

Book Industry Communication

BIC Realtime

Standards for Instant Business Message Exchange

Grant Authority to Despatch Request and Response

Version 2.0, 3 April 2020

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

XML schema: https://www.bic.org.uk/files/xml/BICWSGrantAuthorityToDespatch-v2.0.xsd WSDL file: https://www.bic.org.uk/files/xml/BICWSGrantAuthorityToDespatchSOAP_v2.0.wsdl

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

Next review date: 26 February 2021

This document specifies in human-readable form the *BIC Realtime* web services Grant Authority to Despatch 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 Grant Authority to Despatch Request/Response *BIC Realtime* 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.

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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 to place orders that are not to be despatched immediately they are available at the supplier but are to be held by suppliers pending authority to despatch, for example when the buyer must ensure that the end-customer payment has been made prior to despatch in Consumer Direct Fulfilment (CDF). This *BIC Realtime* web service enables a buyer to specify a list of items previously ordered for which authority to despatch is to be granted.

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 17: 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 4 Request header lines 1 and 2: Elements ClientID and ClientPassword made nonmandatory. It is recommended that HTTPS header-based authentication be used where possible.

Request header line 7: 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 9 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.

Request order detail line 2: 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 10 Request item detail line 5: 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.

GRANT AUTHORITY TO DESPATCH - 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	Customer 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 fulfilling 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 to which this request relates. Mandatory.	М	OrderReferenceNumber
10	Buyer's order line reference, if the request relates to a specific order line and not the whole order.	D	OrderLineReferenceNumber
11	Supplier's order reference	D	SupplierOrderReferenceNumber
12	CDF invoice reference	D	CDFInvoiceReference
13	End-customer order reference	D	ConsumerOrderReference
14	EAN-13 product number (either parameter 14 or both parameters 15 and 16 must be included if parameter 10 is present)	D	EAN13
15	A code value from a BIC-controlled codelist for the type of an alternative identifier of the product (see ONIX codelist 5).	D	ProductIDType
16	An alternative product identifier of the specified type. Only one alternative type of identifier may be carried in a Request using the HTTP GET method.	D	ProductIDValue
17	Language in which the requester would prefer freetext descriptions to be expressed – use ONIX code list 74.	D	DescriptionLanguageCode

Example of a Request using the HTTPS protocol and the GET method:

https://www.booksupplier.co.uk/GrantAuthorityToDespatchService? AccountIDType=01&AccountIDValue=XYZ&IssueDateTime=20191120T152500&OrderReferenceNumber=1012345

² The order of parameters in an HTTPS GET Request is insignificant.

³ In the column headed "M", "M" means mandatory, and "D" means dependent.

⁴ It is recommended that HTTPS header-based authentication be used where possible.

Requests using SOAP or non-SOAP protocols and using the HTTP POST method

Requests using the HTTPS POST method should include an XML or JSON document as the body of a request message. Requests using the SOAP protocol must include an XML document. Multiple orders may be specified using this method.

Request document name and version

Grant authority to despatch request Version 2.0	<pre><grantauthoritytodespatchrequest version="2.0"></grantauthoritytodespatchrequest></pre>	
	{ "GrantAuthorityToDespatchRequest": { "version":	

Header

	Request header	M	Header.	5
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 06 EAN-UCC GLN 07 SAN 11 PubEasy PIN Account identifier for this request, using the specified scheme	M	AccountIDType 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 web service host and if the entire request is to be forwarded to a single supplier (use only for requests sent to aggregation services). Supplier ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	D M D M	SupplierIdentifier. SupplierIDType IDTypeName IDValue	
7	Language in which the requester would prefer free- text descriptions to be expressed – use ONIX code list 74.	D	DescriptionLanguageCode	

 $^{^{\}rm 5}$ An 'R' in the right-most column means that the element is repeatable.

Request order detail

	Order detail. Mandatory, and repeatable when granting authority to despatch items from multiple orders.	M	OrderDetail.	R
1	Order references. Must contain a reference number or a reference date or both for a single order. Reference type 11 Buyer's order reference	M M	ReferenceCoded. ReferenceTypeCode	R
	18 End-customer's order reference 23 Supplier's order reference 25 CDF invoice reference			
	Reference	D	ReferenceNumber	
	Reference date or date and time. See Header line 5 for format options.	D	ReferenceDateTime	
2	Supplier to whom this order detail 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	М	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	М	IDValue	
3	Detail of specific order lines for which authority to despatch is being granted. Mandatory unless the request applies to the whole order. See below.	D	ItemDetail	R

