



# German Customs NCTS Phase 5 migration to ATLAS 9.1

[www.ropaar.com](http://www.ropaar.com)



## ➤ INTRODUCTION

New Computerised Transit System (NCTS) is used to move products between EU member states and those outside the EU. NCTS allows customs officials to track and manage how items move through a customs zone. The system makes it easier for products to move between customs offices inside the European Union (EU) and between the EU and some non-EU nations.

For context, the Union Customs Code (UCC) changes driving interoperability between various country customs systems in the EU are also driving the change to NCTS system to NCTS Phase 5. Every EU country is required to migrate their NCTS implementation from version 4 to 5 by November 30th 2023. This document focuses on migration to new European NCTS Phase 5 for Germany's ATLAS 9.1 system. With Change to new NCTS 5, Customs Shipments for NCTS in Germany must be filed electronically to the German customs system ATLAS 9.1.

The communication with the German customs authorities in the transit procedure area is to be switched from ATLAS 9.0 to ATLAS 9.1. This is the German implementation of the European NCTS phase 5.

## New Change

NCTS phase 5 introduces a new interface between SAP GTS and the converter in the context of message exchange with the customs authorities.

The structure of the NCTS Phase 5 Shipments is a three-tier hierarchy compared to the two-tier structure of header and item in the current interface. Changes will be on new interface for NCTS between SAP GTS and SEEBURGER BIS. The new interface between SAP GTS and Seeburger for NCTS is based on web services. The IDoc interface is no longer used for NCTS Phase 5. This requires changes on the IT infrastructure to enable web service calls in both directions between SAP GTS and SEEBURGER BIS.

## New Messaging Interface

Customs Message Exchange (CME) is an integration scenario between SAP GTS and the middleware (converter) that is used to exchange messages for customs authorities using Web service technology.

The CME integration scenario offers two main advantages for customs message exchange as compared to IDOC's:

1

The interface is based on the Web service technology.

2

SAP GTS already transfers the XML required by the customs authority to the converter so that the conversions on SEEBURGER BIS are primarily streamlined for sending in the national message log.

The integration scenario Customs Message Exchange (CME) consists of the following enterprise services:



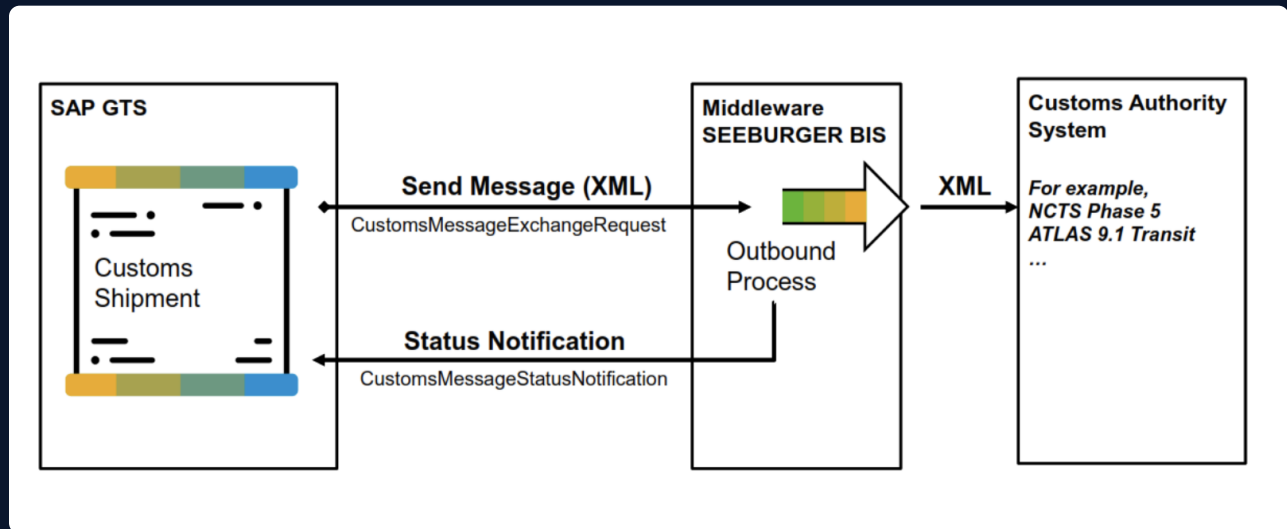
Sending a Message (**CustomsMessageExchangeRequest**)



