

# **VOLVO**

## Key Elements Procedure 1 General Requirements

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## 1 FOREWORD

**Quality** has successively come to mean more than quality assurance itself. The supplier must be able to take complete responsibility for his effect on the environment and also take a holistic view regarding material handling and information exchange. The ability to achieve effective continuous improvement requires good knowledge of modern tools and methods that are offered by the quality technology.

## 2 APPROVED LEVEL IN SEM

### 2.1 Principles

The supplier evaluation shall comprise all aspects that are important for an environment of co-operation between the Volvo Company and the supplier.

The SEM shall be used in all cases where the standard of a supplier for production material is to be defined. It can be used both for existing and potential suppliers.

### 2.2 Co-operation between the Volvo companies

Supplier Evaluation Model has been accepted and will be applied for deliveries to:

- Volvo Trucks
- Renault Trucks
- Mack Trucks
- Volvo Powertrain
- Volvo Parts
- Volvo Aero
- Volvo Buses
- Volvo Penta
- Volvo Construction Equipment

The evaluation model is common for the companies as well as the criteria set up for the evaluation. In principle evaluation is carried out by the company having the biggest business share, or in case of potential supplier by the company planning potential future business.

## 2.3 Evaluation model - SEM

Within the framework for SEM a broad spectrum of the suppliers management capability and systems with regard to engineering and production capabilities are evaluated Each evaluation area is scored depending upon result as follows: 0, 1, 2 or 3 points, with zero indicating a poor result and three equating to excellent, or fully meeting the expectations. For each criteria, the result is calculated as a percentage ratio of the total sum. Some parameters may deal with activities that are not relevant for all suppliers, in such cases it is marked "not applicable" (N/A) and the question is deleted from total calculation.

The purpose with the model is to:

- Make available a basis for evaluation of existing and potential suppliers.
- Provide a unified procedure for all Volvo companies to allow full exploitation of the results within Volvo.
- Deepen the knowledge about each supplier.
- Act as an improvement tool for developing suppliers and the supplier structure.
- Assist in fact-based decision making.
- Share information about a supplier to the Volvo Group organisations.

Volvo personnel carry out evaluations in cross-functional teams (Supplier Quality Assurance, Product Development , Logistics, After-market etc.). A SEM-lead auditor normally located in the purchasing organisation manages the team.

Evaluations can be performed for existing as well as potential suppliers. As to potential suppliers there are some "stopping parameters" which must be evaluated as approved (min.1pt) in order to be selected as a Volvo supplier.

In exceptional circumstances a business decision may be taken to accept a supplier for new business even if a stopping parameter is present at the SEM audit. Again, this will be in exceptional circumstances only and can only be taken if supported by a detailed supplier improvement plan to address the stopping parameter. The plan should be approved by the supplier's senior management and be over a time scale of not more than 12 months. The plan should also contain regular planned regular review of status and feedback to Volvo nominated representatives.

## 2.4 Preparations and collection of facts

In connection with the planning of an evaluation the supplier company can be asked beforehand to present fact based data and presentation material in order to carry out the evaluation as efficiently as possible. Likewise internally in Volvo available data are collected to make the evaluation as objective as possible.

## 2.5 Evaluation criteria

		N/A	0 pts	1 pt	2 pts	3 pts
<b>1</b>	<b>Company Profile</b>					
1.1	Ownership		0			
1.2	Global ability		0			
1.3	Dependency		0			
<b>2</b>	<b>Management</b>					
2.1	Management		0			
2.2	Customer satisfaction		0			
2.3	Ethical standards		0			
2.4	Risk management		0			
<b>3</b>	<b>Environment</b>					
3.1	Environmental Management System		0			
<b>4</b>	<b>Quality</b>					
4.1	Quality system		0			
4.2	Quality planning, Part Quality Assurance		0			
4.3	Quality performance of deliveries		0			
4.4	Reliability		0			
4.5	Problem solving		0			
4.6	Management of critical characteristics		0			
<b>5</b>	<b>Logistics</b>					
5.1	Capacity management		0			
5.2	Delivery precision/ Service level		0			
5.3	Electronic communication		0			
<b>6</b>	<b>After-market</b>					
6.1	Documentation		0			
6.2	Service literature		0			
6.3	Co-operation & support		0			
<b>7</b>	<b>Competence</b>					
7.1	Product and industrial technology		0			
7.2	Industrial engineering		0			
7.3	Customer support and communication		0			
7.4	Maintenance		0			
<b>8</b>	<b>Product development</b>					
8.1	Product development process/ Project support		0			
8.2	Product engineering technology		0			
8.3	Prototypes		0			
8.4	R&D		0			
8.5	Design changes		0			
<b>9</b>	<b>Finance</b>					
9.1	Financial evaluation		0			
<b>10</b>	<b>Productivity</b>					
10.1	Process of internal cost reduction		0			
<b>11</b>	<b>Sourcing</b>					
11.1	Sourcing process		0			
11.2	Subcontractor performance		0			

**Total average**

**Summary**

█ stopping parameter

x = N/A not applicable (reduces number of applicable points accordingly)

## 2.6 Summary of results and follow-up

After the evaluation a summary of the results are made, the result of each criterion and the total summarised output is calculated as a percentages. . The result is informed to the supplier who may be asked to submit a plan for improvement actions depending on the result.

