Department for Education

# ECS System Integration Guide

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# Contents

# 1 Introduction

## 1.1 Background

The Department for Education (DfE) provides an Eligibility Checking System (ECS) to allow local authorities to check online and in real time the eligibility status of parents/carers as part of an application for several types of passported benefits including Free School Meals (FSM) for their children, Funded Early Education for 2 Year Olds (EY) and to support local authorities to establish early years pupil premium (EYPP) funding for service providers.

The ECS also provides checking to allow local authorities to verify online and in real time the validity of eligibility codes issued by HMRC to working parents eligible for 30 Hours Free Childcare.

## 1.2 Purpose

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

The document should be read in conjunction with the ECS LA Implementer Guidelines[1] which provides guidance on the functionality that local authority applications should consider including suggestions for how some of the error codes could be handled.

## 1.3 Support

For technical questions regarding this guide please contact the ECS Service Desk (Email: ECS.admin@education.gov.uk, telephone: 0207 783 8426).

# 2 Technical Standards

The ECS 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 v1.1, 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)

The ECS platform supports:

Transport Layer Security (TLS) – version 1.2
Server Name Indication (SNI)

Systems that connect to ECS must support Server Name Indication (SNI).

[1] LA Implementer Guidelines is part of the Developer Toolkit available from the Service Desk

# 3 Web Service Endpoints

The ECS web service is available from several endpoints[2]:

- **Sandpit**
  https://ecs2.education.gov.uk/webservices/Sandpit/20170701/OnlineQueryService.svc

- **Accreditation**
  https://ecs2.education.gov.uk/webservices/Accreditation/20170701/OnlineQueryService.svc

- **Production**.
  https://ecs.education.gov.uk/fsm.lawebservice/20170701/OnlineQueryService.svc

The following test pages are available for each endpoint:

- **Sandpit Test Page**
  https://ecs2.education.gov.uk/webservices/Sandpit/20170701/testpage.aspx

- **Accreditation Test Page**
  https://ecs2.education.gov.uk/webservices/Accreditation/20170701/testpage.aspx

- **Production Test Page**
  https://ecs.education.gov.uk/fsm.lawebservice/20170701/testpage.aspx

In each environment any breaking changes will be published to a new endpoint and previous versions deprecated.

For security reasons the associated WSDL is not published online in any environment but may be obtained on request by authorised users. It is normally distributed as part of the pack containing this System Integration Guide.

If an 'online' version of the WSDL is needed (e.g. for Visual Studio integration) then see SoapUI_Mock_Service_Guide.doc for instructions on using SoapUI to host a mock service.

The Prototype Environment which formerly provided unsecured access to test the Eligibility Checking System for the use of system integrators was decommissioned in November 2016 and is not available to be used. The Sandpit environment should be used instead.

## 3.1 Sandpit Environment

This environment contains the latest web service endpoint including any pre-production version. It uses a fairly comprehensive, representative but dummy data set, SSL encryption and requires a valid username and password.

## 3.2 Accreditation Environment

This is used to verify the correct functioning of developed web services

[2] The URLs refer to Release 2017-2a (and later) of the ECS. As of June 2018 there was no longer an option available for Local Authorities to connect to the ECS via GSI/PSN.

interfaces prior to systems being granted access to Production. It requires a valid username and password.

### 3.3 Production Environment

This environment provides access to the live Eligibility Checking Service and should be used for normal operational use.

The only access restriction is that a valid username and password must be supplied as two of the input parameters for all calls to the web service. Only if the supplied username and password are authentic will the controlled access web service return the requested data.

## 4 Web Services Authorisation

To use the Production, Sandpit and Accreditation ECS web services you will require a valid username and password. You can obtain these by contacting the ECS Service Desk. Access to Production is only provided to Local Authorities that have been successfully accredited.

## 5 ECS Web Service Methods

### 5.1 Shared Types

These are complex types that are used across multiple actions in the web service methods detailed below.

QueryData

| Property Name | Type |
|---|---|
| Surname | string |
| DateOfBirth | string |
| NiNo | string |
| NASS | string |
| Subscribers | ArrayofSubscriber (Subscriber[]) |
| EligibilityCode | string |

Subscriber

| Property Name | Type |
|---|---|
| Id | int |
| Type | string |

BatchCommonRequest

This is the base type for batch requests. Currently the types that extend this do not add any additional properties.

| Property Name | Type |
|---|---|
| SystemId | string |
| Password | string |
| LocalAuthorityId | string |
| RequestedServiceVersion | string |
| BatchID | string |

## 5.2 Method Descriptions

### 5.2.1 GetFSMSystemStatus

SystemStatusResponse
GetFSMSystemStatus(SystemStatusWithAuthenticationRequest details);

SystemStatusWithAuthenticationRequest

| Property Name | Type |
|---|---|
| SystemId | string |
| Password | string |
| RequestedServiceVersion | string |

SystemStatusResponse

| Property Name | Type |
|---|---|
| ReturnCode | int |
| SystemStatusCode | int |

### 5.2.2 SubmitSingleQuery

SubmitSingleQueryResult SubmitSingleQuery(SubmitSingleQueryRequest requestInput);

SubmitSingleQueryRequest

| Property Name | Type |
|---|---|
| SystemId | string |
| Password | string |
| LocalAuthorityId | string |
| RequestedServiceVersion | string |
| UserToQuery | QueryData |
| SourceType | string |
| EligibilityCheckType | string |
| ServiceType | string |

SubmitSingleQueryResult

| Property Name | Type |
|---|---|
| EligibilityStatus | int |
| ErrorCode | int |
| ValidityStartDate | date |
| ValidityEndDate | date |
| GracePeriodEndDate | date |
| Qualifier | string |
| ParentNino | string |
| ParentForename | string |
| ParentSurname | string |
| ParentDob | date |
| PartnerForename | string |
| PartnerSurname | string |
| PartnerNiNo | string |
| PartnerDoB | date |

| | |
|---|---|
| ChildForename | string |
| ChildSurname | string |
| ChildDob | date |
| ChildPostcode | string |

### 5.2.3 SubmitBatchQuery

SubmitBatchQueryResponseStructure
SubmitBatchQuery(SubmitBatchQueryRequestStructure requestInput);

SubmitBatchQueryRequestStructure

| Property Name | Type |
|---|---|
| SystemId | string |
| Password | string |
| LocalAuthorityId | string |
| RequestedServiceVersion | string |
| LABatchID | string |
| BatchQueries | ArrayOfBatchQuery (BatchQuery[]) |
| EligibilityCheckType | string |
| ServiceType | string |

BatchQuery

| Property Name | Type |
|---|---|
| RowID | string |
| UserToQuery | QueryData |

SubmitBatchQueryResponseStructure

| Property Name | Type |
|---|---|
| LABatchID | string |
| BatchID | string |
| StatusCode | int |
| RecordCount | int |
| ValidRecords | int |
| InvalidRecords | int |
| QueryValidation | ArrayOfValidationResult (ValidationResult[]) |

ValidationResult

| Property Name | Type |
|---|---|
| RowID | string |
| ErrorCode | int |

### 5.2.4 FetchBatchStatus

FetchBatchStatusResponseStructure
FetchBatchStatus(FetchBatchStatusRequestStructure requestInput);

FetchBatchStatusRequestStructure (extends BatchCommonRequest)

FetchBatchStatusResponseStructure

| Property Name | Type |
|---|---|
| StatusCode | int |
| BatchStatuses | ArrayOfBatchStatusItem (BatchStatusItem[]) |

