



Book Industry Communication

BIC Realtime

Standards for Instant Business Message Exchange

Order Cancellation Request and Response

Version 1.1, 8 February 2016

This document: <http://www.bic.org.uk/files/pdfs/BICWSOrderCancellation-V1.1.pdf>

XML schema: <http://www.bic.org.uk/files/xml/BICWSOrderCancellation-V1.1.xsd>

WSDL file: <http://www.bic.org.uk/files/xml/BICWSOrderCancellationSOAP-V1.1.wsdl>

XML namespace: <http://www.bic.org.uk/webservices>

Next review date: 1 February 2018

This document specifies in human-readable form the *BIC Realtime* web services Order Cancellation Request and Response formats.

Two separate formats are specified for Requests:

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

The first of these formats has more restricted application than the second, in that, using the HTTP GET method, it is only possible to cancel a whole order or a single item from a single order, whereas using the HTTP POST method it is possible to include a list of items from multiple orders

The same Response format will apply to both basic HTTP and SOAP exchanges.

The complete specification of the *BIC Realtime* Order Cancellation 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.

Business requirements

A request to cancel an order may only be accepted if that order has not been fulfilled, i.e. the items in question are on back-order. An order cancellation request may apply to a whole order or to

¹ Throughout the term 'HTTP 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).

specific line items on an order. A cancellation may be requested for line items that have been partially fulfilled, in which case the request relates to the back-ordered quantity only.

If a cancellation is requested through an aggregation service, the aggregation service may (in exceptional circumstances) not be able to provide an immediate response from the supplier. In such circumstances the response will contain an acknowledgement that the request has been forwarded to the supplier and that their response is still awaited. In this case the requester has two possible courses of action, after a suitable interval has elapsed:

- to issue a new order cancellation request for the same order or order item(s);
- to request an order status report for the same order or order item(s)..

A suitable interval may be suggested in the response by the aggregation service and would normally be respected by the requester. If no such interval is suggested in the response, the requester is free to determine a suitable interval, and it is suggested that this should increase with each unsuccessful request relating to the same order or order items.

In order to respond correctly to a cancellation request that may be a retry, an aggregation service will need to determine the status of the order at the supplier before forwarding the order cancellation request to the supplier. If the order status at the supplier indicates that the order or order item has already been cancelled, there is no need to forward the order cancellation request and the response to the requester will indicate that the order or order item has already been cancelled. If the order status at the supplier indicates that the order or order item has *not* been cancelled, the request may be forwarded again. However, to avoid multiple cancellation requests for the same order or order item being forwarded to the supplier, it is recommended that an aggregation service should, if possible, keep a record of the details of all order cancellation requests for which no response has yet been received from the supplier, so that the requester can be informed that a response is still awaited without the need to forward the repeat request to the supplier.

Order Cancellation with the CDF Business Model Use Case

This *BIC Realtime* web service can also be used successfully in the CDF (Consumer Direct Fulfilment) business model. For example under the distance selling regulations in the EU consumers are allowed to cancel any order which has not yet shipped and are allowed to cancel and return any orders despatched within 14 days. If a consumer wants to cancel their order it is therefore essential that it be cancelled promptly with the supplier/wholesaler to save incurring the carriage and return costs.

Correction to Version 1.0 made July 2012

- Page 7 Request example: correction of XML errors.
Page 11 Response example: correction of XML errors.

Correction to Version 1.0 made December 2012

- Page 9 Response Header line 6: Use of code values '13', '14' and '15' in the element ResponseType is now deprecated at the Header level. An explanatory note has been added to the description of this element. The XML schema and WSDL remain unchanged but these code values have been removed from this documentation.

Corrections and additions for Version 1.1 made February 2016

- General Version number updated from '1.0' to '1.1' in specification tables and examples.
Page 4 HTTP Request line 3: Value '01' added to code list and value '02' marked as deprecated, for consistency with ONIX Code List 44 from which the code list is derived.
Page 5 Request header line 3: Value '01' added to code list and value '02' marked as deprecated, for consistency with ONIX Code List 44 from which the code list is derived.
Request header line 7: Description of element <ReferenceDateTime> changed to indicate date and date-time format options.
Page 6 Request detail line 6: Description of element <ReferenceDateTime> changed to indicate date and date-time format options.

