... 4
  - ***Supplier Standard Requirements***..... 5
  - ***Supplier Audits***..... 6
  - ***Supplier Changes / Modifications***..... 6
- ***Supplier Metrics***..... 8
  - ***Financial Analysis***..... 8
  - ***Service Level Agreements***..... 9
  - ***Supplier Performance*** ..... 10
  - ***Supplier Selection & Evaluation*** ..... 11
  - ***Key Performance Indicators***..... 11
- ***Supplier Continuous Improvement***..... 12
  - ***Problem Solving***..... 12
  - ***Non-Conformance***..... 12
  - ***GPC Complaints to Suppliers***..... 13
  - ***Continuous Improvement***..... 14

## *Introduction*

This manual describes, in a condensed format, how Graham Packaging Company (GPC) assures quality services and materials from its suppliers. The manual covers most of the main topics found in the company's quality supplier management system:

- Company overview and a summary of the systems in place to assure supplier quality.
- Overview of the supplier quality management system.

The manual has two purposes:

- It briefly outlines the company's supplier quality standards for use by GPC employees and suppliers.
- It also provides an easy-to-follow overview of GPC's supplier quality systems for use by suppliers and other interested audiences.

## *Company Overview*

**Graham Packaging Company** is a global leader in the design, sale, and manufacture of value-added, custom blow-molded plastic containers for branded foods and beverages, personal care and specialty products, household products, chemical-based products, and automotive lubricants. Through superior design, engineering, and technology, we provide our customers with innovative customer packaging that helps them build the value and volume of their brands.

GPC has identified strategic imperatives, which cascade into goals and objectives for every Business Process. The strategic imperatives are:

- A Quality Focused Culture
- Turbo Charged Growth
- Technology as a strategic advantage
- Capital Competitiveness

### **Health, Safety and Environment**

GPC has a long-standing commitment to safety, health and the environment. The company is committed to:

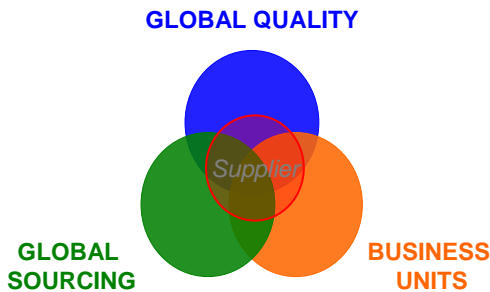
- Be compliant with the Environmental Policies of our Customers.
- Identify and respect laws and regulations.
- Favor the individual responsibility through awareness, information and training of all GPC employees.
- Identify all risks and potential environmental issues associated with our activities, by mean of systems that will allow us to reduce any potential identified effects.
- Develop metrics and establish objectives and targets, and review them periodically, in order to ensure the continuous adequacy of our Environmental Management System.
- Prevent, by appropriate means, any risk of accidental pollution.
- Provide and maintain safe and healthful working conditions, and to follow operating practices that will safeguard employees, our products, customers, and the general public.

Our suppliers are expected to have a similar commitment to safety, health and the environment.

## ***GPC Global Supplier Quality Mission***

This program is designed to improve supplier performance, reduce issues experienced at the plants, and reduce unnecessary costs experienced at GPC as a result of supplier non-conformance. The cornerstone of the program relies on plant input and feedback in relation to supplier complaints and performance discrepancies.

The strategy of the Supplier Quality Management Program is to work closely with Global Sourcing, Global Quality, Operations, and suppliers to establish, implement and maintain supplier quality programs and relationships to ensure all materials, services meet / exceed internal and external customer and manufacturing expectations.



## ***Supplier Quality Management System***

### **Purpose**

The purpose of this document is to communicate Graham Packaging Company L.P.'s ("Graham Packaging Company") requirements for supplier quality conformance to companies that supply products and services to one or more Graham Packaging Company facilities.

Suppliers are encouraged to go to the Graham Packaging Company website and review the Supplier Key Elements and Philosophy information.

This document can be found at the website [http://www.grahampackaging.com/container-suppliers/assets/GlobalSourcing\\_horz\\_3.pdf](http://www.grahampackaging.com/container-suppliers/assets/GlobalSourcing_horz_3.pdf)

### **General**

Graham Packaging Company will work with suppliers to assist them with the goal of achieving compliance to the specifications. This is required of all suppliers who provide production goods and services to any of our locations. These requirements supplement and are an extension to the purchase order. All new suppliers must demonstrate that they are capable of meeting the performance specifications required.