BatchStatusItem

| Property Name | Type |
|---|---|
| BatchID | string |
| BatchStatus | int |
| LocalAuthorityId | string |
| LABatchID | string |
| SubmittedDateTime | dateTime |
| CompletedDateTime | dateTime |
| ExpiryDateTime | dateTime |
| RowCount | int |
| TotalMatched | int |

### 5.2.5 FetchBatchResults

FetchBatchResultsResponseStructure
FetchBatchResults(FetchBatchResultsRequestStructure requestInput);

FetchBatchResultsRequestStructure (extends BatchCommonRequest)

FetchBatchResultsRequestStructure

| Property Name | Type |
|---|---|
| BatchID | string |
| StatusCode | int |
| BatchStatus | int |
| LocalAuthorityId | string |
| LABatchID | string |
| SubmittedDateTime | dateTime |
| CompletedDateTime | dateTime |
| ExpiryDateTime | dateTime |
| RowCount | int |
| BatchResults | ArrayOfBatchResult (BatchResult[]) |
| TotalMatched | int |

BatchResult

| Property Name | Type |
|---|---|
| RowID | string |
| QueryItem | QueryData |
| Eligibility | Int |
| ValidityStartDate | date |
| ValidityEndDate | date |
| GracePeriodEndDate | date |
| Qualifier | string |
| ParentNino | string |
| ParentForename | string |
| ParentSurname | string |

| | |
|---|---|
| ParentDoB | date |
| PartnerNino | string |
| PartnerForename | string |
| PartnerSurname | string |
| PartnerDoB | date |
| ChildForename | string |
| ChildSurname | string |
| ChildDoB | date |
| ChildPostcode | string |

### 5.2.6 SubmitDeleteBatch

SubmitDeleteBatchResponseStructure
SubmitDeleteBatch(SubmitDeleteBatchRequestStructure requestInput);

SubmitDeleteBatchRequestStructure (extends BatchCommonRequest)

SubmitDeleteBatchResponseStructure

| Property Name | Type |
|---|---|
| LABatchID | string |
| StatusCode | int |

### 5.2.7 RequestPasswordReset

RequestPasswordResetResponseStructure
RequestPasswordReset(RequestPasswordResetRequestStructure requestInput);

RequestPasswordResetRequestStructure

| Property Name | Type |
|---|---|
| SystemId | string |
| Password | string |

RequestPasswordResetResponseStructure

| Property Name | Type |
|---|---|
| ErrorCode | int |
| NewPassword | string |

# 6 Web Service Definitions

This section describes each available web service method in detail.

For each web service method the following information is provided:

Purpose – what you can use the web service method for.
Signature – the name of the web service method, the type of value it returns and the names and types of its parameters.

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

The W3C XML specification prohibits the use of certain character types (such as ampersand and angle brackets) in the XML document. If the data submitted in the web services query contains invalid characters then a SOAP Client Error will be returned.

Example SOAP Request Fragments can be found in Appendix B.

The web service methods are broadly speaking split into four categories:

- A web service query to check the "health" of the ECS
- A web service query to perform a single item eligibility check
- A set of queries associated with performing bulk eligibility checks for a series of items
- A web service query to change password.

The web service queries provide equivalent functionality to the corresponding web browser functions also provided by the ECS.

## 6.1 GetFSMSystemStatus

### 6.1.1 Purpose

Use this query to check the current status of the ECS.

### 6.1.2 Signature

SystemStatusResponse
GetFSMSystemStatus(SystemStatusWithAuthenticationRequest requestInput)

### 6.1.3 Input Parameters

**SystemStatusWithAuthenticationRequest**

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. (NB: use dummy values for the Test Service) |
| string Password | The password associated with the SystemId. (NB: use dummy values for the Test Service) |
| String RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |

### 6.1.4 Return Value

**SystemStatusResponse**

| | | |
|---|---|---|
| int ReturnCode | 0 | Web service is successful |
| | -1 | Internal system error. *Not currently used* |
| | -2 | System ID and password are invalid |

| | |
|---|---|
| int SystemStatusCode | 0 System is operating normally<br>-1 ECS is unavailable (e.g. system is currently down or the web server cannot communicate with the database or logic servers)<br>-2 Batch checking is unavailable<br>-3 DWP online checking is unavailable (e.g. problem with CIS database or GSI connection is unavailable)<br>-4 HMRC data is more than 7 days out of date<br>-5 Home Office data is more than 14 days out of date |

If the RequestedServiceVersion does not match the called endpoint version the ECS will return a Client fault code:

| faultcode | Faultstring |
|---|---|
| Client | A request for web service version <*RequestedServiceVersion*> was made to service version <*called endpoint version*>. The RequestedServiceVersion element value must match the endpoint that was called. |

## 6.2 SubmitSingleQuery

### 6.2.1 Purpose

Use this method to check the free school meal eligibility status for a single applicant.

### 6.2.2 Signature

SubmitSingleQueryResult SubmitSingleQuery(SubmitSingleQueryRequest requestInput)

### 6.2.3 Input Parameters

**SubmitSingleQueryRequestStructure**

This is a complex type.

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. (NB: use dummy values for the Test Service) |
| string Password | The password associated with the SystemId. (NB: use dummy values for the Test Service) |

| | |
|---|---|
| string LocalAuthorityId | This parameter supplies a local identifier created by the Local Authority. It can equate to either a system or user identity. The web service simply logs it as part of the audit record. It is suggested that the local authority provide the user name of the LA Officer (if the web service is used by the LA back office) or a parent/carer identifier (if the web service has been called from a citizen facing web form). If the web service is provided as part of a shared service for use by multiple LAs then it is recommended that the field contains the 3 digit LA identification code associated with the parent/carer making the application. Alphanumeric, mandatory field – variable length, max 255 chars |
| String RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |
| QueryData UserToQuery | Complex Type |
| String SourceType | This parameter identifies the originating source of the query and has values:<br>• "MEDIATED" meaning the web service query was originated by a local authority officer<br>• "CITIZEN" meaning that the query originated from a citizen making an online application via a local authority web site<br>• "PROVIDER" meaning the web service query was originated by a provider staff member performing a check via a local authority web site |
| String EligibilityCheckType | This parameter identifies the type of eligibility query and has values:<br>• "FSM" meaning the web service query is to check against Free School Meals eligibility criteria<br>• "EY" meaning that the query is to check against Early Learning criteria<br>• "EYPP" meaning that the query is to check against Early Years Pupil Premium criteria<br>• "30H" meaning that the query is to check against 30 Hours Free Childcare eligibility information. |
| string ServiceType | Mandatory. This parameter identifies whether the transaction originates from a shared service provider or not and has values:<br>• "SHARED" indicating a Shared Service<br>• "SINGLE" indicating a non-Shared Service |

