Department for Education and Skills

QWS System Integration Guide

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1.0 Introduction

1.1 Background

There is a need to collect Post-16 Learning Aims (PLA) to support the “Fair Funding” of all post-16 establishments (schools, colleges and work-based learning). It was decided that this could be achieved by collecting PLA data based on the Qualification Accreditation Number (QAN) which can be used to identify specific qualifications studied by post-16 students. The facility to do this is not in the current versions of the Management Information Systems (MISs) used by schools to provide data to DfES. It was decided that 2006/2007 PLA data would be collected using an interim solution; a stand alone web application (PLAMS – Post-16 Learning Aims Management System) was developed to provide this. From the 2007/2008 academic year it was agreed that these data should be collected using the School Census. This requires school MISs to contain the functionality to record and process PLA data on an event-driven basis and for the Department to provide the necessary base data to support these activities. It was decided to commission a project to develop a system that could build on the interim solution and provide a source of QAN data to schools. The data provided would be tailored specifically from the more generic data received from QCA to support school teaching and learning activities and to improve the data quality from future School Census collections.

1.2 Purpose

The QWS system gives schools access to QAN data. This access is provided through a web site where data files can be downloaded by school users and a set of SOAP 1.2 web services where the same data can be retrieved programmatically by school Management Information Systems.

This document provides a system integration guide to software developers who require detailed technical information about how to integrate the QWS web services into their application.

1.3 Support

For technical questions regarding this guide please contact the DfES Data Services Help Desk:

Email: DSC.helpdesk@dfes.gsi.gov.uk
Telephone: 01325 392626
2.0 Technical Standards

The QWS web services conform to the following technical standards as defined in the central government Technical Standards Catalogue Version 6.2, Final September 2005.

- SSL v3/TLS (RFC 2246)
- SOAP v1.2, as defined by the W3C
- WSDL 1.1, as defined by the W3C
- Basic Security Profile Version 1.0 (WS-I Security) as defined by WS-I
- XML as defined by W3C
- XML schema as defined by W3C
- Transformation Format – 8 bit UTF-8 (RFC 2279)
3.0 Web Services Locations

The QWS web services are provided at two locations; a LIVE environment and a TEST environment.

The LIVE environment provides access to current QAN data and should be used for normal operational use.

The TEST environment provides access to test QAN data and should be used to test the development of your application integration with the QWS web services.

The QWS web services are divided into two groups; public access and controlled access.

The public access web services can be called by any Internet user or connected application.

The controlled access web services can also be called by any Internet user or connected application BUT requires a valid username and password to be supplied as two of the input parameters for these web services. Only if the supplied username and password is authenticated will these controlled access web services return the requested data.

For the LIVE environment the public access web services are located at:

http://data.dfes.gov.uk/QWS/QWSWebService.asmx

The associated WSDL file is located at:

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?WSDL

For the LIVE environment the controlled access web services are located at:

https://data.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx

The associated WSDL file is located at:

https://data.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?WSDL
For the TEST environment the public access web services are located at:

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx

The associated WSDL file is located at:

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?WSDL

For the TEST environment the controlled access web services are located at:

https://datauat.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx

The associated WSDL file is located at:

https://datauat.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?WSDL

**Security Note:** The controlled access web services use SSL to ensure that the passing of usernames and passwords as input parameters are encrypted.
4.0 Web Services Authorisation

To use the controlled access web services you require a valid username and password.

Schools and Local Authorities can use the data collection usernames and passwords that give access to the COLLECT system. DfES have also issued usernames and passwords to all core suppliers of Management Information Systems to schools.

If you fall into any of these groups and do not know what your assigned username and password is please contact the DfES Data Services Help Desk for assistance:

   Email: DSC.helpdesk@dfes.gsi.gov.uk
   Telephone: 01325 392626

If you are not a member of any of these groups but wish to use the controlled access web services, please contact the DfES Data Services Help Desk for assistance. If deemed appropriate the help desk will issue you with a username and password.
5.0 Web Service Definitions

This section describes each available QWS web service in detail.

For each web service the following information is provided:

1. Purpose – what you can use the web service for.
2. Signature – the name of the web service, the type of value it returns and the names and types of its parameters.
3. Address – the exact URL of the web service for both LIVE and TEST environments.
4. Input Parameters – a description of the web service’s input parameters; these are the parameters you will need to supply values for.
5. Return Value – a description of the values the web service can return.
6. Output Parameters – a description of the web service’s output parameters; these are the parameters that the web service will return data in.

