

# Supplier evaluation method

## 1 Preamble

In a partnership with our strategic suppliers, it is our intension to work together for a continuous improvement of the quality of our products, delivery-performance and service as well.

An important basis is the evaluation of our suppliers once a year. This contains the evaluation of the performance, classification of the result and identification of potential improvements.

This document gives you an overview of the evaluation procedure and therewith informs you about the requirements which we demand from our suppliers.

## 2 Evaluation period and systematics

The evaluation period contains the last four quarters as well as the last 12 months as a separate evaluation period. Please mind that the total scores do not reflect the arithmetic mean values of the four quarters. The total scores show the last 12 months as a separate period of evaluation.

## 3 Set of main criteria and sub-criteria

We evaluate our suppliers according to five main criteria that consist of two to four sub-criteria each. The respective weighting of the (sub-)criteria is summarized in the following listing.

- **Quality (25%)**
  - Complaints 30%
  - ppm rate 30%
  - Status of certifications 20%
  - Audit results 20%
- **Pricing (20%)**
  - Price level 30%
  - Price trend 30%
  - Cost transparency 20%
- **Logistics (20%)**
  - Ability to deliver 40%
  - Delivery reliability 40%
  - Logistics concepts 10%
  - EDI integration 10%



- **Technology (15%)**
  - Engineering support 50%
  - Technological innovation 50%
- **Relationship (20%)**
  - Support of Customer Service 25%
  - Cooperation of Sales staff 25%
  - Senior Management commitment 25%
  - Collaboration of Quality team 25%

For further details regarding the evaluation method used for the respective criterion please see section 3.1- 3.5.

### 3.1 Quality (25%)

The weighting for the main criterion “Quality” is 25% and consist of the four sub-criteria “Complaints”, “ppm rate”, “Status of certifications” and “Audit result”.

#### 3.1.1 Complaints (30%)

This criterion shows the registered complaints of the last four quarters as well as the last 12 months in total.

$$\text{registered complaints} = \frac{\text{no. of complained deliveries}}{\text{total no. of deliveries}}$$

The respective percentage value is expressed in points according to the following table.

Registered complaints	Points
x=0%	100
0%<x≤0,5%	80
0,5%<x≤1,25%	60
1,25%<x≤-3%	40
3%<x≤5%	20
x>5%	1

#### 3.1.2 ppm rate (30%)

The ppm rates are analyzed by comparing the reported non-conforming quantity of components in finished goods with the total quantity of the supplier’s incoming quantity.

Formula for non-conforming rating:

$$\text{non - conforming rating} = \frac{\text{no. of non - conforming parts}}{\text{no. of incoming parts}} \times 1000000$$

The ppm metric is determined from the non-conforming rating using the point score below:

Non-conforming rating	Points
0 < x ≤ 10	100
10 < x ≤ 25	80
25 < x ≤ 50	60
50 < x ≤ 200	40
200 < x ≤ 999	20
x > 999	1

### 3.1.3 Status of certifications (20%)

This sub-criterion shows the status of certifications. The score is given according to the following table whereby only the MELECS relevant plants are considered.

Certification	Points
ISO 9001	50
ISO 14001	+20
ISO/TS 16949	+30

For distributors there is a slightly different evaluation method which compensates for the non-applicability of ISO/TS ( $\frac{\text{respective points from table above}}{70\%}$ ).

### 3.1.4 Audit result (20%)

This score shows the audit result achieved. In case of downgrading 10 points are deducted. For potential analysis green is considered as 95 points, yellow as 80 points. Only scores of audits not older than 2 years are taken into account.

## 3.2 Pricing (20%)

The weighting for the main criterion "Pricing" is 20% and consist of the three sub-criteria "Price level", "Price trend" and "Cost transparency".

### 3.2.1 Price level (30%)

The price of each material number is compared to the average price of all alternative suppliers that offer the same component. Material numbers with single sources are excluded.



Only finally booked invoices are considered (status 5 in the relevant SAP tables). The points are given according to linear functions. Positive deviation means that the supplier offers better prices than the average prices of all other suppliers for the respective components.

Deviation from average	Points
$x \geq 10\%$	100
$0\% \leq x < 10\%$	75-100
$-5\% < x < 0\%$	1-75
$x \leq -5\%$	1

### 3.2.2 Price trend (50%)

The supplier's prices of the evaluation period are compared to those of the previous period. The invoiced quantity of the evaluation period is the basis for comparison. Material numbers that have not been invoiced in the previous period are excluded.

