

ALPO GENERAL XML-INTERFACE DOCUMENTATION

VERSION 1.0



Version overview

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1 Introduction

In the ALPO context, the term “OrderIn” describes an incoming XML order file. XML responses, both as acknowledgments of order receipt and for status messages from port systems, are described as “events” in ALPO.

The following documentation describes the general functionality of the ALPO OrderIn XML interface. The behaviors described apply to all five ALPO modules:

APCS, BHT/WHT, Portbase, SOLAS/VGM, and ZAPP/EMP.

If you have any questions about the contents of the documentation or the implementation process (e.g., use of the dbh test systems, etc.), please do not hesitate to contact us.

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2 Transmission options and file names

There are two ways in which ALPO orders and feedback can be exchanged between the client and dbh. Data can be transferred via sftp or https.

The structure of the file names for order transmission and ALPO responses is as follows:

Orders for BHT/WHT, ZAPP/EMP, VGM

ORDER_ALPO_dbh ZKV_*.xml

Example: ORDER_ALPO_00000123_31687432.xml

Orders for APCS, Portbase

ORDEREU_ALPO_dbh ZKV_*.xml

Example: ORDEREU_ALPO_00000123_31687432.xml

ALPO-Event-Responses:

EVENT_dbh ZKV_Datum YYYYMMDD_*.xml

Example: EVENT_00000123_20250623_145256078.xml

The dbh ZKV is the 8-digit customer number assigned by dbh, which is communicated to the client after setup by dbh.

3 ALPO receipt and status messages

An ALPO OrderIn order always receives a receipt from ALPO in the form of an event response with the <StatusTyp> "ACKNOWLEDGE" or "REJECTION", which confirms the successful creation of the order or informs the customer of a rejection by ALPO. Either 'ACK' or "REJ" is returned as the <Auftragsstatus>.

Successfully created and sent port orders over time receive various status messages from the respective port systems. These are transmitted back to the client as event messages with the respective port module (APCS, BHT, ECS, VGM, ZAPP) in the <StatusTyp>. The respective status value is then specified in the <Auftragsstatus>.

It should be noted that the APCS port module sends back the <Auftragsstatus> "ACK" as positive feedback, which should not be confused with the ACK status from the ALPO receipt. The two events can be distinguished by their different <Status typ> values.

Whether and which status values ALPO should transmit back to the client can be specified during setup. The customer can choose between receiving all, selected, or no status messages for each port system.

4 Description of the various options to create an order via the <Bearbeitungszustand>

The <Bearbeitungszustand> element in the ALPO OrderIn file controls which action ALPO should perform on the transmitted order.

4.1 <Bearbeitungszustand> = New

Possible spellings: New, NEW, Neu, NEU, Anlegen (only SOLAS VGM)

With the processing status “New”, (in-)complete port orders can be transmitted to ALPO. The specified data is saved in the ALPO application as a new order and can be accessed by logging into the ALPO web application. The order has the transaction status “EDITABLE”. All transmitted data is displayed in the order, and an error bar indicates which information still needs to be added or changed in order to be able to send the port order.

ALPO Event Messages:

Positiv response:

[...]

```
<Statusmeldung>
  <StatusTyp>ACKNOWLEDGE</StatusTyp>
  <StatusAm>
    <Tag>2025-03-21</Tag>
    <Zeit>08:02:50</Zeit>
  </StatusAm>
  <StatusTypDetails>
    <DetailsZeile>Der Auftrag wurde gespeichert.</DetailsZeile>
  </StatusTypDetails>
  <SENDER_REFERENZ>551493</SENDER_REFERENZ>
  <EMPFAENGER_REFERENZ>1234567</EMPFAENGER_REFERENZ>
  <HafenReferenz>
    <ZAPP>
      <ZAPP-Referenz></ZAPP-Referenz>
    </ZAPP>
  </HafenReferenz>
  <AuftragStatus>ACK</AuftragStatus>
  <AuftragStatusText>AUFTRAGSNACHRICHT BESTAETIGT</AuftragStatusText>
</Statusmeldung>
```

[...]

Error response:

[...]

```
<Statusmeldung>
<StatusTyp>REJECTED</StatusTyp>
<StatusAm>
<Tag>2025-03-21</Tag>
<Zeit>07:29:09</Zeit>
</StatusAm>
<StatusTypDetails>
<DetailsZeile>Der Fehler bezieht sich auf folgende OrderIn Datei:</DetailsZeile>
<DetailsZeile>ORDER_ALPO_0123_20250321_072527_1.xml</DetailsZeile>
<DetailsZeile>org.xml.sax.SAXParseException; cvc-complex-type.2.4.a: Invalid content</DetailsZeile>
<DetailsZeile>was found starting with element 'Containerauftrag'. One of</DetailsZeile>
<DetailsZeile>'{Kommunikationsart}' is expected.</DetailsZeile>
</StatusTypDetails>
<SENDER_REFERENZ>ERR</SENDER_REFERENZ>
<EMPFAENGER_REFERENZ>221005080224600</EMPFAENGER_REFERENZ>
<AuftragStatus>REJ</AuftragStatus>
</Statusmeldung>
```

[...]

