

IADC Global
Supply Chain Committee



Supplier Performance - Metrics
and Scorecard

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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

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Document Change History Sheet

Date	Version	Reason for Change
2015 Oct 30	Baseline	Baseline Document

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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 throughout the entire procure to pay process.

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.

The IADC supplier standard metrics are:

- On-time delivery
- Price variance
- Lead time management
- Percentage of OS&D
- Invoice accuracy
- Qualitative Survey

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 the drilling contractors' organizations and not to be shared with anyone other than their respective suppliers.

On-time Delivery

This metric is created to provide the supplier with statistical evidence of the supplier's ability to meet the delivery date per line item using the date provided 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 request date from the supplier.

$$\frac{\text{Lines items delivered before or on the original acknowledged date}^{(1)}}{\text{Total received line items}} = \% \text{ on-time}$$

⁽¹⁾ IADC recommends adding a seven (7) day "buffer" to the acknowledge date to account for circumstances out of the supplier control, such as receiving process, incoterms, etc.

Price variance

The purpose of this metric is to provide visibility on price fluctuations, either increases or decreases, 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 year 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 year 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%

Lead time management

The lead time management metric measures the percentage of items the supplier acknowledges with the same or an improved delivery date on the purchase order, versus the delivery date provided on the original quote. The results will provide insights about the supplier's inventory and production levels.

$$\frac{\text{Total line items acknowledged with the same or less lead time}}{\text{Total line items}} = \text{Lead time management}$$

Percentage of Overage, Shortage & Damaged (OS&D)

This metric is created to give statistical evidence of the accuracy of a supplier's delivery. The metric is expressed as a percentage (%) of the total lines supplied. Items delivered without documentation such as Safety Data sheets (SDS) are also included in the metric. A list of all documentation that must be supplied for shipments can be found in the IADC Global Supply Chain/Trade Compliance Guidelines (July 2014)

$$\frac{\text{No. of line items delivered with OS\&D}}{\text{Total line items delivered}} = \% \text{ of OS\&D}$$

Invoice accuracy

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 product, quantities and price during a specific time period. The data will reveal whether the supplier is correctly preparing, documenting and billing the purchase orders.

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

Qualitative Survey

The IADC Supply Chain Committee recommends the final metric to be a review of the supplier's overall ability to maintain a positive relationship with the drilling contractor. This includes measurement criteria such as the supplier's ability to provide superior product/technical support, product quality, knowledgeable personnel, and order management.

This type of metric can be best created by requesting feedback with an inner company survey or email. Any department within the drilling contractor's organization that comes into contact with the supplier should be requested to provide feedback such as accounts payable, engineering, operations, etc.

After the drilling contractor has collected the feedback, they will need to determine how to incorporate the survey results effectively into their supplier scorecard. A percentage survey/score is recommended in order to use the scorecard in the following section.

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 desire goal for suppliers to achieve. It is recommended to show trends in the scorecard to identify opportunities.

This document provides guidelines and recommendations on the weighting each metric should have towards a balanced scorecard.

Recommended weighting:

Metric	Recommended Weight	Scorecard Calculation
On Time Delivery	30%	On Time Delivery % * 0.30
Price Variation (PV)	15%	PV greater than -10% = 0.15 PV between 0% and -9% = 0.10 PV between 5% and 0% = 0.5 PV less than -5% = 0.0
Lead Time Management	15%	Lead Time Management % * 0.15
OS & D	10%	(1-OS&D %)* 0.10
Invoice Accuracy	10%	Invoice Accuracy * 0.10
Qualitative Survey	20%	Quality Survey * 0.20

Scorecard example:

	Metric Evaluation	Scorecard Result
On Time Delivery	83%	25%
Price Variation	8%	10%
Lead Time Performance	85%	13%
OS & D	12%	9%
Invoice Accuracy	93%	9%
Qualitative Survey	75%	15%
Final Supplier Score		81%

Conclusion

The purpose of the IADC Supply Chain Committee is to facilitate the exchange of best practices, establish standardized performance measures for suppliers in our industry, and to assist members, suppliers, and other IADC groups through integration, knowledge sharing, and reporting. 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.