Book Industry Communication

BIC Realtime

Standards for Instant Business Message Exchange

Price and Availability Request and Response

Version 2.0, 3 April 2020

This document: https://www.bic.org.uk/files/pdfs/API/Trade/BICWSPriceAvailability-V2.0.pdf
XML schema: https://www.bic.org.uk/files/xml/BICWSPriceAvailability_V2.0.xsd
WSDL file: https://www.bic.org.uk/files/xml/BICWSPriceAvailabilitySOAP_V2.0.wsdl
XML namespace: https://www.bic.org.uk/webservices/priceAvailability
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This document specifies in human-readable form the *BIC Realtime* web services Price and Availability Request formats and the "payload" for the corresponding Price and Availability Response formats.

Three separate formats are specified for Requests:

- an HTTPS query format for use with implementations that use the basic HTTPS protocol[1] and GET method – sometimes referred to as the REST approach

- an XML format for use with both implementations that use either SOAP or the basic HTTPS protocol and POST method

- a JSON format for use with implementations that use the basic HTTPS protocol and POST method.

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

The complete specification of the *BIC Realtime* Price and Availability Request and 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

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

must be taken to ensure that the WSDL Definitions that describe the actual implementation is functionally equivalent to the BIC WSDL Definitions.

Business requirements

The formats have been designed to handle the supply of price and availability information as a value-added service offered by wholesalers and distributors. The typical user of this service will generally be a bookseller, but occasionally a wholesaler referring a bookseller's enquiry on to the distributor.

The formats support a range of service levels suited to different types of business relationship between the the parties involved and different types of enquiry. A casual request over an insecure Internet connection for price and availability of a single product might trigger a minimal response indicating solely current availability and price if available. A routine enquiry between parties with a well-established trading relationship and using a secure connection might result in a much more detailed response including stock levels and discounts.

P&A integration with the CDF Business Model Use Case 1

This *BIC Realtime* web service can be used in the CDF (Consumer Direct Fulfilment) business model. For example an online bookstore might not hold any stock, instead choosing to list titles available from one or more wholesale suppliers. We recommend that the availability and lead-time shown on product pages is established using batch data exchange via FTP. When the shopping basket is displayed it can improve customer service by using this *BIC Realtime* web service to confirm the current availability in real-time. The website may choose to do this on titles which were showing low stock holding on the last batch feed.

P&A integration with the CDF Business Model Use Case 2

In the CDF business model the carriage cost to the consumer and the speed of delivery are critical factors. Online stores need to deliver to their customer as quickly as possible at the lowest cost. This *BIC Realtime* web service can be used to decide which suppliers to place the order with. For example if one supplier has both lines of a two line order in stock but is offering a slightly lower discount it may be preferable to place the order with this supplier to achieve the best delivery time and offset the carriage cost of splitting the consumers order across two suppliers.

NOTE – We suggest that, where commercially permissible, implementations should always return the quantity available for the customer making the request to order (in the SupplyQuantity element of the response). It is permissible for implementations to cap the available stock figure at a value which is sensible for the typical level of trading expected for the customer – for example you might decide to cap this figure at a low level (99, say) for small customers while capping it at a higher level (9,999, say) for large wholesalers and major retailers. If a cap is put in place this should be agreed between trading partners.

Changes for Version 2.0 made December 2019

General	Version number updated from '1.3' 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.
	Deprecated elements and code values removed.
Page 4	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.
Page 4	HTTPS Request line 15: Parameter DescriptionLanguageCode added to enable preferred language of descriptions to be specified. The value must be a three-letter language code from ONIX code list 74.
Page 5	Request header lines 1 and 2: Elements ClientID and ClientPassword made non-mandatory. It is recommended that HTTPS header-based authentication be used where possible.

Page 5   Request header line 9: 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 6   Request detail line 1: Element LineNumber added within Product. Mandatory if the element Product is repeated.

Page 6   Request detail lines 5 and 6: Elements IncludeAlternativeProducts and AlternativeProductForms added within Product, to enable requests for alternative product details.

