

**XML REACH**  
**USER GUIDE**

VERSION 2.3



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## Hello and Welcome

Welcome to our XML Reach service. It's great to have you on board as one of our customers.

At Virgin Media Business, we've been listening hard to what UK businesses really want. We believe you want a provider who genuinely understands your needs. That's the vision that drives us. Our focus will always be on the difference we can make to your business. Virgin Media Business is all about you.

XML Reach has been designed to make doing business with us simpler. In conjunction with Engage (our Web portal), it gives you the tools for raising quotes and orders.

*You'll probably want to keep this document somewhere handy for future reference.*



## Guide Purpose

The purpose of this guide is to provide an introduction to XML Reach and how you can make the most of the service.

Our XML Reach service allows users to access Virgin Media Business pricing and serviceability. This is achieved where the user develops their existing interface to connect with Virgin Media Business.

Currently, you can access Pricing for the following key products:

- National Ethernet
- Ethernet Extensions
- Ethernet Extensions Plus
- Managed Internet Access

Whilst you are currently unable to place an order via XML Reach, you can retrieve a previously raised quote and convert to order within Engage. The Engage portal can be accessed from the following URL: [www.virginmediabusiness.co.uk/engage](http://www.virginmediabusiness.co.uk/engage)



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## Getting Connected

Our service is developed via Extensible Markup Language (XML) with connections passing through an intermediate application:

We currently operate two instances of our service with a Staging (Pre-production) environment and Live (Production) environment.

We operate our Staging environment to enable prospective users to develop application code whilst avoiding any impact to our Live environment. Existing XML Reach users will also have access to the Staging environment to develop additional code or complete any required maintenance. Please note that response times can be considerably longer within the Staging environment.

Once you are happy with your application code in the Staging environment, please let us know before you deploy the changes to the Live environment as this will ensure that we provide proactive support as required.

We authenticate your access to XML Reach by the following:

- **Single External Customer IP Address (Fixed)**
  - *If you as a Customer have separate Staging and Live environments (or equivalent), both IP Addresses will be required*
- **CustomerID**
  - *The customer ID will be provided by VMB Virgin Media Business and will be valid for both the Staging and Live environments*
- **UserID**
  - *The User ID will be provided by VMB Virgin Media Business and will be valid for both the Staging and Live environments*

As highlighted, we currently operate two instances of XML Reach:

- **Staging**
  - <https://portalpreprod.virginmediabusiness.co.uk/xmlreach/BPTComm?userid=xxx&inputdata=xmlstring>
  - In this example, 'xxx' demonstrates the UserID and 'xmlstring' demonstrates the user XML request
- **Production**
  - <https://portal.virginmediabusiness.co.uk/xmlreach/BPTComm?userid=xxx&inputdata=xmlstring>
  - In this example, 'xxx' demonstrates the UserID and 'xmlstring' demonstrates the user XML request

Our service can be called in the following ways:

- Loading the security parameters and XML file programmatically via HTTP POST
- Using HTTP GET, concatenating the service call, security parameters and XML file into a URL string. Please note that the HTTP GET calls have restrictions such as limiting to ASCII characters and limiting the total number of characters (2083 characters when using Internet Explorer)
- Please note that SOAP (Simple Object Access Protocol) method calls are currently unavailable

Messages are transferred to our XML Reach interface via SOAP which conforms to the schema of VMB's API services.

In addition to our Terms of Use, we may ask our XML Reach users including any third parties you may wish to engage, or who will have access to or use of our Data, to sign a special Non-Disclosure Agreement (NDA) prior to providing access.

Additionally, in order to provide accurate pricing, we require each XML Reach user to incorporate UPRN (Unique Property Reference Number) within their interface. UPRN is a unique references assigned by the Ordnance Survey to identify every premise throughout the UK. This identifier enables pricing at a premise level which ensures accuracy.

UPRN data is owned by the Ordnance Survey, whilst we have signed an agreement with them to be able to share this data with you, we need to ensure that we provide access in accordance with their supporting terms and conditions. You will be required to sign a Non-Disclosure Agreement before we provide you with access to this data, which you can then incorporate within your interface.

## 1. Products

Within our XML Reach service, you can access Pricing for the following key products:

- **National Ethernet (NNE)**
  - Available between any sites

Access Circuit	Network Status	Access Bandwidth	Circuit Bandwidth
Ethernet	On-Net Off-Net	10Mbps; 100Mbps; 1Gbps	10Mbps; 20Mbps; 30Mbps; 40Mbps; 50Mbps; 60Mbps; 70Mbps; 80Mbps; 90Mbps; 100Mbps; 200Mbps; 300Mbps; 400Mbps; 500Mbps; 600Mbps; 700Mbps; 800Mbps; 900Mbps; 1Gbps

- **Ethernet Extensions (EE)**
  - Available within a single franchise area with a distance up to 25 km

Access Circuit	Network Status	Access Bandwidth	Circuit Bandwidth
Ethernet	On-Net	Not applicable	10Mbps; 100Mbps; 1Gbps; 10Gbps

- **Ethernet Extensions Plus (EEP)**
  - Available up to 35 km

Access Circuit	Network Status	Access Bandwidth	Circuit Bandwidth
Ethernet	On-Net Off-Net	10Mbps; 100Mbps; 1Gbps	10Mbps; 20Mbps; 30Mbps; 40Mbps; 50Mbps; 60Mbps; 70Mbps; 80Mbps; 90Mbps; 100Mbps; 200Mbps; 300Mbps; 400Mbps; 500Mbps; 600Mbps; 700Mbps; 800Mbps; 900Mbps; 1Gbps

- **MIA**

Access Circuit	Network Status	Access Bandwidth	Circuit Bandwidth
Ethernet	On-Net Off-Net	100Mbps; 1Gbps	10Mbps; 20Mbps; 30Mbps; 40Mbps; 50Mbps; 60Mbps; 70Mbps; 80Mbps; 90Mbps; 100Mbps; 200Mbps; 300Mbps; 400Mbps; 500Mbps; 600Mbps; 700Mbps; 800Mbps; 900Mbps; 1Gbps

Whilst you are currently unable to place an order via XML Reach, you can retrieve a previously raised quote and convert to order within Engage. The Engage portal can be accessed from the following URL: [www.virginmediabusiness.co.uk/engage](http://www.virginmediabusiness.co.uk/engage)

## 2. Quoting

Based on user feedback, before reading the descriptions that follow, you may find it helpful to use the Engage portal to raise a few quotes as many of the XML elements below are presented within the Engage quote process.