Receiving the final status of an outbound process  
(**CustomsMessageStatusNotification**)



Receipt of a message from the customs authority  
(**CustomsMessageExchangeConfirmation**)



## SAP Master Notes to be implemented:

- 1** Customs Message Exchange - 3318211
- 2** NCTS Phase 5 – 3328059
- 3** ALTAS 9.1 – 3331609

Basis Component above 750 and Central SOA Management set up, use the Web Service Set Up V1.1.pdf in SAP Note 3318211.

If you are on lower than 750, follow below steps:

**1**

Upload the WSDL in SOMANAGER -> Tools -> Upload WSDL

**2**

Publish the uploaded WSDL to service registry.

**3**

Create a profile.

**4**

Create a provider system.

**5**

Create Logon Data

**6**

Create Integration Scenario from SAP Note 3318211

**7**

Create Logical Receiver Determination from SAP Note 3318211

## Regarding the CUSDLL Partner

While setting up Logical Receiver Determination, maintain country of Legal Regulation and Data Transmission Service Provider

The screenshot shows the 'Routing Details' step of the 'Logical Determination of Receiver using Service Groups - Wizard'. The wizard is currently on step 2, 'Routing Details', following step 1, 'Service Group and Provider Details'. The interface includes navigation buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'. The main heading is 'Routing Details' with a sub-heading 'Service Group Details'. Below this, it says 'Routing Parameter for Logical Receiver Determination'. There are three buttons: 'Create New Routing' (highlighted with a red box), 'Apply to Routing', and 'Reset Search Criteria'. The 'Priority' is set to 100. There are two rows of dropdown menus for search criteria:

Leg.Reg. Origin	Inclusive	Equals	DE
Service Prov.	Inclusive	Equals	SEEBURGER

The 'SEEBURGER' value in the second row is highlighted with a red box.

This is from the Custom Shipment Document in SAP GTS

The screenshot shows the 'Partners' tab of a Custom Shipment Document in SAP GTS. The document number is 1100000162 and the year is 2023. The view is 'Discharge Transit Procedure'. The 'Partners' section is expanded, showing a table of partners:

Partner Function	Business Partner	Name	Street	Postl...	City	Ctry
<input type="checkbox"/> Auth. Consignee Contact	2000000060	[REDACTED]				DE
<input type="checkbox"/> Data Transmiss. Serv. Provider	SEEBURGER	SEEBURGER				DE
<input type="checkbox"/> Responsible Employee	2000000060	[REDACTED]				DE
<input type="checkbox"/> Authorized Consignee	FTO_055	[REDACTED]				DE

The 'Data Transmiss. Serv. Provider' row is highlighted with a red box.

# Sample XML Output

Message flow

Stat.	Messa.	Description	De Created on	Time	Stat.	Ex Identification/Message Number
■	M0121	Arrival Notification (DE E_DES_NOT)	27.10.2023	12:23:15	■	005056A1458B1EEEE9D965AC51C695954
✓	I1180	Unloading Permission (DE E_DES_PER)	27.10.2023	12:23:42	■	0004913808
■	M0131	Conformity Check (DE E_DES_REM)	27.10.2023	12:24:23	■	005056A1458B1EEEE9D965FDB7358D956
✓	I1200	Temporary Storage Notification (DE CUSTST)	27.10.2023	12:24:37	■	CUSTST586600000388083027102312242
✓	I1181	Status Notification Office of Destination (DE E_DES_STA)	27.10.2023	12:24:47	■	0004913820