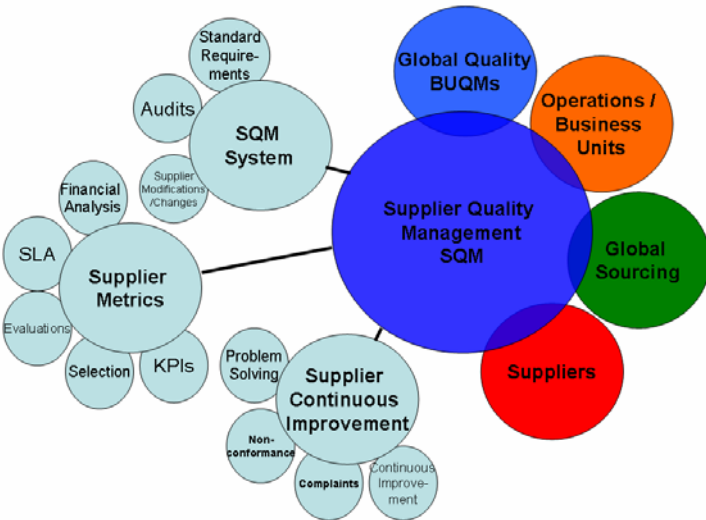
### **Additional Requirements**

The supplier may expect other specific requirements in addition to the requirements of this Manual. If applicable, these requirements will be communicated to the supplier through Graham Packaging Company's Global Sourcing Department. In the event that a supplier perceives a conflict between the needs of two or more Graham Packaging Company facilities, the supplier should contact the Graham Packaging Company Global Sourcing Department and request a determination of the applicable Graham Packaging Company Standard.

### **Governmental, Regulatory and Safety Constraints**

All materials and products must satisfy all current governmental, regulatory and safety constraints. MSDS (Material Safety Data Sheet) must be in Graham Packaging Company's possession before any material arrives to a site location.

## *Supplier Quality Management Program*



The overall Supplier Quality Management Program is comprised of various components. The main consortium consists of:

***The Supplier Quality Management System*** which includes Supplier Standard Requirements, Supplier Quality Audit System, and Supplier Changes / Modifications.

***The SQM Metrics*** which utilizes financial analysis, supplier evaluations, supplier selection, service level agreements, and KPI measurements.

***The Supplier Continuous Improvement*** category encompasses problem solving, non-conformance, complaints, and continuous improvement activities.

Each of these items is described in further detail within this document and in various breakout manuals associated with the overall Supplier Quality Management Program.

## Supplier Quality Management System

### *Supplier Standard Requirements*

#### **Product Safety**

The supplier is responsible for ensuring that material delivered to Graham Packaging Company meets all applicable regulatory requirements and GPC standards associated with product safety. These requirements include but are not limited to cleanliness, hygiene, pest control, etc.

#### **Packaging Requirements and Shipping Identification**

Graham Packaging Company requires all suppliers to provide material packaging that is adequate to protect materials from damage or product degradation. Each container shall be clearly marked and identified with the following, when applicable:

- Graham Packaging Company part number
- Purchase Order Number
- Date of manufacture
- Quantity
- Lot control number
- Bar coding (if required)

Graham Packaging Company reserves the right to require specific packaging practices such as allowable packing materials, bag-in-bag packaging and restrictions on packaging size. These requirements are communicated through engineering specifications, technical documents, and/or Purchase Order requirements.

### **Record Retention Guidelines**

Quality records and material supply records should be kept and made available to Graham Packaging Company if requested. GPC suggests that minimum record retention be identical to the guidelines identified in the ISO 9001:2000 Standard. If you would like more precise retention requirements, contact the Graham Packaging Company Manager, Global Supplier Quality.

## ***Supplier Quality Audit System***

### **Global Sourcing Contact**

All requests to become a new supplier for Graham Packaging Company must go through the Global Sourcing Department. The pertinent Global Sourcing member will initially assess any business opportunities that may be of mutual interest, and will initiate the process for approval.

