

Book Industry Communication

BIC Realtime

Standards for Instant Business Message Exchange

Retrieve Orders Awaiting Despatch Authority Request & Response

Version 2.0, 3 April 2020

This document: https://www.bic.org.uk/files/pdfs/API/Trade/BICWSOrdersAwaitingDespatchAuthority-v2.0.pdf

XML schema: https://www.bic.org.uk/files/xml/BICWSOrdersAwaitingDespatchAuthority_V2.0.xsd WSDL file: https://www.bic.org.uk/files/xml/BICWSOrdersAwaitingDespatchAuthoritySOAP V2.0.wsdl

XML namespace: https://www.bic.org.uk/webservices/ordersAwaitingDespatchAuthority

Next review date: 26 February 2021

This document specifies in human-readable form the *BIC Realtime* web services Retrieve Orders awaiting Despatch Authority Request and Response formats.

Three alternative formats are specified for Requests:

- an HTTPS query format for use with implementations that use the basic HTTPS protocol¹ and GET method – sometimes referred to as the REST approach
- an XML format for use with both implementations that use either SOAP or the basic HTTPS protocol and POST method.
- a JSON format for use with implementations that use the basic HTTPS protocol and POST method.

The Response payload format options (payload in XML or JSON) will both apply to basic HTTPS exchanges using the POST method, but XML is the only Response payload format supported for HTTPS requests using the GET method. A Request using the HTTPS GET method may be more limited than a Request using the HTTPS POST method, so the Response payload may use only a correspondingly limited subset of the content defined here. SOAP only supports XML as a Request or Response payload format.

The complete specification of the *BIC Realtime* Retrieve Orders awaiting Despatch Authority Request/Response web service includes two machine-readable resources that are to be used by implementers in conjunction with this document:

- a WSDL Definition for the SOAP protocol version of the BIC Realtime web service
- an XML Schema for Requests and Response payloads in XML format.

It is strongly recommended that SOAP client implementations of this *BIC Realtime* web service be constructed using the BIC WSDL Definitions as a starting point, as this will promote interoperability between SOAP client and server implementations. In some development environments it may be easier to implement a SOAP server without using the BIC WSDL Definitions, but in this case care must be taken to ensure that the WSDL Definitions that describe the actual implementation is functionally equivalent to the BIC WSDL Definitions.

¹ Throughout the term 'HTTPS protocol' is to be interpreted as including secure internet protocols that are implemented either at the application layer (e.g. HTTPS) or are implemented at the transport layer (e.g. SSL/TLS).

Business requirements

There is a need for buyers, including EDI users, to ensure that they are aware of all orders, especially CDF orders, being held by a particular supplier awaiting despatch authority. This *BIC Realtime* web service enables a buyer to retrieve a list of such orders, which may be selected by order date range or by order reference range or pattern. Having retrieved such a list, a buyer may then authorise orders for despatch using the *BIC Realtime* Grant Authority to Despatch web service or by manual communication.

Correction and additions for Version 2.0 made January 2020

General Version number updated from '1.0C' to '2.0' in specification tables and examples.

Support for JSON implementation added to specification tables and examples.

Text corrected in various places to make it clear that the SOAP protocol only supports XML payloads and not JSON payloads.

Page 3 HTTPS Request lines 1 and 2: Parameters ClientID and ClientPassword made non-mandatory. It is recommended that HTTPS header-based authentication be used where possible.

HTTPS Request line 12: Parameter DescriptionLanguageCode added to enable preferred language of descriptions to be specified. The value must be a three-letter language code from ONIX code list 74.

Page 5 Request payload lines 1 and 2: Elements ClientID and ClientPassword made nonmandatory. It is recommended that HTTPS header-based authentication be used where possible.

Request payload line 8: Element DescriptionLanguageCode added to enable preferred language of descriptions to be specified. The value must be a three-letter language code from ONIX code list 74.

Page 8 Response header line 7: Element DescriptionLanguageCode added to enable language of description to be specified. The value must be a three-letter language code from ONIX code list 74.

RETRIEVE ORDERS AWAITING DESPATCH AUTHORITY – REQUEST

Requests using the HTTPS protocol and the GET method

Requests using the HTTPS protocol and the GET method should include a query string containing parameters as specified below.