The XML schemas for the web services that return XML data are available for download from the QWS web site at:

http://data.dfes.gov.uk/QWSWeb

The data types used in describing the web services are W3C XML Schema types.
5.1 GetSectorSubjectTier1Xml

5.1.1 Purpose

To return the complete list of current sector subject framework tier 1 codes in XML format.

5.1.2 Signature

```csharp
int GetSectorSubjectTier1Xml(string resultXml)
```

5.1.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier1Xml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier1Xml

5.1.4 Input Parameters

None.

5.1.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.1.6 Output Parameters

```csharp
string resultXml
```

This parameter returns the complete list of current sector subject framework tier 1 codes in XML format. The XML conforms to the SSFT1 XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.2 GetSectorSubjectTier1

5.2.1 Purpose

To return the complete list of current sector subject framework tier 1 codes as an array of structures.

5.2.2 Signature

```c
int GetSectorSubjectTier1(SSFT1Data[] resultArray)
```

```c
SSFT1Data
{
    int SSFT1_ID
    string SSFT1
    string SSFT1Description
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.2.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier1

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier1

5.2.4 Input Parameters

None.

5.2.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.2.6 Output Parameters

SSFT1Data[] resultArray

SSFT1Data
{
    int SSFT1_ID
    string SSFT1
    string SSFT1Description
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the complete list of current sector subject framework tier 1 codes in an array of SSFT1Data structures. The SSFT1Data structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSFT1_ID</td>
<td>QWS unique identifier for each sector subject framework tier 1 record</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>SSFT1Description</td>
<td>Description of the sector subject framework tier 1 record</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the sector subject framework tier 1 record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the sector subject framework tier 1 record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the sector subject framework tier 1 record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.3 GetSectorSubjectTier2Xml

5.3.1 Purpose

To return the complete list of current sector subject framework tier 2 codes in XML format.

5.3.2 Signature

```csharp
int GetSectorSubjectTier2Xml(string resultXml)
```

5.3.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier2Xml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier2Xml

5.3.4 Input Parameters

None.

5.3.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.3.6 Output Parameters

```csharp
string resultXml
```

This parameter returns the complete list of current sector subject framework tier 2 codes in XML format. The XML conforms to the SSFT2 XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.4 GetSectorSubjectTier2

5.4.1 Purpose

To return the complete list of current sector subject framework tier 2 codes as an array of structures.

5.4.2 Signature

```csharp
int GetSectorSubjectTier2(SSFT2Data[] resultArray)
```

SSFT2Data

```csharp
{
    int    SSFT2_ID
    string SSFT2
    string SSFT2Description
    string SSFT1
    string SSFT1Description
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.4.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier2

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSectorSubjectTier2

5.4.4 Input Parameters

None.

5.4.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.4.6 Output Parameters

SSFT2Data[] resultArray

SSFT2Data
{
    int SSFT2_ID
    string SSFT2
    string SSFT2Description
    string SSFT1
    string SSFT1Description
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the complete list of current sector subject framework tier 2 codes in an array of SSFT2Data structures. The SSFT2Data structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSFT2_ID</td>
<td>QWS unique identifier for each sector subject framework tier 2 record</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT2Description</td>
<td>Description of the sector subject framework tier 2 record</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code that is the parent of this sector subject framework tier 2 record</td>
</tr>
<tr>
<td>SSFT1Description</td>
<td>Description of the sector subject framework tier 1 record that is the parent of this sector subject framework tier 2 record</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the sector subject framework tier 2 record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the sector subject framework tier 2 record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the sector subject framework tier 2 record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.5 GetMapCodeXml

5.5.1 Purpose

To return the complete list of current map codes in XML format.

5.5.2 Signature

\texttt{int GetMapCodeXml(string resultXml)}

5.5.3 Address

\texttt{http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetMapCodeXml}

\texttt{http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetMapCodeXml}

5.5.4 Input Parameters

None.

5.5.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.5.6 Output Parameters

\texttt{string resultXml}

This parameter returns the complete list of current map codes in XML format. The XML conforms to the Map Codes XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.6 GetMapCode

5.6.1 Purpose

To return the complete list of current map codes as an array of structures.

5.6.2 Signature

```c
int GetMapCode(MapData[] resultArray)
```

```c
struct MapData
{
    int Map_ID;
    string Map;
    string MapDescription;
    dateTime EffectiveFrom;
    dateTime EffectiveTo;
    dateTime LastUpdated;
}
```

5.6.3 Address


5.6.4 Input Parameters

None.

