



1. Supplier assessment - Introduction

Within the framework of permanent improvement of the relationships between KOSTAL and its suppliers, we have now comprehensively reworked and extended the *Supplier Assessment* which has been in use up to now.

The changes are related both to the evaluation criteria which are already used today and to extension of the entire system and methods which are employed. In particular, an ABC system will be introduced for evaluation of supplier performance within the areas of quality, logistics and purchasing and for overall evaluation of supplier performance. Building on these ABC grades, escalation scenarios have been defined, which are also described in the following text.

The supplier evaluation will in future be sent out every six months.

2. Overall weighting

The *supplier assessment* is carried out for the three participating areas of *Quality*, *Logistics* and *Purchasing*. A difference is basically made between suppliers of production materials (*01 to *03) and operating equipment and materials (*04). The relevant percentages can be seen in the following table.

Criterion	Weighting (*01)	Weighting (*02)	Weighting (*03)	Weighting (*04)
Quality	40%	40%	40%	0%
Logistics	40%	40%	40%	0%
Purchasing	20%	20%	20%	100%
<i>of which</i>				
<i>price transparency</i>	10%	10%	30%	37,5%
<i>Evaluation / R&D</i>	15%	30%	20%	25%
<i>Risks</i>	25%	25%	25%	25%
<i>Other factors</i>	50%	35%	25%	12,5%

The relationship of the product groups to the weighting codes can be seen in the following table.

Product groups	Weighting (*01)	Weighting (*02)	Weighting (*03)	Weighting (*04)
Metal	-Semi-finished products -Micro switches -Springs -Turned parts -Standard parts -Subcontractors		-Punched parts -Cast parts	-Production equipment supplier
Non-metallic materials		-Switching mats -Seals -Granulates	-Plastic parts -Cables -Cable looms -Punched parts	
Electronics	-Resistors -Batteries -Throttles/Filters -Thermistors -Res./Quartzes -Varistors -Transistors -Diacs/Triacs -Thyristors -Coils	-IC -Optical components -Lighting components -Diodes -Relays -Condensers	-PCBs without components -PCBs with components	

In order to calculate the results, grades of fulfilment are first determined for each sub criterion. These are assessed at the weighting allocated to each of these criteria. The maximum grade which can be given is "100% fulfilled".

The ABC grade for each area is given depending on the results for the main criteria. In order to calculate the overall ABC grade, the grades for the main criteria are multiplied by their weighting.

The values in the *supplier assessment* are given in terms of percentages, with a high percentage representing a positive result.

3. Content

3.1 Main criterion: Quality (40%)

The question of Quality is split into **four** sub-criteria:

These are:

- » ppm levels (10%)
- » Complaints 8-D's
 - Complaints (8 %)
 - On time reaction to complaints (2 %)
- » No of Customer Complaints (10 %)
- » Quality capability (10 %)
 - Supplier Certification (5 %)

- PPAP Performance (5 %)

3.1.1 PPM-Level (0.25x40% is equivalent to 10 %)

The quality code number (QKZ) is formed from the individual marks between 1 and 100 for each product group. If delivery of all items in one product group is completely faultless, the mark 100 points is awarded. If there are any faults, this will have an effect beyond the agreed ppm rate in the form of a devaluation of the ppm quota, this is then shown in percent.

PPM-Level	Points
Ratio of the quantity of parts not to drawing, compared with the total quantity delivered	100

3.1.2 - 1 Complaints (0.2 x 40% is equivalent to 8 %)

This criterion refers to the amount of complaints found on supplied materials to Kostal. 100 points are awarded for the statement. For each complaint the supplier will be deducted 10 marks for complaint found in Kostal's production. 20 marks will be deducted for a complaint found at the end Customer Line / Field. 99 marks will be deducted for a line stop. A QKZ of 1 point is applied.

Complaints	Deduction Kostal Process	Customer Line / Field
1	Minus 10 points	Minus 20 points
2	Minus 20 points	Minus 40 points
3	Minus 30 points	Minus 60 points
4	Minus 40 points	Minus 80 points
5	Minus 50 points	Minus 99 points
6	Minus 60 points	
7	Minus 70 points	
8	Minus 80 points	
9	Minus 90 points	
10	Minus 99 points	

3.1.2 - 2 On Time Reaction to Complaints (0.05 x 40% is equivalent to 2.0 %)

This criterion refers to the responses to complaints in the form of 8D-Reports within a set timeframe. Each requested statement is evaluated separately. The amount of points for the sub criterion is calculated as the average of all assessed statements in the period under review. If the response is on time, 100 points are awarded for this section. If the set term is exceeded by more than 10 days, a QKZ of 1 point is applied. A linear deduction of points takes place within these 10 days.

Reaction to inspection reports	Points
Percentage achievement grade	100

If there weren't any deliveries in a certain month then this month is not considered in the evaluation.

