Book Industry Communication

BIC Realtime for Libraries Web Services API Standards
Order Cancellation Request and Response

Version 2.0, 29 October 2018

This document: https://www.bic.org.uk/files/pdfs/API/BIC Realtime for Libraries - Request Order Cancellation - Version 2.0.pdf
XML schema: https://www.bic.org.uk/files/pdfs/API/BICWSOrderCancellation_V2.0.xsd
WSDL file: https://www.bic.org.uk/files/pdfs/API/BICWSOrderCancellationSOAP_V2.0.wsdl
XML namespace: http://www.bic.org.uk/webservices/orderCancellation
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This document specifies in human-readable form the Request and Response formats for the *BIC Realtime for Libraries* Order Cancellation API.

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Three alternative formats are specified for Requests:

- a single-line query format for use with implementations that use the HTTPS GET method – sometimes referred to as a REST approach

- an XML Request payload for use with either SOAP or the basic HTTPS POST method

- a JSON Request payload for use with either SOAP or the basic HTTPS 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 SOAP or the HTTPS POST method it is possible to include a list of items from a single orders

The same Response format options (payload in XML or JSON) will apply to both basic HTTPS and SOAP exchanges.

The complete specification of the 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 web service

- an XML Schema for Requests and Response payloads in XML format.

It is strongly recommended that SOAP client implementations of this 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

This API is designed to be used in both trade and library supply.

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 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 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.

Corrections and additions for Version 2.0 made October 2018

General   Version number updated from '1.1' to '2.0' throughout.

This version supports use of the JSON format for Request and Response payloads.

The inclusion of Request client ID and password is no longer mandatory, as using HTTPS header-based or other secure authentication is preferred. The corresponding parameters / elements in examples have been removed.

This version no longer supports the cancellation of items from multiple orders.

Page 4   Parameters ClientID and ClientPassword removed from example, as this method of authentication is no longer preferred.

Page 5   Request header line 7: Element <ReferenceCoded> made mandatory. The buyer's order number must be included in the Request Header.

Page 6   Request detail line 6: Code value '11' removed, as each item cancelled must be from the same order referenced in the header.

Page 7   Example modified to require a buyer's order number at Header level and to remove it at the item detail level.

Page 8   JSON example of Request payload added.

Page 9   Response header line 5: Element <ReferenceCoded> made mandatory. The buyer's order number must be included in the Response Header.

Page 10   Response detail line 5: Code value '11' removed, as each item cancelled must be from the same order referenced in the header.

Page 12   Example modified to require a buyer's order number at Header level and to remove it at the item detail level.

Page 13   JSON example or Response payload added.

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[1]	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.	D	ClientID	
2	A password to further authenticate the sender of the request	D	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 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:

http://www.booksupplier.co.uk/OrderCancellationService?BuyersOrderNumber=012345678
&RequestType=02&BuyersOrderLineNumber=2&ProductIDType=03
&ProductIDValue=9781234567890

---

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

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 2.0	**<OrderCancellationRequest version="2.0">** **{ "OrderCancellationRequest":** **{ "version: "2.0",...**	

Header

	Request header	**M**	**Header.**	
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 for this request	D	AccountIdentifier.	

	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
		M	AccountIDType	

	Account identifier for this request, using the specified scheme	M	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, i.e. letter T
		D	IssueDateTime	

6	Supplier to whom this whole order cancellation request should be forwarded, if it is not addressed to the 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).	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
7	Buyer's order number. Mandatory in all order cancellation requests.	M	ReferenceCoded	
	Reference type *11* Buyer's order number	M	ReferenceTypeCode	
	Reference number / string	M	ReferenceNumber	
	Reference date-time (for format options see line 5)	D	ReferenceDateTime	

