Course Introduction

This course explains the creation and management of Advance Shipping Notifications (ASNs).

After completing this course, you will be able to:

▪ Define the ASN process using SAP Supply Network Collaboration (SAP SNC).
▪ Create and publish an ASN using SAP SNC.
▪ Describe the Goods Receipt (GR) process in the SAP Enterprise Central Component (ECC).
▪ Explain the Proof of Delivery (POD) process with SAP SNC.
▪ View the POD within SAP SNC.
▪ Manage alerts.
ASN Process Overview
Module Objectives

After completing this module, you will be able to:

▪ Outline the ASN workflow in SAP SNC.
▪ State the benefits of ASN in SAP SNC.
▪ Explain the steps for creating an ASN both online and offline.
▪ Describe how to update or cancel an ASN.
▪ Detail the ASN publishing process.
▪ Identify 3M POD and GR processes in SAP SNC.
▪ Explain the SAP SNC ASN alert process.
Advance Shipping Notification Flow

This diagram illustrates the workflow:

**Supplier**

- Create ASN
- Split Quantity by Batch (if required)
- Pack ASN (optional)
- Publish ASN
- Print HU Label (optional)
- Receive Proof of Delivery

**3M**

- Receive ASN
- Receive Material
- Post Goods Receipt
- Send Proof of Delivery
Overview of the ASN Process Using SAP SNC

ASN process:

1. Before the material is shipped, the Supplier creates, splits the quantity by batch (if required), packs (optional), and publishes an ASN in SAP SNC. Suppliers create ASNs against the Purchase Order (PO) number or Scheduling Agreement (SA) prior to shipping the material. Suppliers can create one or multiple ASNs against one or multiple POs. An ASN can also be entered for a partial shipment. There should only be one ASN per shipment, per container, and the ASN details must match the physical shipment. Suppliers may also print Handling Unit (HU) labels after publishing the ASN.

2. 3M receives notification of the ASN through SAP SNC and updates the ASN number against the corresponding PO or SA number in SAP ECC.

3. Upon receipt of material, 3M posts GR information in SAP ECC and sends a POD to SAP SNC against the ASN number.

4. The Supplier verifies the ASN has **Goods Receipt Complete** status.
Benefits of the SAP SNC ASN Process

ASN is a key feature of SAP SNC. ASN allows the Supplier to:

- Inform 3M about the shipment details prior to or at the time of shipping.
- Communicate this information to 3M accurately and in real time:
  - Shipment information
  - Vehicle details
  - Transporter name and contact details
Creating an ASN Process Flow

This diagram illustrates the steps involved in creating an ASN:

**Supplier**
- Create ASN
- Split Quantity by Batch (if required)
- Pack ASN (optional)
- Publish ASN
- Print HU Label (optional)
- Receive Proof of Delivery

**3M**
- Receives ASN
- Receives Material
- Post Goods Receipt
- Send Proof of Delivery

SAP SNC
Creating ASN Key Concepts

Three steps (plus two optional steps) comprise creating an ASN:

1. ASN data entry.
2. Checking the ASN for errors.
   a) Split Quantity by Batch (required for all batch managed materials)
   b) Packing (optional)
3. Publishing the ASN.
   a) Printing HU labels (optional)

Prior to creating the ASN, the Supplier or Sub-Contractor updates the PO with the actual consumed quantity using the PO confirmation process in SAP SNC. The Supplier or Sub-Contractor creates the ASN:

- For a shipment against a PO and Forecast Delivery Schedule (FDS).
- Directly in SAP SNC (online) or using a file download and upload (offline) process.
Creating an ASN

Suppliers create their ASNs from the *Due List for Purchase Documents* window within SAP SNC.
Creating an ASN: Checking an ASN

For Sub-Contracting POs with batch-managed components, Suppliers update the **Supplier Batch** fields using the PO confirmation process. Do this prior to creating the first ASN.