5.6.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.6.6 Output Parameters

MapData[] resultArray

MapData
{
    int     Map_ID
    string  Map
    string  MapDescription
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the complete list of current map codes in an array of MapData structures. The MapData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map_ID</td>
<td>QWS unique identifier for each map code record</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>MapDescription</td>
<td>Description of the map code record</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the map code record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the map code record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the map code record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.7 GetCurrentQanListXml

5.7.1 Purpose

To return the complete list of current QANs in XML format.

5.7.2 Signature

`int GetCurrentQanListXml(string resultXml)`

5.7.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetCurrentQanListXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetCurrentQanListXml

5.7.4 Input Parameters

None.

5.7.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If there are no QANs to return a value of -4 will be returned.

5.7.6 Output Parameters

`string resultXml`

This parameter returns the complete list of current QANs in XML format. The XML conforms to the QANs XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.8 GetCurrentQanList

5.8.1 Purpose

To return the complete list of current QANs as an array of structures.

5.8.2 Signature

```c
int GetCurrentQanList(QANData[] resultArray)
```

QANData
{
    int QAN_ID
    string QAN
    string AB
    string QualType
    string Map
    string DiscCode
    string QualificationTitle
    string QualShortTitle
    dateTime AccStartDate
    dateTime AccEndDate
    dateTime CertEndDate
    dateTime AppStartDate
    dateTime AppEndDate
    string SSFT2
    string SSFT1
    string NQF
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

5.8.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetCurrentQanList

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetCurrentQanList

5.8.4 Input Parameters

None.
5.8.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If there are no QANs to return a value of -4 will be returned.

5.8.6 Output Parameters

QANData[] resultArray

QANData
{
    int QAN_ID
    string QAN
    string AB
    string QualType
    string Map
    string DiscCode
    string QualificationTitle
    string QualShortTitle
    dateTime AccStartDate
    dateTime AccEndDate
    dateTimeCertEndDate
    dateTime AppStartDate
    dateTime AppEndDate
    string SSFT2
    string SSFT1
    string NQF
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the complete list of current QANs in an array of QANData structures. The QANData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAN_ID</td>
<td>QWS unique identifier for each QAN record</td>
</tr>
<tr>
<td>QAN</td>
<td>QAN code</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
<tr>
<td>QualificationTitle</td>
<td>Full qualification title</td>
</tr>
<tr>
<td>QualShortTitle</td>
<td>Short qualification title</td>
</tr>
<tr>
<td>AccStartDate</td>
<td>Accreditation start date</td>
</tr>
<tr>
<td>AccEndDate</td>
<td>Accreditation end date</td>
</tr>
<tr>
<td>CertEndDate</td>
<td>Certification end date</td>
</tr>
<tr>
<td>AppStartDate</td>
<td>Application start date</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>AppEndDate</td>
<td>Application end date</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the QAN record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the QAN record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the QAN record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.9 GetExpiredQanListXml

5.9.1 Purpose

To return the complete list of expired QANs in XML format.

5.9.2 Signature

```c
int GetExpiredQanListXml(string resultXml)
```

5.9.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetExpiredQanListXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetExpiredQanListXml

5.9.4 Input Parameters

None.

5.9.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If there are no QANs to return a value of -4 will be returned.

5.9.6 Output Parameters

```c
string resultXml
```

This parameter returns the complete list of expired QANs in XML format. The XML conforms to the QANs XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.10 GetExpiredQanList

5.10.1 Purpose

To return the complete list of expired QANs as an array of structures.

5.10.2 Signature

```c
int GetExpiredQanList(QANData[] resultArray)
```

```c
QANData
{
    int QAN_ID
    string QAN
    string AB
    string QualType
    string Map
    string DiscCode
    string QualificationTitle
    string QualShortTitle
    dateTime AccStartDate
    dateTime AccEndDate
    dateTime CertEndDate
    dateTime AppStartDate
    dateTime AppEndDate
    string SSFT2
    string SSFT1
    string NQF
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.10.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetExpiredQanList

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetExpiredQanList

5.10.4 Input Parameters

None.
5.10.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If there are no QANs to return a value of -4 will be returned.

5.10.6 Output Parameters

QANData[] resultArray

QANData
{
  int QAN_ID
  string QAN
  string AB
  string QualType
  string Map
  string DiscCode
  string QualificationTitle
  string QualShortTitle
  dateTime AccStartDate
  dateTime AccEndDate
  dateTime CertEndDate
  dateTime AppStartDate
  dateTime AppEndDate
  string SSFT2
  string SSFT1
  string NQF
  dateTime EffectiveFrom
  dateTime EffectiveTo
  dateTime LastUpdated
}

This parameter returns the complete list of expired QANs in an array of QANData structures. The QANData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAN_ID</td>
<td>QWS unique identifier for each QAN record</td>
</tr>
<tr>
<td>QAN</td>
<td>QAN code</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
<tr>
<td>QualificationTitle</td>
<td>Full qualification title</td>
</tr>
<tr>
<td>QualShortTitle</td>
<td>Short qualification title</td>
</tr>
<tr>
<td>AccStartDate</td>
<td>Accreditation start date</td>
</tr>
<tr>
<td>AccEndDate</td>
<td>Accreditation end date</td>
</tr>
<tr>
<td>CertEndDate</td>
<td>Certification end date</td>
</tr>
<tr>
<td>AppStartDate</td>
<td>Application start date</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AppEndDate</td>
<td>Application end date</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the QAN record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the QAN record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the QAN record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.11 GetDiscountCodeXml

5.11.1 Purpose

To return the complete list of current discount codes in XML format.

5.11.2 Signature

