OSHKOSH™

Enterprise EDI

(Electronic Data Interchange)

~ Supplier Manual ~

Oshkosh Corporation Enterprise EDI

Enterprise EDI: Supplier Manual
Version: 2.0

Company: **Oshkosh Corporation**
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1.0 FORWARD

1.1   ABOUT OSHKOSH CORPORATION

Oshkosh Corporation is a leading designer, manufacturer and marketer of a broad range of specialty access equipment, commercial, fire & emergency and military vehicles and vehicle bodies. Oshkosh Corporation manufactures, distributes and services products under the brands of Oshkosh®, JLG®, Pierce®,McNeilus®, Jerr-Dan®, Oshkosh Specialty Vehicles, Frontline(TM), SMIT(TM), CON-E-CO®, London® and IMT®. Oshkosh products are valued worldwide in businesses where high quality, superior performance, rugged reliability and long-term value are paramount. For more information, log on to http://www.oshkoshcorporation.com.

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1.2   ELECTRONIC COMMUNICATION WITH OSHKOSH CORPORATION

Oshkosh Corporation's goal is to communicate electronically with its suppliers – whether through the supplier OSN Portal or via EDI (electronic data interchange). This manual is written for the functional supplier community currently integrating an EDI trading partnerip with Oshkosh Corporation or currently transacting business via EDI with Oshkosh Corporation. For all questions regarding the OSN Portal, please refer to http://osn.oshkoshcorp.com.

The manual is intended for the use of all Oshkosh Corporation suppliers however is tailored towards the domestic supply base. If questions arise pertaining to the international supply base, please contact the EDI Business Analyst. All information presented in this manual is confidential and subject to change. **Please use this manual in conjunction with other documentation to ensure full functional and technical knowledge of the Oshkosh Enterprise EDI solution.**

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2.0 INTRODUCTION

2.1 DEFINITION OF ELECTRONIC DATA INTERCHANGE (EDI)

EDI is the computer to computer exchange of business transactions between trading partners. EDI requires specific formats that are based on widely accepted standards. These standards provide a common language that enables businesses with dissimilar computer-based business systems to communicate with each other.

2.2 ENSURING EDI CAPABILITY

EDI software must be setup by an IT department of a supplier. This software may already be available in business transaction systems (e.g. ERP). If not, additional software may need to be purchased and integrated. The EDI software must then be configured to send and receive messages in specific Oshkosh Corporation format. A representative from the supplier's IT department is the best point of contact to understand if EDI is currently supported and for which standards.

2.3 ENTERPRISE EDI TRANSACTION SETS

Oshkosh Corporation's Enterprise EDI initiative is currently supply-side only focusing on the process areas of planning, purchase order management, and advanced ship notices (ASN). The transaction sets in scope include:

- 816 Organizational Relationship
- 830 Forecast
- 850 Purchase Order
- 855 Purchase Order Acknowledgement
- 860 Purchase Order Change
- 856 Advanced Ship Notice
- 997 Functional Acknowledgement

An overview of the process areas, transaction sets, and flow between Oshkosh Corporation and the supplier can be seen in the illustration below. All documents originating from Oshkosh are considered "outbound" documents. All documents originating from the supplier are considered "inbound" documents.
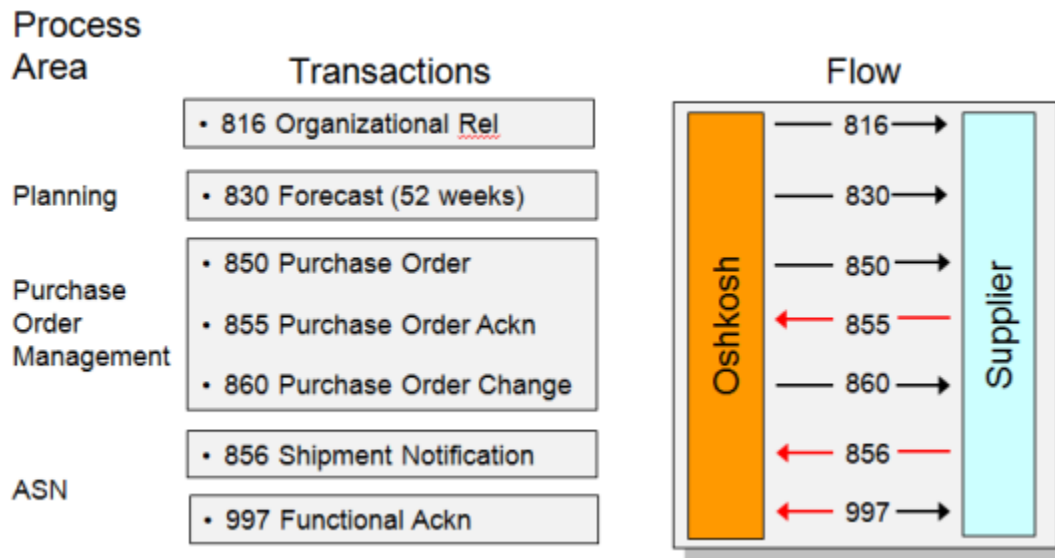