## 3 VOLVO AS PREFERRED CUSTOMER

We like to be valued as preferred customer by our suppliers and want the suppliers to take the view of business with Volvo as a mutually beneficial relationship. With both parties benefiting from shared technical knowledge, with a secured long term business relationship.

We need to be the first to benefit from the suppliers' innovation and like to benefit from their best performances on current business and preferred status in capacity allocation.

Suppliers shall give necessary support to Volvo in relation to other customers. A well-covered and represented business in the automotive/aerospace branch should be considered to be positive for Volvo. Normally the preferred range of dependency upon Volvo is 10 - 30%. The turnover relation between Volvo and other customers need to be in balance. The supplier shall not depend on another customer to a too high extent.

Suppliers must be willing to work in a confidential manner, and willing to enter into a long-term relationship. The supplier shall give Volvo a high priority in all aspects.

The supplier's attitude to actively support Volvo in solving problems is essential.

Suppliers shall exceed the Volvo basic requirements and also give proposals for improvement in cost, quality, logistics etc.

The supplier is outstanding in commitment and handling of relations with Volvo.

The Volvo meaning of Supplier Co-operation is the creation of long-term relationship through the stating and integration of knowledge and understanding of each other's processes, procedures and ideals.

*From co-operation to integration*



Process-driven development requires that the supplier is involved in the early stages of the product development process and that the supplier participates regularly as a full member of the cross-functional working groups at Volvo.

Some suppliers take complete responsibility for a certain system and thus obtain the position as system supplier.

## 4 Honouring the Volvo Purchasing Agreement

The Volvo Purchasing Agreement mirrors the corporate view on a relation with the supplier. From a Volvo point of view, it is important that the agreement is accepted and honoured by our supplying partners.

Honouring the agreement implies that suppliers are considered as preferred.

The purchasing agreement is a fundamental platform for the business relationship with our suppliers. It outlines the conditions between Volvo and the supplier for the purchase and delivery of production parts and spare parts. In addition to traditional commercial terms on delivery, payment etc the purchasing agreement is also part of the key elements for a Volvo group supplier.

Purchasing agreements shall be signed with all of our suppliers.

Honouring the purchasing agreement and complying to the contract also means:

- Delivering quality parts – supporting our demanding customers expectations on Quality products.
- Maintaining a safe and reliable material supply system.
- Contributing to Volvo's core values.

In addition the Volvo Purchasing Agreement is an important document for compliance with The Sarbanes-Oxley Act (SOX) rules, providing internal control of business transactions related to contracts and the business administration process with a supplier. The SOX is a legislation for US financial market to protect investor's interests.

## 5 EDI-COMMUNICATION IN THE WHOLE CHAIN

To support reducing development and order to delivery leadtimes EDI (Electronic Data Interchange) communication throughout the supply chain is a considered as a key success factor to support this.

In addition other benefits can be gained including:

- **Reduced costs:** information is registered automatically instead of manually. The information can be re-used. Both parts can obtain cost savings.
- **Higher quality:** Manual work is reduced, which means that the error rate is reduced. Quality is the most evident advantage; it both lowers the costs and gives satisfied customers.
- **Reduced lead-times:** Fast handling of the information is a condition for more efficient distribution and reduced lead-times. To obtain full effect of the EDI-implementation, the EDI-messages have to be automatically processed in the receiving system.

- Reduced stock:** By reduced lead-times you can reduce the stock level at both the buyer and supplier. It is not so important to keep a buffer stock. The possibility to automatically scan the received goods, results in a more efficient warehouse administration.
- Competitive advantages:** Some assignments disappear and some are changed or simplified. The resulting cost savings will represent a strategic competitiveness improvement.
- Better customer service:** The most common reason for a company to start using EDI is to meet customer demands.
- Improved environment:** Less paper consumption, printed and distributed.

Hence it is expected that our suppliers should have EDI implementation not only with Volvo but also with their 2<sup>nd</sup> tier suppliers.

**What does Volvo communicate with the suppliers via EDI?**

- Product design
- Request for Quotations
- Quotations
- Purchasing agreements
- Prices, payment / delivery conditions
- Delivery schedules / Material Releases
- Ship Notices
- Invoices
- Inspection Reports

Specifications and versions to be found at <http://www.volvo.com/volvoit/edi/en-gb>