

# **Book Industry Communication**

## **BIC Realtime**

Standards for Instant Business Message Exchange

## **Retrieve Financial Document List Request and Response**

Version 1.1, 5 February 2016

This document: <a href="http://www.bic.org.uk/files/pdfs/BICWSFinancialDocumentList-V1.1.pdf">http://www.bic.org.uk/files/pdfs/BICWSFinancialDocumentList-V1.1.pdf</a>

XML schema: <a href="http://www.bic.org.uk/files/xml/BICWSFinancialDocumentList-V1.1.xsd">http://www.bic.org.uk/files/xml/BICWSFinancialDocumentList-V1.1.xsd</a>

WSDL file: <a href="http://www.bic.org.uk/files/xml/BICWSFinancialDocumentListSOAP-V1.1.wsdl">http://www.bic.org.uk/files/xml/BICWSFinancialDocumentList-V1.1.xsd</a>

XML namespace: http://www.bic.org.uk/webservices/financialDocumentList

Next review date: 28 February 2020

This document specifies in human-readable form the *BIC Realtime* web services Retrieve Financial Document List Request and Response formats.

Two separate formats are specified for Requests:

- an HTTP query format for use with implementations that use the basic HTTP protocol<sup>1</sup> 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 same Response format will apply to both basic HTTP and SOAP exchanges.

The complete specification of the *BIC Realtime* Retrieve Invoice List 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**

There is a need for buyers, including EDI users, to ensure that they are aware of all invoices and credit notes issued by a particular supplier. This *BIC Realtime* web service enables a buyer to retrieve a list of invoices and credit notes, selected by date-of-issue range or by whether they are settled or not yet settled. Having retrieved such a list, a buyer may then wish to retrieve a copy of a specific invoice. The *BIC Realtime* Retrieve Financial Document List web service meets the first of

<sup>&</sup>lt;sup>1</sup> 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).

these requirements. The *BIC Realtime* Retrieve Financial Document web service, specified separately, meets the second of these requirements, but implementers should also consider the *BIC Realtime* Post Financial Document web service, which may be a more appropriate means of transferring financial documents from a distributor or wholesaler to an aggregation service in real-time.

This service will also enable an aggregation service to reconcile their system with those of their data suppliers, to check for missing documents and changes made outside their system.

#### Correction to Version 1.0 made July 2012

- Page 6 Request example: correction of XML errors.
- Page 8 Response example: correction of XML errors.

#### Correction 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 3 HTTP Request 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.

HTTP Request line 9: 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.

HTTP Request line 11: New parameter 'DocumentType' added, to enable request to specify particular types of documents to be listed.

HTTP Request line 14: Description changed to clarify that this parameter should only be included when requesting a list of invoices and/or credit notes.

- Page 4 Request examples: Value of request parameter 'AccountIDType' changed from '02' (value deprecated) to '01'.
- 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 8: New element <DocumentType> added, to enable request to specify particular types of documents to be listed.

Request Header line 11: Description changed to clarify that this element should only be included when requesting a list of invoices and/or credit notes.

- Page 6 Request example: Value in element <AccountIDType> changed from '02' (value deprecated) to '01'.
- Page 7 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 <lssueDateTime> but no <RequestNumber>.

Response Header line 6: Description of element <SupplierIdentifier> modified to indicate that this is mandatory if the response code relates to the specific supplier.

Page 8 Response Header line 7: 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.

Response Detail line 4: Values '03' and '04' added to code list, to enable additional types of financial document to be included in the list.

Page 9 Response example: Values in elements <SenderIDType> and <AccountIDType> changed from '02' (value deprecated) to '01'.