3.1.3 Number of failures Customer (0.25x40% is equivalent to 10 %)

This criterion counts the amount of end Customer line and field failures. 100 points are awarded for this section and deductions are made as follows. A QKZ of 1 point is applied.

Defects	Deductions
1	Minus 10 Points
2	Minus 20 Points
3	Minus 30 Points
4	Minus 40 Points
5	Minus 50 Points
6	Minus 60 Points
7	Minus 70 Points
8	Minus 80 Points
9	Minus 90 Points
10	Minus 99 Points

3.1.4 - 1 Quality Capability, Supplier Certification (0.125 x 40% is equivalent to 5 %)

This criterion measures the supplier's certification to Quality management standards and results from VDA audits completed by Kostal. 100 points are awarded for this section. Points are awarded as follows.

Certification	Points awarded
IATF 16949, ISO 14001 & VDA 6.3 Audit	100
IATF16949 & VDA 6.3 Audit	80
ISO 9001, ISO 14001& VDA 6.3 Audit	80
ISO 9001 & VDA 6.3 Audit	60

3.1.4 - 2 Quality Capability, PPAP (0.125 x 40% is equivalent to 5 %)

This criterion measures the supplier's PPAP performance to Kostal. If a PPAP is rejected then deductions are made. 100 points are awarded for this section and deductions are made as follows. A QKZ of 1 point is applied.

PPAP Rejection	Deductions
1	Minus 20 points
2	Minus 40 points
3	Minus 60 points
4	Minus 80 points
5	Minus 99 points

3.2 Main criterion: Logistics (40 %)

Evaluation of logistics is aimed at measuring and improving the operative performance of our suppliers with regard to logistics processes. The evaluation is based on suppliers' links to all individual KOSTAL companies. The evaluations are carried out by the individual companies and summarised at the mother company. The evaluation portfolio is composed of the following subsidiary criteria:

1. Correct quantities
2. Adherence to deadlines and schedules
3. Flexibility and speed and manner of reaction
4. Delivery and transport

Information referring to the first two criteria is recorded automatically. Evaluation is carried out in depth on the material and delivery levels. Evaluation of flexibility is carried out by the goods in departments considering purchasing disposition or quality of delivery. The evaluation is carried out on a one-off basis over a period of 4 months.

3.2.1 Sub criterion: Correct quantities (12%)

This measurement is based on a comparison between the quantity delivered and the quantity ordered (and confirmed by the supplier). Each individual item which is delivered is assessed. Depending on the period over which the evaluation is carried out, a final average is created from all the individual grades.

Partial deliveries are therefore allocated greater weighting within the overall grade, as an individual grade is given each time. Over- and under deliveries are not shown separately.

Individual grades are given in accordance with the following assessment scheme:

Deviation in per cent:	Assessment	Type
<- 5%	100 Points	Under delivery
- 10%	90 Points	
- 15%	80 Points	
- 20%	70 Points	
- 25%	60 Points	
- 30%	50 Points	
- 35%	40 Points	
- 40%	30 Points	
- 45%	20 Points	
<= 50%	10 Points	
> 50%	0 Points	

< + 5%	100 Points	Over delivery
--------	------------	---------------

Deviation in per cent:	Assessment	Type
+ 10%	90 Points	
+ 15%	80 Points	
+ 20%	60 Points	
+ 25%	40 Points	
+ 30%	20 Points	
+ 35%	10 Points	
>= 40%	0 Points	

3.2.2 Sub criterion: Punctuality (12%)

This criteria assesses the supplier's ability to deliver on time. The yardstick is the difference between the date when the goods are delivered and the delivery date confirmed by the supplier. Basically each consignment which is received within the calendar week which has been confirmed as 100% fulfilled.

Non-fulfilment is measured from the first day of the week confirmed for delivery backwards in the case of early delivery, and from the last day of the confirmed week forwards in the case of late delivery.

In the same way as the quantity assessment, each item on the delivery note is assessed individually. The grades which are given within the period of assessment are averaged out into a final overall grade.

Individual grades are given in accordance with the following assessment scheme:

Deviation in per cent:	Assessment	Type
0 days	100 Points	Late delivery
+ 1 day	80 Points	
+ 2 days	60 Points	
+ 3 days	40 Points	
+ 4 days	20 Points	
+ 5 days	10 Points	
>+ 5 days	0 Points	
- 1 day	90 Points	Early delivery
- 2 days	80 Points	
- 3 days	70 Points	
- 4 days	60 Points	
- 5 days	50 Points	
- 6 days	40 Points	
- 7 days	30 Points	
- 8 days	20 Points	
- 9 days	10 Points	
>= 10 days	0 Points	

Weekends and public holidays are not included.