- If the batches are not updated, the Supplier cannot publish the ASN for the Sub-Contracting PO, and encounters a validation error:

  ![ASN error messages]

  - If the Supplier faces this error, they have to return to the PO, change the PO to add valid batches to the components, and then republish the PO.
When checking an ASN for errors, SAP SNC completes an Inventory Validation Check.

The Supplier’s entries for component quantities during PO confirmation should meet these criteria:

- Component has a valid (non-zero) inventory at the Supplier location.
- Quantity entered is less than or equal to the current inventory level at the Supplier location.
If the criteria check fails, then SAP SNC displays the following errors:

- If the Supplier location has no inventory, the Case A error displays.
- If the Supplier does not have enough inventory, the Case B error displays.

- If the confirmation data fails on any one criteria, the Supplier will not be able to publish the ASN for the Sub-Contracting PO.
Creating an ASN: Checking an ASN (continued)

If errors exist after running the check against the ASN, the Supplier:

- Checks the *Display Message Log* section to view the errors.
- Places the ASN in Draft mode.
- Resolves any errors under Change mode.
- Publish the ASN.
Splitting Quantity by Batch

If more than one batch number needs to be entered in the delivery the Supplier must split the line in the ASN.

- Copy the ASN Item.
- Verify the Product Number, PO Number, and Qty copied correctly into the line item.
- Enter the relevant Supplier Batch number for each line.
- Enter the Manufacture Date, this is required for all batch managed materials.
- The Best Before Date is required if the product is shelf life managed.
- Publish the ASN.
Packing is an optional step for Suppliers when creating the ASN. Suppliers can use the Automatic Packing feature or pack the ASN manually.

- Use the **Pack Spec. Identifier** field to select the packing method.
- The packing method defaults to **Pallet**.
- Click **Automatic Packing** to have SNC do the packing.

- Use the buttons in the **HU – Hierarchical view** section of the window for manual packing.
Publishing an ASN

After creating the ASN online and completing the check (with no errors), on the Create ASN window, click **Publish ASN**.

Once the ASN is published in SAP SNC, the 3M Buyer receives an alert of updates requiring review.
Suppliers can print HU labels after creating and publishing an ASN.
- Labels are generated in SNC.
- Click **Print Label** or **Print All Labels** to generate the printable labels.

- Print the labels on the appropriate label printer.
Step-by-Step Instructions

Detailed instructions on how to **Create and Publish an ASN** can be found on the [Supply Network Collaboration Training](#) site.
Creating an ASN Offline

The Supplier:

▪ Defines a profile to use the Download/Upload Center. The Supplier only needs to do this the first time they use the Download/Upload Center.

▪ Downloads a CSV comma delimited file.

▪ Uses Excel to add appropriate information, such as shipping information, to the downloaded CSV file.

▪ Uploads the revised file into SAP SNC using the Download/Upload Center.
Creating an ASN Offline (continued)

To successfully upload the ASN data, the Supplier:

- Creates ASNs for confirmed POs.
- Does **not** change the **Header** details for the ASN download or upload file.
- Does **not** change the **Due List** column headings in the ASN download or the upload file cannot be uploaded.
Updating the ASN Download File

The Supplier specifies these details:

1. **ASN ID** (Mandatory)
2. **ASN Quantity** (Mandatory)
3. **Shipment Date** (Mandatory)
4. **Delivery Date** (Mandatory)
5. **Delivery Time** (Optional)

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<td>Owner Partner</td>
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<tr>
<td>Partner</td>
<td>CORP_3M</td>
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</table>
Updating the ASN Download File (continued)

6. **Bill of Lading** (Mandatory)
7. **Freight Invoice No** (Optional)
8. **Carrier Party** (Optional)
9. **Total Weight & UOM** (Optional)
10. **Total Net Weight & UOM** (Optional)
11. **Total Volume and UOM** (Optional)
12. **Supplier Batch** (Mandatory for batch-managed products)
13. **Manufacturing Date** (Mandatory for batch-managed products)
14. **Means of Transport ID** (Mandatory)
Step-by-Step Instructions

Detailed instructions on Creating a Download and Upload Profile can be found on the Supply Network Collaboration Training site.
Step-by-Step Instructions

Detailed instructions on **ASN File Transfer** can be found on the [Supply Network Collaboration Training](#) site.
Creating an ASN Offline (continued)

After uploading the file, the *Upload Center* lists the new file with the date and time stamp for the upload. The *Upload Center* provides a URL link to view the file.