Page 6   Namespace URI changed in example to match namespace URI on title page. Element IncludeAlternativeProducts added to example.

Page 9   Response header line 9: Element DescriptionLanguageCode added to enable the language of element ResponseTypeDescription to be specified. The value must be a three-letter language code from ONIX code list 74.

Page 9   Response detail line 1: Element LineNumber added within ProductPriceAvailability.

Page 9   Response detail line 4: Element ReferenceCoded added within ProductPriceAvailability, to enable references to lines within the request and alternative product lines within the response.

Page 9   Response detail line 5: Element DescriptionLanguageCode added to enable the language of element ResponseTypeDescription to be specified. The value must be a three-letter language code from ONIX code list 74.

Page 9   Response detail lines 6–9: Elements ProductForm, EditionStatement, DateOfPublication and YearOfPublication added within ProductPriceAvailability.

Page 10   Supplier price and availability line 6: Use of SupplierAvailabilityCode and PublisherAvailabilityCode clarified.

Page 11   Supplier price and availability line 7: Elements SuccessorProductIdentifier and SuccessorProductForm replaced by SuccessorProduct.

Page 11   Supplier price and availability line 8: Elements AlternativeProductIdentifier and AlternativeProductForm replaced by AlternativeProduct.

Pages 11–12
          Supplier unit price: Elements associated with the unit price of a product within SupplierPriceAvailability replaced by the element Price, repeatable for multiple prices at different price-points for the same product, to align the price model more closely with other supply chain communication formats including ONIX. To align with ONIX, the following specific element changes have been made: elements PriceTypeQualifier (line 2) and PriceQualifierCode (line 9) have been renamed PriceQualifier and PriceType, using ONIX code lists 59 and 58 respectively.

Page 12   Supplier unit price: Element BICDiscountGroupCode removed. The element DiscountCoded with DiscountCodeType value '01' is to be used instead.

Page 13   Example modified to include Price and DiscountCoded elements.

PRICE AND AVAILABILITY 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	M[3]	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	A code value from a BIC-controlled code list for the scheme used for the account identifier. Mandatory if including an account identifier. Permitted values are:
	    01 Proprietary
	    06 EAN-UCC GLN
	    07 SAN
	    11 PubEasy PIN
		D	AccountIDType	

4	Account identifier for this request, using the specified scheme	D	AccountIDValue	
5	Identification number of this request	D	PriceAvailabilityRequestNumber	
6	A date/time reference for this request	D	IssueDateTime	
7	EAN-13 product number (mandatory unless trading partners have agreed to use an alternative product identifier)	D	EAN13	
8	A code value from a BIC-controlled code list for the type of an alternative identifier of the product (see ONIX code list 5).	D	ProductIDType	
9	An alternative product identifier of the specified type. Only one alternative type of identifier may be carried in a Request using the HTTPS GET method.	D	ProductIDValue	
10	If and only if this parameter is supported by the *BIC Realtime* web service implementation, the quantity of single copies of the identified product to be supplied may be specified. An integer value must be specified.	D	SupplyQuantity	
11	If and only if this parameter is supported by the *BIC Realtime* 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 code list for the type of identifier of the supplier – see ONIX code list 92	D	SupplierIDType	
12	A unique supplier identifier of the specified type	D	SupplierIDValue	
13	A comma-separated list of country codes specifying regions in which all suppliers included in the response are to be located	D	SupplierRegionCodes	
14	Currency in which the requester would prefer prices to be quoted.	D	CurrencyCode	
15	Language in which the requester would prefer free-text 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/PriceAvailabilityService?ProductIDType=03
&ProductIDValue=9781234567890&SupplierRegionCodes=GB,IE

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[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 HTTPS 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.