## **RETRIEVE FINANCIAL DOCUMENT LIST - 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 <sup>2</sup>	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.	М	ClientID
2	A password to further authenticate the sender of the request	М	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). Mandatory in all financial document list requests. Permitted values are:  01 Proprietary 02 Proprietary (DEPRECATED) 06 EAN-UCC GLN 07 SAN 11 PubEasy PIN	M	AccountIDType
5	Account identifier for this request, using the specified scheme. Mandatory in all financial document list requests All listed documents must relate to this account.	М	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 invoicing 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
8	A unique supplier identifier of the specified type	D	SupplierIDValue
9	A code value from a BIC-controlled codelist for the scheme used to identify a ship-to party, if the customer has multiple delivery locations and wishes to select invoices relating to just one of them. Permitted values are:  01 Proprietary 02 Proprietary (DEPRECATED) 06 EAN-UCC GLN 07 SAN 11 PubEasy PIN	D	ShipToPartyIDType
10	Ship-to party identifier, using the specified scheme. All retrieved invoices and credit notes must relate to this ship-to party.	D	ShipToPartyIDValue
11	Document type(s) to be listed. Permitted values:  00 Invoice or credit note (default)  01 Invoice  02 Credit note  03 Remittance advice note  04 Account statement	D	DocumentType
12	Start date of the period for which a list of outstanding invoices and credit notes is requested – YYYYMMDD	D	PeriodStartDate
13	End date of the period for which a list of outstanding invoices and credit notes is requested – YYYYMMDD	D	PeriodEndDate
14	Selection type (for invoices and credit notes only).  01 Not yet fully settled	D	SelectionType

 $<sup>^{\</sup>rm 2}$  In the column headed "M", "M" means mandatory, and "D" means dependent.

	02 Fully settled		
1	1	1	1 1

A valid request must contain at least one of a start date, an end date and a selection type. A valid request may also contain a ship-to party identifier, if the customer has multiple delivery locations. These are used to narrow the selection of the list of invoices and credit notes that is to be retrieved.

Example of a Request using the HTTP protocol and the HTTP GET method, in which the request is for all invoices and credit notes from 1 August 2015 onwards that have not yet been fully settled:

http://www.booksupplier.co.uk/FinancialDocumentListService?ClientID=12345&ClientPassword=x9a44Ysj &AccountIDType=01&AccountIDValue=XYZ&PeriodStartDate=20150801&SelectionType=01

Example of a Request using the HTTP protocol and the HTTP GET method, in which the request is for all invoices and credit notes between 1 January 2015 and 1 August 2015, whether settled or not:

http://www.booksupplier.co.uk/FinancialDocumentListService?ClientID=12345&ClientPassword=x9a44Ysj &AccountIDType=01&AccountIDValue=XYZ&PeriodStartDate=20150101&PeriodEndDate=20150801

### 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. Multiple ship-to parties may be specified using this method.

#### Request document name and version

Financial document list request Version 1.1	<pre><financialdocumentlistrequest version="1.1"></financialdocumentlistrequest></pre>	
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#### Request document content

1	A unique identifier for the sender of the request. An	М	ClientID	
	alphanumeric string not containing spaces or punctuation			
2	A password to further authenticate the sender of the request	М	ClientPassword	
3	Account identifier. Mandatory in all financial document list requests.	М	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 02 Proprietary (DEPRECATED) 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 <i>BIC Realtime</i> web service host (use only for requests sent to aggregation services).	D	SupplierIdentifier.	
	Supplier ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	M D M	SupplierIDType IDTypeName IDValue	
7	Identifier of a party to whom the invoiced goods were shipped. Used to narrow the selection of invoices where the account relates to multiple delivery locations.	D	ShipToPartyldentifier.	R
	Ship-to party ID type - see ONIX codelist 92 ID type name, only if ID type = proprietary Identifier	M D M	PartyIDType IDTypeName IDValue	
8	Document type(s) to be listed. Permitted values:  00 Invoice or credit note (default)  01 Invoice  02 Credit note  03 Remittance advice note  04 Account statement	D	DocumentType	
9	Start date of the period for which the list is requested.	D	PeriodStartDate	
10	End date of the period for which the list is requested.	D	PeriodEndDate	
11	Selection type (for invoices and credit notes only).  01 Not yet fully settled  02 Fully settled	D	SelectionType	

## Example of a Retrieve Invoice List Request XML payload using either the SOAP or the HTTP protocol and the HTTP POST method:

## **RETRIEVE FINANCIAL DOCUMENT LIST - 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

Retrieve financial document list response	<financialdocumentlistresponse< th=""><th></th></financialdocumentlistresponse<>	
Version 1.1	version="1.1">	