8	Scope of the cancellation request. Mandatory.
	  01 WholeOrder
	  02 ItemList
		M	RequestType	

Request detail

	Item detail Included if the request type is *ItemList.* 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	D	ProductIdentifier.	R
	Product ID type - see ONIX codelist 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue	
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 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).	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
6	Item references	D	ReferenceCoded	R
	Reference type *12* Buyer's order line number	M	ReferenceTypeCode	
	Reference number / string	M	ReferenceNumber	
	Reference date-time (for format options see Header line 5)	D	ReferenceDateTime	

Example of an Order Cancellation Request XML payload using either the SOAP or the basic HTTPS protocol and the HTTPS POST method:

```xml
<OrderCancellationRequest version="2.0"
 xmlns="http://www.bic.org.uk/webservices/orderCancellation">
  <Header>
    <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
    </AccountIdentifier>
    <RequestNumber>001</RequestNumber>
    <IssueDateTime>20150418T1525</IssueDateTime>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>0012345</ReferenceNumber>
    </ReferenceCoded>
    <RequestType>02</RequestType>
  </Header>
  <ItemDetail>
    <LineNumber>1</LineNumber>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9781234567890</IDValue>
    </ProductIdentifier>
    <ReferenceCoded>
      <ReferenceTypeCode>12</ReferenceTypeCode>
      <ReferenceNumber>2</ReferenceNumber>
    </ReferenceCoded>
  </ItemDetail>
</OrderCancellationRequest>
```

Example of an Order Cancellation Request XML payload using either the SOAP or the basic HTTPS protocol and the HTTPS POST method:

```
{
    "OrderCancellationRequest": {
        "version": "2.0",
        "xmlns": "http://www.bic.org.uk/webservices/orderCancellation",
        "Header": {
            "AccountIdentifier": {
                "AccountIDType": "01",
                "IDValue": "12345"
            },
            "RequestNumber": "001",
            "IssueDateTime": "20150418T1525",
            "ReferenceCoded": {
                "ReferenceTypeCode": "11",
                "ReferenceNumber": "0012345"
            },
            "RequestType": "02"
        },
        "ItemDetail": {
            "LineNumber": 1,
            "ProductIdentifier": {
                "ProductIDType": "03",
                "IDValue": "9781234567890"
            },
            "ReferenceCoded": {
                "ReferenceTypeCode": "12",
                "ReferenceNumber": "2"
            }
        }
    }
}
```

ORDER CANCELLATION 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 or JSON document specified below.

Response document name and version

Order cancellation response Version 2.0	**<OrderCancellationResponse version="2.0">** **{ "OrderCancellationResponse":** **{ "version: "2.0",...**	

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, i.e. letter T
		M	IssueDateTime	

2	Sender (web service host)	M	SenderIdentifier.	
	Sender ID type - see ONIX codelist 92	M	SenderIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
3	Identification number / string of this response	D	ResponseNumber	
4	Account identifier, required if included in the request	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
	   02 Proprietary *(DEPRECATED)*
	   06 EAN-UCC GLN
	   07 GLN
	   11 PubEasy PIN
		M	AccountIDType	

	Account identifier for this request, using the specified scheme	M	IDValue	
5	References: request number and/or date/time of request must be quoted if included in the request. Buyer's order number must always be quoted.	M	ReferenceCoded	R

	Reference type
	   01 Number or date/time of associated order
	      cancellation request
	   11 Buyer's order number
		M	ReferenceTypeCode	

	Reference number / string	M	ReferenceNumber	
	Reference date or date and time	D	ReferenceDateTime	

Response header *(continued)*

	Response payload header	M	Header.	
6	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.	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 *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.	M	ResponseType	
	Free text description / reason for response	D	ResponseTypeDescription	
	Supplier identifier (only included if specified in the request header; mandatory if the response type code is '19' or '20').	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
	Suggested minimum delay before retry / status enquiry. Format is HHMMSS. May only be included if the response code is either '19' or '20'.	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	Alternative product identifier	D	ProductIdentifier.	R
	Product ID type - see ONIX codelist 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue	
4	Further description of the item to be cancelled, if needed.	D	ItemDescription	
5	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.	D	ReferenceCoded	R
	Reference type 02 Order cancellation request line number *12* Buyer's order line number	M	ReferenceTypeCode	
	Reference number / string	M	ReferenceNumber	
	Reference date or date and time	D	ReferenceDateTime	