Request document name and version

Price and availability request Version 2.0		**<PriceAvailabilityRequest version="2.0">** { "PriceAvailabilityRequest": { "version": ,..	**5**

Header

	Request header	M	Header.	
1	A unique identifier for the sender of the request. An alphanumeric string not containing spaces or punctuation[4].	D	ClientID	
2	A password to further authenticate the sender of the request[4].	D	ClientPassword	
3	Account identifier for this request	D	AccountIdentifier.	
	A code value from a BIC-controlled code list for the scheme used for the account identifier. Mandatory if including an account identifier. Permitted values are: *01* Proprietary *06* EAN-UCC GLN *07* SAN *11* PubEasy PIN	M	AccountIDType	
	Account identifier for this request, using the specified scheme	M	IDValue	
4	Identification number / string of this request	D	PriceAvailabilityRequestNumber	
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(s) for whom price and availability is requested, if not the *BIC Realtime* web service host (use only for requests sent to aggregators).	D	SupplierIdentifier.	R
	Supplier ID type – see ONIX code list 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
7	Region(s) in which all supplier(s) to which the request applies must be located (use only for requests sent to aggregators)	D	SupplierRegionsCoded	
	Region code scheme *01* ISO 3166 country codes	M	SupplierRegionCodeType	
	Region codes, separated by commas	M	RegionCodes	
8	Currency in which the requester would prefer prices to be quoted	D	CurrencyCode	
9	Language in which the requester would prefer free-text descriptions to be expressed – use ONIX code list 74.	D	DescriptionLanguageCode	

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

Request detail

	Product	M	Product.	R
1	Request line number. Mandatory if there is more than one product item in the request.	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 code list 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue	
4	If and only if this parameter is supported by the *BIC Realtime* web service implementation, the quantity of single copies of the identified product to be supplied may be specified. An integer value must be specified	D	SupplyQuantity	
5	Include alternative product details in the response. If this empty element flag is included, the response should include details for the product itself and zero or more lines detailing each alternative product, which may be restricted by product form – see next line.	D	IncludeAlternativeProducts	
6	Alternative product forms. May only be included if the preceding element is included for this product item. A space-separated list of two-letter product form code values from ONIX code list 150. The second letter of a code value may be replaced by a wild-card character *, providing a short-hand for all product form code values commencing with the first letter, e.g. "B*" for all printed books. If included, only alternative products whose product form matches one of the listed code values are to be included in the response. If omitted, alternative products of any product form are to be included in the response.	D	AlternativeProductForms	

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

```
<PriceAvailabilityRequest version="2.0"
 xmlns="http://www.bic.org.uk/webservices/priceAvailability">
  <Header>
    <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
    </AccountIdentifier>
    <PriceAvailabilityRequestNumber>001</PriceAvailabilityRequestNumber>
    <IssueDateTime>20190418T152500</IssueDateTime>
    <SupplierIdentifier>
      <SupplierIDType>01</SupplierIDType>
      <IDValue>XYZ</IDValue>
    </SupplierIdentifier>
    <CurrencyCode>GBP</CurrencyCode>
  </Header>
  <Product>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9781234567890</IDValue>
    </ProductIdentifier>
    <IncludeAlternativeProducts/>
  </Product>
</PriceAvailabilityRequest>
```

Example of a Request JSON payload using the HTTPS protocol and the POST method:

```json
{
    "PriceAvailabilityRequest": {
        "version": "2.0",
        "xmlns": "http://www.bic.org.uk/webservices/priceAvailability",
        "Header": {
            "AccountIdentifier": {
                "AccountIDType": "01",
                "IDValue": "12345"
            },
            "PriceAvailabilityRequestNumber": "001",
            "IssueDateTime": "20190418T152500",
            "SupplierIdentifier": [
                {
                    "SupplierIDType": "01",
                    "IDValue": "XYZ"
                }
            ],
            "CurrencyCode": "GBP"
        },
        "Product": [
            {
                "ProductIdentifier": [
                    {
                        "ProductIDType": "03",
                        "IDValue": "9781234567890"
                    }
                ],
                "IncludeAlternativeProducts": {}
            }
        ]
    }
}
```

PRICE AND AVAILABILITY 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

	Price and availability response Version 2.0	**<PriceAvailabilityResponse version="2.0">** **{ "PriceAvailabilityResponse": { "version": ,...**	

Response header

	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 (*BIC Realtime* web service host)	M	SenderIdentifier.	
	Sender ID type – see ONIX code list 92	M	SenderIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	D	IDValue	
3	Identification number / string of this response	D	PriceAvailabilityResponseNumber	
4	Account identifier, required if included in the request	D	AccountIdentifier.	

