Explanation

Supplier Evaluation System

GRAMMER Group

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1 Introduction / targets

With the conversion of the supplier evaluation on a monthly basis from January 2019 on, the present explanation on supplier evaluation has been updated.
The supplier evaluation is carried out in order to measure the performance of the production material suppliers at regular intervals and to be able to take measures thereon. The weighting of the individual criteria, as well as the calculation methodology, is shown in the following document, which applies from January 2019. Two new criteria are included from January 2023.
Supplier evaluation is performed for both external and internal suppliers.

The following evaluation criteria apply from 2019

- Q-PPM
- Share quality costs in relation to the sales volume
- Delivery quality / adherence to delivery dates
- Number of Q-complaints
- QM - certification
- UM - certification
- QDA
- Audit results VDA 6.3
- Supplier security level
- Risk Score

From January 2019 on, they will reflect the result of the monthly supplier evaluation.

2 Evaluation criteria

Criteria	Evaluation						Points	Weighting
Q-PPM	**Target vs actual value**							**28%**
	actual ≤ target *1						100	
	actual > target *1 ≤ target *1.25						85	
	actual > target *1.25 ≤ target *1.50						75	
	actual > target *1.50 ≤ target *1.75						50	
	actual > target *1.75 ≤ target *2						25	
	actual > target *2						0	
Quality costs	**Quality costs as percentage of purchasing volume (rework, admin, efforts, handling, material)**							**11%**
	> 0% ≤ 1% of purchasing volume						100	
	> 1% ≤ 2% of purchasing volume						75	
	> 2%≤ 3% of purchasing volume						50	
	> 3% ≤ 5% of purchasing volume						25	
	> 5% of purchasing volume						0	
Supplier incidents	**Quality supplier incidents (depending from failure detection)**							**19%**
		100 pts	**80 pts**	**60 pts**	**30 pts**	**0 pts**		
	C 3	0	> 0 < 10	> 10 < 15	> 15 < 25	> 2S		
	C 2	0	> 0 ≤ 5	> 5 ≤ 8	> 8 ≤ 12	> 12		
	C 1	0	> 0 ≤ 3	> 3 ≤ 5	> 5 ≤ 8	> 8		
	C 1 WR	0	> 0 ≤ 3	> 3 ≤ 5	> 5 ≤ 8	> 8		
Delivery quality / adherence to delivery dates	**Logistic**						$\frac{X\% + Y\%}{2}$	**4%**
	Delivery quality (50%): number of logistic quality notification proportional to total number of all deliveries: **X%**							
	Adherence to delivery dates (50%): number of on-time deliveries proportional to total number of deliveries: **Y%**							
Supplier security level	**Supplier security level**							**1%**
	DIN ISO 27001						100	
	NDA valid						80	
	Normal						30	
	None (Public)						0	
Risk Score	**Risk Score from Risk Methods**							**5%**
	0-20						100	
	>20-40						90	
	>40-60						70	
	>60-80						20	
	>80-100						0	
QDA	**Quality Development Agreement**							**6%**
	valid QDA available						100	
	no QDA available -> automatically B-rating, independent from the total score						0	
Q-system certification	**Q-system certification**							**9%**
	IATF 16949						100	
	DIN ISO 9001						80	
	not available						0	
EM-System certification	**EM-System certification**							**3%**
	DIN ISO 14001						100	
	not available						0	
Process audit	**Result after process audit**							**14%**
	A-Rating						100	
	B-Rating						85	
	C-Rating -> automatically C-rating, independent from the total score						0	
Rating	**≥ 90 points**						**A**	
	≥ 80 points < 90 points						**B**	
	< 80 points						**C**	

3 Supplier evaluation monthly Group Group

The supplier evaluation will be carried out monthly from January 2019 and the result will be made available to each supplier in the supplier portal Astras.

10 criteria are evaluated.