**QueryData <UserToQuery>**

| | |
|---|---|
| string Surname | This parameter supplies the surname of the applicant. |

| | |
|---|---|
| | Optional field containing alphabetic character set including spaces, hyphens and apostrophes - variable length field but only the first three characters are used in the eligibility check. Validated as required for FSM, EY and EYPP checks. |
| string DateOfBirth | This parameter supplies the date of birth (DOB) of the applicant. DOB must be earlier than the current year.<br>**Notes**:<br>• Must comply with W3C standard: http://www.w3.org/TR/NOTE-datetime<br>• Date format CCYY-MM-DD |
| string NiNo | This parameter supplies the applicant's national insurance number (NINO). This is optional, but if missing the NASS must be supplied. NINO should be in the format AANNNNNNA, where A represents an alphabetic character and N represents a numeric character e.g. WE123456Z. Note - NINO is not case sensitive.<br>**Notes**:<br>The format of the NINO is validated against the standard definition. For details of the standard see Wikipedia or the HMRC website (https://www.gov.uk/hmrc-internal-manuals/national-insurance-manual/nim39110)<br>• If the final character is a space then this must be included.<br>• Please note that a final space character in a NINO submitted in a FSM/EY/EYPP check may result in a "Unknown – raise manual query" Qualifier value. The solution is to provide the correct NINO suffix instead of a space. |
| string NASS | This parameter supplies the applicant's national asylum seeker service (NASS) identity. This is optional, but if missing the NINO must be supplied. NASS should be in the format YYMMNNNNN, where YY represents the last two digits of a year, MM represents a month as a two digit number and N represents a digit e.g. 090300017.<br>**Notes**:<br>• Leading zeros are required, e.g. 90300017 will be rejected. |
| ArrayOfSubscriber Subscribers | Optional. This structure is intended for the circumstance whereby a single ECS query could be for multiple children, each child attending a different school (i.e. multiple subscribers per query).<br>Complex Type. |

| | |
|---|---|
| | 1 or more occurrences of complex type Subscriber. |
| string EligibilityCode | Optional. This parameter supplies the applicant's 30 Hours Eligibility Code. The Code must be a 11 digit number e.g. 12345678910. Validated as required for 30 Hours checks. |

Subscriber <Subscribers>

| | |
|---|---|
| string Id | The subscriber Id. This is the Id of the subscriber and has values that correspond to either the LA Code (3 digits) or the school URN (6 digits). |
| string Type | The type of subscriber. This is the type of subscriber and has values of either:<br>• "LA" if the Id is the local authority code<br>• "SCHOOL" if the Id is the school URN |

### 6.2.4 Return Value

**SubmitSingleQueryResult**

| | |
|---|---|
| int EligibilityStatus | 0 Not found<br>1 Found and eligible<br>-1 The web service has returned an error |
| int ErrorCode | 0 Web service is successful.<br>-1 Internal system error. *Not currently used*<br>-2 SystemID and password are invalid<br>-3 Surname is invalid or missing where required<br>-4 DateOfBirth is invalid<br>-5 NINO is invalid<br>-6 NASS is invalid<br>-7 Both NINO and NASS supplied<br>-8 Neither NINO nor NASS supplied<br>-9 SourceType value is invalid<br>-10 The DWP query service used by the ECS is unavailable<br>-11 Invalid format LocalAuthorityId (exceeds 255 characters or that the field is null)<br>-13 EligibilityCheckType value is invalid<br>-14 ServiceType code is invalid<br>-15 SubscriberType code is invalid<br>-16 SubscriberId has invalid format<br>-17 NiNo not supplied where required<br>-18 EligibilityCode not supplied where required<br>-19 EligibilityCode is invalid<br>-20 Password reset required |
| date ValidityStartDate | The system will return the start date of the current validity period for an Eligibility Code. Supplied for 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| date ValidityEndDate | The system will return the end date of the current validity period for an Eligibility Code. Supplied for |

| | |
|---|---|
| | 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| date GracePeriodEndDate | The system will return the end date of the current grace period for a Eligibility Code.<br>Supplied for 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| string Qualifier | The system may return a Qualifier value for FSM, EY, EYPP, 30H checks.<br>Where EligibilityStatus = 0, the system will return a Qualifier which has possible values as follows:<br>• <null> where the eligibility status is Final. If this is a 30 hours check and there are also no dates supplied back, then this means that one or more of the input data items is incorrect.<br>• "No Trace – Check data" where it has not been possible to match the claimant details supplied to a living person on OGD systems (FSM, EY, EYPP checks only)<br>• "Pending – Keep checking" where it is not yet possible to return a Final response (FSM, EY, EYPP checks only)<br>• "Unknown – Raise manual query" where an exception has occurred (FSM, EY, EYPP checks only)<br>• "Found pre-thresholds" means that the result can be converted to a Found if the child met the age criterion for check type on or before 31/12/2017. Otherwise the result is Not Found and is Final. Only used for EY and EYPP.[3]<br>• "Manual process – Found pre-thresholds" means that if the child met the age criterion for the check type on or before 31/12/2017 then the result can be converted to Found. Otherwise a manual process must be used to determine eligibility. Only used for EY and EYPP.<br>• "Manual process" where a manual process must be used to determine eligibility (FSM, EY, EYPP checks only)<br>Where EligibilityStatus = 1, the system will return a Qualifier which has possible values as follows:<br>• <null> where the eligibility status is Final.<br>• "Discretionary Start" where a 30 Hours code qualifies for discretion according to DfE guidelines (30H checks only) |

[3] The "Found pre-thresholds" and "Manual process – Found pre-thresholds" Qualifier values are also Final results and provide the eligibility check result against the "old" eligibility criteria before the introduction of earnings thresholds for UC claimants. These Qualifiers are only

| | |
|---|---|
| string ParentNiNo | The parent's national insurance number (NiNo). Only supplied for 30H checks. |
| string ParentForename | First or given name of the parent. Only supplied for 30H checks. |
| string ParentSurname | Surname or family name of the parent. Only supplied for 30H checks. |
| string ParentDoB | The parent's date of birth. Only supplied for 30H checks. |
| string PartnerNiNo | The partner of the parent's national insurance number (NiNo). Only supplied for 30H checks. |
| string PartnerForename | The given name of the partner of the parent. Only supplied for 30H checks. |
| string PartnerSurname | The family name of the partner of the parent. Only supplied for 30H checks. |
| string PartnerDoB | The date of birth of the partner of the parent. Only supplied for 30H checks. |
| string ChildForename | The given name of the child. Only supplied for 30H checks. |
| string ChildSurname | The family name of the child. Only supplied for 30H checks. |
| string ChildDoB | The date of birth of the child. Only supplied for 30H checks. |
| string ChildPostcode | The postcode of the child. Only supplied for 30H checks. |

The ArrayofSubscriber is an **optional** structure and if omitted will not cause a "Client" error. If supplied then the following validation checks are applied:

1. If the ServiceType is not one of "SHARED" or "SINGLE" then "-14" error code is returned
2. If ServiceType is not supplied (i.e. empty) but subscriber Type contains null or values and/or ID contains null or values then "-14" error code is returned. To avoid a "-14" error code where ServiceType is not supplied, the ArrayofSubscriber structure must be omitted.
3. If the ServiceType is "SINGLE" and Type = "LA" and ID = <LAID of Account> then this is permitted
4. If ServiceType is "SINGLE" and Subscriber data is not "LA" / <LAID of Account> then "-14" error code is returned
5. If ServiceType is "SHARED" and Subscriber data is omitted then this is permitted. However we will be expecting shared services providers to develop their systems to capture and populate Subscriber data at the earliest opportunity.

used for EY and EYPP checks and are provided to allow claimants with a child who met the age criterion for the check type on or before 31/12/2017 to get the entitlement because they are eligible under the old eligibility criteria even if they do not come forward until later in 2018 when they are Not Found under the new eligibility criteria. For EY checks for 2 year old funding, this means that children born on or before 31/12/2015 can have the Not Found result converted to Found. For EYPP checks children born on or before 31/12/2014 can have the Not Found result converted to Found.

6. If Type is not one of “LA” or “SCHOOL” then “-15” error code is returned
7. If ID is not numeric (in the range 100 to 999 if Type is “LA” or in the range 100000 to 999999 if Type is “SCHOOL”) then “-16” error code is returned.