Our service views a network service model as consisting of the following:

- **Sites**
  - The location to which the service is delivered
  - Most products involve two sites (A End / B End)
- **Circuits**
  - A circuit is the end-to-end connection between one A End and one B End
  - Example: an EVC in an Ethernet service

This model is reflected in the structure of the users' XML request and the subsequent XML response.

Based on user feedback, we have seen confusion where a product has a Bearer Circuit / Access Circuit. In all instances this is handled as part of the site to which it connects.

Additionally, if a quote is raised for a circuit between a user site and a 3<sup>rd</sup> party site, the users' site should always be captured as the A End as this will enable an efficient order process.

As part of the quote process, the user can use the following criteria for site selection:



- **UPRN**
  - This is our preferred premise identifier, the new Unique Property Reference Number provided by the Ordnance Survey which enables premise level pricing, therefore improving quote accuracy (see Frequently Asked Questions)
  
- **X & Y Co-ordinates**
  - A search will be completed using the exact co-ordinates provided. Where this is unavailable, the search will be expanded, to a maximum of 10m radius, until a valid record is identified. Please note that a valid Postcode must be provided to ensure there is context for the X & Y co-ordinates
  
- **Postcode**
  - Since a postcode usually contains several premise addresses, this will arbitrarily choose one of the premises meaning the quote should be regarded as indicative with a reduced level of accuracy (see Frequently Asked Questions)
  - If the chosen postcode contains a generic Point of Interconnect (POI) or Customer-specific POI (CS POI), then this site will always be automatically selected
  - If the chosen postcode contains both a POI and a CS POI, then the site used will be the CS POI

Where the XML request contains more than one of the criteria listed above, the search will be completed in the following order until a valid record is identified:

- UPRN
- X & Y Co-ordinates
- Postcode

Please note that it is always necessary to pass a postcode as part of the site details section of the Quoting service

Our service also provides the ability to display Quick Quotes and Quick Sites. These attributes are used to indicate a choice between multiple potential premises (*IsQuickSite*). In such instances, the quote should be regarded as budgetary with a reduced level of accuracy (*IsQuickQuote*).

The information in the XML response is as follows:

- A Boolean attribute *IsQuickQuote* in the Quote Pricing element
- A Boolean attribute called *IsQuickSite* in the Site element

The logic applied is detailed in the following table:

<i>IsQuickSite = True</i>	<i>IsQuickSite = False</i>
<ul style="list-style-type: none"> <li>• Site identified by Postcode only</li> <li>• Site identified by X &amp; Y Co-ordinates and Postcode (where these details identify more than one premise)</li> </ul>	<ul style="list-style-type: none"> <li>• Site identified by UPRN</li> <li>• Site identified by X &amp; Y Co-ordinates and Postcode (where these details identify a single premise)</li> </ul>

An optional attribute called *SiteFlag* has been added to the *Site* element which allows the user to view sites in Engage’s “My Sites” screens. Only sites with *SiteFlag* set to FALSE will be displayed.

Unless a user specifically intends to re-use sites created via XML, we recommend for subsequent performance that you set the *SiteFlag* to TRUE for all XML quotes.

An example XML request when *SiteFlag* is set to TRUE is as follows:

```
<Site Name="">
  <SiteDetails>
    <SitePostcode>BB56BN</SitePostcode>
    <SiteFlag>TRUE</SiteFlag>
  </SiteDetails>
  <SiteConfiguration>
    <AccessCircuit>ETHERNET</AccessCircuit>
    <Flavour></Flavour>
    <Bandwidth>10 Mbps</Bandwidth>
  </SiteConfiguration>
</Site>
```

The *SiteFlag* line must always be the last line within the *Site Details* section and must have valid content if included within the request.

The next section of the guide will provide the elements which will appear within the XML request and will be followed by example XML requests for all available products.

Optional attributes can be omitted from the XML or left blank. The schemas demonstrate data types and lengths. Where a parameter is mandatory for one product but optional for others, the parameter *minOccurs* is set equal to one.

### Elements within the XML request

XML Element	Status	Description
CustomerQuotationData	Mandatory	Main XML document root element.
CustomerData	Mandatory	This covers all customer data
CustomerId	Mandatory	Your Unique Customer ID
QuoteData	Mandatory	Quote Header; Sites; Circuits
RefNo	Optional	User specified reference for the quote. Maximum string of 50 characters
Product	Mandatory	National Ethernet (NNE); Ethernet Extensions (EE); Ethernet Extensions Plus (EEP)
QuoteName	Mandatory	User specified quote name. Maximum string of 50 characters

XML Element	Status	Description
QuoteHeader	Mandatory	Contract Term; Billing Frequency
ContractTerm	Mandatory	User specified value ranging from 1 to 5 years
BillingFreq	Mandatory	User specified value as Monthly, Quarterly or Annually. Quarterly should be selected unless otherwise agreed with VMB
Sites	Mandatory	Must include at least one Site element
Site Name	Optional	User specified Site Name, which can be used as a temporary reference for Access and Circuit configuration. Maximum string of 79 characters. VMB will automatically allocate a site name, and so Input site name may differ from Response site name references
SiteDetails	Mandatory	Site Postcode; UPRN; X & Y Co-ordinates; Site Flag
SitePostcode	Mandatory	User specified value. This is not case-sensitive, and can include or exclude a space
UPRN	Optional	Unique Property Reference Number provided by the Ordnance Survey
Coordinates	Optional	User specified value based on X & Y co-ordinates
SiteFlag	Optional	User selected value to determine status
SiteConfiguration	Mandatory	Access Circuit; Flavour; Bandwidth
AccessCircuit	Mandatory	User specified value based upon product selection – possible value: Ethernet
Flavour	Optional	User specified value based upon product selection
Bandwidth	Mandatory	User specified value based upon product selection
Circuits	Mandatory	Must include at least one Circuit element
Circuit Name	Mandatory	A circuit created between two sites must have a unique name. (The same circuit name can be used with different sites. For example Circuit Name 'CKT1' is used between sites A and B, and also between sites A and C, but 'CKT1' cannot be used again between sites A and B)
CircuitDetails	Optional	A and B Ends – Site Name, UPRN If using Site names, these must be the same as used in the Sites element
Site A	Optional	Circuit A End, can be defined by Name, UPRN
Site B	Optional	Circuit B End, can be defined by Name, UPRN
CircuitConfiguration	Mandatory	User specified value based upon product selection
CircuitBandwidth	Mandatory	The bandwidth of the end-to-end circuit (as distinct from the bearers). Allowed values are detailed within the Products section