For the following criteria there are so-called co-criteria:

- If there is no QM certificate, there is 0 point and no A rating can be achieved. For details see chapter 4.5
- For a missing QDA (20) there is 0 point and no A-rating can be achieved. For details see chapter 4.7
- If the supplier has achieved a C result in a VDA 6.3 audit conducted by Grammer, there is 0 point and he will also be included in the supplier rating classified C rating.

Every single result can reach a maximum of 100 points (exception DIN ISO 9001 certificate max 80 points), is then weighted, see Table 2, and the result is the final result.

In the example case 91 pts. That would be an A rating. However, since there is no QDA, the co-criterion “20” takes effect and recalculates the supplier to a B rating.

Gesamtergebnis
91 % (B)

		Jan-2019	Feb-2019
Grammer Lieferantenbewertung			
Gesamt		92	91
Q-PPM	29%	100	100
Anteil Q Kosten am Einkaufsvolumen	12%	100	100
supplier quality (Q+Log)	4%	85	79
Anzahl Q-Meldungen	20%	100	100
QM Zertifikate	9%	100	100
Umwelt Zertifikate	2%	100	100
Bonität	0%		
QEV / QDA	6%	0	0
Audit Ergebnis (VDA6.3)	18%		

4 Description of criteria

4.1 Supplier PPM (SPPM)

This criterion is calculated as follows:

Q-PPM	**Target vs actual value**		**28%**
	actual ≤ target *1	100	
	actual > target *1 ≤ target *1.25	85	
	actual > target *1.25 ≤ target *1.50	75	
	actual > target *1.50 ≤ target *1.75	50	
	actual > target *1.75 ≤ target *2	25	
	actual > target *2	0	

Supplier evaluation: Q-PPM Ist-Werte Lieferant (1)

Fiscal Year Variant	
Key figures	Actual quantity WE, Claimed Q-quantity, Q-PPM (Formula, Integer)
Supplier	
Fiscal year / period	

Fiscal year / period	March 2018
Supplier	Supplier 1

				ppm Target:	50		
Vendor no.	Supplier name	Fiscal year / period	Incomming quantity	Claimed quantity Q	Q-PPM	Points	Weighted with 29% = Points
500xxx	Supplier 1	March 2018	275.000	16	58	85	25

Following values are used for the calculation:

- Total delivered quantity per month
- Total claimed quantity per month
- Calculated Q-PPM value per month
- PPM target value
- Points per month and weighting according to weighting table

The sum of claimed Q quantity is divided by the sum of the quantity supplied and then multiplied by 1,000,000. The resulting actual PPM value will be compared with the PPM target value and evaluated according to table 2 above.

$$\text{Ist ppm} = \frac{\text{sum of claimed Q quantity}}{\text{sum of the quantity supplied}} \times 1.000.000$$

The weighting factor, which is shown in Table 2, gives the final score from this criterion.

Weighted with 28%.

4.2 Complaint costs

This criterion is calculated as follows:

Quality costs	**Quality costs as percentage of purchasing volume (rework, admin, efforts, handling, material)**					**11%**
	> 0% ≤ 1% of purchasing volume				100	
	> 1% ≤ 2% of purchasing volume				75	
	> 2%≤ 3% of purchasing volume				50	
	> 3% ≤ 5% of purchasing volume				25	
	> 5% of purchasing volume				0	

Lieferantenbewertung: EK-Volumen + Q-Kosten (aus (MP))

Key figures
Supplier
Fiscal year / period

Fiscal year	March 2018
Supplier	Supplier 1

Vendor no.	Supplier name	Fiscal year / period	Incomming quantity	Claimed quantity Q	Q-PPM	Points	Weighted with 12% = Points
500xxx	Supplier 1	March 2018	173.054 €	775 €	0,45%	100	12

The following values of this evaluation are relevant for the supplier evaluation:

- Handling costs in Euro
- Customs value (cost of materials) in Euro
- Administration costs in Euro
- Rework costs in Euro

The sum of the above-mentioned costs blocks is determined per month and compared to the purchase volume per month.
The points are calculated according to Table 2 and included in the overall rating.