The ArrayofSubscriber is a repeating complex type and could therefore contain multiple iterations of subscriber Type/ID. If any individual data item fails validation, returning an error code, it will not be possible to identify which item failed validation. The system will reject the entire query if just one data item in the Array fails validation.

See Section 6.1 “GetFSMSystemStatus” for the validation of “RequestedServiceVersion”.

Note: in relation to a “-10” error code, the ECS holds local copies of HMRC and Home Office data and so will always be able to check eligibility using these data sources. In the case of FSM, EY and EYPP checks, the ECS performs eligibility checks against HMRC and HO data first. If the applicant is not found then a call to DWP is made. Checks against DWP criteria involve a remote call to the DWP CIS database. If the DWP query service does not respond then a “-10” code will be returned. This should not be interpreted as a “Not Found” (EligibilityStatus = 0) response as the applicant could be eligible against DWP criteria. Instead the system will return a web service error code (EligibilityStatus = “-1”).

Note: in relation to a “-20” error code indicating that a password reset is required, the reset must be carried out via the web service method defined in Section 6.7 - RequestPasswordReset

## 6.3 SubmitBatchQuery

### 6.3.1 Purpose

Use this method to submit a batch of checks of the eligibility status for multiple applicants.

### 6.3.2 Signature

SubmitBatchQueryResponseStructure
SubmitBatchQuery(SubmitBatchQueryRequestStructure requestInput)

### 6.3.3 Input Parameters

**SubmitBatchQueryRequestStructure**

This is a complex type.

| | |
|---|---|
| String<br>SystemId | The username assigned to the system accessing the web service. |
| String<br>Password | The password associated with the SystemId. |
| String<br>LocalAuthorityId | This parameter supplies a local identifier created by the Local Authority. As Batch Queries are not available to citizens, the data can equate to either a system identity (if the batch is submitted as part of an automated process) or user identity (if the batch is submitted by an LA Officer). The web service simply logs it as part of the audit record. If the web service is provided as part of a shared service and the service provider is submitting batch queries on behalf of a number of local authorities then it is recommended that this field contains the 3 digit LA identification code associated with the local authority whose data is being processed.<br>Alphanumeric, mandatory field – variable length, max 255 chars |
| String<br>RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |
| String<br>LABatchId | This field allows the LA to specify an identifier for the batch for use within the LA for tracking purposes. It is not validated by the ECS. It provides the equivalent functionality as the “Batch Filename” for the web browser file transfer interface.<br>Alphanumeric, optional field – variable length, max 255 chars |
| ArrayofBatchQuery<br>BatchQueries | Complex Type.<br>1 or more occurrences of complex type BatchQuery. |
| String<br>EligibilityCheckType | This parameter identifies the type of eligibility query and has values:<br>• “FSM” meaning the web service query is to check against Free School Meals eligibility criteria<br>• “EY” meaning that the query is to check against Early Learning criteria<br>• “EYPP” meaning that the query is to check against Early Years Pupil Premium criteria<br>• “30H” meaning that the query is to check against 30 Hours Free Childcare eligibility information. |

| | |
|---|---|
| string ServiceType | Mandatory. This parameter identifies whether the transaction originates from a shared service provider or not and has values:<br>• "SHARED" indicating a Shared Service<br>• "SINGLE" indicating a non-Shared Service |

**ArrayofBatchQuery <BatchQuery>**

| | |
|---|---|
| string RowID | This field is used for LA reference purposes. If it were a database index value, it could facilitate loading of results data into the calling application. It could be a NULL value and is not validated or used by the ECS.<br>Alphanumeric, optional field – variable length, max 36 chars |
| QueryData UserToQuery | Complex Type |

**QueryData <UserToQuery>**

| | |
|---|---|
| string Surname | As for Single Query structure |
| string DateOfBirth | |
| string NiNo | |
| string NASS | |
| ArrayOfSubscriber Subscribers | Optional. This structure is intended for the circumstance whereby a single ECS query could be for multiple children, each child attending a different school (i.e. multiple subscribers per query).<br>Complex Type.<br>1 or more occurrences of complex type Subscriber. |
| string EligibilityCode | As for Single Query structure |

Subscriber <Subscribers>

| | |
|---|---|
| string Id | The subscriber Id. This is the Id of the subscriber and has values that correspond to either the LA Code (3 digits) or the school URN (six digits) |
| string Type | The type of subscriber. This is the type of subscriber and has values of either:<br>• "LA" if the Id is the local authority code<br>• "SCHOOL" if the Id is the school URN |

### 6.3.4 Return Value

**SubmitBatchQueryResponseStructure**

| | |
|---|---|
| String LABatchId | The system will echo the supplied value. |
| string BatchID | The system will return the unique identifier for the submitted batch which must be used for subsequent retrieval of completed batch files. |

| | |
|---|---|
| int StatusCode | 0 Web service is successful. Batch job submitted.<br>-1 Internal system error. *Not currently used*<br>-2 The user is not authorised to perform eligibility checks (or SystemId and Password are invalid).<br>-3 Job submission failed. No valid data (e.g. empty file submitted or all rows have errors).<br>-4 Some rows have errors. Job submitted with only valid rows.<br>-11 Invalid format LocalAuthorityId (exceeds 255 characters)<br>-12 Invalid format LocalAuthorityBatchId (exceeds 255 characters)<br>-13 EligibilityCheckType value is invalid<br>-14 ServiceType code is invalid |
| int RecordCount | The number of rows contained in the submitted batch file |
| int ValidRecords | The number of valid rows contained in the submitted batch file to be processed |
| int InvalidRecords | The number of rows rejected as failing to meet validation requirements |
| ArrayofValidationResult QueryValidation | Complex Type.<br>1 or more occurrences of complex type ValidationResult**.** |

**ValidationResult <ArrayofValidationResult>**

| | |
|---|---|
| string RowID | The RowID supplied in the submitted QueryData (or truncated to 36 characters) |
| int ErrorCode | 0 Valid data *Not currently used*<br>-1 Internal system error *Not currently used*<br>-2 *Not currently used*<br>-3 Surname is invalid or missing where required<br>-4 DateOfBirth is invalid<br>-5 NINO is invalid<br>-6 NASS is invalid<br>-7 Both NINO and NASS supplied<br>-8 Neither NINO nor NASS supplied<br>-9 RowID is invalid format (exceeds 36 characters)<br>-14 ServiceType code is invalid<br>-15 Subscriber Type code is invalid<br>-16 Subscriber Id has invalid format<br>-17 NiNo not supplied where required<br>-18 EligibilityCode not supplied where required<br>-19 EligibilityCode is invalid<br>-20 Password reset required |

The ValidationResult structure will only contain information about queries that have failed the validation checks. If all the submitted data is in a valid format then the system will return an empty ValidationResult tag.

See earlier sections for the validation of RequestedServiceVersion and ArrayofSubscribers and how the password reset required by ErrorCode “-20” must be carried out.

## 6.4 FetchBatchStatus

### 6.4.1 Purpose

Use this method to check the status of a previously submitted batch file.