3.2.3 Sub criterion: Flexibility and reaction (10%)

The two sub criteria of flexibility and reaction and supply and transport are assessed manually. Assessment is carried out by the responsible purchasing despondent.

The following aspects are taken into consideration:

- Communication behaviour, transfer of information
- Reaction to questions
- Processing of backlog lists
- Availability of a contact for communication
- Flexibility when items are required at short notice.

The aim and background of this criterion is to consider the availability of the supplier and the possibility of reacting to varying requirements in a flexible way as a decisive aspect, in order that we in turn can react flexibly to the needs of our customers.

If no goods are received in any given month, the grade of the previous month is taken over automatically.

3.2.4 Sub criterion: Delivery and Transport (6%)

In order to control supply and logistics processes (disposition) in a clear and positive way, it is essential that suitable documentation is provided and that terms of delivery are adhered to. Problems within communication media and interfaces can therefore be avoided as potential sources of error for the supplier and for KOSTAL. The following criteria are used to evaluate the logistical quality of delivery and transport:

- Adherence to delivery guidelines
- Adherence to packaging guidelines
- Presence of KOSTAL material number and revision status
- Transport damage
- Condition and presence of delivery documents

If no goods are received in any given month, the grade of the previous month is taken over automatically.

3.3 Main criterion: Purchasing (33%)

The area of purchasing is divided into the following four subsidiary criteria with their relevant sub criteria and weightings. Please note that the percentage distribution should be considered relative to the respective higher-level subsidiary or main criterion.

	Weighting (*01)	Weighting (*02)	Weighting (*03)	Weighting (*04)
Overall purchasing of which	20%	20%	20%	100%
Price transparency	10%	10%	30%	37,5%
Advice / R&D	15%	30%	20%	25%
Risks	25%	25%	25%	25%
<i>of which tool and component-related flexibility of supplier</i>	40%	40%	40%	40%
<i>other risks regarding production failure</i>	30%	30%	30%	30%
<i>transport time, emergency logistics chain</i>	30%	30%	30%	30%
Other factors	50%	35%	25%	12,5%
<i>of which cooperation</i>	30%	30%	30%	30%
<i>availability/ease of contact</i>	30%	30%	30%	30%
<i>technical equipment</i>	25%	25%	25%	25%
<i>Ecology</i>	10%	10%	10%	10%
<i>Social and ethical aspects</i>	5%	5%	5%	5%

3.3.1 Sub criterion: price transparency

The price transparency or ease of understanding the makeup of the component price. Here, the presence of individual cost types is evaluated, so that, for example, personnel or material costs can be compared. The following cost types should be shown in offers:

Price transparency	Points
Material costs	20
Manufacturing costs	20
Overhead costs	20
Freight costs	20
Packaging costs	20
Maximum points	100

3.3.2 Sub criterion: Advice / R&D

In this subsidiary criterion the supplier is evaluated as to how far the supplier fulfils KOSTAL requirements within the framework of his R&D services, but also in the advice he offers, and if he offers suggestions for improvement.

Advice / R&D	Points
Can the supplier comply to the KOSTAL technical standard as regards data exchange?	40
Has the supplier his own R+D department?	20
Adapts to KOSTAL requirements and fulfils them?	20
Draws attention to potential for improvement and makes suggestions for reducing costs which are economically viable?	20
Maximum points	100

3.3.3 Sub criterion: Risks

Secondary subsidiary criterion: Flexibility of supplier with regard to tools and components

The capacity of the supplier as regards the complete component production process is assessed here. It is also possible that the supplier's capacity is partially taken up by other customers etc. The important thing is the general possibility of being able to cover KOSTAL requirements both on a regular basis and short term at peak times (e.g. by running extra shifts).

Tool and component-related flexibility of supplier	Points
Is spare capacity available?	40
Is less than 20% of capacity used by KOSTAL?	20
All 3 shifts not taken up by production?	20
Keeps buffer stock?	20
Maximum points	100

Secondary subsidiary criterion: Other risks related to production failure (act of God, risk of strike etc.)

Other risks related to production failure	Points
There is no increased risk of strike	20
Production not in political crisis area	20
Production not in area of geological risk	20
Can fulfil product liability obligations (manufacturer's liability insurance if appropriate)	20
Economic situation, danger of insolvency, VDA ranking, D&B	20
Maximum points	100

Secondary subsidiary criterion: Transport time, emergency logistics chain

The duration of transport over emergency transport routes, measured between the dispatch location of the supplier where there are manufacturing facilities or minimum stocks and the KOSTAL factory. This should be a worst case study (weekend, difficulties with customs etc.).

Transport time, emergency logistics chain	Points
Less than 120 hours	20
Less than 96 hours	20
Less than 72 hours	20
Less than 48 hours	20
Less than 24 hours	20
Maximum points	100

3.3.4 Sub criterion: Other factors

Secondary subsidiary criterion: cooperation

The supplier draws attention to his own problems. He tries to hold constructive discussions about problems.