M0121 XML

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<DETSNF>
  <preparationDateAndTime>2023-10-27T10:23:15</preparationDateAndTime>
  <messageIdentification>005056A1458B1EEEE9D965AC51C695954</messageIdentification>
  <messageGroup>DES</messageGroup>
  <messageType>DETSNF</messageType>
  <messageVersion>F.1.4</messageVersion>
  <MessageSender>
    <identificationNumber>DE90...</identificationNumber>
    <subsidiaryNumber>0000</subsidiaryNumber>
    <authenticationNumber>8717...!871738321</authenticationNumber>
  </MessageSender>
  <MessageRecipient>
    <referenceNumber>DE005866</referenceNumber>
  </MessageRecipient>
  <TransitOperation>
    <MRN>23DES8740046 M6</MRN>
    <arrivalNotificationDateAndTime>2023-10-27T10:19:04</arrivalNotificationDateAndTime>
    <incidentFlag>0</incidentFlag>
  </TransitOperation>
  <Authorisation>
    <sequenceNumber>1</sequenceNumber>
    <type>CS22</type>
    <referenceNumber>DEA... 0339</referenceNumber>
  </Authorisation>
  <CustomsOfficeOfDestinationActual>
    <referenceNumber>DE005866</referenceNumber>
  </CustomsOfficeOfDestinationActual>
  <TraderAtDestination>
    <identificationNumber>DE9003304</identificationNumber>
    <subsidiaryNumber>0000</subsidiaryNumber>
    <ContactPerson>
      <name>...</name>
      <phoneNumber>...3</phoneNumber>
      <eMailAddress>...</eMailAddress>
    </ContactPerson>
  </TraderAtDestination>
  <Consignment>
    <LocationOfGoods>
      <additionalIdentifier>BB01</additionalIdentifier>
    </LocationOfGoods>
  </Consignment>
</DETSNF>
```

EORI Number

MRN Number

Authorization Number

## ➤ **Lessons: While migrating from IDOC interface to Web Services, the following are some watchouts**

### **Whitelisting of Seeburger BIS managed service End points:**

A common issue encountering our customers is the firewall rules preventing web services end points being accessible in either direction. Typical resolution involves involving the network security teams that manage firewall rules to update them and whitelist the end points for Seeburger quality and production end points.

### **End point Testing:**

Since NCTS Phase 5 replaces the IDOC communication with Web services, SAP delivers a web services communication test tool Transaction /SAPSLI/MSGEX\_TST that can be used to test communications between GTS and Seeburger.

### **Message Monitor:**

The typical IDOC monitoring tool transaction WE02 are no longer useful. Message monitoring is instead done in SRT\_MONI web services message monitoring transaction.







## > Summary:

While the typical message flow and data requirements remain like what existed before NCTS Phase5, there are still important underlying changes introduced by NCTS Phase 5. The most important change being to the communication setup between GTS and Seeburger converter from an IDOC to a Web Services. Which in turn drives how we test, troubleshoot and establish communication channels from GTS to Customs and vice versa.

### AUTHORS

**Jatin Khandelwal**  
SAP GTS Consultant  
at Ropaar



**Jitendra Singh**  
Founder and Practice Leader,  
Global Trade, Transportation and  
Logistics Consulting at Ropaar



## ABOUT ROPAAR

Ropaar is an SAP Services Company focused on Global Trade, Transportation, and Logistics. We are an SAP North America Silver Partner committed to solving complex Trade Compliance problems through Superior Domain Expertise, Effective Collaboration, and Cutting Edge Thought Leadership.

We are independent thinkers and innovative problem solvers. Our practitioners have straddled the cusp of SAP technology and trade for over 18 years, helping customers realize the full value of optimized trade, transportation, and logistics operations.