```csharp
int GetDiscountCodeXml(string resultXml)
```

5.11.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetDiscountCodeXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetDiscountCodeXml

5.11.4 Input Parameters

None.

5.11.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.11.6 Output Parameters

```csharp
string resultXml
```

This parameter returns the complete list of current discount codes in XML format. The XML conforms to the Discount Codes XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.12 GetDiscountCode

5.12.1 Purpose

To return the complete list of current discount codes as an array of structures.

5.12.2 Signature

```csharp
int GetDiscountCode(DiscCodeData[] resultArray)
```

```csharp
DiscCodeData
{
    int DiscCode_ID
    string DiscCode
    string DiscCodeDescription
    string SSFT2
    string SSFT1
    string Map
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.12.3 Address


5.12.4 Input Parameters

None.

5.12.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.12.6 Output Parameters

`DiscCodeData[] resultArray`

`DiscCodeData`

```csharp
{
    int DiscCode_ID;
    string DiscCode;
    string DiscCodeDescription;
    string SSFT2;
    string SSFT1;
    string Map;
    dateTime EffectiveFrom;
    dateTime EffectiveTo;
    dateTime LastUpdated;
}
```

This parameter returns the complete list of current discount codes in an array of `DiscCodeData` structures. The `DiscCodeData` structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DiscCode_ID</td>
<td>QWS unique identifier for each discount code record</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
<tr>
<td>DiscCodeDescription</td>
<td>Description of the discount code record</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the discount code record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the discount code record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the discount code record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.13 GetAwardingBodyXml

5.13.1 Purpose

To return the complete list of current awarding bodies in XML format.

5.13.2 Signature

```c
int GetAwardingBodyXml(string resultXml)
```

5.13.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetAwardingBodyXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetAwardingBodyXml

5.13.4 Input Parameters

None.

5.13.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.13.6 Output Parameters

```c
string resultXml
```

This parameter returns the complete list of current awarding bodies in XML format. The XML conforms to the Awarding Bodies XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.14 GetAwardingBody

5.14.1 Purpose

To return the complete list of current awarding bodies as an array of structures.

5.14.2 Signature

```c
int GetAwardingBody(ABData[] resultArray)
```

```
ABData
{
    int    AB_ID
    string AB
    string AwardingBodyName
    string AB_Acronym
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.14.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetAwardingBody

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetAwardingBody

5.14.4 Input Parameters

None.

5.14.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.14.6 Output Parameters

ABData[] resultArray

ABData
{
    int       AB_ID
    string    AB
    string    AwardingBodyName
    string    AB_Acronym
    dateTime  EffectiveFrom
    dateTime  EffectiveTo
    dateTime  LastUpdated
}

This parameter returns the complete list of current awarding bodies in an array of ABData structures. The ABData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB_ID</td>
<td>QWS unique identifier for each awarding body record</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>AwardingBodyName</td>
<td>Full name of awarding body</td>
</tr>
<tr>
<td>AB_Acronym</td>
<td>Acronym of awarding body</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the awarding body record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the awarding body record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the awarding body record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.15 GetQualificationTypeXml

5.15.1 Purpose

To return the complete list of current qualification types in XML format.

5.15.2 Signature

```csharp
int GetQualificationTypeXml(string resultXml)
```

5.15.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypeXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypeXml

5.15.4 Input Parameters

None.

5.15.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.15.6 Output Parameters

```csharp
string resultXml
```

This parameter returns the complete list of current qualification types in XML format. The XML conforms to the Qualification Types XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.16 GetQualificationType

5.16.1 Purpose

To return the complete list of current qualification types as an array of structures.

5.16.2 Signature

```c
int GetQualificationType(QualTypeData[] resultArray)
```

`QualTypeData`:

```c
{
    int QualType_ID
    string QualType
    string QualificationDescription
    string NQF
    string DiscountFamily
    string QualCode
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.16.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationType

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationType

5.16.4 Input Parameters

None.