## Elements within the XML response

XML Element	Description
ReachResponseEnvelope	Summarised by intermediate application
BPTResponse	Summarised by intermediate application
QuotePricing	Main pricing root element
CustomerId	As defined earlier
CustomerQuoteRefNo	User specified value in XML request

XML Element	Description
BPTQuoteRefNo	VMB pricing reference for this quote
Product	User specified value in XML request
ResponseCode	Displays applicable response code
IsQuickQuote	Identifies Quote status
Layer2ControlProtocol	Displays whether the quote was requested with Layer2Control, this option is available only via Engage at present
QuoteData	Quote Validity defines the period, in days, which the quote is valid for
SitePricing	Displays pricing for all requested sites. There will be one Site element for each site in the XML request
Site	Displays pricing for each site
UPRN	Unique Property Reference Number of the premise used in the quote
Site Name	VMB auto generated value which may differ from site name specified in XML request
AccessFlavour	User specified value in XML request or system suggested flavour
SiteType	Normal; Generic POI; Customer Specific POI
NetStatus	Information about the serviceability of the site. Possible values are: Lit Building; Serviceable Building; Near Net >100m Dig; Offnet
IsQuickSite	User specified value in XML request
Site Install Revenue; Site Rental Revenue; Site Tariff Summary	The per-site price components of Site Pricing
QoS Cost; Reporting Cost; Ancillary Charges	(Please ignore these numbers: the prices you need are provided in the other results.) QoS Cost and Reporting Cost are currently part of EEP Output XML only
Circuit Pricing	Displays pricing information for all circuits. There will be one Circuit element for each circuit in the XML request
Circuit	Displays pricing information for each circuit
Circuit Name	User specified value in XML request
Circuit Install Revenue; Circuit Rental Revenue; Circuit Tariff Summary	The per-circuit price components of circuit pricing
Total Pricing	Summary pricing information
Install Revenue; Rental Revenue	Your Quote's Pricing! Install is the One Off Payment and Rental Revenue is the pricing per annum

## Example XML for National Ethernet (NNE)

### Input

```
<?xml version="1.0" encoding="utf-8" ?>
<CustomerQuotationData
  xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
  <CustomerData CustomerId="YOUR_CUSTOMER_ID"/>
  <QuoteData RefNo="" Product="NNE" QuoteName="Your_Quote_Name">
    <QuoteHeader ContractTerm="3" BillingFreq="Quarterly" />
    <Sites>
      <Site Name="">
```



```

    <SiteDetails>
      <SitePostcode>E14 2AA</SitePostcode>
      <UPRN></UPRN>
      <Coordinates>
        <X>0.0</X>
        <Y>0.0</Y>
      </Coordinates>
    </SiteDetails>
    <SiteConfiguration>
      <AccessCircuit>ETHERNET</AccessCircuit>
      <Bandwidth>100 Mbps</Bandwidth>
    </SiteConfiguration>
  </Site>
  <Site Name="">
    <SiteDetails>
      <SitePostcode>E1 1AA</SitePostcode>
      <UPRN>6011524</UPRN>
      <Coordinates>
        <X>0.0</X>
        <Y>0.0</Y>
      </Coordinates>
    </SiteDetails>
    <SiteConfiguration>
      <AccessCircuit>ETHERNET</AccessCircuit>
      <Bandwidth>100 Mbps</Bandwidth>
    </SiteConfiguration>
  </Site>
</Sites>
<Circuits>
  <Circuit Name="SS1">
    <CircuitDetails>
      <SiteA Name="" UPRN = "" />
      <SiteB Name="" UPRN = "6011524" />
    </CircuitDetails>
    <CircuitConfiguration>
      <CircuitBandwidth>50 Mbps</CircuitBandwidth>
    </CircuitConfiguration>
  </Circuit>
</Circuits>
</QuoteData>
</CustomerQuotationData>

```

## Output

```

<?xml version="1.0" encoding="utf8" ?>
<QuotePricing xmlns:xsi="http://www.w3.org/2001/XMLSchemainstance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" CustomerId="1358"
CustomerQuoteRefNo="" BPTQuoteRefNo="19493310" Product="NNE"
ResponseCode="P0001" CAL_ID="0" IsQuickQuote="false"
Layer2ControlProtocol="No"
xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
  <QuoteData>
    <QuoteValidity>30</QuoteValidity>
  </QuoteData>
  <SitePricing>
    <Site Name="Test CP POI E14 2AA London" UPRN="0" TOID=""
AccessFlavour="On Net" SiteType="Customer Specific POI" NetStatus="Lit

```

```

Building" IsQuickSite="false">
  <SiteInstallRevenue>0</SiteInstallRevenue>
  <SiteRentalRevenue>0</SiteRentalRevenue>
  <AncillaryCharges>
    <Install>0</Install>
    <Rental>0</Rental>
  </AncillaryCharges>
  <ReportingCost>
    <Install>0</Install>
    <Rental>0</Rental>
  </ReportingCost>
  <SiteTariffSummary>0</SiteTariffSummary>
</Site>
<Site Name="E11AA ROYAL MAIL WHITECHAPEL DELIVERY OFFICE 206
WH 6011524" UPRN="6011524" TOID="osgb1000002190297613" AccessFlavour="On
Net" SiteType="Normal" NetStatus="Lit Building" IsQuickSite="false">
  <SiteInstallRevenue>0</SiteInstallRevenue>
  <SiteRentalRevenue>2196</SiteRentalRevenue>
  <AncillaryCharges>
    <Install>0</Install>
    <Rental>0</Rental>
  </AncillaryCharges>
  <ReportingCost>
    <Install>0</Install>
    <Rental>0</Rental>
  </ReportingCost>
  <SiteTariffSummary>3294</SiteTariffSummary>
</Site>
</SitePricing>
<CircuitPricing>
  <Circuit Name="SS1">
    <SiteA Name="Test CP POI E14 2AA London" UPRN="0"
TOID="" AccessFlavour="On Net" NetStatus="Lit Building"
IsQuickSite="false" />
    <SiteB Name="E11AA ROYAL MAIL WHITECHAPEL DELIVERY
OFFICE 206 WH 6011524" UPRN="6011524" TOID="osgb1000002190297613"
AccessFlavour="On Net" NetStatus="Lit Building" IsQuickSite="false" />
    <CircuitInstallRevenue>0</CircuitInstallRevenue>
    <CircuitRentalRevenue>2232</CircuitRentalRevenue>
    <AncillaryCharges>
      <Install>0</Install>
      <Rental>0</Rental>
    </AncillaryCharges>
    <QoS Cost>
      <Install>0</Install>
      <Rental>0</Rental>
    </QoS Cost>
    <CircuitTariffSummary>3348</CircuitTariffSummary>
  </Circuit>
</CircuitPricing>
<TotalPricing>
  <InstallRevenue>0</InstallRevenue>
  <RentalRevenue>4428</RentalRevenue>
  <AncillaryCharges>
    <Install>0</Install>
    <Rental>0</Rental>
  </AncillaryCharges>
  <QoS Cost>
    <Install>0</Install>
  </QoS Cost>