Relevant is the **purchasing volume** of the selected suppliers **in Euro for all company codes** of the Grammer Group.

Weighted with 11%.

4.3 Adherence to delivery date / delivery quality

This criterion is calculated as follows

In this value run in 50% each logistical delivery quality and punctuality.

Lieferqualität/ Liefertermintreue	**Logistic**		
	Delivery quality (50%): number of logistic quality notification proportional to total number of all deliverys: X%	$\frac{(X\% + Y\%)}{2}$	**4%**
	Adherence to delivery dates (50%): number of on-time deliverys proportional to toal number of deliverys: Y%		

The following values are relevant for supplier evaluation from this evaluation:

- Number of delivered goods (deliveries) per month
- Number of goods receipts (deliveries) delivered per month in the time window (log tolerance)
  Calculated delivery reliability per month

- Number of Q-messages logistic per month
- Number of delivered goods (deliveries) per month
- Calculated logistical delivery quality per month

- Calculation of the average of the two results “delivery reliability” and “logistical delivery”
- Average weighting according to % value
- Points per month according to the weighting table

Supplier evaluation: Delivery quality supplier (1)

Key figures	,Anzahl Lief. i.O.,Anzahl Lief. gesamt,Liefertreue (ganzzahlig),Anzahl Q-Meldungen,Anz. Q-Meld. für Lieferqualität...
Supplier	
Fiscal year / period	

Fiscal year / period	March 2018
Supplier	Supplier 1

Vendor no.	Supplier name	Fiscal year / period	Number of deliveries ok	Number all of deliveries	adherence to delivery date %	Number of claims	number of Q-Meldungen for Logistic	delivery quality Logistic %	delivery quality Logistic (66+100)/2=	Punkte	Weighted with 4% = Pts
500xxx	Supplier 1	March 2018	414	627	66			100	83	83	3

Weighted with 4%

4.4 Number of supplier complaints, depending on the location of the error detection (supplier incidents)

This criterion checks how many complaints (without a collective scrap) the supplier received during the evaluation period, but differentiated by the location of the error detection.

C 3 = supplier complaint incoming goods

C 2 = supplier complaint production

C1 = supplier complaint customer

C1WR = supplier complaint field

Lieferantenbewertung: Demo Q-Mldg. pro Herk. zu akt. Lls 1

Plant	
Q-message origin	
QPPM origin	
Key figures	
Supplier	
Fiscal year / period	
Fiscal year / period	March 2018
Supplier	Supplier 1

Supplier		Fiscal year / period	QPPM origin	Plant	Number of C1	Number of C2	Number of C3	Number of C1WR	Total amount	Points	Weighted with 20% = Pkt
500xxx	Supplier 1	März 2018	C1	9710		2			2	80	12
			C2	7130		6			6	60	

The scoring system is set as follows:

Example 2 Q message C1 -> 80 pts.

6 Q messages C2 -> 60 pts

The calculation in the monthly evaluation always uses the "worse" value. In this case the 60 pts resulting from the 6 Q messages C2.

	Quality supplier incidents (depending from failure detection)							
		100 pts	80 pts	60 pts	30 pts	0 pts		
Supplier incidents	**C 3**	0	> 0 < 10	> 10 < 15	> 15 < 25	> 2S		**19%**
	C 2	0	> 0 ≤ 5	> 5 ≤ 8	> 8 ≤ 12	> 12		
	C 1	0	> 0 ≤ 3	> 3 ≤ 5	> 5 ≤ 8	> 8		
	C 1 WR	0	> 0 ≤ 3	> 3 ≤ 5	> 5 ≤ 8	> 8		

Weighted with: 19%.

4.5 Supplier security level

GRAMMER Group's suppliers are classified into information protection levels regarding data security according to DIN ISO 27001.