5.16.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.16.6 Output Parameters

QualTypeData[] resultArray

QualTypeData
{
    int QualType_ID
    string QualType
    string QualificationDescription
    string NQF
    string DiscountFamily
    string QualCode
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the complete list of current qualification types in an array of QualTypeData structures. The QualTypeData structure consists of the following fields:

<table>
<thead>
<tr>
<th>QualType_ID</th>
<th>QWS unique identifier for each qualification type record</th>
</tr>
</thead>
<tbody>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>QualificationDescription</td>
<td>Description of qualification type record</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework code</td>
</tr>
<tr>
<td>DiscountFamily</td>
<td>Discount family code</td>
</tr>
<tr>
<td>QualCode</td>
<td>Qualification code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the qualification type record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the qualification type record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the qualification type record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.17 GetQualificationTypePointsXml

5.17.1 Purpose

To return the complete list of current qualification type points in XML format.

5.17.2 Signature

```c
int GetQualificationTypePointsXml(string resultXml)
```

5.17.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypePointsXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypePointsXml

5.17.4 Input Parameters

None.

5.17.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.

5.17.6 Output Parameters

```c
string resultXml
```

This parameter returns the complete list of current qualification type points in XML format. The XML conforms to the Qualification Type Points XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.18 GetQualificationTypePoints

5.18.1 Purpose

To return the complete list of current qualification type points in XML as an array of structures.

5.18.2 Signature

```c
int GetQualificationTypePoints(
    QualTypePointsData[] resultArray)
```

```c
QualTypePointsData
{
    int QualType_ID
    string QualGrade
    string UCAS_Pts
    string QCA_Pts
}
```

5.18.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypePoints

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetQualificationTypePoints

5.18.4 Input Parameters

None.

5.18.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned.
5.18.6 Output Parameters

```
QualTypePointsData[] resultArray

QualTypePointsData
{
    int QualType_ID
    string QualGrade
    string UCAS_Pts
    string QCA_Pts
}
```

This parameter returns the complete list of current qualification type points in an array of `QualTypePointsData` structures. The `QualTypePointsData` structure consists of the following fields:

<table>
<thead>
<tr>
<th>QualType_ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QualType_ID</td>
<td>QWS unique identifier for each qualification type record</td>
</tr>
<tr>
<td>QualGrade</td>
<td>Qualification grade</td>
</tr>
<tr>
<td>UCAS_Pts</td>
<td>UCAS points</td>
</tr>
<tr>
<td>QCA_Pts</td>
<td>QCA points</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.19 SearchQanXml

5.19.1 Purpose

To search the complete list of current QANs based on a set of supplied search criteria and return the matching QANs in XML format.

5.19.2 Signature

```csharp
int SearchQanXml(string awardingBody,
                 string nqfLevel,
                 string qualType,
                 string discountCode,
                 string ssft2,
                 string shortTitle,
                 string title,
                 string qanCode,
                 string resultXml)
```

5.19.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=SearchQanXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=SearchQanXml

5.19.4 Input Parameters

**string awardingBody**

This parameter supplies an awarding body code value to search on. QANs match when their awarding body code matches the parameter value exactly. Matching is case insensitive. If searching on awarding body is not required, then this parameter should be set to an empty string.

**string nqfLevel**

This parameter supplies a NQF level value to search on. QANs match when their NQF level value matches the parameter value exactly. Matching is case insensitive. If searching on NQF level is not required, then this parameter should be set to an empty string.
**string** qualType

This parameter supplies a qualification type code value to search on. QANs match when their qualification type code value matches the parameter value exactly. Matching is case insensitive. If searching on qualification type code is not required, then this parameter should be set to an empty string.

**string** discountCode

This parameter supplies a discount code value to search on. QANs match when their discount code value matches the parameter value exactly. Matching is case insensitive. If searching on discount code is not required, then this parameter should be set to an empty string.

**string** ssft2

This parameter supplies a sector subject framework tier 2 code value to search on. QANs match when their sector subject framework tier 2 code value matches the parameter value exactly. Matching is case insensitive. If searching on sector subject framework tier 2 code is not required, then this parameter should be set to an empty string.