	A code value from a BIC-controlled code list for the scheme used for the account identifier. Must be specified if an account identifier is specified. Permitted schemes are:
	  01 Proprietary
	  06 EAN-UCC GLN
	  07 SAN
	  11 PubEasy PIN
		M	AccountIDType	

	Account identifier for this request, using the specified scheme	M	IDValue	
5	References: request number of request must be quoted if included in the request; request date or date and time must be quoted in this composite if both number and date/time are included in the request.	D	ReferenceCoded	R
	Reference type *01* Request number or date/time of associated price and availability request	M	ReferenceTypeCode	
	Reference number / string	M	ReferenceNumber	
	Reference date or date and time	D	ReferenceDateTime	
6	Reference date or date and time: must be quoted separately if and only if included in the request *without* a request number. See header line 5 for permitted formats.	D	ReferenceDateTime	
7	Region(s) in which all supplier(s) to which the response applies must be located (for use by aggregators when responses include information from multiple suppliers located in different regions).	D	SupplierRegionsCoded	
	Region code scheme *01* ISO 3166 country codes	M	SupplierRegionCodeType	
	Region codes, separated by spaces	M	RegionCodes	
8	Default currency of prices given in the response – mandatory if response code '05' is included.	D	CurrencyCode	

Response header (continued)

	Payload header	M	Header.	
9	Response code, if there are exception conditions that affect the response as a whole	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 *04* No information for supplier(s) listed below *05* Prices not quoted in preferred currency	M	ResponseType	
	Free text description / reason for response	D	ResponseTypeDescription	
	Language of description. Mandatory if included in the request. See request header line 9.	D	DescriptionLanguageCode	
	Supplier identifier, if the exception condition affects a specified supplier	D	SupplierIdentifier.	R
	Supplier ID type – see ONIX code list 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	

Response detail

	Product price and availability: mandatory unless the header reports an exception condition that prevents any response	D	ProductPriceAvailability.	R
1	Response 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 code list 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue	
4	Reference to request line and other response lines. If the request specified that details of alternative products should be included in the response, each alternative product must reference the request line to which it relates and should also reference the response line for the product for which it is an alternative.	D	ReferenceCoded	R
	Reference type *02* Request line reference *03* Response line reference	M	ReferenceTypeCode	
	Reference number / string	M	ReferenceNumber	
5	Response code, if no information can be sent for this product. If present, elements 6 to 14 below must not be sent.	D	ResponseCoded.	
	Response type code. Suggested code values: *05* Price not quoted in preferred currency *06* Invalid product ID *07* No information for this product	M	ResponseType	
	Free text description	D	ResponseTypeDescription	
	Language of description. Mandatory if included in the request. See request header line 9.	D	DescriptionLanguageCode	
6	Product form – see ONIX code list 150.	D	ProductForm	
7	Edition statement: text	D	EditionStatement	
8	Date of publication: YYYYMMDD	D	DateOfPublication	
9	Year of publication: YYYY	D	YearOfPublication	
10	Height in mm	D	Height	

Response detail *(continued)*

	Product price and availability	**D**	**ProductPriceAvailability.**	**R**
11	Width in mm	D	Width	
12	Depth in mm	D	Depth	
13	Unit weight in gm	D	UnitWeight	
14	Supplier price and availability – *for details see below.*	D	SupplierPriceAvailability.	R