2	Parameter description	M³	Name	
1	A unique identifier for the sender of the Request. An alphanumeric string not containing spaces or punctuation. The form of the identifier used must be agreed between the parties to an exchange ⁴ .	D	ClientID	
2	A password to further authenticate the sender of the request ⁴ .	D	ClientPassword	
3	Identification number of this request	D	RequestNumber	
4	A code value from a BIC-controlled codelist for the scheme used for the customer account identifier (see ONIX codelist 44). Permitted values are: 01 Proprietary 06 EAN-UCC GLN 07 SAN 11 PubEasy PIN	D	AccountIDType	
5	Account identifier for this request, using the specified scheme.	D	AccountIDValue	
6	A date/time reference for this request	D	IssueDateTime	
7	If and only if this parameter is supported by the <i>BIC Realtime</i> web service implementation, a third party supplier may be specified where the web service host is not the supplier fuifilling the order, in which case this parameter and the next must be included. This parameter contains a code value from a BIC-controlled codelist for the type of identifier of the supplier - see ONIX codelist 92	D	SupplierIDType	
8	A unique supplier identifier of the specified type.	D	SupplierIDValue	
9	Order filter type. Must be followed by the OrderFilterFirstValue parameter. In the case of ranges, the OrderFilterSecondValue parameter must also be included. Order reference ranges are applicable only if order references contain an ordered numerical component. Permitted values are: 01 Order date range 02 Customer order reference range 03 Supplier order reference range 04 Customer order reference pattern (regex) 05 Supplier order reference pattern (regex)	D	OrderFilterType	
10	Order filter first value. If the order filter type is a range, this parameter must be included and contain the earliest date or lowest reference in the included range. If the order filter type is a pattern, this parameter must be included and contain a regular expression that conforms to Appendix G of W3C XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes. Characters that have reserved use in HTTPS query parts must be percent encoded.	D	OrderFilterFirstValue	
11	Order filter second value. If the order filter type is a range, this parameter must contain the latest date or highest reference in the range. If the order filter type is a pattern, this parameter must be omitted.	D	OrderFilterSecondValue	
12	Language in which the requester would prefer free-text descriptions to be expressed – use ONIX code list 74.	D	DescriptionLanguageCode	

The order of parameters in an HTTPS GET Request is insignificant.

In the column headed "M", "M" means mandatory, and "D" means dependent.

It is recommended that HTTPS header-based authentication be used where possible.

Example of a Request using the HTTPS protocol and the GET method, in which the request is for all orders awaiting despatch authority issued between 1 January and 1 April 2019 inclusive:

https://www.booksupplier.co.uk/OrdersAwaitingDespatchAuthorityService?AccountIDType=01 &AccountIDValue=XYZ&OrderFilterType=01&OrderFilterFirstValue=20190101 &OrderFilterSecondValue=20190401

Example of a Request using the HTTPS protocol and the GET method, in which the request is for all orders awaiting despatch authority whose customer order reference matches the specified pattern '01020\d+' (i.e. numbers beginning '01020'):

https://www.booksupplier.co.uk/OrdersAwaitingDespatchAuthorityService?AccountIDType=01 &AccountIDValue=XYZ&OrderFilterType=04&OrderFilterFirstValue=01020%5Cd%2B

Requests using the SOAP or basic HTTPS protocol and the POST method

Requests using the HTTPS POST method should include an XML or JSON request document as the body of a request message. Requests using the SOAP protocol must include an XML document.

Request document name and version

Orders awaiting despatch authority r Version 2.0	<pre><st <="" pre=""><pre><ordersawaitingdespatchauthorityrequest version="2.0"> { "OrdersAwaitingDespatchAuthorityRequest": "version":</ordersawaitingdespatchauthorityrequest></pre></st></pre>	5	
-----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	--