Supplier security level	**Supplier security level**		**1%**
	DIN ISO 27001	100	
	NDA valid	80	
	Normal	30	
	None (Public)	0	

Levels are explained below:

- Level „**None (public)**“means, that these suppliers are not associated with sensitive data of GRAMMER Group. Neither in data exchange nor when entering the grounds of the GRAMMER Group. (Generally, not available in purchasing),
- Level „**Normal**“ means, that these suppliers are not associated with sensitive data of GRAMMER Group,
- Level „**High**“ means, that these suppliers are associated with sensitive data of GRAMMER Group,
- Level „very high“ means, that these suppliers are associated with highly sensitive data of GRAMMER Group.

Weighted with 1%

4.6 Risk Score

Coming out of the risk management tool “Riskmethods”. The Riskmethods scorecard is divided into 4 risk areas. Every risk area contains of a lot of different indicators, which will be weighted, and the result is the Total Risk score.

The risk areas are Viability, Delivery, Market & Cost, Image & Compliance:

- Viability: Financial risk, like the financial stability of the supplier, but also financial stability of the country will be rated,
- Delivery: Geopolitical risk, contains every event which could lead to delivery stops, just like riots, disasters, natural hazards,
- Market & Cost: Macroeconomics risk, looks at the development of the labor costs in a country,
- Image & Compliance: Contains all aspects of ESG, like Human rights, working conditions, environment, anti-corruption, … (most scores are the result of the Integrity Next assessments).

Risk Score	**Risk Score from Risk Methods**		**5%**
	0-20	100	
	>20-40	90	
	>40-60	70	
	>60-80	20	
	>80-100	0	

Weighted with 5%

4.7 QM-certification

This criterion checks, whether the selected suppliers have a valid QM certificate DIN ISO 9001 and/or IATF 16949

QM system certification	**QM system certification**		
	IATF 16949	100	**9%**
	DIN ISO 9001	80	
	certifcate is not available	0	

Lieferantenbewertung: Zusatzdaten-LI 1

Supplier	
ISO TS / IATF 16949	
DIN EN ISO 9001	
DIN EN ISO 14001	
QEV Gültig bis	
Lieferanten-Bonität	
Auditergebnis	

Supplier	Komplexe Auswahl

Supplier		ISO TS/ IATF 16949	DIN EN ISO 9001	DIN EN ISO 14001	QEV valid till	Audit rating
500xxx	Supplier 1		07.09.2020	30.09.2020		A
			80 Pkt.			
		Weighted with 9%	8			

Is there a valid QM certificate according to IATF 16949, the supplier receives 100 points for this criterion: However, exists only a valid certificate to the DIN ISO 9001 standard, then the supplier receives 80 points for this criterion.
Points are awarded as soon as the validity date appears in the respective month.
If the existing certificate has expired, 0 points are assigned.

KO criterion: If there is NO longer valid certificate (neither IATF 16949 nor ISO 9001) at the time of the evaluation (certificate expired, but not yet renewed) -> 0 points, but the grading rule does NOT apply!

If there has never been a certificate, the grading rule applies!

Then, an overall rating of A, becomes a B rating

If the supplier has an overall rating of C, then C. will not be upgraded!

If the supplier has an overall rating of B, then B remains!

Weighted with 9%

4.8 EM - certification

This criterion checks whether the selected suppliers have a valid environmental management certificate.

EM-System certification	**EM-System certification**		**3%**
	DIN ISO 14001	100	
	not available	0	

Lieferantenbewertung: Zusatzdaten-LI 1

Supplier	
ISO TS / IATF 16949	
DIN EN ISO 9001	
DIN EN ISO 14001	
QEV Gültig bis	
Lieferanten-Bonität	
Auditergebnis	

Supplier	Komplexe Auswahl

Supplier		ISO TS/ IATF 16949	DIN EN ISO 9001	DIN EN ISO 14001	QEV valid till	Audit rating
500xxx	Supplier 1		07.09.2020	30.09.2020		A
				100 Pkt.		
			Weighted with 2%	2		

Is there a valid UM certificate according to DIN EN ISO 14001, the supplier receives 100 points for this criterion; if no valid EM-certificate exists, the supplier receives 0 points for this criterion. A KO-criterion, like in QM-system, is NOT applied in this case.