Supplier price and availability

	Supplier price and availability – repeatable for each supplier if the response covers more than one source for the requested item	**D**	**ProductPriceAvailability.SupplierPriceAvailability.**	**R**
1	Date and possibly time when the price and availability information contained in this supplier's response was last updated (YYYYMMDD or YYYYMMDDTHHMMSS)	D	LastUpdated	
2	Supplier identifier, if *BIC Realtime* web service host is an aggregator responding on behalf of a supplier	D	SupplierIdentifier.	R
	Supplier ID type – see ONIX code list 92	M	SupplierIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Identifier	M	IDValue	
3	Location(s) from which supplier is able to ship the item.	D	SupplierLocation	R
	Location identifier	D	LocationIdentifier	R
	Location ID type *01* Proprietary *06* EAN-UCC GLN *07* SAN	M	LocationIDType	
	Proprietary ID type name	D	IDTypeName	
	Location ID value	M	IDValue	
	Location name	D	LocationName	
4	Quantity requested, if applicable – see Note on page 2	D	SupplyQuantity	
5	In stock indicator. Suggested code values: *01* In stock, quantity unspecified *02* Out of stock *03* Requested quantity available *04* Requested quantity unavailable	D	InStock	
6	Product availability status. Mandatory unless the order line is shipping now.	D	AvailabilityCoded	
	Supplier item availability code value. Indicates current availability of the item from the supplier responding to this request, or, when the web service host is an aggregator, from the supplier identified in line 2 above. See Table 1 for *BIC Realtime* web services availability status codes that should be used in this context.	M	SupplierAvailabilityCode	
	Publisher's distributor's product availability code value – use ONIX code list 65	D	PublisherAvailabilityCode	
	Availability date	D	ExpectedShipDate	
	Publishing status code value – use ONIX code list 64	D	PublishingStatusCode	
	On-sale date for the product, if ordered (YYYYMMDD) – included if sale is embargoed until the specified date, or if mandated by a publishing status code value.	D	ConsumerOnSaleDate	
	Expected order time for a non-stock item – in days	D	OrderTime	

Supplier price and availability *(continued)*

	Supplier price and availability	D	ProductPriceAvailability.SupplierPriceAvailability.	R
7	Successor product	D	SuccessorProduct	R
	Product identifier	M	ProductIdentifier.	R
	Product ID type – see ONIX code list 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue.	
	Product form – see ONIX code list 150	D	ProductForm	
	Edition statement: text	D	EditionStatement	
	Date of publication: YYYYMMDD	D	DateOfPublication	
	Year of publication: YYYY	D	YearOfPublication	
8	Alternative format product	D	AlternativeProduct	R
	Product identifier	M	ProductIdentifier.	R
	Product ID type – see ONIX code list 5	M	ProductIDType	
	ID type name, only if ID type = proprietary	D	IDTypeName	
	Product number	M	IDValue.	
	Product form – see ONIX code list 150	M	ProductForm	
	Edition statement: text	D	EditionStatement	
	Date of publication: YYYYMMDD	D	DateOfPublication	
	Year of publication: YYYY	D	YearOfPublication	
9	Pack quantity	D	PackQuantity	
10	Supplier's expected unit price. Repeated for each price-point for this product from this supplier, if available under various terms and conditions.	D	Price	R

Supplier's unit price

	Supplier's expected unit price	D	ProductPriceAvailability. SupplierPriceAvailability.Price	R
1	Supplier's price identifier. Must be included if the product is available at various identified prices according to the terms, conditions and constraints of supply. If both price amount and price identifier are specified, the buyer must ensure they are consistent. The price identifier must match a price identifier specified in the current ONIX record for the same item.	D	PriceIdentifier	
	Proprietary price identifier scheme – use ONIX code list 217	M	PriceIDType	
	Proprietary scheme name	D	IDTypeName	
	Identifier value	M	IDValue	
2	Price type qualifier corresponding to the supplier's price identifier – use ONIX code list 59.	D	PriceQualifier	
3	For digital items, the technical protection method(s) applied as a condition of sale at the supplier's price identifier. Repeatable – use ONIX code list 144.	D	EpubTechnicalProtection	R
4	Usage constraint(s) associated with the supplier's identified price. Repeatable	D	PriceConstraint	R
	Type of constraint – use ONIX code list 230.	M	PriceConstraintType	
	Status of constraint – use ONIX code list 146.	M	PriceConstraintStatus	
	Limit of constraint	D	PriceConstraintLimit	R
	Limiting quantity	M	Quantity	
	Quantity unit – use ONIX code list 147.	M	PriceConstraintUnit	
5	For digital items, the licensing terms applicable as a condition of sale at the supplier's identified price.	D	EpubLicense	
	License name	M	EpubLicenseName	R
	License expression	D	EpubLicenseExpression	
	Expression type – use ONIX code list 218.	M	EpubLicenseExpressionType	
	Expression type name	D	EpubLicenseExpressionTypeName	
	URI of license expression	M	EpubLicenseExpressionLink	