Request document content

1	A unique identifier for the sender of the request. An alphanumeric string not containing spaces or punctuation	D	ClientID	
2	A password to further authenticate the sender of the request	D	ClientPassword	
3	Account identifier.	D	AccountIdentifier.	
	A code value from a BIC-controlled codelist for the scheme used for the account identifier (see ONIX codelist 44). Permitted schemes are: 01 Proprietary	М	AccountIDType	
	06 EAN-UCC GLN 07 SAN 11 PubEasy PIN Account identifier for this request, using the specified	М	IDValue	
	scheme	IVI	idvalue	
4	Identification number / string of this request	D	RequestNumber	
5	Document date/time: the date/time when the request was generated. Permitted formats are: YYYYMMDD YYYYMMDDTHHMM YYYYMMDDTHHMMZ (universal time) YYYYMMDDTHHMM±HHMM (time zone) where "T" represents itself, ie letter T	D	IssueDateTime	
6	Supplier to whom this request should be forwarded, if it is not addressed to the <i>BIC Realtime</i> web service host (use only for requests sent to aggregation services).	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary Identifier	D M	IDTypeName IDValue	
7	Order filter. Where multiple filters are provided results must match all supplied filters, e.g. within the given date range, orders matching the given pattern. This means it is not possible to 'or' combine a set of pattern filters.	D	OrderFilter	R
	Filter type. Must be followed by the element OrderFilterFirstValue. In the case of ranges, the element OrderFilterSecondValue must also be included. Order reference ranges are applicable only if order references contain an ordered numerical component. Permitted values are:	M	FilterType	
	 01 Order date range 02 Customer order reference range 03 Supplier order reference range 04 Customer order reference pattern (regex) 05 Supplier order reference pattern (regex) 			
	Pattern or earliest date or lowest reference of included range. See line 5 above for permissible date formats.	D	FirstValue	
	Latest date or highest reference of included range. See line 5 above for permissible date formats.	D	SecondValue	
8	Language in which the requester would prefer free-text descriptions to be expressed – use ONIX code list 74.	D	DescriptionLanguageCode	

 $^{^{5}}$ An 'R' in the right-most column means that the element is repeatable. If implementing this API using the JSON format option, all repeatable elements must be represented by JSON array objects.

Example of a Retrieve Orders awaiting Despatch Authority Request payload, first in XML then in JSON, using either the SOAP or the HTTPS protocol and the POST method, in which the request is for all orders awaiting despatch authority issued between 1 January and 1 April 2019 inclusive:

In XML:

```
<OrdersAwaitingDespatchAuthorityRequest version="2.0"</pre>
xmlns="http://www.bic.org.uk/webservices/ordersAwaitingDespatchAuthority">
  <AccountIdentifier>
    <AccountIDType>01</AccountIDType>
    <IDValue>12345</IDValue>
  </AccountIdentifier>
  <RequestNumber>001</RequestNumber>
  <IssueDateTime>20190422T1525</IssueDateTime>
  <OrderFilter>
    <FilterType>01</FilterType>
    <FirstValue>20190101</FirstValue>
    <SecondValue>20190401</SecondValue>
  </OrderFilter>
</OrdersAwaitingDespatchAuthorityRequest>
In JSON:
  "OrdersAwaitingDespatchAuthorityRequest": {
   "version": "2.0",
   "xmlns": "http://www.bic.org.uk/webservices/ordersAwaitingDespatchAuthority",
   "AccountIdentifier": {
     "AccountIDType": "01",
     "IDValue": "12345"
   "RequestNumber": "001",
   "IssueDateTime": "20190422T1525",
   "OrderFilter": [
       "FilterType": "01",
       "FirstValue": "20190101",
       "SecondValue": "20190401"
   ]
 }
}
```

Example of a Retrieve Orders awaiting Despatch Authority Request XML payload using either the SOAP or the HTTPS protocol and the POST method, in which the request is for all orders with customer order numbers that match the regular expression pattern '01020\d+' (i.e. numbers beginning '01020'):

RETRIEVE ORDERS AWAITING DESPATCH AUTHORITY – RESPONSE

The Response will use the protocol corresponding to the Request. If the Request uses the basic HTTPS protocol, the Response will be an XML or JSON document as specified below attached to a normal HTTPS header. If the Request uses the SOAP protocol, the Response will contain a SOAP response message whose body will contain the XML document specified below.