### **Supplier Quality System Self-Assessment**

A potential supplier must complete the *Supplier Quality System Self-Assessment Questionnaire* in order to provide Graham Packaging Company with a general understanding of their quality system. When complete, the assessment must be forwarded to Graham Packaging Company's Manager, Global Supplier Quality. Existing suppliers may be asked to complete a quality self-assessment as part of Graham Packaging Company's Supplier Quality Program.

### **Quality System Audit**

A quality system site audit may be required prior to issuance of the initial purchasing agreement. This survey will be conducted by a Graham Packaging Company representative(s) and will verify the existence of a quality system and disciplines necessary to meet Graham Packaging Company's requirements. Graham Packaging Company reserves the right to assess current suppliers, as a result of a supplier's quality performance, when there is a change in the supplier's facility processes, a change in ownership, a significant change in the nature of the product previously supplied, or as part of Graham Packaging Company's Supplier Quality Program.

## ***Supplier Changes /Modifications***

### **Material Supplier Change Control Policy and Procedure**

Suppliers are required to identify any change in:

- product formulation,
- basic product components,
- physical properties,
- chemical properties,
- product identification,
- manufacturing process,
- manufacturing location,
- supply,
- status,
- product withdrawals,
- company ownership, etc.

The supplier is obligated to provide written notification of a proposed change to the Graham Packaging Company Global Sourcing Department and the Manager of Global Supplier Quality as soon as the potential change or modification is identified by the supplier. This is to allow adequate time for Graham Packaging Company to perform the necessary internal reviews, customer testing, and written approval for the change.

### **Engineering Change Request**

If the supplier has a concern or suggestion that can be resolved only with Engineering assistance, a complete description, accompanied by supporting documentation, should be submitted to the Graham Packaging Company's Manager, Global Supplier Quality. Graham Packaging Company strongly encourages suppliers to submit suggestions that will improve product quality or reliability, reduce costs, and/or be mutually beneficial. The Graham Packaging Company Manager, Global Supplier Quality will communicate the results of the Engineering review to the supplier.

### **Supplier Initiated Cost Reduction Proposals**

The supplier should submit all cost reduction proposals to the Graham Packaging Company Global Sourcing Department. Results of cost reduction activities will be handled through commercial negotiations with the Global Sourcing Department.

### **New Supply to Facility**

If a supply is new to a facility but not necessary new to Graham Packaging Company, it must still be treated as a supplier change or modification to the facility. As with all proposed changes, the proposed change must be submitted to the Global

Sourcing Department and the Manager, Global Supplier Quality. This includes items specified by a Graham Packaging Company customer as well as materials procured directly by Graham Packaging Company. Once the submittal is reviewed and deemed reasonable, it is to be qualified at the facility before it can go into full production. The facility is required to perform the full qualification and verify the new supply is acceptable.

### **Deviations**

There shall be no deviations to Graham Packaging Company Engineering drawings, specifications or other Graham Packaging Company requirements without written approval and/or deviation from Graham Packaging Company.

### **Quality Deviations**

The supplier is responsible for knowing the quality level of material before it is shipped. GPC will not accept material if the quality of the material is not within specification without prior written authorization.

If the supplier finds nonconforming material, the supplier may request consideration of product acceptance. A written request must be submitted through Graham Packaging Company's Global Supplier Quality Manager along with the following information:

- Part number or product name (with SAP reference if applicable)
- Quantity of parts affected
- Specification(s) involved
- Statistical analysis of the nonconforming characteristic(s), if applicable

- A statement of the requested deviation
- Issuance of a Nonconformance Report (NCR) along with root cause determination and actions plans for preventing a future occurrence.
- Plant or location(s) for which the material has been produced

Approval, if granted, will be made in writing to the supplier. If the nonconforming material is approved, the NCR report must accompany any shipped nonconforming material. The supplier should not rely on GPC accepting nonconforming material and should adjust their production accordingly to ensure the supply to GPC is maintained and there are no service interruptions.

### **Quality Verification**

As stated previously, The supplier is responsible for knowing the quality level of material before it is shipped. Non conforming material is the responsibility of the supplier. If non conforming material is received by Graham Packaging Company, it is the suppliers responsibility to provide replacement material promptly and provide an RMA for the nonconforming material.