Supplier's unit price *(continued)*

		Supplier's expected unit price	**D**	**ProductPriceAvailability.** **SupplierPriceAvailability.Price.**	**R**
6		Textual description of the price, its conditions and constraints, for display purposes.	D	PriceTypeDescription	
7		Language of description. Mandatory if included in the request. See request header line 9.	D	DescriptionLanguageCode	
8		Further conditions applicable to the supplier's identified price.	D	PriceCondition	R
		Type of condition – use ONIX code list 167.	M	PriceConditionType	
		Quantity associated with condition	D	PriceConditionQuantity	R
		Type of quantity – use ONIX code list 168.	M	PriceConditionQuantityType	
		Quantity	M	Quantity	
		Quantity unit – use ONIX code list 169.	M	QuantityUnit	
9		Price amount. Repeatable for different currencies or price types	D	PriceAmount	R
		Monetary amount	M	MonetaryAmount	
		Currency: ISO 4217 currency code	D	CurrencyCode	
		Price type – use ONIX code list 58.	D	PriceType	
		Tax details. May be included only if the price amount is inclusive of any tax. May be repeated for split-rate items only.	D	Tax	R
		Product identifier. Included only for split-rate items when trading terms require identification of the item(s) to which this rate applies.	D	ProductIdentifier	R
		Product ID type – see ONIX code list 5	M	ProductIDType	
		ID type name, only if proprietary	D	IDTypeName	
		Product number	M	IDValue	
		Tax component description	D	PricePartDescription	
		Language of description. Mandatory if included in the request. See request header line 9.	D	DescriptionLanguageCode	
		Tax type – see ONIX code list 171	M	TaxType	
		Tax rate code – see ONIX code list 62	D	TaxRateCode	
		Tax rate: percentage. Mandatory if either the taxable amount is specified or the tax amount isn't specified	D	TaxRatePercent	
		Taxable amount. Mandatory if either the tax rate is specified or the tax amount isn't specified.	D	TaxableAmount	
		Tax amount. Mandatory if no tax rate or taxable amount is specified.	D	TaxAmount	
10		Discount percent (discount from RRP, specific to the requester)	D	DiscountPercent	
11		Discount code from a specified scheme	D	DiscountCoded	R
		Discount code scheme – see ONIX code list 100	M	DiscountCodeType	
		Scheme name, only if scheme is proprietary	D	DiscountCodeTypeName	
		Discount code value from the specified scheme	M	DiscountCode	

12		Supply terms. If omitted, standard trade terms may be assumed to apply to this product. Permitted values are:
		    00 Standard trade terms – default
		    01 Sale or return
		    02 Firm sale only
			D	SupplyTerms	