**string** shortTitle

This parameter supplies a qualification short title value to search on. QANs match when their qualification short title value matches the parameter value exactly. Matching is case insensitive. If searching on qualification short title is not required, then this parameter should be set to an empty string.

**string** title

This parameter supplies a qualification title value to search on. QANs match when their qualification title value matches the parameter value exactly. Matching is case insensitive. If searching on qualification title is not required, then this parameter should be set to an empty string.

**string** qanCode

This parameter supplies a qualification code value to search on. QANs match when their qualification code value matches the parameter value exactly. Matching is case insensitive. If searching on qualification code is not required, then this parameter should be set to an empty string.
When more than one input parameter is used to search on, QANs match only when their values match ALL the input parameter values supplied (logical AND). For example a QAN search with the following input parameter values:

- awardingBody = "103"
- nqfLevel = ""
- qualType = ""
- discountCode = "BAC"
- ssft2 = "2.1"
- shortTitle = ""
- title = ""
- qanCode = ""

will only match QANs where:

- QAN.AwardingBody == "103" AND
- QAN.DiscountCode == "BAC" AND
- QAN.SSFT2 == "2.1"

5.19.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If no input parameter values are supplied a value of -2 will be returned. If any of the input parameter values an invalid a value of -3 will be returned. If there are no QANs to return a value of -4 will be returned.

5.19.6 Output Parameters

$string resultXml$

This parameter returns the list of matching QANs in XML format. The XML conforms to the QANs XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.20 SearchQAN

5.20.1 Purpose

To search the complete list of current QANs based on a set of supplied search criteria and return the matching QANs in an array of structures.

5.20.2 Signature

```c
int SearchQan(string awardingBody,
               string nqfLevel,
               string qualType,
               string discountCode,
               string ssft2,
               string shortTitle,
               string title,
               string qanCode,
               QANData[] resultArray)
```

QANData
{
  int QAN_ID
  string QAN
  string AB
  string QualType
  string Map
  string DiscCode
  string QualificationTitle
  string QualShortTitle
  dateTime AccStartDate
  dateTime AccEndDate
  dateTime CertEndDate
  dateTime AppStartDate
  dateTime AppEndDate
  string SSFT2
  string SSFT1
  string NQF
  dateTime EffectiveFrom
  dateTime EffectiveTo
  dateTime LastUpdated
}
5.20.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=SearchQan

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=SearchQan

5.20.4 Input Parameters

string awardingBody

This parameter supplies an awarding body code value to search on. QANs match when their awarding body code matches the parameter value exactly. Matching is case insensitive. If searching on awarding body is not required, then this parameter should be set to an empty string.

string nqfLevel

This parameter supplies a NQF level value to search on. QANs match when their NQF level value matches the parameter value exactly. Matching is case insensitive. If searching on NQF level is not required, then this parameter should be set to an empty string.

string qualType

This parameter supplies a qualification type code value to search on. QANs match when their qualification type code value matches the parameter value exactly. Matching is case insensitive. If searching on qualification type code is not required, then this parameter should be set to an empty string.

string discountCode

This parameter supplies a discount code value to search on. QANs match when their discount code value matches the parameter value exactly. Matching is case insensitive. If searching on discount code is not required, then this parameter should be set to an empty string.

string ssft2

This parameter supplies a sector subject framework tier 2 code value to search on. QANs match when their sector subject framework tier 2 code value matches the parameter value exactly. Matching is case insensitive. If searching on sector subject framework tier 2 code is not required, then this parameter should be set to an empty string.
**string shortTitle**

This parameter supplies a qualification short title value to search on. QANs match when their qualification short title value matches the parameter value exactly. Matching is case insensitive. If searching on qualification short title is not required, then this parameter should be set to an empty string.

**string title**

This parameter supplies a qualification title value to search on. QANs match when their qualification title value matches the parameter value exactly. Matching is case insensitive. If searching on qualification title is not required, then this parameter should be set to an empty string.

**string qanCode**

This parameter supplies a qualification code value to search on. QANs match when their qualification code value matches the parameter value exactly. Matching is case insensitive. If searching on qualification code is not required, then this parameter should be set to an empty string.