<table>
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<tr>
<th>Type</th>
<th>Profile Number</th>
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<th>URL to View File</th>
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<td>affinvv.exe</td>
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<td>CORP_3M</td>
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<td>CORP_3M</td>
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Creating an ASN Offline: E-mail

Before sending the ASN by e-mail, the Supplier creates a Download Profile. As part of the Download Profile parameters, the Supplier sets the Periodicity of File Generation to Every Day at This Time.

**Note:** When using an offline e-mail option, it is strongly recommended that an Alert Notification Profile is set up for the same recipient, containing Alert Type 9001.
Creating an ASN Offline: E-mail (continued)

To upload an ASN using e-mail:

- 3M e-mails Due ASNs to the Supplier as a spreadsheet attachment.
- The Supplier or 3rd-Party Logistics Provider (3PL) updates the file with ASN shipment information, e-mailing it back to SAP SNC. SAP SNC then creates an ASN based on the information.

![Email example]

From: 3M/US-TBD/3M/US
To: *CORP_3M* <300SAP@MMM.COM>
Date: 06/28/2013 02:15 AM
Subject: [133]

CORP_3M_ASNDLPD_20130627204357.csv
Creating an ASN Offline: E-mail (continued)

Parameters for uploading an ASN using e-mail:
- The Supplier or 3PL completes the file and e-mails it back to SAP SNC.
- The e-mail’s subject line has the Upload Profile ID.
- Once the ASN data is uploaded into SAP SNC, it is sent by e-mail automatically.

![Example e-mail]

From: Supplier
To: "CORP_3M" <[redacted]@1.com>
Date: 06/28/2013 02:15 AM
Subject: [133]

CORP_3MASNDLPD_20130627204357.csv
Canceling an Advance Shipping Notification

ASNs published and entered in error require deletion in SAP SNC, as well as 3M internal systems. Canceling an ASN can only occur prior to 3M receiving the material.

**Note:** If the Supplier cancels an ASN, the Supplier always notifies the 3M Buyer. The 3M Buyer then performs the 3M portion of ASN cancellation in 3M internal systems.
Step-by-Step Instructions

Detailed instructions on how to **ASN Cancellation in SNC** can be found on the [Supply Network Collaboration Training](#) site.
Proof of Delivery for Goods Received

This diagram illustrates the steps involved in Proof of Delivery (POD):

**Supplier**
- Create ASN
- Split Quantity by Batch (if required)
- Pack ASN (optional)
- Publish ASN
- Print HU Label (optional)

**3M**
- Receive ASN
- Receive Material
- Post Goods Receipt
- Send Proof of Delivery

SAP SNC
Proof of Delivery for Goods Received (continued)

When a GR occurs in SAP ECC, SAP ECC generates a POD. The POD then transfers to SAP SNC and updates the received quantity on the ASN.

- Suppliers can view the POD in SAP SNC to determine whether or not 3M received the material.
- After confirming the GR occurred, the Supplier generates an invoice.
Managing Advance Shipping Notification Alerts

Both 3M and Suppliers receive alerts from SAP SNC.

- Different actions trigger creation of alerts, such as a new ASN, changing an ASN, GR against an ASN, or ASN with partial shipment.
- The alert type sent depends upon the Alert Profile. Users can also opt to have an e-mail sent.
- Access the *Alerts Monitor* by selecting **Exceptions**, then **Alert Monitor** from the drop-down list.
## Managing ASN Alerts: Common Alerts