## **Supplier Metrics**

### ***Financial Analysis***

The number of suppliers currently engaged by Graham Packaging Company is extensive; as a result, it is imperative that GPC focuses primarily on the suppliers that have a large financial impact on the overall business. In order to assist in determining which suppliers or more importantly which materials or services supplied have the largest opportunity for cost savings or the most impact on overall financial performance, a brief survey has been developed.

This survey will assist in determining if the supplier/ material/ service should become a focus for:

- Negotiations (price, service, quality, lead-time, etc)
- Request for competitive bids
- Corrective Action (non-conformance performance)
- New Technology
- Service Level Agreement
- Quality Audit
- Cost Saving Projects
- Replacement
- Elimination, etc.

The survey can be completed by any GPC employee who recognizes an opportunity for improvement. The completed survey is to be turned into the Manager of Global Supplier Quality via email for review.

If appropriate, an action plan will be developed and executed to take the necessary steps in obtaining the proposed improved component(s) of the supplier / GPC relationship.

## *Service Level Agreements (SLA)*

### **Service Level Agreements (SLA)**

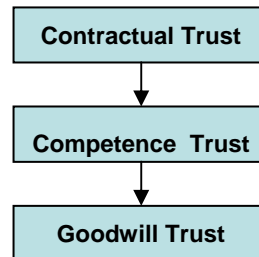
A Service Level Agreement is a two way agreement, between a service provider and its customer, used to define roles and responsibilities. Its purpose is to quantify acceptable levels of service to the customer and to define the capabilities of the supplier. This non-contractual agreement documents intent and capabilities with the idea of encouraging improvement in performance. It should be utilized to:

- develop partnerships,
- define roles and responsibilities,
- create constructive dialogues,
- provide focus.

A primary reason to develop an SLA is to build trust between the customer and the provider. This is accomplished by:

- honestly discussing the needs and capabilities of each party
- establishing clear objectives for each party at each element of the Supply Chain
- ensuring participants are capable of performing and providing an incentive for improving

Three types of trust are present in the supplier / customer relationship. These separate trusts build upon each other:



Contractual trust is the practice of keeping to formal legal agreements. This relationship in itself does not create an atmosphere of motivation to make improvements to the Supply Chain.

Competence trust is the confidence that a customer or supplier is able to do what is promised. This is an earned trust that helps to solidify the customer/supplier relationship.

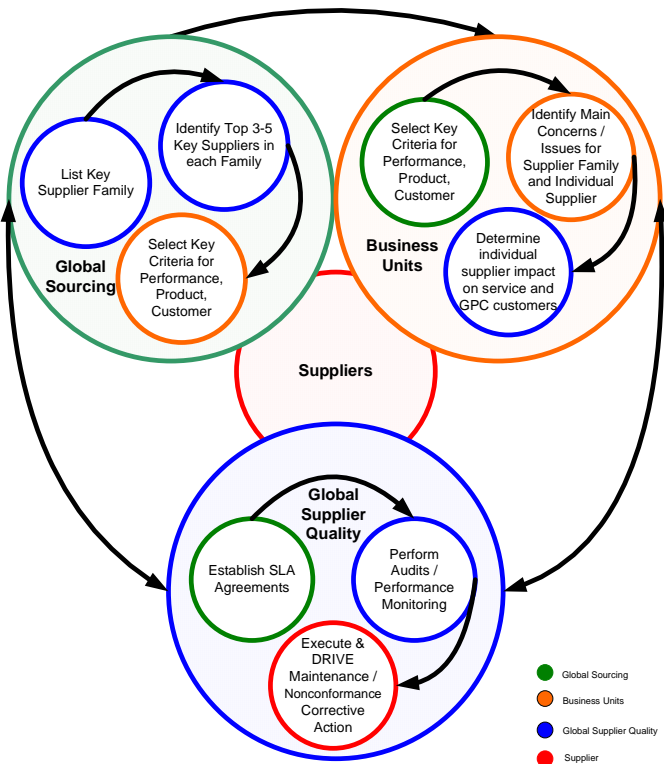
Goodwill trust is the sense that the other party will behave appropriately without the need for specific contractual promises. This is an imperative in any customer/supplier relationships.