#### Header

	Response payload header	M	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, ie letter T	М	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	M	IDValue	
3	Identification number / string of this response	D	ResponseNumber	
4	Account identifier. Mandatory in all responses.	М	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 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 invoice list request	М	ReferenceTypeCode	
	Reference number / string	М	ReferenceNumber	
	Reference date or date and time. Mandatory if an IssueDateTime is included in the request.	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	M	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	M	ResponseType	
	Free text description / reason for response	D	ResponseTypeDescription	
8	Default currency of values given in the response. If omitted, 'GBP' is assumed.	D	CurrencyCode	

### Response detail

	Details of all invoices and credit notes that meet the selection criteria in the request.  Mandatory unless the header reports a condition that prevents any response	D	ItemDetail.	R
1	Financial document list response item line number	D	LineNumber	
2	Identifier of the party or parties to whom the invoiced goods were shipped. In current UK trade practice there would not be more than one delivery location per invoice, so repeatable only if this format is used in other markets.	D	ShipToPartyldentifier.	R
	Ship-to party ID type - see ONIX codelist 92	М	PartyIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	М	IDValue	
3	Invoice / credit note reference. Mandatory in all items.	М	ReferenceCoded	
	Reference type code  14 Supplier's financial document reference	М	ReferenceTypeCode	
	Reference number / string	D	ReferenceNumber	
	Reference date or date and time	D	ReferenceDateTime	
4	Document type. Permitted values are:  01 Invoice 02 Credit note 03 Remittance advice note 04 Account statement	М	DocumentType	
5	Settlement status of the invoice or credit note. Permitted code values are: 01 Not yet fully settled 02 Fully settled	М	SettlementStatus	
6	Settlement due date – YYYYMMDD	D	SettlementDueDate	
7	Gross value of invoice or credit note. If the document is a credit note, the value must be negative.	D	GrossValue	
8	Net value of invoice or credit note. If the document is a credit note, the value must be negative.	D	NetValue	
9	Currency of value(s) if not the default currency.	D	CurrencyCode	

## Example of a Retrieve Financial Document List Response XML payload using either the SOAP or the HTTP protocol and the HTTP POST method:

```
<FinancialDocumentListResponse version="1.1"</pre>
xmlns="http://www.bic.org.uk/webservices/financialDocumentList">
  <Header>
    <IssueDateTime>20150818T1527</IssueDateTime>
   <SenderIdentifier>
      <SenderIDType>01</SenderIDType>
      <IDValue>XYZ</IDValue>
   </SenderIdentifier>
   <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
   </AccountIdentifier>
  </Header>
  <ItemDetail>
    <ReferenceCoded>
      <ReferenceTypeCode>14</ReferenceTypeCode>
      <ReferenceNumber>I1020304</ReferenceNumber>
      <ReferenceDateTime>20150809</ReferenceDateTime>
   </ReferenceCoded>
   <DocumentType>01
   <SettlementStatus>01/SettlementStatus>
   <SettlementDueDate>20150909/SettlementDueDate>
   <GrossValue>100.00</GrossValue>
   <NetValue>100.00</NetValue>
  </ItemDetail>
  <ItemDetail>
    <ReferenceCoded>
     <ReferenceTypeCode>14</ReferenceTypeCode>
     <ReferenceNumber>I1020405</ReferenceNumber>
      <ReferenceDateTime>20150812</ReferenceDateTime>
   </ReferenceCoded>
   <DocumentType>01
   <SettlementStatus>01/SettlementStatus>
   <SettlementDueDate>20150912/SettlementDueDate>
   <GrossValue>217.50</GrossValue>
   <NetValue>200.00</NetValue>
  </ItemDetail>
  <ItemDetail>
   <ReferenceCoded>
     <ReferenceTypeCode>14</ReferenceTypeCode>
     <ReferenceNumber>C9012345</ReferenceNumber>
     <ReferenceDateTime>20150815</ReferenceDateTime>
   </ReferenceCoded>
   <DocumentType>01</DocumentType>
   <SettlementStatus>01/SettlementStatus>
   <SettlementDueDate>20150915/SettlementDueDate>
   <GrossValue>300.00</GrossValue>
   <NetValue>300.00</NetValue>
  </ItemDetail>
</FinancialDocumentListResponse>
```