Request item detail

	Item detail. Mandatory if the scope of the request order detail is an item list. Must not be included if the scope of the request order detail is the whole order.	D	OrderDetail.ltemDetail.	R
1	Request line number	М	LineNumber	
2	EAN-13 product number (either this element or element 3 must be included)	D	EAN13	
3	Alternative product identifier	D	ProductIdentifier.	R
	Product ID type - use ONIX Code List 5	М	ProductIDType	
	ID type name, only if ID type = '01' (proprietary)	D	IDTypeName	
	Product number	M	IDValue	
4	Quantity authorised for despatch. Mandatory.	М	AuthorisedQuantity	
5	Order line references If included, must contain a reference number or a reference date/time or both.	D	ReferenceCoded	R
	Reference type 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 6 for format options.	D	ReferenceDateTime	

Example of a Grant Authority to Despatch Request XML payload using either the SOAP or the HTTPS protocol and the POST method:

```
<GrantAuthorityToDespatchRequest version="2.0"</pre>
 xmlns="http://www.bic.org.uk/webservices/grantAuthorityToDespatch">
  <AccountIdentifier>
    <AccountIDType>01</AccountIDType>
    <IDValue>12345</IDValue>
  </AccountIdentifier>
  <RequestNumber>001</RequestNumber>
  <IssueDateTime>20190422T1525</IssueDateTime>
  <OrderDetail>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>1012345</ReferenceNumber>
    </ReferenceCoded>
    <ItemDetail>
      <LineNumber>1</LineNumber>
      <ProductIdentifier>
        <ProductIDType>03</ProductIDType>
        <IDValue>9780123456789</IDValue>
      </ProductIdentifier>
      <AuthorisedQuantity>1</AuthorisedQuantity>
      <ReferenceCoded>
        <ReferenceTypeCode>12</ReferenceTypeCode>
        <ReferenceNumber>5</ReferenceNumber>
      </ReferenceCoded>
    </ItemDetail>
    <ItemDetail>
      <LineNumber>2</LineNumber>
      <ProductIdentifier>
        <ProductIDType>03</ProductIDType>
        <IDValue>9780987654321</IDValue>
      </ProductIdentifier>
      <AuthorisedQuantity>1</AuthorisedQuantity>
      <ReferenceCoded>
        <ReferenceTypeCode>12</ReferenceTypeCode>
        <ReferenceNumber>6</ReferenceNumber>
      </ReferenceCoded>
    </ItemDetail>
  </OrderDetail>
</GrantAuthorityToDespatchRequest>
```

Example of a Grant Authority to Despatch Request JSON payload using the HTTPS protocol and the POST method:

```
{
    "GrantAuthorityToDespatchRequest": {
        "version": "2.0",
        "xmlns":
"http://www.bic.org.uk/webservices/grantAuthorityToDespatch",
        "AccountIdentifier": {
    "AccountIDType": "01",
             "IDValue": "12345"
        "RequestNumber": "001",
        "IssueDateTime": "20190422T1525",
        "OrderDetail": [
            {
                 "ReferenceCoded": [
                          "ReferenceTypeCode": "11",
                          "ReferenceNumber": "1012345"
                 "ItemDetail": [
                     {
                          "LineNumber": 1,
                          "ProductIdentifier": [
                              {
                                  "ProductIDType": "03",
                                  "IDValue": "9780123456789"
                          "AuthorisedQuantity": 1,
                          "ReferenceCoded": [
                                  "ReferenceTypeCode": "12",
                                  "ReferenceNumber": 5
                          ]
                     },
                          "LineNumber": 2,
                          "ProductIdentifier": [
                              {
                                  "ProductIDType": "03",
                                  "IDValue": "9780987654321"
                              }
                          ],
                          "AuthorisedQuantity": 1,
                          "ReferenceCoded": [
                                  "ReferenceTypeCode": "12",
                                  "ReferenceNumber": 6
                         ]
                     }
                ]
            }
        ]
    }
```

GRANT AUTHORITY TO DESPATCH - 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

Grant authority to despatch response Version 2.0	<pre><grantauthoritytodespatchresponse version="2.0"></grantauthoritytodespatchresponse></pre>	5
	{ "GrantAuthorityToDespatchResponse" { "version":	

Header

	Response payload header	М	Header.	6
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, ie letter T	M	IssueDateTime	
2	Sender (BIC Realtime web service host)	М	SenderIdentifier.	
	Sender ID type - see ONIX codelist 92	М	SenderIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	М	IDValue	
3	Identification number / string of this response	D	ResponseNumber	
4	Account identifier.	D	AccountIdentifier.	
	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	M	AccountIDType IDValue	
5	References: request number and/or date/time of request must be quoted if included in the request.	D	ReferenceCoded	
	Reference type 01 Number or date/time of associated request	М	ReferenceTypeCode	
	Reference number / string	М	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	М	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	М	IDValue	

⁶ An 'R' in the right-most column means that the element is repeatable.

