



IADC[™]

**IADC GLOBAL
SUPPLY CHAIN COMMITTEE**

Supplier Performance Metrics and Scorecard (GU-IADC-SC-002) Rev. 1

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This document contains recommendations from the IADC Supply Chain Committee that developed metrics and a scorecard to be used as a standard guide in evaluating suppliers' performance throughout the procure-to-pay process.

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Suggested revisions to the guidelines are invited and will be considered along with future changes to its content. Suggestions should be submitted to the Director-Offshore Technical and Regulatory Affairs, International Association of Drilling Contractors, 10370 Richmond Avenue, Suite 760, Houston, TX 77042. (713-292-1945)

Controlled Material

The entire contents of this document are subject to change.
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Document Change History Sheet

Date	Version	Reason for Change
2015 Oct 30	Baseline	Baseline Document
2018 April 04	1	Added/Removed Performance Measures

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Purpose and Scope

In an effort to develop a mutually beneficial relationship with suppliers, the IADC Supply Chain Committee has created standard supplier metrics and a scorecard to align expectations and promote performance improvement.

The supplier metrics were evaluated both on impact to the supply chain process as well as the measurability by both suppliers and drilling contractors.

These metrics are considered to provide the highest impact to the procurement process, and considers Safety, Quality, Delivery and Service metrics.

The IADC supplier standard metrics are:

- Service safety performance (Service)
- Revenue impact due to poor quality (Service & Parts/Equipment)
- Non-conformances (Parts/Equipment)
- On-time delivery (Parts/Equipment)
- % late (of current orders) (Parts/Equipment)
- Aged overdue open PO lines (Parts/Equipment)
- Invoice accuracy (Service & Parts/Equipment)
- Price variance (Service & Parts/Equipment)

The data collected from these metrics will be used to create a standard scorecard with suggested weightings.

Any and all data collected from these metrics are to be strictly confidential within each of the drilling contractors' organizations and not to be shared with anyone other than their respective suppliers.

Service Safety Performance (Service)

This metric is created to measure the safety performance of the supplier's service technicians when on the drilling contractor's rigs. It measures the number of recordable and lost-time incidents of the supplier's service personnel on the specific drilling contractor's rigs fleetwide. It is recommended that the drilling contractor maintain a database of safety incidents by supplier.

Revenue Impact Due To Poor Quality (Service & Parts/Equipment)

This metric measures the cost incurred by the drilling contractor due to poor quality by the supplier.

$$\frac{(\text{Downtime (\# hrs * (day-rate / 24)) due to suppliers' equipment/service}) + (\text{\# of poor quality events * \$3000 USD})}{\text{Total Revenue}} = \text{Revenue Impact due to Poor Quality}$$

IADC recommends \$3,000 USD (which includes cost of resources such as people and time) to manage the quality incidents, and ensures a consistent value is being used amongst drilling contractors when measuring their respective suppliers.

Non-Conformances (Parts/Equipment)

This metric measures the number of failures upon receipt, installation, and/or within the warranty period. Examples include:

- Items missing or damaged when receipt is performed on the rig
- Equipment failures within agreed upon warranty period
- Equipment failure upon installation
- Equipment failure while testing prior to use

On-Time Delivery (Parts/Equipment)

This metric is created to provide the customer with statistical evidence of the supplier's ability to meet the delivery date per line item using the date provided (promised) by the supplier at the time they acknowledged the purchase order. If no delivery date is acknowledged at the time the supplier receives the purchase order, the delivery date shall default to the original quoted date from the supplier.

$$\frac{\text{\# of line items delivered on or before the original promised or quoted delivery date + 7 calendar days}}{\text{Total \# of line items delivered}} = \% \text{ on time delivery}$$

IADC recommends adding a seven (7) day “buffer” to the acknowledge date to account for circumstances out of the supplier’s control, such as the drilling contractor’s receiving process, incoterms, etc.