Cooperation	Points
Accepts KOSTAL conditions of purchase	20
Accepts KOSTAL warranty conditions	20
Supplies necessary supplier declarations as requested by KOSTAL	20
Answers requests for information such as questionnaires and requests for quotations. Including KOSTAL Onventis web portal.	20
Communicates problems in good time and is open to suggestions for solutions and special measures	20
Total points	100

Secondary subsidiary criterion: Availability / ease of contact

The supplier is ready to respond to queries at short notice and is willing and prepared to meet shorter delivery times than is his normal practice. The contact person is available personally at short notice.

Availability / Ease of contact	Points
Contact persons or representatives are available or phone back immediately, agreements are reached quickly and are binding	20
The supplier is ready to offer unconventional solutions in exceptional cases	20
It is always possible to communicate in English	20
The contact person is always competent to deal with the matter in hand	20
Has all necessary communication media	20
Total points	100

Secondary sub criterion: Technical Facilities

This assessment deals with the age, condition and completeness of production equipment.

Technical Equipment	Points
Production equipment corresponds to the current state of technology	20
Supplier can repair production equipment with own staff	20
Supplier can manufacture production equipment in-house	20
Supplier can measure accuracy of production equipment in-house	20
Supplier can develop production material in-house	20
Total points	100

- D) Ecology

The assessment considers the environmental policy of the supplier as well as environmentally critical aspects of the production process and material usage.

Ecology	Points
The supplier has an environmental management system in place and adheres to it.	20
Environmental objectives have been formulated by management	20
The production process is environmentally uncritical	20
The used materials and their disposal is environmentally uncritical	20
Environmental considerations play a role when selecting forwarders and sub-suppliers.	20
Total points	100

- E) Social and ethical aspects

The social and ethical principles of the supplier are evaluated.

Social and ethical principles	Points
The right to amalgamate has been granted	20
Domestic work and safety regulations are adhered to	20
The supplier assures that child labour and exploitation is not done by him or his suppliers.	20
In the working practices of the supplier standards have been developed that prohibit any form of bribery or corruption.	20
Commitment of the supplier to further charitable/non-profit activities.	20
Total points	100

3.4 ABC Classification

Classification is by means of categories (A), (B) and (C). Depending on the grade awarded, different escalation scenarios are used whose first stage results from the descriptions of the grades given below. It must be the aim of all suppliers to achieve grade (A) in the medium term and then to retain it.

3.4.1 Departmental classification

The meaning of area classifications is explained below:

- Grade A: Your Company currently fulfils the requirements in this area fully.
- Grade B: Your Company does not fulfil the requirements in this area. In order to rectify this state of affairs we ask you to present an action plan to the supplier owner, supplier developer or Logistic person assigned within two weeks.
- Grade C: Your Company does not fulfil KOSTAL requirements. Your Company is now on new business hold.
In order to rectify this situation, we ask you to attend a meeting at KOSTAL. Please make an appointment supplier owner, supplier developer or Logistic person assigned within four weeks.

The following table is used for classification of supplier performance in the individual areas:

Grade	Quality	Logistics	Purchasing
A	≥ 85	≥ 80	≥ 60
B	≥ 75	≥ 60	≥ 30
C	< 75	< 60	< 30

3.4.2 Overall classification

The meaning of the overall grade is explained below:

- A Supplier:** Your Company currently fulfils the requirements of our company to a satisfactory extent. This means that your company has supported us in fulfilling the requirements of our customers and to implement these, and we would like to thank you. KOSTAL assumes that you will continue to provide this good performance in the future so that we can continue to cooperate and make use of optimisation potential in both our companies.
- B Supplier:** Your Company does not fulfil our requirements. Continuation of our partnership is considerably endangered. We urgently request you to fulfil the requirements in specific areas which we have described in cooperation with us.
- C Supplier:** Your Company does not fulfil KOSTAL requirements. Your Company is now placed on new business hold. We urgently request you to fulfil the requirements in specific areas which we have described in cooperation with us.

The following table is used for overall classification of supplier performance:

Overall classification	Condition
A	All Areas (Quality, Logistics & Purchasing) are A.
B	At least one area is B and no area is C.
C	One area is C.

The overall assessment therefore basically results from the weighted average of the area classification, in part combined with other factors.

4. Escalation scheme

	Step 1	Step 2	Step 3
A	Requirements are fulfilled	Considered as strategic Supplier	
B	Action Plan Required to fulfil Requirements	Supplier Meeting & Review of Action Plan	

C	On New Business Hold	Supplier Meeting & Review of Action Plan	Review of Action plan & Release with VDA 6.3 Audit
---	----------------------	--	--