Figure 2.3.1 Enterprise EDI Scope

Each transaction set is broken down and discussed in detail throughout the manual. Below however is a quick summary of the transaction sets.

Transaction Set	Transmission Frequency	Horizon	Quick Notes
816 Organizational Relationship	Weekly, Saturdays	-	Sent only if changes occurred in the time period
830 Forecast	Weekly, Mondays	52 weeks	Not release-based
850 Purchase Order	Real-time	-	Delivery-based
855 Purchase Order Acknowledgement	As determined by the supplier	-	Header level acknowledgements
860 Purchase Order Change	Batched (10 minute cycles)	-	-
856 Advanced Ship Notice	As determined by the supplier	-	Sent within 15 minutes of product leaving
997 Functional Acknowledgement	Real-time	-	-

For specific technical information regarding the transaction sets, please reference the EDI implementation guidelines. The EDI implementation guidelines will illustrate what fields are both recommended and mandated by Oshkosh Corporation on EDI transmissions.

2.4   ENTERPRISE EDI STANDARDS AND CONNECTIVITY

Oshkosh Corporation will communicate EDI using ANSI X.12 standards with the capability to translate to EDIFACT if needed. The current ANSI X.12 version supported by Oshkosh Corporation is v4010. Besides applying traditional EDI standards, Oshkosh Corporation will also be adhering to the AIAG (Automotive Industry Action Group) guidelines.

Oshkosh Corporation will transmit EDI data via three channels: AS2 Direct (preferred), VAN, and SFTP. AS2 Direct transmits data securely over the Internet; VAN stands for Value Added Networker and uses a third-party for secure data transmissions; SFTP is a secured FTP location used for sending and retrieving EDI data.

Please reference Section 2.7 regarding the supplier self-registry/certification process.

2.5   ENTERPRISE EDI DEPENDENCIES ON OSN PORTAL

Oshkosh Corporation's Enterprise EDI solution is built from the OSN Portal. With this being said, transacting via the Enterprise EDI solution has a few dependencies which include:

a)   A supplier must be live and familiar with the OSN Portal before going live with Enterprise EDI
b)   Once a supplier is live on the OSN Portal, Enterprise EDI will become available for specific Oshkosh Corporation business units currently using the OSN Portal
c)   EDI is available for suppliers by supplier site for eligible business units