% Late (of current orders) (Parts/Equipment)

This metric is a leading indicator of future performance, in particular for long lead items. It measures the percentage of open PO lines whose original promised due date is past the current date + 7 calendar days.

$$\frac{\text{\# of open line items past original promised due date (+7 calendar days)}}{\text{Total \# of open line items}} = \% \text{ late current orders}$$

IADC recommends adding a seven (7) day “buffer” to the acknowledge date to account for circumstances out of the supplier’s control, such as the drilling contractor’s receiving process, incoterms, etc.

Aged Overdue Open PO Lines (Parts/Equipment)

This metric is a leading indicator of future performance. It measures the average number of days of overdue open PO line items at the time of reporting. Overdue date is defined as past promised date + 7 calendar days. The result is displayed in both an average number of days and an aging report as per example below (1-30 days, 31-60 days, 61-90 days, 91-180 days, 181-365 days, 1 year+). Please note the data is a snapshot in time at the month/date of occurrence. Therefore, we advise to run the report at the same day/time of each month.

Example:

	1-30	31-60	61-90	91-180	181-365	>1 year	Total Overdue	Avg Days Late
Jan '17	73	53	42	31	18	40	257	127.3
Feb '17	78	55	37	47	18	37	272	119.4
Mar '17	82	56	39	43	18	31	269	117.7
Apr '17	70	49	41	27	13	24	224	94.3
May '17	65	46	36	21	10	18	196	92.9
Jun '17	62	47	29	19	6	7	170	88.6
Jul '17	57	42	38	14	3	2	156	83.1
Aug '17	59	37	28	7	2	0	133	57.2
Sep '17	50	40	27	6	1	0	124	52.4
Oct '17	57	36	18	3	0	0	114	42.0
Nov '17	47	42	17	0	0	0	106	37.7
Dec '17	43	46	19	0	0	0	108	38.2

IADC recommends adding a seven (7) day “buffer” to the acknowledge date to account for circumstances out of the supplier’s control, such as the drilling contractor’s receiving process, incoterms, etc.

Invoice accuracy (Service & Parts/Equipment)

This metric is intended to track and improve the billing process. It measures whether the supplier’s invoices are accurate and reflect the orders placed in terms of products and services, quantities and price during a specific time period. The data will reveal whether the supplier is correctly preparing, documenting and billing the purchase orders.

$$\frac{\text{No. of invoices with no issues}}{\text{Total no. of invoices processed}} = \% \text{ of accurate invoices}$$

Price variance (Service & Parts/Equipment)

The purpose of this metric is to provide visibility on price fluctuations, either increases or decreases (percentage & amount), when compared to previous year baseline.

Previous year baseline is calculated using the weighted average price paid for each of the items provided by the supplier.

Baseline is then compared to current year weighted average price paid to calculate the variance.

A negative variation is a price decrease; a positive variation is an increase in price.

$$\sum 1 - \frac{(\text{Qty Current Year} * \text{Weighted Average Price Previous Year})}{(\text{Qty Current Year} * \text{Weighted Average Price Current Year})}$$

Example:

Previous rolling 12 months weighted average

Item ID	Qty	Unit Price Paid	Total
1A	20	\$10.00	\$200.00
1A	50	\$9.50	\$475.00
1A	25	\$10.00	\$250.00
1A	10	\$10.00	\$100.00
1A	5	\$12.00	\$60.00
Sum	110		\$1,085.00
Weighted Average			\$9.86

Current rolling 12 months weighted average

Item ID	Qty	Unit Price Paid	Total
1A	10	\$9.80	\$98.00
1A	10	\$9.80	\$98.00
1A	20	\$9.00	\$180.00
1A	10	\$9.80	\$98.00
1A	5	\$10.00	\$50.00
Sum	55		\$524.00
Weighted Average			\$9.53

Price Variation

Item ID	Current Year Qty	Previous Year Weighted Average	Current Year Weighted Average	Previous Year Total Paid	Current Year Total Paid
1A	55	\$9.86	\$9.53	\$542.30	\$524.15
2B	100	\$20.50	\$20.50	\$2,050.00	\$2,050.00
3C	25	\$25.00	\$22.10	\$625.00	\$552.50
4D	64	\$152.00	\$145.75	\$9,728.00	\$9,328.00
5E	50	\$35.10	\$42.00	\$1,755.00	\$2,100.00
6F	63	\$40.00	\$35.00	\$2,520.00	\$2,205.00
Sum				\$17,220.30	\$16,759.65
Price Variation (Positive = price increase; negative = price decrease)					-2.7%

Scorecard

A scorecard is a report or graphical representation of the progress over time of a particular supplier towards specified goals.