## Stakeholders

The primary stakeholders in the development and execution of Service Level Agreements are

- Global Sourcing
- Operations
- Global Quality
- Suppliers

### SUPPLIER QUALITY IMPROVEMENT PROCESS FLOW / STAKEHOLDERS



Global Quality assists in coordinating the stakeholders and gathering data to assist in the creation and implementation of the SLA. Once the draft of the SLA is completed negotiations begin with the supplier to finalize the document.

Overall supplier performance will be reviewed as indicated in the SLA or as necessary based on performance.

## Supplier Performance

Graham Packaging Company maintains records in order to evaluate suppliers when considering continuation, expansion or termination of business. Examples of such records are:

- PPM of nonconforming material
- Nonconforming Material Reports (NCR's)
- Number of complaints from facilities
- Nature of complaints
- Severity of complaint
- Response to requests
- 100% on-time delivery with required quantities
- Cost reduction proposals
- Competitiveness and ability to meet marketplace pricing
- Proven track record of engineering support/technology
- Supplier responsiveness to quality issues

The evaluation process utilizes an in-depth investigation to compare and determine which supplier is best suited to meet the needs of Graham Packaging.

In some cases, the process takes a team approach to solicit supplier information and make comparisons to determine the appropriate course of action.

Evaluations will be completed for various reasons such as:

- New GPC Supplier
- Large Capital Expenditures
- New Business Ventures
- Strategic Business Expenditures
- Request for bids

## ***Supplier Selection & Evaluation***

### **New Business Ventures, Capital Spending, Large Dollar Expenditures, Strategic Business Expenditures, Key Material or Service Items**

The process is initiated to select a strategic supplier. The objective of this sourcing strategy is to obtain competitive costs with best-in-class quality and lead times. The supplier should be a leader in their field who will pursue continuous improvement in cost, quality, and lead times. The prospective candidates must possess the eligibility to manufacture the desired supply. Prospective candidates will be provided with two questionnaires. One is to assess the quality systems and the second is to do an overall assessment of the ability to meet GPC requirements. A selection committee will evaluate the responses and conclude if your company is a candidate for further review. The next phase of the process will be to visit your location for a more detailed review.

### **New Supplier Selection**

Graham Packaging Company utilizes a formal approach to qualifying new suppliers. This process eliminates bias from the decision and helps to identify the correct supplier for the GPC need.

The process begins with establishing the need for the material or service and identifying the attributes and specifications necessary for the supplier. A bid process ensues along with a supplier evaluation.

### **Existing Supplier Selection**

In order to evaluate / rank suppliers, it is important for Graham Packaging to review all components of supplier performance and price.

Several attributes are utilized to assess the supplier. This allows Graham Packaging to determine which supplier will provide us the best overall performance.

### ***KPI Metrics***

Graham Packaging Company tracks supplier performance using Key Performance Indicators. These indicators include but are not limited to:

- Number of complaints per supplier
- Number of complaints by GPC facility
- Number of complaints by type
- Number of complaints by supplier by GPC facility
- Number of complaints compared to last year, last month, etc
- Number of complaints compared to other suppliers
- Severity of complaint
- Resolution of complaints
  - Timeliness
  - Ease
  - Responsiveness

Written corrective actions may be required if the supplier's performance does not meet the yearly minimum goals established for both Quality and Delivery performance.

Suppliers who would like details on their individual KPI metrics as measured by GPC can contact the Manager, Global Supplier Quality.

It is expected that suppliers are aware of their performance and have action plans in place to reduce the number of overall Graham Packaging Company complaints by a minimum of 50% annually.

## Supplier Continuous Improvement

### *Problem Solving*

Understanding the root cause of issues is key to eliminating problems and preventing repeat occurrences. Graham Packaging Company expects its suppliers to provide in-depth root cause analysis for any issues of non-conformance (i.e. quality, service, delivery, etc). From the root cause analysis, detailed corrective action plans with assigned responsibilities and completion dates are to be established. These plans should be intended to eliminate the possibility of reoccurrence.

In cases where non-conformance occurs, follow up and feed back is essential. Obviously expedited replacement material is necessary, complaint resolution is also necessary. This follow up communication helps to build the relationship between GPC and the supplier by building confidence and trust.

Several tools are available for troubleshooting, problem solving, and root cause analysis / corrective action implementation. One in-depth tool that GPC utilizes and finds beneficial is the 8D process.