NOTE: Regardless if transacting business with Oshkosh Corporation via the OSN Portal or Enterprise EDI, the OSN Portal is the source of record for contact information/management and announcements. Suppliers will be responsible for these maintenance activities. Please see http://osn.oshkoshcorp.com.
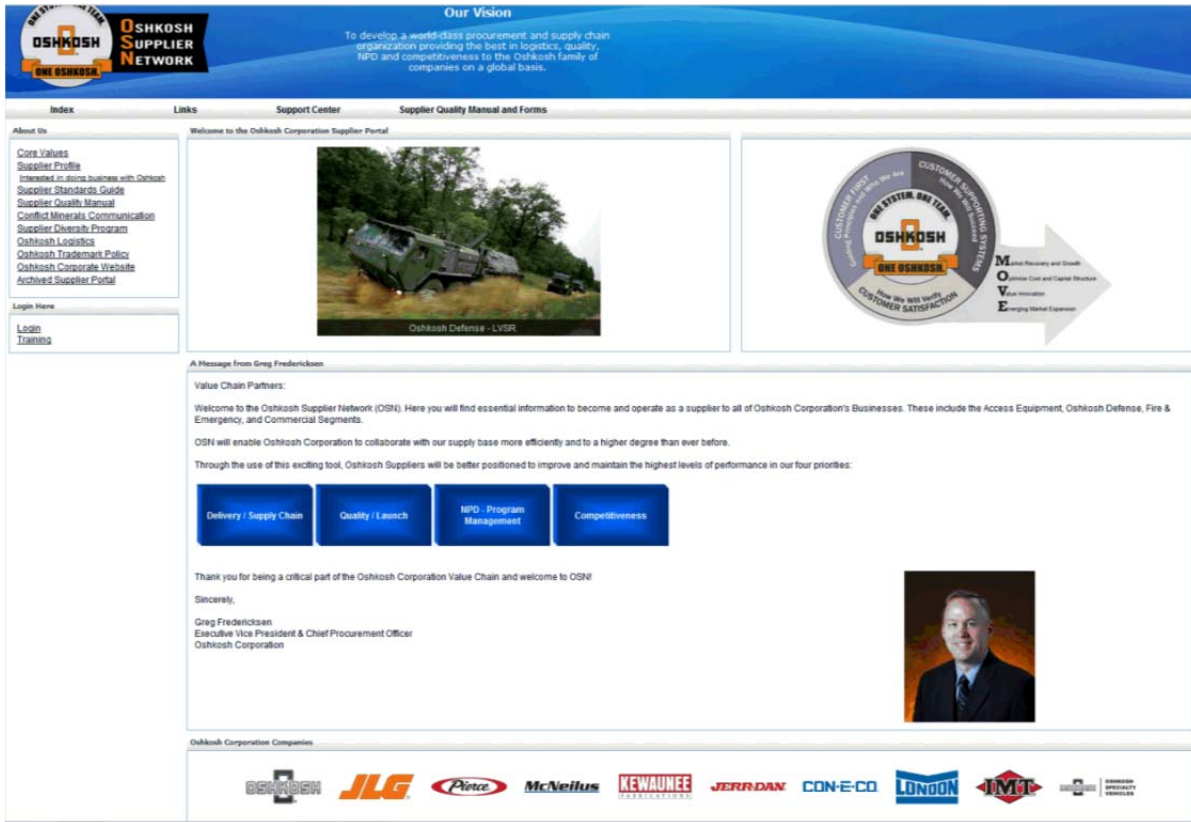
Figure 2.5.1 OSN Portal Homepage

2.6   TRANSITIONING TO BE AN ENTERPRISE EDI SUPPLIER

Becoming an Enterprise EDI supplier with Oshkosh Corporation is an exciting and rewarding adventure. Typical suppliers on Enterprise EDI are mid-large size companies with large transactional volume.

If interested in becoming an Enterprise EDI supplier and your company has not yet been assigned an on-boarding deadline by one of Ohskosh Corporation's Business Units, please reference Section 2.7 for instructions on requesting to start the on-boarding process.

2.7   SUPPLIER SELF-REGISTRY/CERTIFICATION

In order to become an EDI supplier, a company must first submit the appropriate documentation and information as well as establish an on-boarding due date with the Business EDI representative. Once complete, the company will be provided access to the Oshkosh Corporation self-certification system within the OSN Portal.

The Supplier is then responsible to establish connections and test document transmissions conducted back and forth with Oshkosh Corporation. Once this process is complete, an EDI Business Analyst from Oshkosh Corporation will review the test

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results, finalize the set-up, and coordinate a move from the test environment to the production environment for all approved transaction sets.

Please contact Oshkosh's EDI technical team at edi@oshkoshcorp.com to begin this process.