```

```

        <Rental>0</Rental>
    </QosCost>
    <ReportingCost>
        <Install>0</Install>
        <Rental>0</Rental>
    </ReportingCost>
    <TariffSummary>13284</TariffSummary>
</TotalPricing>
</QuotePricing>

```

## Example XML request for Ethernet Extensions Plus (EEP)

### Input

```

<?xml version="1.0" encoding="utf-8" ?>
<CustomerQuotationData
  xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
  <CustomerData CustomerId="YOUR_CUSTOMER_ID"/>
  <QuoteData RefNo="" Product="EEP" QuoteName="Your_Quote_Name">
    <QuoteHeader ContractTerm="3" BillingFreq="Quarterly" />
    <Sites>
      <Site Name="">
        <SiteDetails>
          <SitePostcode>E14 2AA</SitePostcode>
          <UPRN></UPRN>
          <Coordinates>
            <X>0.0</X>
            <Y>0.0</Y>
          </Coordinates>
        </SiteDetails>
        <SiteConfiguration>
          <AccessCircuit>ETHERNET</AccessCircuit>
          <Bandwidth>100 Mbps</Bandwidth>
        </SiteConfiguration>
      </Site>
      <Site Name="">
        <SiteDetails>
          <SitePostcode>E1 1AA</SitePostcode>
          <UPRN>6011524</UPRN>
          <Coordinates>
            <X>0.0</X>
            <Y>0.0</Y>
          </Coordinates>
        </SiteDetails>
        <SiteConfiguration>
          <AccessCircuit>ETHERNET</AccessCircuit>
          <Bandwidth>100 Mbps</Bandwidth>
        </SiteConfiguration>
      </Site>
    </Sites>
    <Circuits>
      <Circuit Name="SS1">
        <CircuitDetails>
          <SiteA Name="" UPRN = "" />
          <SiteB Name="" UPRN = "6011524" />
        </CircuitDetails>
        <CircuitConfiguration>
          <CircuitBandwidth>50 Mbps</CircuitBandwidth>
        </CircuitConfiguration>
      </Circuit>
    </Circuits>
  </QuoteData>
</CustomerQuotationData>

```



```

        </Circuit>
      </Circuits>
    </QuoteData>
  </CustomerQuotationData>

```

## Output

```

<?xml version="1.0" encoding="utf8" ?>
<QuotePricing xmlns:xsi="http://www.w3.org/2001/XMLSchemainstance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" CustomerId="1358"
CustomerQuoteRefNo="" BPTQuoteRefNo="19495240" Product="EEP"
ResponseCode="P0001" CAL_ID="0" IsQuickQuote="false"
Layer2ControlProtocol="No"
xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
  <QuoteData>
    <QuoteValidity>30</QuoteValidity>
  </QuoteData>
  <SitePricing>
    <Site Name="Test CP POI E14 2AA London" UPRN="0" TOID=""
AccessFlavour="On Net" SiteType="Customer Specific POI" NetStatus="Lit
Building" IsQuickSite="false">
      <SiteInstallRevenue>0</SiteInstallRevenue>
      <SiteRentalRevenue>0</SiteRentalRevenue>
      <AncillaryCharges>
        <Install>0</Install>
        <Rental>0</Rental>
      </AncillaryCharges>
      <ReportingCost>
        <Install>0</Install>
        <Rental>0</Rental>
      </ReportingCost>
      <SiteTariffSummary>0</SiteTariffSummary>
    </Site>
    <Site Name="E11AA ROYAL MAIL WHITECHAPEL DELIVERY OFFICE 206
WH 6011524" UPRN="6011524" TOID="osgb1000002190297613" AccessFlavour="On
Net" SiteType="Normal" NetStatus="Lit Building" IsQuickSite="false">
      <SiteInstallRevenue>0</SiteInstallRevenue>
      <SiteRentalRevenue>0</SiteRentalRevenue>
      <AncillaryCharges>
        <Install>0</Install>
        <Rental>0</Rental>
      </AncillaryCharges>
      <ReportingCost>
        <Install>0</Install>
        <Rental>0</Rental>
      </ReportingCost>
      <SiteTariffSummary>0</SiteTariffSummary>
    </Site>
  </SitePricing>
  <CircuitPricing>
    <Circuit Name="SS1">
      <SiteA Name="Test CP POI E14 2AA London" UPRN="0"
TOID="" AccessFlavour="On Net" NetStatus="Lit Building"
IsQuickSite="false" />
      <SiteB Name="E11AA ROYAL MAIL WHITECHAPEL DELIVERY
OFFICE 206 WH 6011524" UPRN="6011524" TOID="osgb1000002190297613"
AccessFlavour="On Net" NetStatus="Lit Building" IsQuickSite="false" />
      <CircuitInstallRevenue>1852.5</CircuitInstallRevenue>

```



```

    <CircuitRentalRevenue>3693.59</CircuitRentalRevenue>
    <AncillaryCharges>
      <Install>0</Install>
      <Rental>0</Rental>
    </AncillaryCharges>
    <QoS<Cost>
      <Install>0</Install>
      <Rental>0</Rental>
    </QoS<Cost>
    <ReportingCost>
      <Install>0</Install>
      <Rental>0</Rental>
    </ReportingCost>
    <CircuitTariffSummary>7392.89</CircuitTariffSummary>
  </Circuit>
</CircuitPricing>
<TotalPricing>
  <InstallRevenue>1852.5</InstallRevenue>
  <RentalRevenue>3693.59</RentalRevenue>
  <AncillaryCharges>
    <Install>0</Install>
    <Rental>0</Rental>
  </AncillaryCharges>
  <QoS<Cost>
    <Install>0</Install>
    <Rental>0</Rental>
  </QoS<Cost>
  <ReportingCost>
    <Install>0</Install>
    <Rental>0</Rental>
  </ReportingCost>
  <TariffSummary>12933.29</TariffSummary>
</TotalPricing>
</QuotePricing>