4.2 <Bearbeitungszustand> = NewAndSend

Possible spellings: NewAndSend, NEWANDSEND, Neu_Senden, NEU_SENDEN, Senden (only SOLAS VGM)

With the processing status “NewAndSend,” complete port orders are transmitted to ALPO, which are saved in ALPO and automatically sent. For this, it is necessary that all information required for the desired port system is contained in the order file. If processing is successful, the created order can be accessed in the ALPO web application and has the transaction status “SENT.”

If the information in the order file is incomplete or partially incorrect, the order will still be saved but will not be sent automatically. The order will have the status “EDITABLE” and can be completed/corrected via the ALPO web application and then sent manually.

If the order could not be sent automatically, the ALPO event message will contain a note stating that the order was saved but could not be sent.

ALPO Event Messages:

Positiv response:

[...]

```
<Statusmeldung>
<StatusTyp>ACKNOWLEDGE</StatusTyp>
```

```
<StatusAm>
  <Tag>2025-03-21</Tag>
  <Zeit>08:13:06</Zeit>
</StatusAm>
<StatusTypDetails>
  <DetailsZeile>Der Auftrag wurde gespeichert.</DetailsZeile>
  <DetailsZeile>Der Auftrag wurde gesendet.</DetailsZeile>
</StatusTypDetails>
<SENDER_REFERENZ>964624</SENDER_REFERENZ>
<EMPFAENGER_REFERENZ>8406</EMPFAENGER_REFERENZ>
<HafenReferenz>
  <BHT>
    <BHT-Referenz></BHT-Referenz>
  </BHT>
</HafenReferenz>
<AuftragStatus>ACK</AuftragStatus>
<AuftragStatusText>AUFTRAGSNACHRICHT BESTAETIGT</AuftragStatusText>
</Statusmeldung>
[...]
```

Error response:

```
[...]
<Statusmeldung>
  <StatusTyp>ACKNOWLEDGE</StatusTyp>
  <StatusAm>
    <Tag>2025-03-21</Tag>
    <Zeit>09:38:06</Zeit>
  </StatusAm>
  <StatusTypDetails>
    <DetailsZeile>Die Angabe MRN/LRN-Komplett = [] ist unzulässig. Die MRN/LRN [25DE245</DetailsZeile>
    <DetailsZeile>212345678B4] wurde bereits in Position [1] AES-Position [1] als MRN/LR</DetailsZeile>
    <DetailsZeile>N-Komplett = [] gemeldet.</DetailsZeile>
    <DetailsZeile>Der Auftrag wurde gespeichert.</DetailsZeile>
    <DetailsZeile>Der Auftrag wurde nicht gesendet.</DetailsZeile>
  </StatusTypDetails>
  <SENDER_REFERENZ>964837</SENDER_REFERENZ>
  <EMPFAENGER_REFERENZ>POS2510109245</EMPFAENGER_REFERENZ>
  <HafenReferenz>
    <BHT>
      <BHT-Referenz></BHT-Referenz>
    </BHT>
  </HafenReferenz>
  <AuftragStatus>ACK</AuftragStatus>
  <AuftragStatusText>AUFTRAGSNACHRICHT BESTAETIGT</AuftragStatusText>
```

</Statusmeldung>
[...]

4.3 <Bearbeitungszustand> = NewAndSend + „Blackbox“

Possible spellings: NewAndSend, NEWANDSEND, Neu_Senden, NEU_SENDEN, Senden (only SOLAS VGM)

The setup as a “blackbox” customer is activated or deactivated by dbh. It is not part of the order transmission.

Similar to the behavior in the “NewAndSend” processing, the order is accepted, saved, and sent by ALPO if it is valid. In contrast to the NewAndSend behavior without blackbox activation, however, an incomplete or incorrect order is not saved when blackbox rules are activated. Orders that cannot be sent are rejected by ALPO with a “REJECTED” event message in the blackbox case. In most cases, the reason for rejecting the order is specified in the message. The order must be corrected and resubmitted.

ALPO Event Messages:

Positiv response: Siehe oben bei „NewAndSend“.