Response detail *(continued)*

	Response payload item detail		ItemDetail.	
6	Response code, if there are exception conditions that affect this specific item.	D	ResponseCoded.	R

	Response type code. Suggested code values:
	06 Invalid or unknown product ID
	11 Invalid or unknown buyer's order number
	12 Invalid buyer's order line number
	    (TRADACOMS code 09)
	13 Cannot cancel order line –
	    items not in backorder file
	    (TRADACOMS code 10)
	14 Cannot cancel order line –
	    items shipped or in process
	    (TRADACOMS code 08)
	15 Cannot cancel order line –
	    order line already cancelled
	16 Invalid or unknown supplier identifier
	19 Server unable to process request –
	    unable to contact supplier
	20 Cancellation request acknowledged –
	    awaiting response from supplier
	21 Order line backorder items cancelled
	    (TRADACOMS code 07)
		M	ResponseType	

	Free text description	D	ResponseTypeDescription	
	Supplier identifier (as specified in the request at the item detail level; mandatory if the response type code is '19' or '20').	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
	Suggested minimum delay before retry / status enquiry. Format is HHMMSS. May only be included if the response code is either '19' or '20'.	D	MinimumDelayBeforeRetry	
7	The quantity of back ordered items that have been cancelled. An integer value must be specified. Not mandatory.	D	CancelledQuantity	

Example of an Order Cancellation Response XML payload using either SOAP or the basic HTTPS protocol and the HTTPS POST method:

```
<OrderCancellationResponse version="2.0"
 xmlns="http://www.bic.org.uk/webservices/orderCancellation">
  <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>
    <ReferenceCoded>
      <ReferenceTypeCode>11</ReferenceTypeCode>
      <ReferenceNumber>0012345</ReferenceNumber>
    </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>12</ReferenceTypeCode>
      <ReferenceNumber>2</ReferenceNumber>
    </ReferenceCoded>
    <ResponseCoded>
      <ResponseType>13</ResponseType>
    </ResponseCoded>
  </ItemDetail>
</OrderCancellationResponse>
```

Example of an Order Cancellation Response JSON payload using either SOAP or the HTTPS protocol and the HTTPS POST method:

```json
{
    "OrderCancellationResponse": {
        "version": "2.0",
        "xmlns": "http://www.bic.org.uk/webservices/orderCancellation",
        "Header": {
            "IssueDateTime": "20150723T1200",
            "SenderIdentifier": {
                "SenderIDType": "01",
                "IDValue": "XYZ"
            },
            "AccountIdentifier": {
                "AccountIDType": "01",
                "IDValue": "12345"
            },
            "ReferenceCoded": [
                {
                    "ReferenceTypeCode": "01",
                    "ReferenceNumber": "001",
                    "ReferenceDateTime": "20150418T152500"
                },
                {
                    "ReferenceTypeCode": "11",
                    "ReferenceNumber": "0012345"
                }
            ],
            "ResponseCoded": {
                "ResponseType": "20",
                "SupplierIdentifier": {
                    "SupplierIDType": "07",
                    "IDValue": "1234567"
                },
                "MinimumDelayBeforeRetry": "010000"
            }
        },
        "ItemDetail": {
            "LineNumber": 1,
            "ProductIdentifier": {
                "ProductIDType": "03",
                "IDValue": "9781234567890"
            },
            "ReferenceCoded": {
                "ReferenceTypeCode": "12",
                "ReferenceNumber": "2"
            },
            "ResponseCoded": {"ResponseType": "13"}
        }
    }
}
```