2.8   FUTURE ENTERPRISE EDI ENHANCEMENTS

Enterprise EDI is an ever-evolving program for Oshkosh Corporation. Additional transaction sets may be added for suppliers using the program. As enhancements become available, current Enterprise EDI suppliers will be notified. Also, documentation and training will be updated to reflect the changes.

NOTE: The 865 EDI transaction set will be incorporated to the Oshkosh portfolio in 2014.

2.9   GENERAL QUESTIONS AND CONCERNS

Throughout the manual, questions, concerns, or clarification points may be needed. Please feel free to contact the following individuals depending on the situation.

EDI Technical Questions:
Corporate EDI Technical Team   edi@oshkoshcorp.com
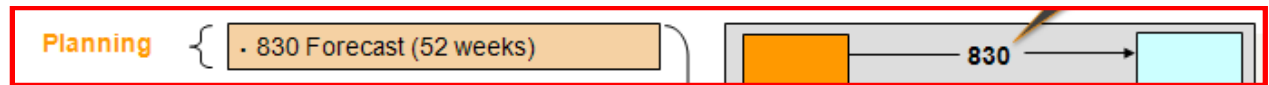
EDI Business Questions:
Oshkosh Defense   edionboarding@defense.oshkoshcorp.com
JLG   sehopkins@jlg.com
McNeilus   kjongbloedt@mcneilusco.com

3.0 PLANNING PROCESS AREA

The EDI transaction set in the Planning Process Area represents firm and planned demand. The information is communicated via the 830 Forecast.

3.1   830 FORECAST

3.1.1 INFORMATION COMMUNICATED ON THE 830 FORECAST

Oshkosh Corporation communicates 52-weeks of planning data (both firm and planned orders) to suppliers on a weekly basis. The supplier will receive their 830 Forecast on Mondays shortly after noon.

The 830 Forecast communicates the generic blanket order purchase number and both firm and planned demand. Blanket release quantities and finite purchase order quantities are sent per Oshkosh Corporation ship-to locations. Data is specific to Oshkosh business unit and should be handled individually from each other.

If an item has a blanket purchase order but no firm data nor planning data, Enterprise EDI will communicate zeros for the first transmission and then consider the blanket purchase order cancelled suppressing future data transmissions. If an item on a blanket purchase order has some firm or planned demand, this demand will be transmitted but zero quantities will not.

Past due orders will be communicated in a "past due" bucket on the 830 Forecast. Obviously past due orders signal a late order and should be managed and resolved expeditiously.

### 3.1.2 INFORMATION NOT COMMUNICATED ON THE 830 FORECAST

Because the 830 Forecast is primarily for planning purposes, blanket purchase order release numbers are not provided. Instead this information can be found on the 850 Purchase Order for the PO Release.

3.1.3 HOW TO USE THE INFORMATION ON THE 830 FORECAST

The supplier should use the information on the 830 Forecast to plan fulfillment of Oshkosh orders. Also, the supplier should utilize the forecast information to look-ahead and see possible increases or decreases in demand.

As a reminder, the 830 Forecast is a one-way transaction from Oshkosh Corporation to the supplier. If there are questions or concerns regarding the data transmission sent via EDI, please contact the Oshkosh EDI Business Analyst. If there are questions regarding actual orders, please contact the appropriate buyer.

4.0 PURCHASE ORDER MGMT PROCESS AREA
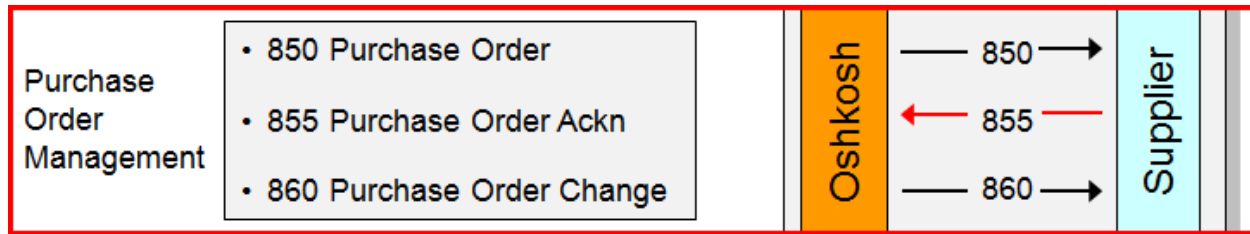
The EDI transaction sets within the Purchase Order Management planning area represent two things: planned and unplanned demand. Planned demand is the communication and agreement of blanket purchase order conditions or finite orders between the supplier and Oshkosh Corporation. Unplanned demand is the discrete purchase order placed to fulfill changes in demand. Ideally unplanned demand should be minimal and used on an exception basis only.