- Page 7 Request example: Code value in element <AccountIDType> changed from '02' (value deprecated) to '01'.
- Page 8 Response header line 4: Value '01' added to code list and value '02' marked as deprecated, for consistency with ONIX Code List 44 from which the code list is derived.
Response Header line 5: Description of value '01' changed to indicate that it should be used if the Request Header contained <IssueDateTime> but no <RequestNumber>.
- Page 9 Response Header line 6: Text added to description of value '03' and to description of element <ResponseTypeDescription> to indicate that a response of this kind should normally be accompanied by a reason in free text.
- Page 11 Response example: Code values in elements <SenderIDType> and <AccountIDType> changed from '02' (value deprecated) to '01'.

ORDER CANCELLATION REQUEST

Requests using the HTTP protocol and the HTTP GET method

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

	Parameter description	M ²	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.	M	ClientID
2	A password to further authenticate the sender of the request	M	ClientPassword
3	A code value from a BIC-controlled codelist for the scheme used for the account identifier (see ONIX codelist 44). Mandatory if including an account identifier. Permitted values are: 01 Proprietary 02 Proprietary (DEPRECATED) 06 EAN-UCC GLN 07 GLN 11 PubEasy PIN	D	AccountIDType
4	Account identifier for this request, using the specified scheme	D	AccountIDValue
5	Identification number of this request	D	RequestNumber
6	Purchase order number associated with this request	M	BuyersOrderNumber
7	A date/time reference for this request	D	IssueDateTime
8	Scope of the cancellation request 01 WholeOrder 02 ItemList	M	RequestType
9	Order line identification number for the order item associated with this request	D	BuyersOrderLineNumber
10	EAN-13 product number (mandatory if element 9 is present, unless trading partners have agreed to use an alternative product identifier)	D	EAN13
11	A code value from a BIC-controlled codelist for the type of an alternative identifier of the product (see ONIX codelist 5).	D	ProductIDType
12	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
13	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 intended supplier, 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
14	A unique supplier identifier of the specified type	D	SupplierIDValue
15	If a specific item is being cancelled, further description, if needed.	D	ItemDescription

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

² In the column headed "M", "M" means mandatory, and "D" means dependent.

<http://www.booksupplier.co.uk/OrderCancellationService?ClientID=12345&ClientPassword=x9a44Ysj&BuyersOrderNumber=012345678&RequestType=02&BuyersOrderLineNumber=2&ProductIDType=03&ProductIDValue=9781234567890>

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

Requests using the HTTP POST method should include a request document as the body of a request message.

Request document name and version

	Order cancellation request Version 1.1		<OrderCancellationRequest version="1.1">	
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Header

	Request header	M	Header.	
1	A unique identifier for the sender of the request. An alphanumeric string not containing spaces or punctuation	M	ClientID	
2	A password to further authenticate the sender of the request	M	ClientPassword	
3	Account identifier for this request A code value from a BIC-controlled codelist for the scheme used for the account identifier (see ONIX codelist 44). Mandatory if including an account identifier. Permitted values are: 01 Proprietary 02 Proprietary (<i>DEPRECATED</i>) 06 EAN-UCC GLN 07 GLN 11 PubEasy PIN Account identifier for this request, using the specified scheme	D M M	AccountIdentifier. 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 whole order cancellation request should be forwarded, if it is not addressed to the <i>BIC Realtime</i> web service host (use only for requests sent to aggregators, and only at the header level if the order cancellation request relates to a single supplier). 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	Buyer's order number. Mandatory if the whole of a single order is being cancelled. May be included if the specific items being cancelled are all from a single order, in which case it is not included at the detailed level. Reference type 11 Buyer's order number Reference number / string Reference date-time (for format options see line 5)	D M M D	ReferenceCoded ReferenceTypeCode ReferenceNumber ReferenceDateTime	
8	Scope of the cancellation request. Mandatory. 01 WholeOrder 02 ItemList	M	RequestType	

Request detail

	Item detail Included if the request type is <i>ItemList</i> . Repeatable if there are two or more items on a single order that are to be cancelled.	D	ItemDetail.	R
1	Cancellation item line number	M	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 - see ONIX codelist 5 ID type name, only if ID type = proprietary Product number	D M D M	ProductIdentifier. ProductIDType IDTypeName IDValue	R
4	Further description of the item to be cancelled, if needed.	D	ItemDescription	
5	Supplier to whom the order cancellation request for this specific item should be forwarded, if it is not addressed to the <i>BIC Realtime</i> web service host (use only for requests sent to aggregators, and only at the item detail level if requesting cancellation of items on several orders from different suppliers). Supplier ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	D M D M	SupplierIdentifier. SupplierIDType IDTypeName IDValue	
6	Item references Reference type 11 Buyer's order number Mandatory if requesting cancellation of items from multiple orders 12 Buyer's order line number Reference number / string Reference date-time (for format options see Header line 5)	D M M D	ReferenceCoded ReferenceTypeCode ReferenceNumber ReferenceDateTime	R