Response document name and version

Orders awaiting despatch authority response Version 2.0	<pre><ordersawaitingdespatchauthorityresponse version="2.0"></ordersawaitingdespatchauthorityresponse></pre>	
	{ "OrdersAwaitingDespatchAuthorityResponse":	
	{ "version":	

Header

	Response payload header	М	Header.
1	Document date/time: the date/time when the report was generated. Permitted formats are: YYYYMMDD YYYYMMDDTHHMM YYYYMMDDTHHMMZ (universal time) YYYYMMDDTHHMM±HHMM (time zone) where "T" represents itself, i.e. letter T	М	IssueDateTime
2	Sender (<i>BIC Realtime</i> web service host) Sender ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	M M D	SenderIdentifier. SenderIDType IDTypeName IDValue
3	Identification number / string of this response	D	ResponseNumber
4	Account identifier. A code value from a BIC-controlled codelist for the scheme used for the account identifier (see ONIX codelist 44). Must be specified if an account identifier is specified. Permitted schemes are: 01 Proprietary 06 EAN-UCC GLN 07 SAN 11 PubEasy PIN Account identifier for this request, using the specified scheme	D M	AccountIdentifier. AccountIDType IDValue
5	References: request number and/or date/time of request must be quoted if included in the request. Reference type 01 Number or date/time of associated request Reference number / string	D M M	ReferenceCoded ReferenceTypeCode ReferenceNumber
	Reference date or date and time. Mandatory if an IssueDateTime is included in the request. See Header line 1 for format options.	D	ReferenceDateTime
6	Supplier identifier (only included if specified in the request; mandatory if the response type code is '19' or '20')	D	SupplierIdentifier.
	Supplier ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	M D M	SupplierIDType IDTypeName IDValue

Response header (continued)

	Payload header	М	Header.	
7	Response code, if there are exception conditions.	D	ResponseCoded.	R
	Response type code. Suggested code values: 01 Service unavailable 02 Invalid ClientID or ClientPassword 03 Server unable to process request – a reason should normally be given as a free text description – see below 16 Invalid or unknown account, supplier or ship-to party identifier 17 Invalid period start or end date 18 Server unable to process request - specified range too large 19 Server unable to process request – unable to contact supplier 20 Request acknowledged – awaiting response from supplier	M	ResponseType	
	Free text description / reason for response	D	ResponseTypeDescription	
	Language of description. Mandatory if included in the request. See request payload line 8.	D	DescriptionLanguageCode	

Order detail

	Responses for each order awaiting despatch authority that meet the selection criteria in the request. Mandatory unless the response type code at the header level indicates exception conditions.	D	OrderDetail.	R
1	References: the order number must be quoted.	М	ReferenceCoded	
	Reference type 11 Order number or date/time specified in the request 18 End-customer's order reference 23 Supplier's order reference 25 CDF invoice reference	М	ReferenceTypeCode	
	Reference number / string	D	ReferenceNumber	
	Reference date or date and time. Mandatory if an IssueDateTime is included in the request. See Report Header line 1 for format options.	D	ReferenceDateTime	
2	Item details – the lines within the order that are awaiting authority. For details see below.	М	ItemDetail	R

Item detail

	Details of all orders that meet the selection criteria in the request. Mandatory unless the header reports a condition that prevents any response	M	OrderDetail.ltemDetail.	R
1	Item line number in this response	D	LineNumber	
2	EAN-13 product number (mandatory unless trading partners have agreed to use an alternative product identifier)	D	EAN13	
3	Alternative product identifier. Product ID type – use ONIX Code List 5 ID type name, only if ID type = '01' (proprietary) Product number	D M D M	ProductIdentifier. ProductIDType IDTypeName IDValue	R
4	Quantity awaiting authority to despatch	М	QuantityAwaitingAuthority	

Item detail (continued)

		D	OrderDetail.ltemDetail.	R
5	Document references.	D	ReferenceCoded	R
	Reference type code 12 Buyer's unique order line reference 18 End customer order reference 25 CDF invoice reference 26 CDF invoice line reference	M	ReferenceTypeCode	
	Reference number / string	D	ReferenceNumber	
	Reference date or date and time. See Header line 1 for format options.	D	ReferenceDateTime	
6	Date authority to despatch first requested. Format is YYYYMMDD.	D	DateFirstRequested	