```

## Example XML request for Managed Internet Access (MIA)

### Input

```

<?xml version="1.0" encoding="utf-8" ?>
<CustomerQuotationData
  xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
  <CustomerData CustomerId="YOUR_CUSTOMER_ID">
  </CustomerData>
  <QuoteData RefNo="" Product="MIA" QuoteName="Your_Quote_Name">
    <QuoteHeader ContractTerm="3" BillingFreq="Annually" >
    </QuoteHeader>
    <Sites >
      <Site Name="">
        <SiteDetails>
          <SitePostcode>E1 1AA</SitePostcode>
          <UPRN>6011524</UPRN>
        </SiteDetails>
        <SiteConfiguration>
          <AccessCircuit>Ethernet</AccessCircuit>
          <Flavour></Flavour>
          <Bandwidth>100MB</Bandwidth>

```

```

        <CircuitBandwidth>100MB</CircuitBandwidth>
    </SiteConfiguration>
</Site>
</Sites>
</QuoteData>
</CustomerQuotationData>

```

## Output

```

<?xml version="1.0" encoding="utf8" ?>
<QuotePricing xmlns:xsi="http://www.w3.org/2001/XMLSchemainstance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:q1="http://www.infoaxon.com/BPT/Services/"
xsi:type="q1:WF_MIAQuotePricing" CustomerId="1358" CustomerQuoteRefNo=""
BPTQuoteRefNo="19495390" Product="MIA" ResponseCode="P0001" CAL_ID="0"
IsQuickQuote="false"
xmlns="http://www.infoaxon.com/BPT/Services/Schemas/">
    <QuoteData>
        <QuoteValidity>30</QuoteValidity>
    </QuoteData>
    <sitepricing>
        <WF_MIASite Name="HU179EN 41 NEW WALKERGATE BEVERLEY
100050009256" UPRN="100050009256" TOID="osgb1000002115053853"
AccessFlavour="TTB Fract 100/100" SiteType="Normal" NetStatus="Offnet"
IsQuickSite="false">
            <SiteTariff>
                <Install>0</Install>
                <Rental>4774</Rental>
            </SiteTariff>
            <ThreatProtection>
                <Install>0</Install>
                <Rental>0</Rental>
            </ThreatProtection>
            <WebFiltering>
                <Install>0</Install>
                <Rental>0</Rental>
            </WebFiltering>
            <ExtendedWildFire>
                <Install>0</Install>
                <Rental>0</Rental>
            </ExtendedWildFire>
            <SiteToSiteVPN>
                <Install>0</Install>
                <Rental>0</Rental>
            </SiteToSiteVPN>
            <RemoteUser>
                <Install>0</Install>
                <Rental>0</Rental>
            </RemoteUser>
            <ClientAuthentication>
                <Install>0</Install>
                <Rental>0</Rental>
            </ClientAuthentication>
            <FirewallCPE>
                <Install>0</Install>
                <Rental>0</Rental>
            </FirewallCPE>
            <BGP>

```

```

        <Install>0</Install>
        <Rental>0</Rental>
    </BGP>
    <AncillaryCharges>
        <SiteTariff>
            <Install>0</Install>
            <Rental>0</Rental>
        </SiteTariff>
        <ThreatProtection>
            <Install>0</Install>
            <Rental>0</Rental>
        </ThreatProtection>
        <WebFiltering>
            <Install>0</Install>
            <Rental>0</Rental>
        </WebFiltering>
        <ExtendedWildFire>
            <Install>0</Install>
            <Rental>0</Rental>
        </ExtendedWildFire>
        <SiteToSiteVPN>
            <Install>0</Install>
            <Rental>0</Rental>
        </SiteToSiteVPN>
        <RemoteUser>
            <Install>0</Install>
            <Rental>0</Rental>
        </RemoteUser>
        <ClientAuthentication>
            <Install>0</Install>
            <Rental>0</Rental>
        </ClientAuthentication>
        <FirewallCPE>
            <Install>0</Install>
            <Rental>0</Rental>
        </FirewallCPE>
        <BGP>
            <Install>0</Install>
            <Rental>0</Rental>
        </BGP>
    </AncillaryCharges>
</WF_MIASite>
</sitepricing>
<Totalpricing>
    <InstallRevenue>0</InstallRevenue>
    <RentalRevenue>4774</RentalRevenue>
    <AncillaryCharges>
        <Install>0</Install>
        <Rental>0</Rental>
    </AncillaryCharges>
    <TariffSummary>14322</TariffSummary>
</Totalpricing>
</QuotePricing>

```

### 3. Schema (XSD Format)

## XML Input

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema targetNamespace="http://www.infoaxon.com/BPT/Services/Schemas/"
elementFormDefault="qualified"
xmlns:ians="http://www.infoaxon.com/BPT/Services/Schemas/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="StringType">
    <xs:restriction base="xs:string">
      <xs:maxLength value="50" />
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="IsRequired">
    <xs:restriction base="xs:string">
      <xs:maxLength value="5" />
      <xs:enumeration value="Yes" />
      <xs:enumeration value="No" />
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="CustomerQuotationData">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="CustomerData"
type="ians:CustomerData" minOccurs="1" maxOccurs="1" />
        <xs:element name="QuoteData" type="ians:QuoteData"
minOccurs="1" maxOccurs="1" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="CustomerData">
    <xs:attribute name="CustomerId" type="xs:integer"
use="required" />
  </xs:complexType>
  <xs:complexType name="QuoteData">
    <xs:sequence>
      <xs:element name="QuoteHeader" type="ians:QuoteHeader"
minOccurs="1" maxOccurs="1" />
      <xs:element name="Sites" minOccurs="1" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Site" minOccurs="1"
maxOccurs="unbounded">
              <xs:complexType>
                <xs:sequence>
                  <xs:element
name="SiteDetails" minOccurs="0" maxOccurs="1">
                    <xs:complexType>
                      <xs:sequence>
                        <xs:element name="SitePostcode" minOccurs="1" maxOccurs="1">
                          <xs:simpleType>
                            <xs:restriction base="xs:string">
                              <xs:maxLength value="10" />

```