Example of a Order Cancellation Request XML payload using either the SOAP or the HTTP protocol and the HTTP POST method:

```
<OrderCancellationRequest version="1.1"
xmlns="http://www.bic.org.uk/webservices">
  <Header>
    <ClientID>12345</ClientID>
    <ClientPassword>x9a44Ysj</ClientPassword>
    <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
    </AccountIdentifier>
    <RequestNumber>001</RequestNumber>
    <IssueDateTime>20150418T1525</IssueDateTime>
    <RequestType>02</RequestType>
  </Header>
  <ItemDetail>
    <LineNumber>1</LineNumber>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9781234567890</IDValue>
    </ProductIdentifier>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>0012345</ReferenceNumber>
    </ReferenceCoded>
    <ReferenceCoded>
      <ReferenceTypeCode>12</ReferenceTypeCode>
      <ReferenceNumber>2</ReferenceNumber>
    </ReferenceCoded>
  </ItemDetail>
  <ItemDetail>
    <LineNumber>2</LineNumber>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9781357924680</IDValue>
    </ProductIdentifier>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>0012347</ReferenceNumber>
    </ReferenceCoded>
    <ReferenceCoded>
      <ReferenceTypeCode>12</ReferenceTypeCode>
      <ReferenceNumber>2</ReferenceNumber>
    </ReferenceCoded>
  </ItemDetail>
</OrderCancellationRequest>
```

ORDER CANCELLATION RESPONSE

The Response will use the protocol corresponding to the Request. If the Request uses the basic HTTP protocol, the Response will be an XML document as specified below attached to a normal HTTP 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

	Order cancellation response Version 1.1		<OrderCancellationResponse version="1.1">	
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Header

	Response payload header	M	Header.	
1	Document date/time: the date/time when the response 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 (<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 M	SenderIdentifier. SenderIDType IDTypeName IDValue	
3	Identification number / string of this response	D	ResponseNumber	
4	Account identifier, required if included in the request 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 02 Proprietary (<i>DEPRECATED</i>) 06 EAN-UCC GLN 07 GLN 11 PubEasy PIN Account identifier for this request, using the specified scheme	D M M	AccountIdentifier. AccountIDType IDValue	
5	References: request number and/or date/time of request must be quoted if included in the request. Buyer's order number must be quoted if quoted in the request header, i.e. the request relates to a single order. Reference type 01 Number or date/time of associated order cancellation request 11 Buyer's order number Reference number / string Reference date or date and time	D M M D	ReferenceCoded ReferenceTypeCode ReferenceNumber ReferenceDateTime	R

Response header (continued)

	Response payload header	M	Header.	
6	<p>Response code, if there are exception conditions that affect the response as a whole. Note that, if the request was to cancel a whole order, and any or all order items cannot be cancelled because they have already been fulfilled or cancelled, this should be indicated at the item detail level.</p> <p>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 11 Invalid or unknown buyer's order number 16 Invalid or unknown account or supplier identifier 19 Server unable to process request – unable to contact supplier 20 Cancellation request acknowledged – awaiting response from supplier.</p> <p>Free text description / reason for response Supplier identifier (only included if specified in the request header; 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 Suggested minimum delay before retry / status enquiry. Format is HHMMSS. May only be included if the response code is either '19' or '20'.</p>	D	ResponseCoded.	R
		M	ResponseType	
		D	ResponseTypeDescription	
		D	SupplierIdentifier.	
		M	SupplierIDType	
		D	IDTypeName	
		M	IDValue	
		D	MinimumDelayBeforeRetry	

Response detail

	Details of all backorder items that have or have not been cancelled: mandatory unless the header reports a condition that prevents any response or prevents all items from being cancelled	D	ItemDetail.	R
1	Cancellation response item line number	D	LineNumber	
2	EAN-13 product number (mandatory unless trading partners have agreed to use an alternative product identifier)	D	EAN13	
3	<p>Alternative product identifier</p> <p>Product ID type - see ONIX codelist 5 ID type name, only if ID type = proprietary Product number</p>	D	ProductIdentifier.	R
		M	ProductIDType	
		D	IDTypeName	
		M	IDValue	
4	Further description of the item to be cancelled, if needed.	D	ItemDescription	
5	<p>References: buyer's order number, buyer's order line number, request line number and reference date/time must be quoted if included in the request at the item detail level.</p> <p>Reference type= 02 Order cancellation request line number 11 Buyer's order number 12 Buyer's order line number</p> <p>Reference number / string Reference date or date and time</p>	D	ReferenceCoded	R
		M	ReferenceTypeCode	
		M	ReferenceNumber	
		D	ReferenceDateTime	