Only finally booked invoices are considered (status 5 in the relevant SAP tables).

The points are given according to linear functions. Positive deviation means that the supplier improved its prices compared to the previous year.

Deviation from average	Points
$x \geq 10\%$	100
$0\% \leq x < 10\%$	75-100
$-5\% < x < 0\%$	1-75
$x \leq -5\%$	1

### 3.2.3 Cost transparency (20%)

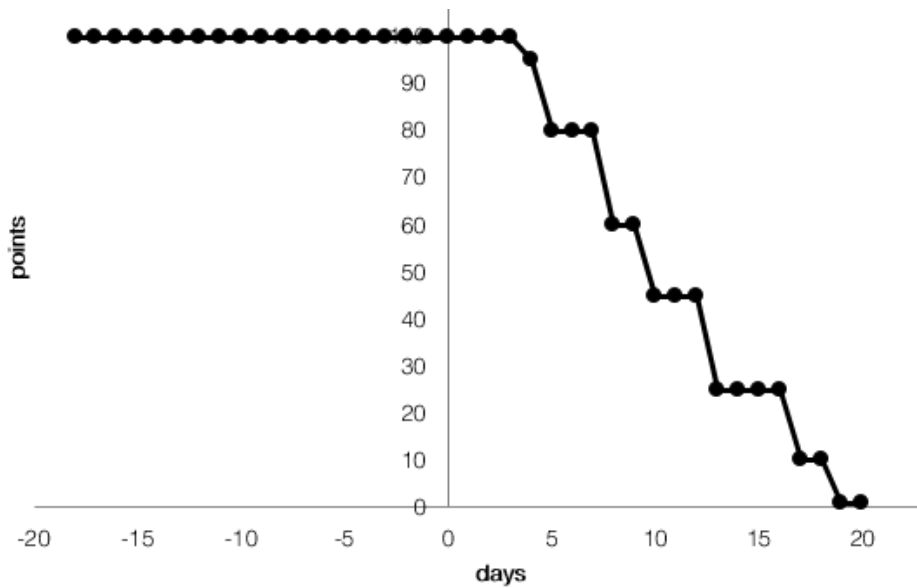
Cost transparency is a subjective criteria given by the respective Strategic Purchasing Manager. It should reflect the supplier's willingness to disclose cost breakdowns and other detailed pricing information.

## 3.3 Logistics (20%)

The weighting for the main criterion "Logistics" is 20% and consist of the four sub-criteria "Ability to deliver", "Delivery reliability", "Logistics concepts" and "EDI integration".

### 3.3.1 Ability to deliver (40%)

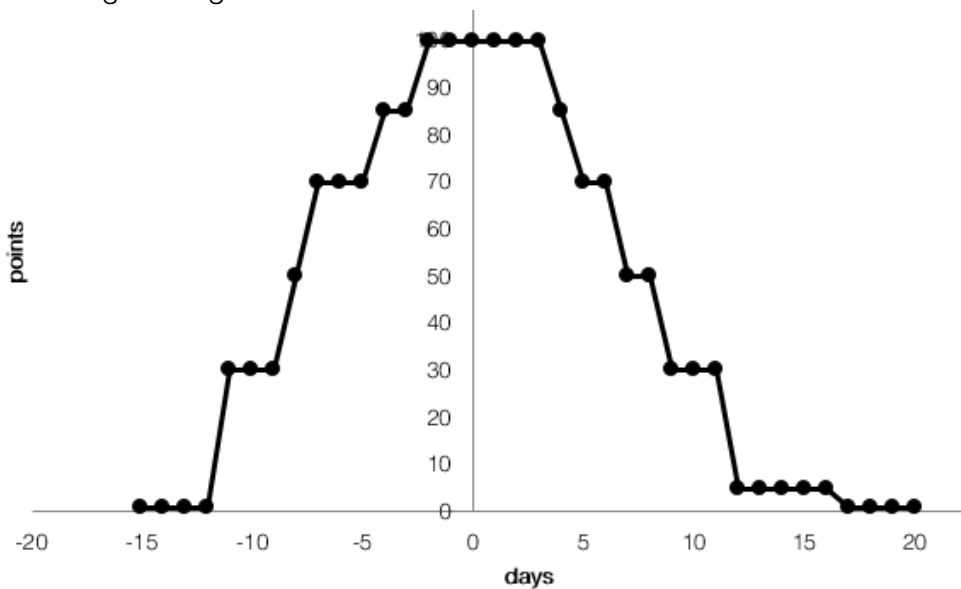
"Ability to deliver" is the conformity between required date and delivery date confirmed by the supplier. This sub-criterion is calculated for each single shipment where the delivered quantity is at least 80% of the ordered quantity using the following scoring:



The total score reflects the average performance of the supplier.