Error response:

[...]

```
<Statusmeldung>
  <StatusTyp>REJECTED</StatusTyp>
  <StatusAm>
    <Tag>2025-03-21</Tag>
    <Zeit>10:30:06</Zeit>
  </StatusAm>
  <StatusTypDetails>
    <DetailsZeile>Formatfehler: Container/Bruttogewicht darf nur max. 5 Ziffern enthalte</DetailsZeile>
    <DetailsZeile>n. Eingabe ggf. auf Leerzeichen prüfen.</DetailsZeile>
    <DetailsZeile>Formatfehler: Container/Nettogewicht darf nur max. 5 Ziffern enthalten</DetailsZeile>
    <DetailsZeile>. Eingabe ggf. auf Leerzeichen prüfen.</DetailsZeile>
    <DetailsZeile>Der Auftrag wurde nicht gespeichert.</DetailsZeile>
    <DetailsZeile>Der Auftrag wurde nicht gesendet.</DetailsZeile>
  </StatusTypDetails>
  <SENDER_REFERENZ>O</SENDER_REFERENZ>
  <EMPFAENGER_REFERENZ>0000000101</EMPFAENGER_REFERENZ>
  <HafenReferenz>
    <BHT>
      <BHT-Referenz></BHT-Referenz>
    </BHT>
  </HafenReferenz>
  <AuftragStatus>REJ</AuftragStatus>
```

```
<AuftragStatusText>AUFTRAGSNACHRICHT ABGELEHNT</AuftragStatusText>
</Statusmeldung>
[...]
```

4.4 <Bearbeitungszustand> = Cancellation

Possible spellings: CANCELATION, Cancelation, STORNO, Storno

An order created in ALPO and successfully entered into the respective port system can be canceled by means of a “cancellation” message. It is not possible to cancel a port order at any time, but only at certain statuses, depending on the port module.

ALPO Event Messages:

Positiv response:

```
[...]
<Statusmeldung>
  <StatusTyp>ACKNOWLEDGE</StatusTyp>
  <StatusAm>
    <Tag>2025-03-21</Tag>
    <Zeit>09:34:06</Zeit>
  </StatusAm>
  <StatusTypDetails>
    <DetailsZeile>Der Auftrag wurde storniert.</DetailsZeile>
  </StatusTypDetails>
  <SENDER_REFERENZ>964133</SENDER_REFERENZ>
  <EMPFAENGER_REFERENZ>0000024011</EMPFAENGER_REFERENZ>
  <HafenReferenz>
    <BHT>
      <BHT-Referenz></BHT-Referenz>
    </BHT>
  </HafenReferenz>
  <AuftragStatus>ACK</AuftragStatus>
  <AuftragStatusText>AUFTRAGSNACHRICHT BESTAETIGT</AuftragStatusText>
</Statusmeldung>
[...]
```

4.5 <Bearbeitungszustand> = Replace

The processing status “Replace” is not enabled for general use and is therefor not available for use. Orders that are to be replaced with new data must be canceled and then recreated.

5 OrderIn check for references

To avoid duplicate orders in ALPO, when setting up an ALPO customer, it can be specified that a check should be performed against one of three definable references and that duplicate entries under the specified reference should be prevented. Such a check is only activated at the explicit request of the customer.

The possible references for which a check can be set up are the following elements from the OrderIn XML file:

```
<SENDER_REFERENZ>  
<SpeditionsbuchNr>  
<Kundenreferenz>
```

If the check for one of the above references is activated, ALPO checks whether an active order already exists in ALPO for the specified reference when processing an incoming OrderIn file. If this is the case, the order is rejected with a REJECTION message and a corresponding note. Only one check can be activated per customer at a time for one of the three reference types mentioned.

Example of a REJECTION due to an activated check:

```
[...]  
<Statusmeldung>  
  <StatusTyp>REJECTED</StatusTyp>  
  <StatusAm>  
    <Tag>2025-03-21</Tag>  
    <Zeit>08:12:06</Zeit>  
  </StatusAm>  
  <StatusTypDetails>  
    <DetailsZeile>Die in der OrderIn-Nachricht genannte Kundenreferenz [ABCD1234567]</DetailsZeile>  
    <DetailsZeile>existiert bereits.</DetailsZeile>  
    <DetailsZeile>Der Auftrag wurde nicht gespeichert.</DetailsZeile>  
  </StatusTypDetails>  
  <SENDER_REFERENZ>654321</SENDER_REFERENZ>  
  <EMPFAENGER_REFERENZ>1234567</EMPFAENGER_REFERENZ>  
  <HafenReferenz>  
    <BHT>  
      <BHT-Referenz></BHT-Referenz>  
    </BHT>  
  </HafenReferenz>  
  <AuftragStatus>REJ</AuftragStatus>  
  <AuftragStatusText>AUFTRAGSNACHRICHT ABGELEHNT</AuftragStatusText>  
</Statusmeldung>  
[...]
```