### 6.4.2 Signature

FetchBatchStatusResponseStructure
FetchBatchStatus(FetchBatchStatusRequestStructure requestInput)

### 6.4.3 Input Parameters

**FetchBatchStatusRequestStructure**

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. (NB: use dummy values for the Test Service) |
| string Password | The password associated with the SystemId. (NB: use dummy values for the Test Service) |
| string LocalAuthorityId | This parameter supplies a local identifier created by the Local Authority. It can equate to either a system or user identity. The web service simply logs it as part of the audit record. Alphanumeric, mandatory field – variable length, max 255 chars |
| String RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |
| string BatchID | The unique identifier generated by the system when the batch was submitted. The ID must be a valid batch ID and also be associated with the LA associated with the SystemID. If left blank the system will return details for all batch jobs for the LA associated with the System ID. |

### 6.4.4 Return Value

**FetchBatchStatusResponseStructure**

| | |
|---|---|
| int StatusCode | 0 Web service is successful – batch jobs found which match the request<br>-1 Internal system error. *Not currently used*<br>-2 The user is not authorised to perform eligibility checks (or Id and Password are invalid).<br>-3 BatchID is invalid (or no matches found if no BatchID parameter provided)<br>-11 Invalid format LocalAuthorityId (exceeds 255 characters) |
| ArrayofBatchStatusItem BatchStatuses | Complex Type.<br>1 or more occurrences of complex type BatchStatusItem |

**BatchStatusItem <BatchStatuses>**

| | |
|---|---|
| string BatchID | Will be the value of the BatchID or NULL if an error condition is returned |
| Int BatchStatus | 0 Complete<br>batch has finished processing<br>-1 Pending<br>batch has been submitted and is awaiting processing<br>-2 In Progress<br>batch is being processed<br>-3 Expired<br>batch has been automatically deleted<br>-4 Deleted<br>batch was deleted by user<br>-5 Error in processing<br>batch processing was not completed due to system error |
| string LocalAuthorityId | The Identifier associated with the batch job when it was submitted |
| string LABatchId | The BatchId supplied by the Local Authority when the Batch was submitted |
| Datetime SubmittedDateTime | Date and Time that the Batch was submitted |
| Datetime CompletedDateTime | Date and Time that the Batch completed processing<br>(Will be NULL if the Batch has not completed) |
| DateTime ExpiryDateTime | Date that the batch file will be automatically deleted by the system if not deleted by the user |
| int RowCount | The number of rows contained in the submitted batch file to be processed<br>(Should be the same as the number of valid records when the batch was submitted) |

| | |
|---|---|
| int TotalMatched | Number of rows in the batch that returned a "Found" response<br>(Will be NULL if the batch has not completed) |

The system checks for submitted batches every few minutes. Under normal circumstances a submitted batch will move from "Pending" to "In Progress" after less than five minutes and from "In Progress" to either "Complete" or "Error in Processing" a few minutes later. However, this is a guideline only. The time taken to process batches is a factor of: overall system utilisation, the number of batches in the queue to be processed, the number of rows in each batch.

Consequently, we suggest that developers do not poll the ECS using FetchBatchStatus at a frequency of less than 5 minutes. If a batch is "Pending" for more than 15 minutes then this indicates either an exceptional level of system usage or more likely there is a problem with batch processing (e.g. there is problem with the link to DWP).

## 6.5 FetchBatchResults

### 6.5.1 Purpose

Use this method to retrieve the results of a previously submitted batch file.

### 6.5.2 Signature

FetchBatchResultsResponseStructure
FetchBatchResults(FetchBatchResultsRequestStructure requestInput)

### 6.5.3 Input Parameters

**FetchBatchResultsRequestStructure**

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. (NB: use dummy values for the Test Service) |
| string Password | The password associated with the SystemId. (NB: use dummy values for the Test Service) |
| string LocalAuthorityId | This parameter supplies a local identifier created by the Local Authority. It can equate to either a system or user identity. The web service simply logs it as part of the audit record.<br>Alphanumeric, mandatory field – variable length, max 255 chars |
| String RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |
| string BatchID | The unique identifier generated by the system when the batch was submitted. The ID must be a valid batch ID and also be associated with the LA associated with the SystemID. It is a mandatory field and cannot be left blank. |

### 6.5.4 Return Value

**FetchBatchResultsResponseStructure**

| | |
|---|---|
| string BatchID | Will be the value of the Batch ID or NULL if an error condition is returned |
| int StatusCode | 0 Web service is successful – batch jobs found which match the request<br>-1 Internal system error.<br>-2 The user is not authorised to perform eligibility checks (or Id and Password are invalid).<br>-3 BatchID is invalid (or no matches found if no BatchID parameter provided)<br>-11 Invalid format LocalAuthorityId (exceeds 255 characters) |
| Int BatchStatus | 0 Complete<br>batch has finished processing<br>-1 Pending<br>batch has been submitted and is awaiting processing<br>-2 In Progress<br>batch is being processed<br>-3 Expired<br>batch has been automatically deleted<br>-4 Deleted<br>batch was deleted by user<br>-5 Error in processing<br>batch processing was not completed due to system error |
| string LocalAuthorityId | The Identifier associated with the batch job when it was submitted |
| string LABatchId | The LABatchId supplied by the Local Authority when the Batch was submitted |
| Datetime SubmittedDateTime | Date and Time that the Batch was submitted |
| Datetime CompletedDateTime | Date and Time that the Batch completed processing<br>(Will be NULL if the Batch has not completed) |
| DateTime ExpiryDateTime | Date that the batch file will be automatically deleted by the system if not deleted by the user |
| int RowCount | The number of rows contained in the submitted batch file to be processed<br>(Should be the same as the number of valid records when the batch was submitted) |
| ArrayofBatchResult BatchResults | Complex Type<br>1 or more occurrences of complex type BatchResult. |
| int TotalMatched | Number of rows in the batch that returned a “Found” response<br>(Will be NULL if the batch has not completed) |

**ArrayofBatchResult <BatchResult>**

| | |
|---|---|
| string RowID | The Row ID supplied in the submitted QueryData |
| QueryData QueryItem | Complex Type |
| int Eligibility | 1 Found and eligible<br>0 Not Found |
| date ValidityStartDate | The system will return the start date of the current validity period for an Eligibility Code. Supplied for 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| date ValidityEndDate | The system will return the end date of the current validity period for an Eligibility Code. Supplied for 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| date GracePeriodEndDate | The system will return the end date of the current grace period for an Eligibility Code.<br>Supplied for 30 Hours checks only (will be NULL for FSM, EY, EYPP checks). |
| string Qualifier | The system may return a Qualifier value for FSM, EY, EYPP, 30H checks.<br>Where EligibilityStatus = 0, the system will return a Qualifier which has possible values as follows:<br>• <null> where the eligibility status is Final (if this is a 30H check and there are also no dates supplied back then this means that one or more of the input data items is incorrect).<br>• "No Trace – Check data" where it has not been possible to match the claimant details supplied to a living person on OGD systems (FSM, EY, EYPP checks only)<br>• "Pending – Keep checking" where it is not yet possible to return a Final response (FSM, EY, EYPP checks only)<br>• "Unknown – Raise manual query" where an exception has occurred (FSM, EY, EYPP checks only)<br>• "Found pre-thresholds" means that the result can be converted to a Found if the child met the age criterion for check type on or before 31/12/2017. Otherwise the result is Not Found and is Final. Only used for EY and EYPP.[4] |