### 3.3.2 Delivery reliability (40%)


This sub-criterion reflects the supplier's ability to deliver on time. This criterion is calculated for each single shipment where the delivered quantity is at least 80% of the ordered quantity using the following scoring:



The total score reflects the average performance of the supplier.

### 3.3.3 Logistics concepts (10%)

This sub-criterion is evaluated by the logistics team. 100 points are given for suppliers with perfectly working consignment stock agreements (or similar logistics concepts) in place. If



the supplier is willing to implement a consignment stock short-term the logistics team can also give 100 points. If there occur any problems during the evaluation period points will be deducted accordingly. 1 point is given to all suppliers where there is no consignment stock agreement in place.

### 3.3.4 EDI integration (10%)

100 points are given to suppliers with whom we have EDI integration, 1 point for those without. If there are any problems during the evaluation period, points will be deducted accordingly. This sub-criterion is evaluated by the logistics team.

## 3.4 Technology (15%)

The weighting for the main criterion “Technology” is 15% and consist of the two sub-criteria “Engineering support” and “Technological innovation”.

### 3.4.1 Engineering support (50%)

This sub-criterion reflects how well the MELECS’ engineering team is supported by the supplier. The score is from 1 (very bad) to 100 (excellent) points.

### 3.4.2 Technological innovation (50%)

“Technological innovation” shows the technological capability of the supplier in its market. This sub-criterion is evaluated by Strategic Purchasing. Very innovative companies that use state of the art technology will get the maximum of 100 points. Distributors are not evaluated.

## 3.5 Relationship (20%)

The main criterion “Relationship” consists of the following four sub-criteria: “Support of Customer Service”, “Cooperation of Sales staff”, “Senior Management commitment” and “Collaboration of Quality team”. All those sub-criteria are subjective assessments.

### 3.5.1 Support of Customer Service (25%)

The sub-criterion “Support of Customer Service” is evaluated by the logistics team and considers how fast the supplier reacts to e-mails or other requests. The maximum of 100 points is given to suppliers that respond quickly and are very supportive in regards to any requests.

### 3.5.2 Cooperation of Sales staff (25%)

This sub-criterion is evaluated by Strategic Purchasing and assesses the cooperation between the Strategic Purchasing Manager and the respective Sales Manager. 100 points are given for excellent cooperation, 1 point for very bad cooperation.



### 3.5.3 Senior Management commitment (25%)

This sub-criterion shows how the supplier's Senior Management commitment in regards to any requests or problems is perceived by Strategic Purchasing. 100 points are given for excellent cooperation, 1 point for very bad cooperation.

### 3.5.4 Collaboration of Quality team (25%)

"Collaboration of Quality team" is evaluated by the Supplier Quality Management department. It shows how well the respective people work together. 100 points are given for excellent cooperation, 1 point for very bad cooperation.

## 4 Valuation classes

The classification is done according to the result of the total rating. The suppliers are categorized according to the gained total points. There are four valuation classes which also show the required actions regarding supplier-development.

Classification	Valuation points	Conclusion
preferred (A)	85 to 100	<u>Preferred supplier</u> The supplier belongs in the current observation period to the best class. A target-agreement is only in special cases necessary.
accepted (B)	70 to 84	<u>Acceptable, good supplier</u> The requirements are mainly fulfilled. Some detected issues show room for improvement. Chosen actions and a time schedule are to be announced by the supplier.
restricted (C)	50 to 69	<u>Supplier restricted</u> The supplier mostly doesn't meet the requirements and significant weaknesses are detected. The intended measures and actions including the time schedule for the implementation are to be announced within 3 weeks.
desourced (D)	under 50	<u>Systematical phase-out of the supplier</u> The supplier doesn't meet the requirements. A further co-operation is to be clarified. The announcement about the corrective actions, which shows traceable improvements, within one week is required.