Weighted with 3%

4.9 Quality Development Agreement (QDA)

This criterion checks whether a valid quality development agreement has been concluded with the respective supplier.

QDA	**Quality Development Agreement**		
	valid QDA available	100	**6%**
	no QDA available -> automatically B-ratnig, independent from the total score	0	

Lieferantenbewertung: Zusatzdaten-LI 1

Supplier	
ISO TS / IATF 16949	
DIN EN ISO 9001	
DIN EN ISO 14001	
QEV Gültig bis	
Lieferanten-Bonität	
Auditergebnis	

Supplier	Komplexe Auswahl

Supplier		ISO TS/ IATF 16949	DIN EN ISO 9001	DIN EN ISO 14001	QEV valid till	Audit rating
500xxx	Supplier 1		07.09.2020	30.09.2020		A
					0 pts	
				Weighted with 6%	0	

If a valid QDA (QDA = Quality Development Agreement) is available at the time of evaluation, the supplier will receive 100 points for this criterion

If there is NO QDA, which is valid at the evaluation period (means "QDA is not longer valid"), QDA expired, but not yet renewed, -> 0 points, but the downgrading rule does NOT apply!

KO-criterion:

Is there NO QDA for the valuation time period (e.g.: Supplier refuses to sign it) -> Downgrading rule takes effect!

If the supplier has an overall rating of A, then this becomes a B rating

If the supplier has an overall rating of C, then C remains. No upgrading!

If the supplier has an overall rating of B, then B remains!

Weighted with 6%

4.10 Process Audit VDA 6.3

This criterion checks which rating the supplier received at the last VDA 6.3 process audit·

Process audit	**Result after process audit**		**14%**
	A-Rating	100	
	B-Rating	85	
	C-Rating -> automatically C-rating, independent from the total score	0	

Lieferantenbewertung: Zusatzdaten-LI 1

Lieferant						
ISO TS / IATF 16949						
DIN EN ISO 9001						
DIN EN ISO 14001						
QEV Gültig bis						
Lieferanten-Bonität						
Auditergebnis						
Supplier	Komplexe Auswahl					
Supplier		ISO TS/ IATF 16949	DIN EN ISO 9001	DIN EN ISO 14001	QEV valid till	Audit rating
500xxx	Supplier 1		07.09.2020	30.09.2020		A
				Weighted with 18%	A-Ergebnis	100
					B-Ergebnis	85
					C-Ergebnis	0

If the supplier got an A-rating, he receives 100 points for this criterion, in case of a B-rating, he receives 85 points.

KO-criterion: If the supplier was classified with a C at the audit, this leads to a C-rating at the rating, irrespective of the actually reached overall points.

This downgrading will continue to be included in the supplier evaluation until the supplier has upgraded to a B rating in the VDA 6.3 audit

Weighted with 14 %.
If there was no audit (empty space), this criterion will not be used in the overall rating.

The supplier must do a self-audit if he received a C or B-rating in the VDA 6.3 audit by GRAMMER. If the supplier achieves an upgrading (B or A) in this audit and this result is accepted by GRAMMER, the supplier will receive the next highest number of points in the next supplier evaluation.

Grammer reserves the right to carry out the revaluation by means of a follow-up audit.

4.11 Total result

With regard to the rating of suppliers following classification is based on:

- >= 90 – 100 points = A-supplier
- >= 80 < 90 points = B-supplier
- < 80 points = C-supplier (red)

4.12 Fixed rating, Overview of all KO-criteria

Evaluation criteria		weighting	rating (number)	rating
20	QDA	6	2	B
60	QM-certification	9	2	B
80	Audit result	18	3	C

5 Changes in Blue