[4] The "Found pre-thresholds" and "Manual process – Found pre-thresholds" Qualifier values are also Final results and provide the eligibility check result against the "old" eligibility criteria before the introduction of earnings thresholds for UC claimants. These Qualifiers are only used for EY and EYPP checks and are provided to allow claimants with a child who met the age criterion for the check type on or before 31/12/2017 to get the entitlement because they are eligible under the old eligibility criteria even if they do not come forward until later in 2018 when they are Not Found under the new eligibility criteria. For EY checks for 2 year old funding, this means that children born on or before 31/12/2015 can have the Not Found result

| | |
|---|---|
| | • "Manual process – Found pre-thresholds" means that if the child met the age criterion for the check type on or before 31/12/2017 then the result can be converted to Found. Otherwise a manual process must be used to determine eligibility. Only used for EY and EYPP.<br>• "Manual process" where a manual process must be used to determine eligibility (FSM, EY, EYPP checks only)<br>• "Discretionary Start" where a 30 Hours code qualifies for discretion according to DfE guidelines (30H checks only)<br>Where EligibilityStatus = 1, the system will return a Qualifier which has possible values as follows:<br>• <null> where the eligibility status is Final<br>• "Discretionary Start" where a 30 Hours code qualifies for discretion according to DfE guidelines (30H checks only) |
| string ParentNiNo | The parent's national insurance number (NiNo). Only supplied for 30H checks. |
| string ParentForename | First or given name of the parent. Only supplied for 30H checks. |
| string ParentSurname | Surname or family name of the parent. Only supplied for 30H checks. |
| string ParentDoB | The parent's date of birth. Only supplied for 30H checks. |
| string PartnerNiNo | The partner of the parent's national insurance number (NiNo). Only supplied for 30H checks. |
| string PartnerForename | The given name of the partner of the parent. Only supplied for 30H checks. |
| string ParentSurname | The family name of the partner of the parent. Only supplied for 30H checks. |
| string PartnerDoB | The date of birth of the partner of the parent. Only supplied for 30H checks. |
| string ChildForename | The given name of the child. Only supplied for 30H checks. |
| string ChildSurname | The family name of the child. Only supplied for 30H checks. |
| string ChildDoB | The date of birth of the child. Only supplied for 30H checks. |
| string ChildPostcode | The postcode of the child. Only supplied for 30H checks. |

converted to Found. For EYPP checks children born on or before 31/12/2014 can have the Not Found result converted to Found.

**QueryData <QueryItem>**

| | |
|---|---|
| string Surname | As for Single Query UserToQuery structure |
| string DateOfBirth | |
| string NiNo | |
| string NASS | |
| string EligibilityCode | |

If the system returns an Error Code (other than 0) then no further information will be included in the response. Only if the Batch Status Code is 0 (Batch is complete) will Batch Result Items be returned.

### 6.6 SubmitDeleteBatch

#### 6.6.1 Purpose

Use this method to delete a completed batch or cancel a pending batch.

#### 6.6.2 Signature

SubmitDeleteBatchResponseStructure
SubmitDeleteBatch(SubmitDeleteBatchRequestStructure requestInput);

#### 6.6.3 Input Parameters

**SubmitDeleteBatchRequestStructure**

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. (NB: use dummy values for the Test Service) |
| string Password | The password associated with the SystemId. (NB: use dummy values for the Test Service) |
| string LocalAuthorityId | This parameter supplies a local identifier created by the Local Authority. It can equate to either a system or user identity. The web service simply logs it as part of the audit record. Alphanumeric, mandatory field – variable length, max 255 chars |
| String RequestedServiceVersion | The eight digit identifier for the web service endpoint (e.g. 20170701) |
| string BatchID | The unique identifier generated by the system when the batch was submitted. The ID must be a valid batch ID and also be associated with the LA associated with the SystemID. It is a mandatory field and cannot be left blank. |

#### 6.6.4 Return Value

**DeleteBatchResponseStructure**

| | |
|---|---|
| String LABatchId | The BatchId supplied by the Local Authority when the Batch was submitted |
| int StatusCode | 1 Web service is successful – Pending batch cancelled<br>0 Web service is successful – Completed |

| | |
|---|---|
| | batch deleted<br>-1 Internal system error. *Not currently used*<br>-2 The user is not authorised to perform eligibility checks (or Id and Password are invalid).<br>-3 BatchID is invalid or does not match a BatchID submitted by the local authority<br>-4 Unable to delete. Batch processing in progress.<br>-11 Invalid format LocalAuthorityId (exceeds 255 characters) |

## 6.7 RequestPasswordReset

### 6.7.1 Purpose

Use this method to request a password reset. This can be done at any time, but if password reset via this method is set to be *mandatory*, it must be done following a password reset by the ECS System Administrator. Once a password reset has been requested, the returned *password* value must be used for new queries.

Please note that the password reset via this method is only *mandatory* where the LA system account is set to receive 30 hours personal data. Otherwise it is optional. Contact the ECS System Administrator to change the 30 hours personal data setting.

### 6.7.2 Signature

RequestPasswordResetResponseStructure
RequestPasswordReset (RequestPasswordResetRequestStructure requestInput);

### 6.7.3 Input Parameters

**RequestPasswordResetStructure**

| | |
|---|---|
| string SystemId | The username assigned to the system accessing the web service. |
| string Password | The password associated with the SystemId. |

### 6.7.4 Return Value

**RequestPasswordResetResponseStructure**

| | |
|---|---|
| int ErrorCode | 0 Web service is successful. Password has been reset.<br>-2 SystemID and password are invalid |
| String Password | The new password. |

## 6.8 Fault Codes

In the event that the service experiences an unexpected error (e.g. invalid SOAP message) then a standard SOAP fault will be returned. The faults that

may be raised are:

| faultcode | Faultstring |
|---|---|
| Client | The message was incorrectly formed or contained incorrect information |
| Server | There was a problem with the server so the message could not proceed |

At present ErrorCode “-1” is not used by the system as internal system errors cannot be differentiated from a SOAP Server error. The code remains available within the system for future compatibility should it become possible for the system to detect and respond to an internal error.

## 7 System Constraints

The web services interface is constrained to a 16bit limit (65535) on the number of elements that can be de-serialised. In practice this means that there is a recommended limit of 5,000 rows in a web services batch file. If LAs need to submit greater than that number, then the batch should be broken into a number of separate batch queries with each batch not exceeding 5,000 rows.

System developers should design their applications to pass web service queries to the ECS in a sequential, serial manner rather than as multi-thread parallel queries. This is to avoid potential record locking problems associated with simultaneous transactions originating from the same source.

The main constraint on system response time is latency across the GSI/PSN infrastructure when making calls to the DWP CIS database. The ECS will start to exhibit slow response and possible system error conditions if transaction rates in excess of 10 per second are sustained for more than 30 seconds aggregated across all sources.

## 8 SoapUI Project

SoapUI is an open source, cross-platform, Java-based web service test tool. It may be downloaded from http://www.soapui.org/

To facilitate testing and to give a standard method of testing connectivity and confirming web service availability a SoapUI project file (XML) will be provided. This project includes a test case with assertions for each of the main request / response scenarios documented in Appendix A. Using this it is possible to check whether the Sandpit Environment web service is available and responsive from a given client without using custom code. The Sandpit Environment is secured therefore a valid Sandpit SystemId and Password must be included in all requests.

If you access the internet via a proxy server then you need to configure this within SoapUI (File; Preferences;).

The project also includes a mock service. When run this listens on

http://localhost:8088/mockMain and cycles through the following responses:

- Response 1 – Passported benefit check – found (eligible)
- Response 2 – Passported benefit check – not found
- Response 3 – 30 Hours Free Childcare check – found, with data
- Response 4 – 30 Hours Free Childcare check – not found, with data
- Response 5 – 30 Hours Free Childcare check – not found, no data

It is possible to script a response based on the incoming request but this is outside the scope of this document.

SoapUI provides the ability to generate proxy code in various languages. Under Windows this is available from the right click context menu of the FsmoDummyService Main interface.