When more than one input parameter is used to search on, QANs match only when their values match ALL the input parameter values supplied (logical AND). For example a QAN search with the following input parameter values:

```plaintext
awardingBody = "103"
nqfLevel = ""
qualType = ""
discountCode = "BAC"
ssft2 = "2.1"
shortTitle = ""
title = ""
qanCode = ""
```

will only match QANs where:

```plaintext
QAN.AwardingBody == "103" AND
QAN.DiscountCode == "BAC" AND
QAN.SSFT2 == "2.1"
```

### 5.20.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If no input parameter values are supplied a value of -2 will be returned. If any of the input parameter values an invalid a value of -3 will be returned. If there are no QANs to return a value of -4 will be returned.
5.20.6 Output Parameters

QANData[] resultArray

QANData
{
    int QAN_ID
    string QAN
    string AB
    string QualType
    string Map
    string DiscCode
    string QualificationTitle
    string QualShortTitle
    dateTime AccStartDate
    dateTime AccEndDate
    dateTime CertEndDate
    dateTime AppStartDate
    dateTime AppEndDate
    string SSFT2
    string SSFT1
    string NQF
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}

This parameter returns the list of matching QANs in an array of QANData structures. The QANData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAN_ID</td>
<td>QWS unique identifier for each QAN record</td>
</tr>
<tr>
<td>QAN</td>
<td>QAN code</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
<tr>
<td>QualificationTitle</td>
<td>Full qualification title</td>
</tr>
<tr>
<td>QualShortTitle</td>
<td>Short qualification title</td>
</tr>
<tr>
<td>AccStartDate</td>
<td>Accreditation start date</td>
</tr>
<tr>
<td>AccEndDate</td>
<td>Accreditation end date</td>
</tr>
<tr>
<td>CertEndDate</td>
<td>Certification end date</td>
</tr>
<tr>
<td>AppStartDate</td>
<td>Application start date</td>
</tr>
<tr>
<td>AppEndDate</td>
<td>Application end date</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the QAN record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the QAN record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the QAN record was last updated</td>
</tr>
</tbody>
</table>
If the web service return value indicates an error, this parameter will return an empty array.
5.21 GetSpecificQanXml

5.21.1 Purpose

To return the list of QANs specified by an array of QWS QAN ids in XML format.

5.21.2 Signature

```c
int GetSpecificQanXml(int[] qan_IDs,
                      string resultXml)
```

5.21.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSpecificQanXml

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSpecificQanXml

5.21.4 Input Parameters

```c
int[] qan_IDs
```

This parameter supplies an array of QWS QAN ids. Only QANs with a matching QWS QAN id are returned. If no matches are found or an empty array is supplied, then the QAN list returned will be empty.

5.21.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If no input parameter values are supplied a value of -2 will be returned. If any of the input parameter values an invalid a value of -3 will be returned. If there are no QANs to return a value of -4 will be returned.

5.21.6 Output Parameters

```c
string resultXml
```

This parameter returns the list of matching QANs in XML format. The XML conforms to the QANs XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.22 GetSpecificQan

5.22.1 Purpose

To return the list of QANs specified by an array of QWS QAN ids as an array of structures.

5.22.2 Signature

```c
int GetSpecificQan(int[] qan_IDs,
                   QANData[] resultArray)
```

```c
QANData
{
    int    QAN_ID
    string QAN
    string AB
    string QualType
    string Map
    string DiscCode
    string QualificationTitle
    string QualShortTitle
    dateTime AccStartDate
    dateTime AccEndDate
    dateTime CertEndDate
    dateTime AppStartDate
    dateTime AppEndDate
    string SSFT2
    string SSFT1
    string NQF
    dateTime EffectiveFrom
    dateTime EffectiveTo
    dateTime LastUpdated
}
```

5.22.3 Address

http://data.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSpecificQan

http://datauat.dfes.gov.uk/QWS/QWSWebService.asmx?op=GetSpecificQan
5.22.4 Input Parameters

`int[] qan_IDS`

This parameter supplies an array of QWS QAN ids. Only QANs with a matching QWS QAN id are returned. If no matches are found or an empty array is supplied, then the QAN list returned will be empty.

5.22.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If no input parameter values are supplied a value of -2 will be returned. If any of the input parameter values an invalid a value of -3 will be returned. If there are no QANs to return a value of -4 will be returned.