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 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 header line 7.	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. 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	M	ReferenceCoded ReferenceTypeCode	
	Reference number / string Reference date or date and time. Mandatory if an IssueDateTime is included in the request. See Report Header line 1 for format options.	D D	ReferenceNumber ReferenceDateTime	
2	Response code, if there are exception conditions, in which case this composite terminates the response. Response type code. Suggested code values: 03 Server unable to process request – a reason should normally be given as a free text description – see below 11 Invalid order reference 14 Cannot change order – order shipped or in progress 15 Cannot change order – order previously cancelled 19 Server unable to process request – unable to contact supplier 20 Request acknowledged – awaiting response from supplier	D M	ResponseCoded. ResponseType	R
	24 Request does not reference a unique order Free text description / reason for response Language of description. Mandatory if included in the request. See request header line 13. Supplier identifier (only included if specified in the corresponding order detail line in the request; mandatory if the response type code is '19' or '20'). Supplier ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	D D D M D M	ResponseTypeDescription DescriptionLanguageCode SupplierIdentifier. SupplierIDType IDTypeName IDValue	
3	Item details – the lines within the order for which the granting of despatch authority is acknowledged. For details see below.	М	ItemDetail	R

Item detail

	Details of all order lines to be despatched. Mandatory unless the header reports a condition that prevents any response	М	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.	D	ProductIdentifier.	R
	Product ID type - use ONIX Code List 5	М	ProductIDType	
	ID type name, only if ID type = '01' (proprietary)	D	IDTypeName	
	Product number	М	IDValue	
4	Order line references If included, must contain a reference number or a reference date/time or both.	D	ReferenceCoded	R
	Reference type 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 6 for format options.	D	ReferenceDateTime	
5	Response code	М	ResponseCoded	R
	Response type code. Suggested code values: 06 Invalid or unknown product ID 11 Invalid or unknown document reference 12 Invalid order line reference 14 Line already shipped or in progress 15 Cannot authorise for despatch — line cancelled 21 Order line authorised for despatch 22 Item not ready — authority to despatch not yet requested 25 Order line reference and product identifier don't match 26 Split ship not allowed — authority to despatch must only be granted for the whole order 27 Quantity ordered and authorised quantity don't match Free text description	М	ResponseType ResponseTypeDescription	
	Language of description. Mandatory if included in the request. See request header line 13.	D	DescriptionLanguageCode	

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

```
<GrantAuthorityToDespatchResponse version="2.0"</pre>
xmlns="http://www.bic.org.uk/webservices/grantAuthorityToDespatch">
  <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</ProductIDType>
        <IDValue>9780123456789</IDValue>
      </ProductIdentifier>
      <ReferenceCoded>
        <ReferenceTypeCode>12</ReferenceTypeCode>
        <ReferenceNumber>1</ReferenceNumber>
      </ReferenceCoded>
      <ResponseCoded>
        <ResponseType>21/ResponseType>
      </ResponseCoded>
   </ItemDetail>
  </OrderDetail>
  <OrderDetail>
   <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>01020405</ReferenceNumber>
      <ReferenceDateTime>20190419</ReferenceDateTime>
   </ReferenceCoded>
    <ItemDetail>
      <ProductIdentifier>
        <ProductIDType>03</ProductIDType>
        <IDValue>9780987654321</IDValue>
      </ProductIdentifier>
      <ReferenceCoded>
        <ReferenceTypeCode>12</ReferenceTypeCode>
        <ReferenceNumber>3</ReferenceNumber>
      </ReferenceCoded>
      <ResponseCoded>
        <ResponseType>22</ResponseType>
      </ResponseCoded>
    </ItemDetail>
  </OrderDetail>
</GrantAuthorityToDespatchResponse>
```

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

```
"GrantAuthorityToDespatchResponse": {
    "version": "2.0",
    "xmlns": "http://www.bic.org.uk/webservices/grantAuthorityToDespatch",
    "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"
                        }
                    ],
                    "ReferenceCoded": [
                        {
                             "ReferenceTypeCode": "12",
                             "ReferenceNumber": 1
                        }
                    ],
                    "ResponseCoded": [ { "ResponseType": "21" } ]
                }
            ]
        },
```

```
"ReferenceCoded": [
                     {
                         "ReferenceTypeCode": 11,
"ReferenceNumber": "01020405",
                          "ReferenceDateTime": "20190419"
                 ],
                 "ItemDetail": [
                     {
                          "ProductIdentifier": [
                              {
                                   "ProductIDType": "03",
                                  "IDValue": "9780987654321"
                              }
                         ],
                          "ReferenceCoded": [
                              {
                                   "ReferenceTypeCode": "12",
                                  "ReferenceNumber": 3
                          ],
                          "ResponseCoded": [ { "ResponseType": "22" } ]
                     }
                ]
           }
       ]
   }
}
```