# APPENDICES

## Appendix A: Test Data

The **Sandpit Environment** contains extensive test data and details should be requested from the ECS Service Desk.

The unsecured Prototype Environment which was originally created to give early access to the web service interface for system integration has been decommissioned. The **Sandpit Environment** should be used instead.

## Appendix B: Sample SOAP Request fragments

Examples of how to call the ECS web service interface can be found in the WSDL and XSD documents and the dummy SOAPUI project that are included in the Developer Toolkit.

The correct calling sequence for using the web service interface is critical. Failure to structure the call correctly will result in a Client fault code with the message “The message was incorrectly formed or contained incorrect information”.

The following soap Request fragments are provided for guidance.

### GetFSMSystemStatus

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
        <soapenv:Header/>
        <soapenv:Body>
           <ns:GetFSMSystemStatus>
           <!--Optional:-->
                <ns:details>
                     <ns:SystemId>systemid</ns:SystemId>
                     <ns:Password>password</ns:Password><ns:RequestedServi
                     ceVersion>endpointversion</ns:RequestedServiceVersion>
                </ns:details>
           </ns:GetFSMSystemStatus>
        </soapenv:Body>
</soapenv:Envelope>
```

### SubmitSingleQuery

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
  <soapenv:Header/>
  <soapenv:Body>
     <ns:SubmitSingleQuery>
       <!--Optional:-->
       <ns:requestInput>
          <ns:SystemId>systemid<ns:SystemId>
          <ns:Password>password</ns:Password>
          <ns:LocalAuthorityId>laid</ns:LocalAuthorityId>
<ns:RequestedServiceVersion>endpointversion</ns:RequestedServiceVersio
n>
          <ns:UserToQuery>
            <!--Optional:-->
            <ns:Surname>surname</ns:Surname>
            <ns:DateOfBirth>ccyy-mm-dd</ns:DateOfBirth>
            <!--Optional:-->
```

```
            <ns:NiNo>nino</ns:NiNo>
            <!--Optional:-->
            <ns:NASS>nass</ns:NASS>
            <!--Optional:-->
            <ns:Subscribers>
              <!--Zero or more repetitions:-->
              <ns:Subscriber>
                <ns:Id>subscriberid</ns:Id>
                <ns:Type>subscribertype</ns:Type>
              </ns:Subscriber>
            </ns:Subscribers>
            <!--Optional:-->
            <ns:EligibilityCode>eligibilitycode</ns:EligibilityCode>
          </ns:UserToQuery>
          <ns:SourceType>sourcetype</ns:SourceType>
<ns:EligibilityCheckType>eligibilitychecktype</ns:EligibilityCheckType>
          <ns:ServiceType>servicetype</ns:ServiceType>
        </ns:requestInput>
      </ns:SubmitSingleQuery>
  </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:SubmitSingleQueryResponse>
      <!--Optional:-->
      <ns:SubmitSingleQueryResult>
        <ns:EligibilityStatus>eligibilitystatus</ns:EligibilityStatus>
        <ns:ErrorCode>errorcode</ns:ErrorCode>
        <!--Optional:-->
        <ns:ValidityStartDate>validitystartdate</ns:ValidityStartDate>
        <!--Optional:-->
        <ns:ValidityEndDate>validityenddate</ns:ValidityEndDate>
        <!--Optional:-->
<ns:GracePeriodEndDate>graceperiodenddate</ns:GracePeriodEndDate>
        <!--Optional:-->
        <ns:Qualifier>qualifier</ns:Qualifier>
        <!--Optional:-->
        <ns:ParentNino>parentnino</ns:ParentNino>
        <!--Optional:-->
        <ns:ParentForename>parentforename</ns:ParentForename>
        <!--Optional:-->
        <ns:ParentSurname>parentsurname</ns:ParentSurname>
        <!--Optional:-->
        <ns:ParentDob>parentdob</ns:ParentDob>
        <!--Optional:-->
        <ns:PartnerNino>partnernino</ns:PartnerNino>
        <!--Optional:-->
```

```
          <ns:PartnerForename>partnerforename</ns:PartnerForename>
          <!--Optional:-->
          <ns:PartnerSurname>partnersurname</ns:PartnerSurname>
          <!--Optional:-->
          <ns:PartnerDob>partnerdob</ns:PartnerDob>
          <!--Optional:-->
          <ns:ChildForename>childforename</ns:ChildForename>
          <!--Optional:-->
          <ns:ChildSurname>childsurname</ns:ChildSurname>
          <!--Optional:-->
          <ns:ChildDob><childdob/ns:ChildDob>
          <!--Optional:-->
          <ns:ChildPostCode>childpostcode</ns:ChildPostCode>
        </ns:SubmitSingleQueryResult>
      </ns:SubmitSingleQueryResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

**SubmitBatchQuery**

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/"
xmlns:ns1="http://www.dcsf.gov.uk/20090810/">
   <soapenv:Header/>
   <soapenv:Body>
      <ns:SubmitBatchQuery>
         <!--Optional:-->
         <ns:requestInput>
            <ns1:SystemId>systemid</ns1:SystemId>
            <ns1:Password>password</ns1:Password>
            <ns1:LocalAuthorityId>laid</ns1:LocalAuthorityId>
<ns1:RequestedServiceVersion>endpointversion</ns1:RequestedServiceVer
sion>
            <!--Optional:-->
            <ns1:LABatchID>laid</ns1:LABatchID>
            <ns1:BatchQueries>
               <!--Zero or more repetitions:-->
               <ns1:BatchQuery>
                  <!--Optional:-->
                  <ns1:RowID>rowid</ns1:RowID>
                  <!--Optional:-->
                  <ns1:UserToQuery>
                     <!--Optional:-->
                     <ns:Surname>surname</ns:Surname>
                     <ns:DateOfBirth>dateofbirth</ns:DateOfBirth>
                     <!--Optional:-->
                     <ns:NiNo>nino</ns:NiNo>
                     <!--Optional:-->
                     <ns:NASS>nass</ns:NASS>
                     <!--Optional:-->
```

```
                <ns:Subscribers>
                  <!--Zero or more repetitions:-->
                  <ns:Subscriber>
                    <ns:Id>subscriberid</ns:Id>
                    <ns:Type>subscribertype</ns:Type>
                  </ns:Subscriber>
                </ns:Subscribers>
                <!--Optional:-->
                <ns:EligibilityCode>eligibilitycode</ns:EligibilityCode>
              </ns1:UserToQuery>
            </ns1:BatchQuery>
          </ns1:BatchQueries>
<ns1:EligibilityCheckType>eligibilitychecktype</ns1:EligibilityCheckType>
          <ns1:ServiceType>servicetype</ns1:ServiceType>
        </ns:requestInput>
      </ns:SubmitBatchQuery>
    </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/"
xmlns:ns1="http://www.dcsf.gov.uk/20090810/">
   <soapenv:Header/>
   <soapenv:Body>
      <ns:SubmitBatchQueryResponse>
         <!--Optional:-->
         <ns:SubmitBatchQueryResult>
            <!--Optional:-->
            <ns1:LABatchID>laid</ns1:LABatchID>
            <ns1:BatchID>batchid</ns1:BatchID>
            <ns1:StatusCode>statuscode</ns1:StatusCode>
            <ns1:RecordCount>recordcount</ns1:RecordCount>
            <ns1:ValidRecords>validrecords</ns1:ValidRecords>
            <ns1:InvalidRecords>invalidrecords</ns1:InvalidRecords>
            <ns1:QueryValidation>
               <!--Zero or more repetitions:-->
               <ns1:ValidationResult>
                  <!--Optional:-->
                  <ns1:RowID>rowid</ns1:RowID>
                  <ns1:ErrorCode>errorcode</ns1:ErrorCode>
               </ns1:ValidationResult>
            </ns1:QueryValidation>
         </ns:SubmitBatchQueryResult>
      </ns:SubmitBatchQueryResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

**FetchBatchStatus**

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
        <soapenv:Header/>
        <soapenv:Body>
              <ns:FetchBatchStatus>
               <!--Optional:-->
               <ns:requestInput>
                     <ns:SystemId>systemid</ns:SystemId>
                     <ns:Password>password</ns:Password>
                     <ns:LocalAuthorityId>laid</ns:LocalAuthorityId>
<ns:RequestedServiceVersion>endpointversion</ns:RequestedServiceVersion>
                     <ns:BatchID>batchid</ns:BatchID>
               </ns:requestInput>
              </ns:FetchBatchStatus>
        </soapenv:Body>
</soapenv:Envelope>
```