5.22.6 Output Parameters

`QANData[] resultArray`

QANData
{
  int QAN_ID
  string QAN
  string AB
  string QualType
  string Map
  string DiscCode
  string QualificationTitle
  string QualShortTitle
  dateTime AccStartDate
  dateTime AccEndDate
  dateTime CertEndDate
  dateTime AppStartDate
  dateTime AppEndDate
  string SSFT2
  string SSFT1
  string NQF
  dateTime EffectiveFrom
  dateTime EffectiveTo
  dateTime LastUpdated
}
This parameter returns the list of matching QANs in an array of QANData structures. The QANData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAN_ID</td>
<td>QWS unique identifier for each QAN record</td>
</tr>
<tr>
<td>QAN</td>
<td>QAN code</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>Map</td>
<td>Map code</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
<tr>
<td>QualificationTitle</td>
<td>Full qualification title</td>
</tr>
<tr>
<td>QualShortTitle</td>
<td>Short qualification title</td>
</tr>
<tr>
<td>AccStartDate</td>
<td>Accreditation start date</td>
</tr>
<tr>
<td>AccEndDate</td>
<td>Accreditation end date</td>
</tr>
<tr>
<td>CertEndDate</td>
<td>Certification end date</td>
</tr>
<tr>
<td>AppStartDate</td>
<td>Application start date</td>
</tr>
<tr>
<td>AppEndDate</td>
<td>Application end date</td>
</tr>
<tr>
<td>SSFT2</td>
<td>Sector subject framework tier 2 code</td>
</tr>
<tr>
<td>SSFT1</td>
<td>Sector subject framework tier 1 code</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework code</td>
</tr>
<tr>
<td>EffectiveFrom</td>
<td>Date from which the QAN record is effective</td>
</tr>
<tr>
<td>EffectiveTo</td>
<td>Date to which the QAN record is effective</td>
</tr>
<tr>
<td>LastUpdated</td>
<td>Date and time when the QAN record was last updated within QWS</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.
5.23 GetSchoolQanXml

5.23.1 Purpose

To return the list of QANs specified associated with a school in XML format.

5.23.2 Signature

```csharp
int GetSchoolQanXml(string username,
                    string password,
                    string resultXml)
```

5.23.3 Address

https://data.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?op=GetSchoolQanXml

https://datauat.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?op=GetSchoolQanXml

5.23.4 Input Parameters

**string username**

This parameter supplies a username.

**string password**

This parameter supplies a password.

If the username is associated with a school the list of school QANs for that school will be returned.

If the username is associated with a local authority the list of school QANs returned will include ALL the school QANs for EVERY school associated with the local authority.

5.23.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If the username and password are invalid a value of -2 will be returned.
5.23.6 Output Parameters

string resultXml

This parameter returns the list of school QANs associated with the username in XML format. The XML conforms to the School QANs XML schema. If the web service return value indicates an error, this parameter will return an empty string.
5.24 GetSchoolQan

5.24.1 Purpose

To return the list of QANs specified associated with a school as an array of structures.

5.24.2 Signature

```csharp
int GetSchoolQan(string username, string password, SchoolQANData[] resultArray)
```

```csharp
SchoolQANData
{
    string URN,
    string LEA,
    string Estab,
    string QAN,
    string SpecRef,
    string AB,
    string QualType,
    string DiscCode
}
```

5.24.3 Address

https://data.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?op=GetSchoolQan

https://datauat.dfes.gov.uk/QWS/QWSWebServiceSchool.asmx?op=GetSchoolQan

5.24.4 Input Parameters

```csharp
string username
```

This parameter supplies a username.

```csharp
string password
```

This parameter supplies a password.

If the username is associated with a school the list of school QANs for that school will be returned.
If the username is associated with a local authority the list of school QANs returned will include ALL the school QANs for EVERY school associated with the local authority.

5.24.5 Return Value

The web service returns an integer value. If the web service is successful a value of 0 will be returned. If the web service fails due to an internal system error a value of -1 will be returned. If the username and password are invalid a value of -2 will be returned.

5.24.6 Output Parameters

SchoolQANData[] resultArray

SchoolQANData
{
    string URN
    string LEA
    string Estab
    string QAN
    string SpecRef
    string AB
    string QualType
    string DiscCode
}

This parameter returns the list of school QANs associated with the username in an array of SchoolQANData structures. The SchoolQANData structure consists of the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>URN</td>
<td>School DfES Unique Reference Number</td>
</tr>
<tr>
<td>LEA</td>
<td>Local Education Authority identifier</td>
</tr>
<tr>
<td>Estab</td>
<td>Education establishment identifier</td>
</tr>
<tr>
<td>QAN</td>
<td>QAN code</td>
</tr>
<tr>
<td>SpecRef</td>
<td>Specification reference</td>
</tr>
<tr>
<td>AB</td>
<td>Awarding body code</td>
</tr>
<tr>
<td>QualType</td>
<td>Qualification type code</td>
</tr>
<tr>
<td>DiscCode</td>
<td>Discount code</td>
</tr>
</tbody>
</table>

If the web service return value indicates an error, this parameter will return an empty array.