```
        </xs:restriction>
    </xs:simpleType>
</xs:element>

<xs:element name="UPRN" type="xs:string" minOccurs="0" maxOccurs="1"
default="0"/>

<xs:element name="Coordinates" minOccurs="0" maxOccurs="1">

<xs:complexType>

    <xs:sequence>

        <xs:element name="X" type="xs:decimal" minOccurs="1"
maxOccurs="1" default="0"/>

        <xs:element name="Y" type="xs:decimal" minOccurs="1"
maxOccurs="1" default="0"/>

    </xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name="SiteFlag" type="xs:boolean" minOccurs="0"
maxOccurs="1"/>

</xs:sequence>

</xs:complexType>

                                </xs:element>
                                <xs:element
name="SiteConfiguration" minOccurs="1" maxOccurs="1">
                                <xs:complexType>
                                <xs:sequence>

<xs:element name="AccessCircuit" type="ians:StringType"
minOccurs="1" maxOccurs="1" />

<xs:element name="Flavour" type="ians:StringType" minOccurs="0"
maxOccurs="1" />

<xs:element name="Bandwidth" type="ians:StringType" minOccurs="0"
maxOccurs="1" />

<xs:element name="CircuitBandwidth" type="ians:StringType"
minOccurs="0" maxOccurs="1" />

<xs:element name="ManagementLevel" type="ians:StringType"
minOccurs="0" maxOccurs="1" />

<xs:element name="SecureMIA" type="ians:StringType" minOccurs="0"
maxOccurs="1" />

                                </xs:sequence>
```

```

        </xs:complexType>
                                </xs:element>
                                </xs:sequence>
                                <xs:attribute name="Name"
type="ians:StringType" use="required" />
                                </xs:complexType>
                                </xs:element>
                                </xs:sequence>
                                </xs:complexType>
        </xs:element>
        <xs:element name="Circuits" minOccurs="0" maxOccurs="1">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="Circuit"
minOccurs="1" maxOccurs="unbounded">
                        <xs:complexType>
                            <xs:sequence>
                                <xs:element
name="CircuitDetails" minOccurs="1" maxOccurs="1">
                                    <xs:complexType>
                                        <xs:sequence>
                                            <xs:element name="SiteA" minOccurs="1" maxOccurs="1">
                                                <xs:complexType>
                                                    <xs:attribute name="Name" type="ians:StringType"
use="required" />
                                                    <xs:attribute name="UPRN" type="ians:StringType"
use="optional" />
                                                    <xs:attribute name="Flavour" type="ians:StringType"
use="optional" />
                                                </xs:complexType>
                                            </xs:element>
                                            <xs:element name="SiteB" minOccurs="1" maxOccurs="1">
                                                <xs:complexType>
                                                    <xs:attribute name="Name" type="ians:StringType"
use="required" />
                                                    <xs:attribute name="UPRN" type="ians:StringType"
use="optional" />
                                                    <xs:attribute name="Flavour" type="ians:StringType"
use="optional" />
                                                </xs:complexType>
                                            </xs:element>
                                        </xs:sequence>
                                    </xs:complexType>
                                </xs:sequence>
                            </xs:complexType>
                        </xs:sequence>
                    </xs:complexType>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    </xs:sequence>

```

```

        </xs:complexType>
                                                    </xs:element>
        <xs:element
        <xs:element
name="CircuitConfiguration" minOccurs="1" maxOccurs="1">
        <xs:complexType>
        <xs:sequence>
        <xs:element name="CircuitBandwidth" type="ians:StringType"
minOccurs="1" maxOccurs="1" />
        </xs:sequence>
        </xs:complexType>
                                                    </xs:element>
                                                    </xs:sequence>
                                                    </xs:complexType>
                                                    </xs:element>
        </xs:sequence>
        <xs:attribute name="RefNo" type="ians:StringType"
use="optional" />
        <xs:attribute name="Product" default="NNE">
        <xs:simpleType>
        <xs:restriction base="xs:string">
        <xs:enumeration value="NNE" />
        <xs:enumeration value="EE" />
        <xs:enumeration value="EEP" />
        <xs:enumeration value="MIA" />
        </xs:restriction>
        </xs:simpleType>
        </xs:attribute>
        <xs:attribute name="QuoteName" type="ians:StringType"
use="required" />
        </xs:complexType>
        <xs:complexType name="QuoteHeader">
        <xs:attribute name="ContractTerm" default="1"
type="xs:integer">
        </xs:attribute>
        <xs:attribute name="BillingFreq" default="Annually">
        <xs:simpleType>
        <xs:restriction base="xs:string">
        <xs:enumeration value="Annually" />
        <xs:enumeration value="Monthly" />
        <xs:enumeration value="Quarterly" />
        </xs:restriction>
        </xs:simpleType>
        </xs:attribute>
        <xs:attribute name="Reporting" type="ians:IsRequired"
use="optional" />
        </xs:complexType>

```

## XML Output



```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema targetNamespace="http://www.infoaxon.com/BPT/Services/Schemas/"
elementFormDefault="qualified"
  xmlns:ians="http://www.infoaxon.com/BPT/Services/Schemas/"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="StringType">
    <xs:restriction base="xs:string">
      <xs:maxLength value="50"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="AncillaryChargeType">
    <xs:sequence>
      <xs:element name="Install" type="xs:decimal"
minOccurs="1" maxOccurs="1"/>
      <xs:element name="Rental" type="xs:decimal"
minOccurs="1" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="QuotePricing">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="QuoteData"
type="ians:QuoteDataType" minOccurs="1" maxOccurs="1" />
        <xs:element name="SitePricing"
type="ians:SitePricingType" minOccurs="1" maxOccurs="1" />
        <xs:element name="CircuitPricing"
type="ians:CircuitPricingType" minOccurs="0" maxOccurs="1" />
        <xs:element name="TotalPricing"
type="ians:TotalPricingType" minOccurs="1" maxOccurs="1" />
      </xs:sequence>
      <xs:attribute name="CustomerId" type="xs:integer"
use="required" />
      <xs:attribute name="CustomerQuoteRefNo"
type="ians:StringType" use="required" />
      <xs:attribute name="BPTQuoteRefNo" type="xs:integer"
use="required" />
      <xs:attribute name="Product" use="required">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="NNE" />
            <xs:enumeration value="EE" />
            <xs:enumeration value="EEP" />
            <xs:enumeration value="MIA" />
          </xs:restriction>
        </xs:simpleType>
      </xs:attribute>
      <xs:attribute name="ResponseCode" use="required">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="5"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:attribute>
      <xs:attribute name="IsQuickQuote" type="xs:boolean"
use="required" />
    </xs:complexType>
  </xs:element>
  <xs:complexType name="QuoteDataType">
    <xs:sequence>
      <xs:element name="QuoteValidity" type="xs:date"

```