Each drilling contractor should determine the best design for their own scorecard and should determine the desired goal for suppliers to achieve. It is recommended to show trends in the scorecard to identify opportunities.

This document provides guidelines and recommendations on a scorecard as shown in the below example. The example shows seven of the aforementioned performance measures with equal weighting. Please note we intentionally kept "Price Variance" as a discussion point with the applicable supplier (separate from the scorecard). Please feel free to adjust the percentages in the "Weight" column based on your own company's priorities and level of importance.

In addition, please also change the scoring values (e.g., <5 incidents within 12 months for a score of 2 for the "Revenue Impact due to Poor Quality" measure) based on your specific company's thresholds and historical data. The values given in the example are just guidance.

Also, note that the scoring mechanism is setup similar to a performance appraisal whereas a 5 is "Superior Performance," a 4 is "Exceeds Expectations," a 3 is "Met Expectations," a 2 is "Below Expectations," and a 1 is "Poor." Therefore, the goal is for the supplier to achieve at least a 3 in each performance measure.

Finally, please also consider using different types of scorecards and valuation thresholds based on the type of supplier (e.g., OEM, MRO, Logistics provider). The objectives are to create a balance scorecard that you can share with your suppliers so they understand your priorities and expectations, and are relevant and meaningful with their areas of expertise and business.

EXAMPLE:

Supplier Name	ABC Company
Time Period	Q4 2017
Total Score	2.6

No.	Description	Evaluation					Weight	Score	Weighted Score	Comments
		5	4	3	2	1				
1	Service Safety Performance	0 incidents for rolling 3+ years	0 incidents for rolling 2+ years	0 incidents for rolling 1+ year	1 incident within 12 mos.	1+ incidents within 12 mos.	14.3%	2	0.3	
2	Revenue Impact due to Poor Quality	\$0 in rolling 3+ years	\$0 in rolling 2+ years	\$0 in rolling 1+ year	<\$50K USD within 12 mos.	>\$50K USD incidents within 12 mos.	14.3%	3	0.4	
3	Non-Conformances	0 in rolling 3+ years	0 in rolling 2+ years	0 in rolling 1+ year	<5 incidents within 12 mos.	5+ incidents within 12 mos.	14.3%	3	0.4	
4	On-Time Delivery	98%	95%	90%	80%	<80%	14.3%	4	0.6	
5	% Late	<3%	<5%	<10%	<15%	>15%	14.3%	3	0.4	
6	Aged Overdue Open PO Lines	None overdue	<3 days	<7 days	<14 days	>14 days	14.3%	2	0.3	
7	Invoice Accuracy	100%	99%	98%	90%	<90%	14.3%	1	0.1	
							100%	2.6		

Other Measures	Value	Comments
Price Variance		

	Q1 '17	Q2 '17	Q3 '17	Q4 '17
ABC Company	2.9	3.1	3.2	2.6

- 5 - Superior Performance
- 4 - Exceeds Expectations
- 3 - Meets Expectations
- 2 - below Expectations
- 1 - Poor Performance

Conclusion

The purpose of the IADC Supply Chain Committee is to facilitate the exchange of ideas, knowledge sharing, and interaction amongst drilling contractors, suppliers, and other IADC groups with the aim of implementing best practices for the betterment of the drilling industry. In addition, the IADC Supply Chain Committee endeavors to improve the overall performance of the drilling contractor's supply chain in order to better serve our customers and key stake holders.

The IADC Supply Chain Committee recognizes there are many other valuable metrics available to measure suppliers' performance. However, the Committee considers the metrics included in this document to be the most relevant and beneficial to the overall supply chain process.