Example of a Retrieve Orders awaiting Despatch Authority Response XML payload using either the SOAP or the HTTPS protocol and the POST method:

```
<OrdersAwaitingDespatchAuthorityResponse version="2.0"</pre>
xmlns="http://www.bic.org.uk/webservices/ordersAwaitingDespatchAuthority">
  <Header>
   <IssueDateTime>20190422T1527</IssueDateTime>
   <SenderIdentifier>
     <SenderIDType>01
      <IDValue>XYZ</IDValue>
   </SenderIdentifier>
   <AccountIdentifier>
     <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
   </AccountIdentifier>
  </Header>
  <OrderDetail>
    <ReferenceCoded>
     <ReferenceTypeCode>11</ReferenceTypeCode>
     <ReferenceNumber>01020304</ReferenceNumber>
      <ReferenceDateTime>20190409</ReferenceDateTime>
   </ReferenceCoded>
   <ReferenceCoded>
     <ReferenceTypeCode>23</ReferenceTypeCode>
      <ReferenceNumber>DN0123456</ReferenceNumber>
   </ReferenceCoded>
   <ItemDetail>
     <ProductIdentifier>
       <ProductIDType>03
       <IDValue>9780123456789</IDValue>
     </ProductIdentifier>
     <QuantityAwaitingAuthority>1</QuantityAwaitingAuthority>
     <ReferenceCoded>
       <ReferenceTypeCode>12</ReferenceTypeCode>
       <ReferenceNumber>1</ReferenceNumber>
     </ReferenceCoded>
   </ItemDetail>
  </OrderDetail>
  <OrderDetail>
   <ReferenceCoded>
     <ReferenceTypeCode>11</ReferenceTypeCode>
     <ReferenceNumber>01020405</ReferenceNumber>
     <ReferenceDateTime>20190419</ReferenceDateTime>
   </ReferenceCoded>
    <ItemDetail>
     <ProductIdentifier>
       <ProductIDType>03</ProductIDType>
       <IDValue>9780987654321</IDValue>
     </ProductIdentifier>
     <QuantityAwaitingAuthority>1</QuantityAwaitingAuthority>
     <ReferenceCoded>
       <ReferenceTypeCode>12</ReferenceTypeCode>
        <ReferenceNumber>3</ReferenceNumber>
     </ReferenceCoded>
   </ItemDetail>
  </OrderDetail>
</OrdersAwaitingDespatchAuthorityResponse>
```

Example of a Retrieve Orders awaiting Despatch Authority Response JSON payload using the HTTPS protocol and the POST method:

```
"OrdersAwaitingDespatchAuthorityResponse": {
   "version": "2.0",
   "xmlns": "http://www.bic.org.uk/webservices/ordersAwaitingDespatchAuthority",
   "Header": {
        "IssueDateTime": "20190422T1527",
        "SenderIdentifier": {
           "SenderIDType": "01",
           "IDValue": "XYZ"
       },
        "AccountIdentifier": {
           "AccountIDType": "01",
           "IDValue": "12345"
    "OrderDetail": [
       {
            "ReferenceCoded": [
                {
                    "ReferenceTypeCode": "11",
                    "ReferenceNumber": "01020304",
                    "ReferenceDateTime": "20190409"
                },
                {
                    "ReferenceTypeCode": "23",
                    "ReferenceNumber": "DN0123456"
            ],
            "ItemDetail": [
                {
                    "ProductIdentifier": [
                            "ProductIDType": "03",
                            "IDValue": "9780123456789"
                    ],
                    "QuantityAwaitingAuthority": 1,
                    "ReferenceCoded": [
                            "ReferenceTypeCode": "12",
                            "ReferenceNumber": 1
                        }
                    ]
                }
            ]
        },
            "ReferenceCoded": [
                {
                    "ReferenceTypeCode": "11",
                    "ReferenceNumber": "01020405",
                    "ReferenceDateTime": "20190419"
            ],
```

```
"ItemDetail": [
                {
                    "ProductIdentifier": [
                           "ProductIDType": "03",
                           "IDValue": "9780987654321"
                       }
                    ],
                    "QuantityAwaitingAuthority": 1,
                    "ReferenceCoded": [
                           "ReferenceTypeCode": "12",
                           "ReferenceNumber": 3
                       }
                   ]
               }
       }
   ]
}
```