



Introduction to EDI with 3M

What is EDI?

Simply stated, EDI (Electronic Data Interchange) is the electronic exchange of business documents between Customers and Suppliers.

EDI is comprised of two components: translation and communication.

- During translation, a business document is changed “translated” into a standardized EDI format. There are various EDI standards (or formats) that a company may use. 3M supports:
 - ANSI X/12 version 4010
 - EDIFACT 96A
- Once a business document is translated into an EDI format it is communicated or electronically sent to the intended recipient.
- There are several methods of EDI communications available,
 - VAN
 - AS2
 - SFTP

Benefits of EDI

EDI provides many benefits to support your business in achieving its objectives. Keep the following in mind as we begin to work together to implement EDI.

- EDI reduces paperwork (forms handling), data entry labor costs, postage costs, and printing costs.
- EDI reduces order cycle time by allowing for 24-hour processing cycle and elimination of manual processing bottlenecks.
- EDI reduces errors resulting from manual data entry.
- EDI drives out inefficiencies in the business process by ensuring data consistency, data accuracy and elimination of manual order processing time.

Customers choosing to integrate via EDI with 3M should consider integrating each of the core procure to pay transactions to capture the full benefit of integration (Purchase Order, PO Acknowledgement, PO Change Order, PO Change Acknowledgement, Advanced Ship Notice and Invoice)

Requirements

- 3M is requesting that customers implement all complementary transactions for their Procure to Pay process (Purchase Orders, PO Acknowledgements, PO Change Orders, Change Order Acknowledgements, Advanced Ship Notices and Invoice. For the greatest efficiency, please ensure that you can support all of these transactions.
- 3M supports ANSI X12 version 4010 and EDIFACT version 96A.

US Sender/Receiver ID

Production

- ISA ID/Qualifier: 01/006173082
- GS ID: 006173082

Test

- ISA ID/Qualifier: 01/006173082T
- GS ID: 006173082

CA Sender/Receiver ID

Production

- ISA ID/Qualifier: 5194512500/12
- GS ID: 5194512500

Test

- ISA ID/Qualifier: 5194512500T/12
- GS ID: 5194512500T

GLNs for European Countries

Country Code	Country	GLN
AT	Austria	9003333000014
BE	Belgium	5410176000011
CH	Switzerland	7610182007044
CZ	Czech Republic	8594028320001
DE	Germany	4001895000003
DK	Denmark	5790000429226
ES	Spain	8410001000015
FI	Finland	003702008145
FR	France	3011343710003
GB	Great Britain	5013546030160
HU	Hungary	5990030022002
IT	Italy	8000280000006
NL	Netherlands	8713258999997
NO	Norway	7080000366880
PL	Poland	5909000038608
PT	Portugal	5600000000717
SE	Sweden	7310080000016
TH	Thailand	8850304999997
TR	Turkey	8690734006885

Connection Options

1. Direct Connections

- AS2 HTTP
- AS2 HTTPS

What we will need from you for direct connection

- **AS2 HTTP and HTTPS**
 - AS2 ID
 - AS2 URL along with Port Number
 - IP Address
 - Certificates (Exchange and Signing Certificate and SSL Handshake Certificate for HTTPS)
 - Encryption and Signing Algorithm
 - MDN Delivery Type: We prefer Synchronous Mode of Communication
 - Synchronous (Preferred)
 - Asynchronous

AS2 Connectivity

	Production	QA
Host IP Address	3.138.65.88	35.175.73.236
3M receiving server	3.133.164.131	3.234.32.159
Originating IP Address	192.28.17.0/24	192.28.16.0/24
3M sending server		

2. SFTP

- **3M prefers Push/Push Model**- Partner will place the file in 3M server for Inbound to 3M and 3M will place file in Partner server for our outbound to 3M.
- **Pull/Push Model** - 3M will pick file from Partner Server for Inbound to 3M and 3M will place file in Partner server for our outbound to 3M.

What 3M will need from you for SFTP option:

- URL along with Port Number
- IP Address
- Authentication Method:
 - User-Id + Password
 - User-Id + Public Key, 3M to provide Public Key
- Folder, Filename: If there is specific folder and filename where file needs to place.

SFTP Connectivity

	Production	QA
Host URL	b2b.3m.com	b2bqa.3m.com
Host IP Address	3.138.65.88 3.133.164.131	35.175.73.236 3.234.32.159
Originating IP Address	3.128.218.252 18.218.54.173	52.45.160.143 34.195.37.207 44.193.227.95 54.145.30.15

For more details regarding connectivity please refer to 3M's EDI/API Intake Form

Onboarding Process

1. Fill out EDI onboarding form.

Link to form

2. 3M team will reach out to your representative parties to discuss process, requirements and timing for the implementation. 3M suggests reading the user guides for the suite of transactions and being ready to discuss any questions you may have.
3. Customer creates or adjusts maps to accommodate 3M standard maps.
4. Customer connects with 3M via defined protocol.
5. Customer internally tests transaction maps and ability to transmit EDI to 3M test environment.
6. Customer notifies 3M onboarding team that they are ready to begin integration testing.
7. Integration Test

Successful integration testing and sign off by both parties is required prior to moving a trading partner into production. Testing will involve the execution of a pre-set script as follows:

1. The customer generates and transmits a **Purchase Order**.
2. 3M receives Purchase Order and transmits **Functional Acknowledgement** confirming receipt of order.
3. 3M generates and transmits an **Acknowledgement/Response** to Purchase Order.
4. 3M makes change to customers order and transmits additional. **Acknowledgement/Response** to Purchase Order indicating a change.
5. Customer generates and transmits a **Purchase Order Change**
6. 3M receives PO Change and transmits **Function Acknowledgement** confirming receipt of change order.
7. 3M generates and transmits an **Acknowledgement/Response** to PO Change.
8. 3M fulfills order and transmits an **Advanced Shipping Notice**.
9. 3M generates and transmits an **Invoice**.

End of Process

Note – It is recommended that the transactions are tested all the way through customer and 3M applications to ensure that all the data required for processing is being transmitted.

9. Sign off on Testing by 3M and Customer.
10. Move new trading partner to production.

Notes

- Customers will receive Functional Acknowledgements for Purchase Orders and Purchase Order Changes.
- Customer will receive a PO Acknowledgement/Response for ALL 3M initiated changes to a customer's order thus a customer may receive multiple Acknowledgement/Responses for one Purchase Order.
- If for whatever reason 3M cannot transmit customer label information relative to a customer shipment, 3M will NOT send an Advanced Ship Notice.

Transactions and User Guides

3M recommends that newly onboarded customers implement the following transaction set:

Purchase Order	3M 850 - PO_Implementation_Guide.doc.docx EDIFACT ORDER Link
Purchase Order Acknowledgement	3M_855_POA_Implementation_Guide.doc.docx EDIFACT ORDRSP Link
PO Change Order	3M 860 PO Pending Final.docx EDIFACT POCHG Link
PO Change Order Acknowledgement	3M 865_Pending Final.docx No Equivalent EDIFACT Transaction
Advanced Ship Notice	3M_856_ASN_Implementation_Guide.doc.docx EDIFACT DESADV Link
Invoice	3M 810 Invoice Implementatio Guide.doc.docx EDIFACT INVOIC Link