**FetchBatchResults**

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
        <soapenv:Header/>
        <soapenv:Body>
              <ns:FetchBatchResults>
               <ns:requestInput>
                     <ns:SystemId>systemid</ns:SystemId>
                     <ns:Password>password</ns:Password>
                     <ns:LocalAuthorityId>laid</ns:LocalAuthorityId>
<ns:RequestedServiceVersion>endpointversion</ns:RequestedServiceVersion>
                     <ns:BatchID>batchid</ns:BatchID>
               </ns:requestInput>
              </ns:FetchBatchResults>
        </soapenv:Body>
</soapenv:Envelope>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/"
xmlns:ns1="http://www.dcsf.gov.uk/20090810/">
   <soapenv:Header/>
   <soapenv:Body>
      <ns:FetchBatchResultsResponse>
         <!--Optional:-->
         <ns:FetchBatchResultsResult>
            <ns1:BatchID>batchid</ns1:BatchID>
            <ns1:StatusCode>statuscode</ns1:StatusCode>
            <ns1:BatchStatus>batchstatus</ns1:BatchStatus>
```

```
        <ns1:LocalAuthorityId>laid</ns1:LocalAuthorityId>
        <!--Optional:-->
        <ns1:LABatchID>labatchid</ns1:LABatchID>
<ns1:SubmittedDateTime>submitteddatetime</ns1:SubmittedDateTime>
<ns1:CompletedDateTime>completeddatetime</ns1:CompletedDateTime>
        <ns1:ExpiryDateTime>expirydatetime</ns1:ExpiryDateTime>
        <ns1:RowCount>rowcount</ns1:RowCount>
        <!--Optional:-->
        <ns1:BatchResults>
          <!--Zero or more repetitions:-->
          <ns1:BatchResult>
            <ns1:RowID>rowid</ns1:RowID>
            <ns1:QueryItem>
              <!--Optional:-->
              <ns:Surname>surname</ns:Surname>
              <ns:DateOfBirth>dateofbirth</ns:DateOfBirth>
              <!--Optional:-->
              <ns:NiNo>nino</ns:NiNo>
              <!--Optional:-->
              <ns:NASS>nass</ns:NASS>
              <!--Optional:-->
              <ns:Subscribers>
                <!--Zero or more repetitions:-->
                <ns:Subscriber>
                  <ns:Id>subscriberid</ns:Id>
                  <ns:Type>subscribertype</ns:Type>
                </ns:Subscriber>
              </ns:Subscribers>
              <!--Optional:-->
              <ns:EligibilityCode>eligibilitycode</ns:EligibilityCode>
            </ns1:QueryItem>
            <ns1:Eligibility>eligibility</ns1:Eligibility>
            <!--Optional:-->
            <ns1:ValidityStartDate>validitystartdate</ns1:ValidityStartDate>
            <!--Optional:-->
            <ns1:ValidityEndDate>validityenddate</ns1:ValidityEndDate>
            <!--Optional:-->
<ns1:GracePeriodEndDate>graceperiodenddate</ns1:GracePeriodEndDate>
            <!--Optional:-->
            <ns1:Qualifier>qualifier</ns1:Qualifier>
            <!--Optional:-->
            <ns1:ParentNino>parentnino</ns1:ParentNino>
            <!--Optional:-->
            <ns1:ParentForename>parentforename</ns1:ParentForename>
            <!--Optional:-->
            <ns1:ParentSurname>parentsurname</ns1:ParentSurname>
            <!--Optional:-->
            <ns1:ParentDob>parentdob</ns1:ParentDob>
            <!--Optional:-->
            <ns1:PartnerNino>partnernino</ns1:PartnerNino>
            <!--Optional:-->
```

```
            <ns1:PartnerForename>partnerforename</ns1:PartnerForename>
            <!--Optional:-->
            <ns1:PartnerSurname>partnersurname</ns1:PartnerSurname>
            <!--Optional:-->
            <ns1:PartnerDob>partnerdob</ns1:PartnerDob>
            <!--Optional:-->
            <ns1:ChildForename>childforename</ns1:ChildForename>
            <!--Optional:-->
            <ns1:ChildSurname>childsurname</ns1:ChildSurname>
            <!--Optional:-->
            <ns1:ChildDob>childdob</ns1:ChildDob>
            <!--Optional:-->
            <ns1:ChildPostCode>childpostcode</ns1:ChildPostCode>
          </ns1:BatchResult>
        </ns1:BatchResults>
        <ns1:TotalMatched>totalmatched</ns1:TotalMatched>
      </ns:FetchBatchResultsResult>
    </ns:FetchBatchResultsResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

**DeleteBatch**

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
        <soapenv:Header/>
        <soapenv:Body>
              <ns:SubmitDeleteBatch>
               <ns:requestInput>
                    <ns:SystemId>systemid</ns:SystemId>
                    <ns:Password>password</ns:Password>
                    <ns:LocalAuthorityId>laid</ns:LocalAuthorityId>
<ns:RequestedServiceVersion>endpointversion</ns:RequestedServiceVersion>
                    <ns:BatchID>batchid</ns:BatchID>
               </ns:requestInput>
              </ns:SubmitDeleteBatch>
        </soapenv:Body>
</soapenv:Envelope>

soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
        <soapenv:Header/>
        <soapenv:Body>
              <ns:SubmitDeleteBatchResponse>
               <!--Optional:-->
               <ns:SubmitDeleteBatchResult>
                    <!--Optional:-->
                    <ns:LABatchID>labatchid</ns:LABatchID>
                    <ns:StatusCode>statuscode</ns:StatusCode>
```

```
            </ns:SubmitDeleteBatchResult>
          </ns:SubmitDeleteBatchResponse>
      </soapenv:Body>
</soapenv:Envelope>
```

**RequestPasswordReset**

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:RequestPasswordReset>
      <!--Optional:-->
      <ns:requestInput>
        <ns:SystemId>systemid</ns:SystemId>
        <ns:Password>currentpassword</ns:Password>
      </ns:requestInput>
    </ns:RequestPasswordReset>
  </soapenv:Body>
</soapenv:Envelope>
```

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.dcsf.gov.uk/20090308/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:RequestPasswordResetResponse>
      <!--Optional:-->
      <ns:RequestPasswordResetResult>
        <ns:ErrorCode>errorcode</ns:ErrorCode>
        <ns:NewPassword>newpassword</ns:NewPassword>
      </ns:RequestPasswordResetResult>
    </ns:RequestPasswordResetResponse>
  </soapenv:Body>
</soapenv:Envelope>
```