The 8D process utilizes eight steps to complete the problem solving process. These steps begin after you prepare for solving the problem and include:

- Assemble Team
- Describe Problem

- Contain the Problem
- Diagram (Diagnose Root Cause using tools such as the 5 whys & cause/effect, establish the action plan)
- Solve the Problem
- Validate (implement corrective actions and ensure they work)
- Prevent (ensure corrective action is permanent and successful)
- Wrap up the team

### *Supplier Quality Non-conformance*

#### **Quality Hold for Inspection**

A Nonconforming Report or Quality Hold for Inspection notification may be issued to the supplier when a Graham Packaging Company facility detects nonconforming material.

A written corrective action response directed to the Quality Department of the facility is required from the supplier detailing the root cause of the discrepancy with both short-term and long-term corrective actions with effective execution dates. An initial response, including containment action, must be provided within 48 hours (two working days) from the date it is received.

Immediate response and replacement material may be necessary if the nonconformance jeopardizes GPC production or GPC customers.

Final resolution, which includes closure of the complaint, should be made within thirty (30) days after the supplier receives the complaint from GPC.

A written request for additional time should be directed to the Quality Department of the appropriate Graham Packaging Company facility. The written request must include the action plan and time line for implementation. In certain circumstances, a formal Corrective Action Report may be required ( i.e. 8D problem resolution).

### **Product Recall / Recovery**

In the event there is an incident that requires a customer or consumer recall or recovery, GPC demands an expedited time line for an immediate response from suppliers. GPC expects full support and cooperation from the supplier in a product recall/recovery situation. Immediate action is essential and required to ensure customer and consumer satisfaction and safety.

## ***GPC Complaints to Suppliers***

### **Graham Packaging Facilities Responsibility**

It is the responsibility of the GPC facility location that has the issue to enter the complaint in the GPC notification system. The GPC facility is to notify the supplier of the complaint and discuss replacement materials if necessary. The facility should come to resolution with the supplier for the majority of complaints. For GPC complaints that involve dollar claims, facilities should notify and involve the Global Quality Department's Manager, Global Supplier Quality prior to submittal of the monetary claim to the supplier.

In addition, for complaints that are:

- severe,
- consistently repeated,
- directly impacting GPC customers,
- lacking supplier response,
- lacking supplier resolution,
- lacking supplier urgency,
- lacking supplier follow through,
- causing facility downtime, etc

The GPC facilities should contact the Manager, Global Supplier Quality for support and assistance in achieving resolution.

Suppliers that are not able to perform as required by GPC will be placed on non-conformance corrective action programs and closely monitored for improvement. GPC will assist these vendors in detailing what service attributes are in need of improvement. The supplier will be expected to respond with an action plan based on root cause analysis with timelines for completion and who has been assigned the responsibility to execute. Suppliers will be expected to provide regular updates (to be determined when the non-conformance corrective action program is implemented) with progress metrics.

### **SAP Z2 Complaint Log**

The data that is entered into the SAP system by each individual facility for supplier complaints is evaluated and analyzed each month. This data is utilized to determine which suppliers require significant focus. The facilities can access this KPI evaluation on the *Intragraham (Departments → Quality → Supplier Quality Management → Supplier Metrics)* at any time.

## *Continuous Improvement*

### **Quality Performance / Process Improvements**

In some instances Graham Packaging Company may ask for process performance data. This may entail but is not limited to the following:

- All Key Characteristics,  $ppk \geq 1.66$
- Gage R & R Studies  $>90$
- Process FMEA
- MSDS (Material Safety Data Sheet)
- Authorized Engineering Change documents
- Checking aids
- Design Engineering Approval
- Appearance Approval Report
- Design Records (math data, part drawing, specifications)
- Design FMEA

GPC will work with the supplier in circumstances where this data is necessary but not readily available.

### **Supplier Team Meetings**

In order to continue to drive improvements, Graham Packaging will develop functional teams with individual suppliers to identify areas of opportunity to make improvements and reduce costs. These teams will be comprised of various members of Graham Packaging Company and key contacts from the suppliers.

The team will strengthen the relationship between the supplier and GPC by focusing on continuous improvement activities, trust, cost saving initiatives, and performance.