<table>
<thead>
<tr>
<th>Alert Type</th>
<th>Alerts</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0031</td>
<td>Past Due ASN</td>
<td>Sent or published ASN that is past the delivery date, but no GR received</td>
</tr>
<tr>
<td>0032</td>
<td>GR Quantity Differs from ASN Quantity</td>
<td>A GR message received where the quantity differs from the ASN</td>
</tr>
<tr>
<td>7033</td>
<td>Data Validation Alert for ASN</td>
<td>For inbound ASN from Supplier system, check the message for valid location and product.</td>
</tr>
<tr>
<td>7437</td>
<td>SA Release: ASN Quantity Lower than Requested</td>
<td>An ASN alert of this type refers to a particular request schedule line of the current Scheduling Agreement release. The (partial) ASN item quantity that is assigned to the requested schedule line does not suffice to cover the open quantity of the requested schedule line. (The open quantity of the requested schedule line is the quantity that is not covered by earlier ASNs.)</td>
</tr>
<tr>
<td>Alert Type</td>
<td>Alerts</td>
<td>Description</td>
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<tr>
<td>------------</td>
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<tr>
<td>7438</td>
<td>SA Release: ASN Quantity Higher than Requested</td>
<td>An ASN alert of this type refers to a particular requested schedule line of the current Scheduling Agreement release. The (partial) ASN item quantity that is assigned to the requested schedule line exceeds the open quantity of the requested schedule line. (The open quantity of the requested schedule line is the quantity that is not covered by earlier ASNs.)</td>
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<td>7439</td>
<td>SA Release: ASN Delivery Date or Time Earlier than Requested</td>
<td>An ASN alert of this type refers to a particular requested schedule line of the current Scheduling Agreement release. The delivery date or time of the ASN lies before the delivery date time of the requested schedule line.</td>
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### Managing ASN Alerts: Common Alerts (continued)

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<td>SA Release: ASN Delivery Date or Time Later than Requested</td>
<td>An ASN alert of this type refers to a particular requested schedule line of the current Scheduling Agreement release. The delivery date or time of the ASN lies after the delivery date time of the requested schedule line.</td>
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<td>7441</td>
<td>SA Release: ASN Quantity Lower than Confirmed</td>
<td>An ASN alert of this type refers to a particular confirmation schedule line of the current Scheduling Agreement release. The (partial) ASN item quantity assigned to the confirmation schedule line does not suffice to cover the open quantity of the confirmation schedule line. (The open quantity of the confirmation schedule line is the quantity that is not covered by earlier ASNs.)</td>
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### Managing ASN Alerts: Common Alerts (continued)

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<td>SA Release: ASN Quantity Higher than Confirmed</td>
<td>An ASN alert of this type refers to a particular confirmation schedule line of the current Scheduling Agreement release. The (partial) ASN item quantity assigned to the confirmation schedule line exceeds the open quantity of the confirmation schedule line. (The open quantity of the confirmation schedule line is the quantity that is not covered by earlier ASNs.)</td>
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<td>An ASN alert of this type refers to a particular confirmation schedule line of the current Scheduling Agreement release. The delivery date or time of the ASN lies after the delivery date time of the confirmation schedule line.</td>
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Conclusion

The key points covered in this course are:

▪ The ASN collaboration process benefits both 3M and Suppliers by communicating shipping information in real time.
▪ An ASN in SAP SNC informs 3M about the shipment details in advance or at the time of shipping.
▪ Suppliers create ASNs in SAP SNC against either a PO or an SA.
▪ Creating an ASN has 3-6 steps: data entry, error checking, splitting quantity by batch (if required), packing (optional), publishing, and printing labels (optional).
▪ Suppliers have the option to either create an ASN online or offline.
▪ Suppliers are responsible for creating, editing, and publishing ASNs in SAP SNC prior to shipment arriving at the 3M dock.
▪ Only one ASN per shipment, and ASN details must match physical shipment.
3M is responsible for receiving the material, posting the GR, and sending the POD within SAP SNC to the Supplier.

ASN data is used by 3M for follow-on processing of receipts, as well as importing of goods and freight payment processing.

Both 3M and Suppliers receive ASN Alerts based on their profile settings.

Different alerts trigger depending upon the action taken, such as creation of a new ASN, changing an ASN, Goods Receipt against an ASN, or an ASN with partial shipment.