Example of a Response XML payload:

```xml
<PriceAvailabilityResponse version="2.0"
 xmlns="http://www.bic.org.uk/webservices/priceAvailability">
  <Header>
    <IssueDateTime>20190424T1145</IssueDateTime>
    <SenderIdentifier>
      <SenderIDType>01</SenderIDType>
      <IDValue>XYZ</IDValue>
    </SenderIdentifier>
    <AccountIdentifier>
      <AccountIDType>01</AccountIDType>
      <IDValue>12345</IDValue>
    </AccountIdentifier>
    <ReferenceCoded>
      <ReferenceCodeType>01</ReferenceCodeType>
      <ReferenceNumber>001</ReferenceNumber>
      <ReferenceDateTime>20190418T152500</ReferenceDateTime>
    </ReferenceCoded>
  </Header>
  <ProductPriceAvailability>
    <ProductIdentifier>
      <ProductIDType>03</ProductIDType>
      <IDValue>9780123456789</IDValue>
    </ProductIdentifier>
    <SupplierPriceAvailability>
      <SupplierIdentifier>
        <SupplierIDType>01</SupplierIDType>
        <IDValue>XYZ</IDValue>
      </SupplierIdentifier>
      <AvailabilityCoded>
        <SupplierAvailabilityCode>20</SupplierAvailabilityCode>
        <PublisherAvailabilityCode>21</PublisherAvailabilityCode>
      </AvailabilityCode>
      <Price>
        <PriceAmount>
          <MonetaryAmount>19.99</MonetaryAmount>
          <PriceType>01</PriceType>
          <Tax>
            <TaxType>01</TaxType>
            <TaxRateCode>Z</TaxRateCode>
            <TaxRatePercent>0</TaxRatePercent>
            <TaxableAmount>19.99</TaxableAmount>
            <TaxAmount>0.00</TaxAmount>
          </Tax>
        </PriceAmount>
      </Price>
      <DiscountCoded>
        <DiscountCodeType>01</DiscountCodeType>
        <DiscountCode>ABCDE999</DiscountCode>
      </DiscountCoded>
    </SupplierPriceAvailability>
  </ProductPriceAvailability>
</PriceAvailabilityResponse>
```

Example of a Response JSON payload:

```json
{
    "PriceAvailabilityResponse": {
        "version": "2.0",
        "xmlns": "http://www.bic.org.uk/webservices/priceAvailability",
        "Header": {
            "IssueDateTime": "20190424T1145",
            "SenderIdentifier": {
                "SenderIDType": "01",
                "IDValue": "XYZ"
            },
            "AccountIdentifier": {
                "AccountIDType": "01",
                "IDValue": "12345"
            },
            "ReferenceCoded": [
                {
                    "ReferenceCodeType": "01",
                    "ReferenceNumber": "001",
                    "ReferenceDateTime": "20190418T152500"
                }
            ]
        },
        "ProductPriceAvailability": [
            {
                "ProductIdentifier": [
                    {
                        "ProductIDType": "03",
                        "IDValue": "9780123456789"
                    }
                ],
                "SupplierPriceAvailability": [
                    {
                        "SupplierIdentifier": [
                            {
                                "SupplierIDType": "01",
                                "IDValue": "XYZ"
                            }
                        ],
                        "AvailabilityCoded": {
                            "SupplierAvailabilityCode": "20",
                            "PublisherAvailabilityCode": "21"
                        },
                        "Price": {
                            "PriceAmount": [
                                {
                                    "MonetaryAmount": 19.99,
                                    "PriceType": "01",
                                    "Tax": [
                                        {
                                            "TaxType": "01",
                                            "TaxRateCode": "Z",
                                            "TaxRatePercent": 0,
                                            "TaxableAmount": 19.99,
                                            "TaxAmount": 0
                                        }
                                    ]
                                }
                            ]
                        },
                        "DiscountCoded": [
                            {
                                "DiscountCodeType": "01",
                                "DiscountCode": "ABCDE999"
                            }
                        ]
                    }
                ]
            }
        ]
    }
}
```

Table 1: Supplier item availability codes

Used in SupplierAvailabilityCode (page 10, line 8).

Code value	Description
10	Not yet available - reason may be provided by publisher product availability code and/or publishing status code
20	Available - further information on the precise nature of the availability should normally be provided by publisher product availability code
21	Available - from stock - no additional availability information would normally be provided
23	Available - manufactured on demand
30	Temporarily unavailable - reason may be provided by publisher product availability code
31	Temporarily unavailable due to stock taking
40	Not available - if due to a supply chain issue, the reason should be provided by publisher product availability code and/or publishing status code
41	Not available - publisher address unknown
42	Not available - publisher no longer trading
43	Not available - rights restricted
44	Not available in pack/set form - only available singly
80	Sold - second-hand or antiquarian item
90	Availability uncertain - no further information
91	Availability uncertain - item not known / identifier not recognised
92	Availability uncertain - apply to customer services