Response detail (continued)

6	<p>Response code, if there are exception conditions that affect this specific item.</p> <p>Response type code. Suggested code values:</p> <p>06 Invalid or unknown product ID</p> <p>11 Invalid or unknown buyer's order number</p> <p>12 Invalid buyer's order line number (TRADACOMS code 09)</p> <p>13 Cannot cancel order line – items not in backorder file (TRADACOMS code 10)</p> <p>14 Cannot cancel order line – items shipped or in process (TRADACOMS code 08)</p> <p>15 Cannot cancel order line – order line already cancelled</p> <p>16 Invalid or unknown supplier identifier</p> <p>19 Server unable to process request – unable to contact supplier</p> <p>20 Cancellation request acknowledged – awaiting response from supplier</p> <p>21 Order line backorder items cancelled (TRADACOMS code 07)</p> <p>Free text description</p> <p>Supplier identifier (as specified in the request at the item detail level; mandatory if the response type code is '19' or '20').</p> <p>Supplier ID type - see ONIX codelist 92</p> <p>ID type name, only if ID type = proprietary Identifier</p> <p>Suggested minimum delay before retry / status enquiry. Format is HHMMSS. May only be included if the response code is either '19' or '20'.</p>	<p>D</p> <p>M</p> <p>D</p> <p>D</p> <p>M</p> <p>D</p> <p>M</p> <p>D</p>	<p>ResponseCoded.</p> <p>ResponseType</p> <p>ResponseTypeDescription</p> <p>SupplierIdentifier.</p> <p>SupplierIDType</p> <p>IDTypeName</p> <p>IDValue</p> <p>MinimumDelayBeforeRetry</p>	R
7	<p>The quantity of back ordered items that have been cancelled. An integer value must be specified. Not mandatory.</p>	D	CancelledQuantity	

Example³ of an Order Cancellation Response XML payload using either the SOAP or the HTTP protocol and the HTTP POST method:

```
<OrderCancellationResponse version="1.1"
  xmlns="http://www.bic.org.uk/webservices">
  <Header>
    <IssueDateTime>20150723T1200</IssueDateTime>
    <SenderIdentifier>
      <SenderIDType>01</SenderIDType>
      <IDValue>XYZ</IDValue>
    </SenderIdentifier>
    <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
    </AccountIdentifier>
    <ReferenceCoded>
      <ReferenceTypeCode>01</ReferenceTypeCode>
      <ReferenceNumber>001</ReferenceNumber>
      <ReferenceDateTime>20150418T152500</ReferenceDateTime>
    </ReferenceCoded>
    <ResponseCoded>
      <ResponseType>20</ResponseType>
      <SupplierIdentifier>
        <SupplierIDType>07</SupplierIDType>
        <IDValue>1234567</IDValue>
      </SupplierIdentifier>
      <MinimumDelayBeforeRetry>010000</MinimumDelayBeforeRetry>
    </ResponseCoded>
  </Header>
  <ItemDetail>
    <LineNumber>1</LineNumber>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9781234567890</IDValue>
    </ProductIdentifier>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>0012345</ReferenceNumber>
    </ReferenceCoded>
    <ReferenceCoded>
      <ReferenceTypeCode>12</ReferenceTypeCode>
      <ReferenceNumber>2</ReferenceNumber>
    </ReferenceCoded>
    <ResponseCoded>
      <ResponseType>13</ResponseType>
    </ResponseCoded>
  </ItemDetail>
```

³ This example will not fit on one page, so has been split over two pages.

```
<ItemDetail>
  <LineNumber>2</LineNumber>
  <ProductIdentifier>
    <ProductIDType>03</ProductIDType>
    <IDValue>9781357924680</IDValue>
  </ProductIdentifier>
  <ReferenceCoded>
    <ReferenceTypeCode>11</ReferenceTypeCode>
    <ReferenceNumber>0012347</ReferenceNumber>
  </ReferenceCoded>
  <ReferenceCoded>
    <ReferenceTypeCode>12</ReferenceTypeCode>
    <ReferenceNumber>2</ReferenceNumber>
  </ReferenceCoded>
  <ResponseCoded>
    <ResponseType>21</ResponseType>
  </ResponseCoded>
  <CancelledQuantity>5</CancelledQuantity>
</ItemDetail>
</OrderCancellationResponse>
```