4.1   850 PURCHASE ORDER

4.1.1 INFORMATION COMMUNICATED ON THE 850 PURCHASE ORDER

The 850 Purchase Order is technically used to communicate overall attributes of a blanket purchase order. It is also used as a finite purchase order to cover planned and unplanned demand including spot buy purchase order requirements as well as blanket purchase order release requirements. Unplanned demand can be seen from a number of sources some of which include increases in customer requirements, inventory adjustments, and quality issues.850 Purchase Orders are sent real-time to the supplier. When orders are placed to the supplier, item lead time are considered and respected as much as possible. If expedited orders are needed, typical practice is for the buyer to reach out and confirm item availability.

4.1.2 HOW TO USE THE INFORMATION ON THE 850 PURCHASE ORDER

Initial communication of a blanket purchase order will be seen via an 850 Purchase Order transmission. The purpose code set on the actual EDI transmission will alert the supplier to the type of transmission – whether it is a blanket order, blanket order release, or a standard purchase order.

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850 Purchase Order transactions require acknowledgements at the header via the 855 Purchase Order Acknowledgement EDI transaction set (specific details discussed later in the manual). Once acknowledgement is received on a purchase order, it is the expectation of Oshkosh Corporation that the order be filled and delivered based on the agreed upon price, quantity, delivery date, and item revision by the supplier. If for any reason a change is needed by the supplier, they must contact the appropriate buyer immediately.

NOTE: The 855 transaction set will be modified in 2014 to allow accept with changes. In addition, the 865 transaction set will be incorporated in 2014 to allow Supplier requested changes to Oshksoh initiated change requests via the 860 EDI transaction set. In the interim, suppliers must communicate all change requests with your buyer and via the OSN portal.

4.2   855 PURCHASE ORDER ACKNOWLEDGEMENT

The 855 Purchase Order Acknowledgment is a one-way transaction set received by Oshkosh Corporation from the supplier. Please reference the Enterprise EDI Implementation Guidelines for specifics on this header level acceptance or rejection.

NOTE: If a supplier cannot physically make the parts on the purchase order, they should contact their Buyer to have the purchase order cancelled. If a supplier can make some of the parts or only has concerns regarding specific line level part attributes (price, quantity, delivery date, or item revision), they should send an 855 accept and contact their buyer to work out the details. See note in 4.1.2 for additional information regarding modifications to the 855.

4.3   860 PURCHASE ORDER CHANGE

4.4.1 INFORMATION COMMUNICATED ON THE 860 PURCHASE ORDER CHANGE

The 860 Purchase Order Change communicates both header and line level changes to the supplier. Information is batched and communicated every 10 minutes to the supplier. Both blanket purchase order changes and finite purchase order changes are communicated via this transaction set.

4.3.2 HOW TO USE THE INFORMATION ON THE 860 PURCHASE ORDER CHANGE

Change requests received through an 860 Purchase Order Change transmission should be reviewed by the supplier. If any questions or issues still remain, the supplier should contact their buyer.

NOTE: Change requests can be made by a buyer or a supplier via the OSN Portal Change facility or via manual methods (i.e. phone, email).   See note in 4.1.2 for additional information regarding modifications to the 855.

5.0 ADVANCED SHIP NOTICE (ASN) PROCESS AREA

The Advanced Ship Notice (ASN) process area represents clear communication from suppliers to Oshkosh Corporation regarding inbound freight. The ASN will allow Oshkosh Corporation facilities to better plan and manage their inbound activities.