```

minOccurs="1" maxOccurs="1" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="SitePricingType">
    <xs:sequence>
      <xs:element name="Site" minOccurs="1"
maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="SiteInstallRevenue"
type="xs:decimal" minOccurs="1" maxOccurs="1" />
            <xs:element name="SiteRentalRevenue"
type="xs:decimal" minOccurs="1" maxOccurs="1" />
            <xs:element name="AncillaryCharges"
type="ians:AncillaryChargeType" minOccurs="1" maxOccurs="1" />
            <xs:element name="QoS"
type="ians:PricingDetails" minOccurs="0" maxOccurs="1" />
            <xs:element name="SiteTariffSummary"
type="xs:decimal" minOccurs="1" maxOccurs="1" />
          </xs:sequence>
          <xs:attribute name="Name"
type="ians:StringType" use="required" />
          <xs:attribute name="UPRN"
type="ians:StringType" use="optional" />
          <xs:attribute name="AccessFlavour"
type="ians:StringType" use="required" />
          <xs:attribute name="SiteType"
type="ians:StringType" use="required" />
          <xs:attribute name="NetStatus"
type="ians:StringType" use="required" />
          <xs:attribute name="IsQuickSite"
type="xs:boolean" use="required" />
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="CircuitPricingType">
    <xs:sequence>
      <xs:element name="Circuit" minOccurs="1"
maxOccurs="unbounded">
        <xs:complexType>
          <xs:attribute name="Name" type="xs:string"
use="required" />
          <xs:element name="SiteA" minOccurs="1"
maxOccurs="1">
            <xs:complexType>
              <xs:attribute name="Name"
type="ians:StringType" use="required" />
              <xs:attribute name="UPRN"
type="ians:StringType" use="optional"/>
              <xs:attribute name="
AccessFlavour" type="ians:StringType" use="required" />
              <xs:attribute name="NetStatus"
type="ians:StringType" use="required" />
              <xs:attribute name="IsQuickSite"
type="xs:boolean" use="required" />
            </xs:complexType>
          </xs:element>
          <xs:element name="SiteB" minOccurs="1"
maxOccurs="1">

```