The 856 Advanced Ship Notice is a one-way transaction from the supplier to Oshkosh Corporation. It is the expectation of Oshkosh Corporation that an ASN be generated and sent within 15 minutes of the product leaving the supplier's facility OR prior to Oshkosh receiving the product, whichever occurs first.   It is the supplier's responsibility to arrange for shipment with Oshkosh Corporation's preferred carrier in order to meet the specified due date. Please reference the Oshkosh Logistics link on https://osn.oshkoshcorp.com for routing instructions.

Mandatory fields exist on the ASN and without the proper information populated, the transmission will fail and be sent back to the supplier for correction. Please reference the 856 ASN Enterprise EDI Implementation Guidelines for a listing of the mandatory fields. If a change to the ASN is required after it has been submitted and accepted, the supplier will need to cancel the first transmission and resubmit a new ASN with a new ASN number.

If any questions arise regarding the mandatory fields for the ASN, please contact the EDI Business Analyst. Please note, standard labeling guidelines and ASN compliance requirements also exist for suppliers and can be found in Section J of the Oshkosh Supplier Standards Guide.

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6.0 FUNCTIONAL ACKNOWLEDGEMENT

The 997 Functional Acknowledgement EDI transaction set is a standard transmission used with EDI to ensure technically documents are sent and received between trading partners. The 997 Functional Acknowledgement does not validate the data sent on each transmission but is a fail-safe to ensure technically documents do not fail.

For any questions regarding failed EDI transmissions, please contact the EDI Business Analyst.

7.0 ORGANIZATIONAL RELATIONSHIPS

The 816 Organizational Relationships EDI transaction set is a standard transmission used by Oshkosh to convey changes in ship-to location to our Suppliers. One complete file is sent with all ship-to locations for business units that our Suppliers have set up with EDI. Any changes made within the week are compiled and transmitted on Saturdays at noon.

8.0 DEFINITION OF TERMS

Attributes – Specific characteristics represented on a purchase order that can be changed (i.e. item, price, quantity, item revision).

Blanket purchase order – (per APICS) A long-term commitment to a supplier for material against which short-term releases will be generated to satisfy requirements.

Blanket purchase order release – Short-term release against blanket purchase order to satisfy material requirements.

Discrete purchase order – See finite purchase order.

Electronic Data Interchange (EDI) – (per APICS) The paperless (electronic) exchange of trading documents, such as purchase orders, shipment authorizations, advanced shipment notices, and invoices, using standardized document formats.

Enterprise EDI – Oshkosh Corporation's EDI solution across all business units.

Finite purchase order – Purchase order not tied to a blanket purchase order; stand-alone purchase order with specific contractual terms and conditions.

Firm demand – Demand tied specifically to a blanket purchase order release or finite purchase order.

Firm release order – See blanket purchase order release.

Fixed week – Saturday through Sunday.

Functional – Representing the business portion of the business.

Header level – Purchase order attributes at the top level of a purchase order (i.e. supplier name, buyer, purchase order number, etc.).

Item lead time – Specific time set up in division level business units representing time span in which supplier will see firm orders.

Line level – Purchase order attributes at the second level of a purchase order (i.e. item, price, quantity, item revision, etc.).

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OSN Portal – Web-based program used to communicate data between Oshkosh Corporation and suppliers.

Past due – Purchase order where due date precedes current date.

Planned demand – Anticipated material needs not yet firmed into a blanket purchase order release.

Planning data – Forecasted material needs.

Ship-to – Unique physical location where product is to be delivered.

Spot buy – See finite purchase order.

Technical – Representing the information technology (IT) portion of the business.

Trading partner – (per APICS) Any organization external to the firm that plays an integral role within the supply chain community and whose business fortune depends on the success of the supply chain community.

Transaction set – EDI transmission used to communicate specific information.

Unplanned demand – Demand not forecasted or planned for; typically handled with a finite purchase order.

9.0 ACRONYMS

AIAG – Automotive Industry Action Group

ASN – Advanced Ship Notice

EDI – Electronic Data Interchange

ERP – Enterprise Resource Planning

OSN – Oshkosh Supplier Network