```

        <xs:complexType>
            <xs:attribute name="Name"
type="ians:StringType" use="required" />
            <xs:attribute name="UPRN"
type="ians:StringType" use="optional"/>
            <xs:attribute name="
AccessFlavour" type="ians:StringType" use="required" />
            <xs:attribute name="NetStatus"
type="ians:StringType" use="required" />
            <xs:attribute name="IsQuickSite"
type="xs:boolean" use="required" />
        </xs:complexType>
    </xs:element>
</xs:sequence>
    <xs:element
name="CircuitInstallRevenue" type="xs:decimal" minOccurs="1" maxOccurs="1"
/>
    <xs:element
name="CircuitRentalRevenue" type="xs:decimal" minOccurs="1" maxOccurs="1"
/>
    <xs:element name="AncillaryCharges"
type="ians:AncillaryChargeType" minOccurs="1" maxOccurs="1" />
    <xs:element name="QoS"
type="ians:PricingDetails" minOccurs="0" maxOccurs="1" />
    <xs:element
name="CircuitTariffSummary" type="xs:decimal" minOccurs="1" maxOccurs="1"
/>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="TotalPricingType">
    <xs:sequence>
        <xs:element name="InstallRevenue" type="xs:decimal"
minOccurs="1" maxOccurs="1" />
        <xs:element name="RentalRevenue" type="xs:decimal"
minOccurs="1" maxOccurs="1" />
        <xs:element name="AncillaryCharges"
type="ians:AncillaryChargeType" minOccurs="1" maxOccurs="1" />
        <xs:element name="QoSCost"
type="ians:AncillaryChargeType" minOccurs="0" maxOccurs="1" />
        <xs:element name="TariffSummary" type="xs:decimal"
minOccurs="1" maxOccurs="1" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="PricingDetails">
    <xs:sequence>
        <xs:element name="Install" type="xs:decimal"
minOccurs="1" maxOccurs="1" />
        <xs:element name="Rental" type="xs:decimal"
minOccurs="1" maxOccurs="1" />
        <xs:element name="AncillaryCharges"
type="ians:AncillaryChargeType" minOccurs="1" maxOccurs="1" />
    </xs:sequence>
</xs:complexType>

```

## 4. Response Codes

Our service will return a response code where it is unable to complete the requested action. We have created the following table to assist with user investigation in such instances:

Code	Description
E0001	Security Error. Authentication/Authorization failed.
E0002	The input XML is not compatible with the schema provided.
E0003	Invalid values provided in the input XML as per the schema.
E0004	Some mandatory values are absent in the input XML.
E0005	Values are correct in terms of the BPT system feature list; but not supported in the XML Interface.
E0006	Provided Customer Id is Incorrect.
E0007	Unable to create the Customer.
E0008	Unable to create the Quote.
E0009	At least one Site must be provided.
E0010	Invalid Circuit Details.
E0011	Some values provided in the input XML, but not supported by the BPT system.
E0012	AIM failed, could not generate the quote.
E0013	Invalid Postcode.
E0014	Invalid Billing Frequency.
E0015	Check Bandwidth. Bandwidth not supported.
E0016	Invalid Install Type.
E0017	Invalid Access Circuit.
E0018	Invalid Product.
E0019	Both end sites are same.
E0020	Invalid flavor.
E0021	Invalid Contract Term.
E0022	This Product is not supported for OffNet Site Configuration.
E0023	Both end Site Franchisees are not same.
E0024	EVC Bandwidth used in circuit should not be greater than the Bearer Bandwidth of the participating sites.
E0025	Invalid Install type for given bandwidth.
E0026	All sites are not participated in circuit.
E0027	Duplicate Site Name.
E0028	Duplicate Circuit Name.
E0029	Pop Not Found.
E0030	Post Code Not Found.
E0031	Duplicate Quote Name.
E0042	Quote is not Priced. AIM not Generated.
E0046	Invalid Coordinates.
E0047	At least one parameter is required.
E0049	User Id not found.
E0050	Invalid User Id.
E0055	Minimum two sites required for this product.
E0056	Access Bandwidth is mandatory.
E0064	Circuit Bandwidth is mandatory.
E0065	Circuit Bandwidth should be less than or equal to Access Bandwidth.
E0077	Bearer-bandwidth is incompatible with Circuit-bandwidth. Check Bandwidths!
E0079	Quote Name could not be left blank.
E0081	Distance not supported for the Product. Check all the circuits and verify postcodes/coordinates.
E0083	Site Name can have Only "[A-Z][a-z][0-9]#&.-@ ."

Code	Description
E0086	Please check the input parameters. Either the Site-ids or site-flag values are incorrect.
E0088	Please check the input for the Display-Site flag.
E0089	A End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per A end Bearer-bandwidth is 2Mbps to 10Mbps.
E0090	A End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per A end Bearer-bandwidth is 20Mbps to 100Mbps.
E0091	A End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per A end Bearer-bandwidth is 200Mbps to 1000Mbps.
E0092	B End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per B end Bearer-bandwidth is 2Mbps to 10Mbps.
E0093	B End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per B end Bearer-bandwidth is 20Mbps to 100Mbps.
E0094	B End Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for circuit bandwidth as per B end Bearer-bandwidth is 200Mbps to 1000Mbps.
E0096	Unable to update site flags as One or more site/sites are POI.
E0099	Bearer-bandwidth is incompatible with Circuit-bandwidth. Allowable range for Bearer-bandwidth as per Circuit Bandwidth is 10Mb, 100 Mb and 1Gb. Please Check Input Bandwidths
E0100	Bandwidth not supported. Allowable Bandwidth range for NNE Product is 10 Mb, 100 Mb and 1000 Mb. Please Check Input Bandwidths.
E0101	Circuit Bandwidth is not supported. Allowable Circuit Bandwidth for Ethernet Extension Product is 10 Mb Short, 10 Mb, 100 Mb, 1000 Mb and 10 Gb. Please Check Input Bandwidths.
E0102	Bandwidth not supported. Allowable Bandwidth range for Ethernet Extension Product is 10 Mb Short, 10 Mb, 100 Mb, 100 Mb and 10 Gb. Please Check Input Bandwidths.
E0126	Check Bandwidth. This Bandwidth not supported for this Service Type.
E0137	Bandwidth is not supported for the specified Product and Access Type.
E0284	UPRN must be a numeric value.
E0285	UPRN length must be maximum 12 digits.

Where you receive a response code which is not listed above, please contact your VMB Virgin Media Business Account Team at [Wholesalesupport@virginmedia.co.uk](mailto:Wholesalesupport@virginmedia.co.uk) in the first instance.

## 5. Frequently Asked Questions

Based on feedback from prospective and current XML Reach users, we have collated some frequently asked questions:

**Q. What does the XML Reach service actually offer?**

**A.** Our service allows user to access Virgin Media Business pricing and serviceability. This is achieved where the user develops their existing interface to connect with Virgin Media Business.

**Q. Am I able to raise quotes and orders via XML Reach?**

A. At this stage, our XML Reach service provides the ability to check serviceability and quote for the following products:

- National Ethernet
- Ethernet Extensions
- Ethernet Extensions Plus
- MIA

Whilst you are currently unable to place an order via XML Reach, we have a fantastic portal which enables you to convert quotes raised via the service, called Engage. The Engage portal can be accessed from the following URL: [www.virginmediabusiness.co.uk/engage](http://www.virginmediabusiness.co.uk/engage)

**Q. *How can I obtain access to your XML Reach service and Engage?***

A. If you are interested in accessing our XML Reach service or Engage then please contact your VMB Virgin Media Business Account Team.

**Q. *How long is a quote valid for via XML Reach?***

A. Each quote is valid for 30 calendar days unless otherwise agreed.

**Q. *How can I ensure that I am validating the price correctly?***

A. The XML response will include the total install and annual rental for the quote in the Total Pricing tag. The response also includes pricing split for individual quote components, but these can be confusing and so we recommend you to ignore them.

- **<TotalPricing>**

```

<InstallRevenue>0</InstallRevenue>
<RentalRevenue>5520</RentalRevenue>
<AncillaryCharges>
  <Install>0</Install>
  <Rental>0</Rental>
</AncillaryCharges>
<QosCost>
  <Install>0</Install>
  <Rental>0</Rental>
</QosCost>
<ReportingCost>
  <Install>0</Install>
  <Rental>0</Rental>
</ReportingCost>
<TariffSummary>16560</TariffSummary>
</TotalPricing>

```

**Q. *If my quote is valid, why is the price I am quoted sometimes different when I place the order?***

- A. In order to provide accurate pricing, we require each XML Reach user to incorporate UPRN within their interface. UPRN is a unique premises reference assigned by the Ordnance Survey to identify every premise throughout the UK. This identifier enables pricing at a premise level which ensures accuracy.

If UPRN isn't incorporated, pricing will be based upon generic information such as street name or post code which offers less accuracy. In such instances and upon converting a quote, Engage will then convert to a premise level price which may differ to what was originally provided.

**Q. *As an XML Reach user, can you provide access to UPRN?***

- A. Yes! We can provide access to the data.

As the data is owned by the Ordnance Survey, we need to ensure that we provide access in accordance with their supporting terms and conditions. Once we have a non-disclosure agreement with you, we will provide access to the data which you can then incorporate within your interface.

To obtain access or to receive the latest version, just send an e-mail to your Account Manager

**Q. *Are there any plans to add more products to the service?***

- A. At this stage we are not planning to make additions to our XML Reach service. However, you can quote for the following products via our Engage portal:

- National Ethernet
- Ethernet Extensions
- Ethernet Extensions+
- IPVPN
- MIA
- EVPN
- Broadband
- Broadband and Phone

Throughout each year, we will make enhancements to our existing product set and where possible, any changes will be backward compatible.

Where we identify an enhancement, which may require some development on a user interface, and where possible, we will provide 30 days' notice of the planned change to ensure each user has the opportunity to utilise our Staging environment as required.

**Q. *Will VMB provide support to develop or maintain an external user interface?***

A. We are always happy to help if there are any queries relating to our XML Reach service or the XML code. As every interface is unique, we do not offer a specific service around development and maintenance of external interfaces.

**Q. *I believe there is a fault with the XML Reach service, who should I contact?***

A. If you experience any issues with our XML Reach service then please contact your VMB Virgin Media Business Account Team.

