Technical Specification

Student Information Service

Change of Circumstance File Upload

VERSION:	6.0
LAST UPDATED:	21/06/2011

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1. Release History

Release Date	Version	Status	Comment
02/12/2009	1.0	Live	Initial version of the CoC Bulk Upload. Includes ability to upload an XML file containing Withdrawal and Fee Change CoCs
22/12/2010	2.0	Live	Update to schema to allow all CoC categories to be imported. **The updates made in V2.0 of the schema mean that V1.0 will no longer be supported once the update is implemented into the Live HE Portal. For details on the changes which need to be implemented for all V1.0 users please refer to Appendix D**
06/04/2100	4.1	Live	Updated schemas to include SlcCourseCode in FullCourseIdentifier, to change the format of the UcasCourseCode and to remove the version number from the schema name

2. Terminology

Acronym/Term	Definition
SLC	Student Loans Company
HEI	Higher Education Institution, a body offering tertiary educational services
CoC	Change of Circumstance
SAAS	Student Awards Agency for Scotland

3. Document Overview

3.1 Introduction

Under the previous Change of Circumstance process HEIs completed a "Notification of Student's Change of Circumstances" form and sent this to the student's respective Award Authority by either email or post. The form that the HEI completed was split into six sections which covered each category of Change of Circumstance. The categories are:

- Student who is withdrawing;
- Student who is suspending;
- Student who is resuming a course they were originally attending;
- Student who is repeating a period of study;

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- Student who is transferring to a new course or HEI;
- Updated information regarding course, year, Tuition Fee amount or Tuition Fee liability.

On receipt of the change form from the HEI, the Award Authority would re-assess and update the student's information, send the student a notification and adjust payments accordingly if the changes to the students details were approved.

The new process will utilise the HE Portal, allowing Change of Circumstance notifications to be created and submitted online. Maintenance payments to the students will be stopped for Withdrawal CoCs as soon as the CoC is submitted.

3.2 Purpose of document

This document provides information on the Change of Circumstances (CoC) File Import which will allow HEIs to submit CoCs for all of the CoC categories detailed above.

It contains details of the structure and content of the import file as well as details of validations carried out on the CoCs contained within it.

This document will be updated when any changes are made to the import file format. These changes may involve a new version of the CoC File Import Schema being released (e.g. if new functionality is introduced). If no changes are required to the file format (as a result of defect resolution or the introduction of new validations etc), then only this document will be updated and released.

3.3 Intended Audience

This document is intended to be read by any system implementer who is creating a CoC file which will be submitted to SLC through the Change of Circumstances online system.

It is assumed that the reader has a basic knowledge of XML.

3.4 Scope

The scope of this document is limited to defining the format of the XML CoC Import File and the validations which are carried out on it.

The various reference documents (e.g. schemas etc) required to implement a specific version of the import file will be combined into a Bundle.

As each schema has its own version number, this will ensure that the correct combination of versions is being used.

The table below details the versions of each reference document required in order to implement each Bundle version:

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File	Document Version			Description
	File Import Bundle V1.0	File Import Bundle V2.0	File Import Bundle V3.0	
sis.xsd	V1.0	V2.0	V3.0	This file details the format of the file
hei-types.xsd	V1.0	V2.0	V3.0	This file details the format and values for each element in the file

These documents are available for download from the HE Portal:

http://www.heinfo.slc.co.uk/hei-services/change-of-circumstances.aspx

4. Interface Definition

The file produced by the HEI will be imported into the SLC CoC system through the portal screens.

Users with the HEI CoC Administrator role will be able to navigate to the **"Import CoC"** screen by:

1. Logging into the HE Portal
2. Selecting the Student Information Service menu option
3. Selecting the Change of Circumstance menu option
4. Selecting the **Import CoC** option from the menu navigation

This screen will allow the user to either enter the filepath of the file they wish to import or use the **Browse** button to navigate through their internal file directories to select the required file.

The user will be asked to select a contact for the CoCs contained within the file (in case the relevant Award Authority requires any further information).

The file can then be submitted by selecting the "Submit" button.

An example of the Import CoC Portal screen is shown below:

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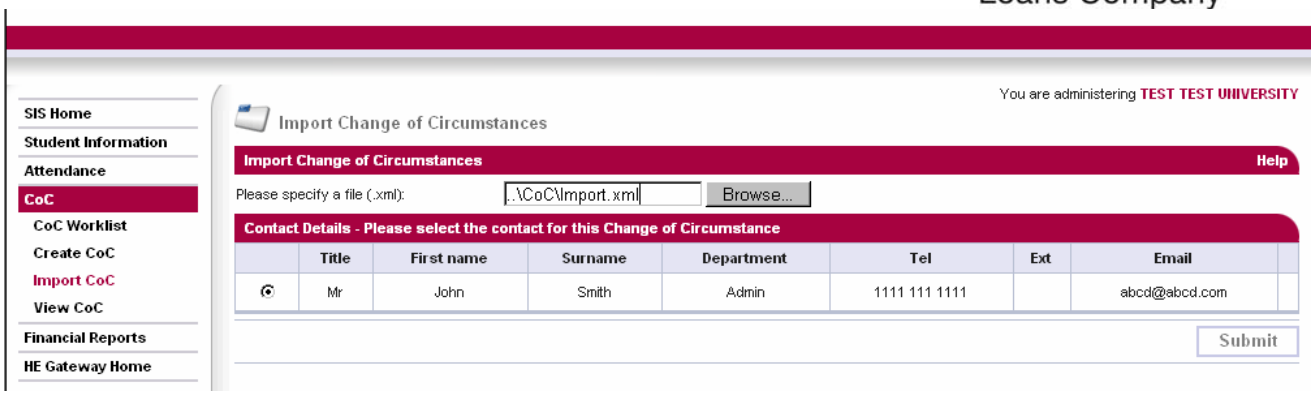

(Please note that this is a prototype of the screen and is not a final representation of the branding or positioning of the links on the page)

4.1 Data Transmission

The format of the import file will be standard and is detailed in SLC's bespoke XML schema (refer to sis.xsd).

5. Versioning

There are two types of changes that can be made to the CoC File Import which would involve a new File Import Bundle version being created by SLC:

- Backwards compatible changes - These are changes made to the schema that will not break previous versions, for example adding optional fields.
- Non-backwards compatible changes – These are changes made to the schema that require changes to previous versions, for example removing a mandatory field.

As far as possible, changes which are not backwards compatible (and which would conflict with any previous version of the Schema) will be avoided to ensure that submissions can still be made by HEIs using the previous Bundle but this may be unavoidable. Where non backwards compatible changes are required, we give all users as much notice of the changes being made as is possible.

Assuming that the most changes made are backwards compatible from version 0.2 onwards, SLC will maintain multiple concurrent bundle versions. This means that SLC will be able to receive and process files from HEIs using either the latest version or previous versions.

For example, if a new Bundle Version is implemented (e.g. V2.0), SLC will be able to interact with HEIs using both V1.0 (the previous version) as well as HEIs using V2.0 (the new version).

It is proposed that SLC will support three bundle versions:

- The latest bundle version
- The previous two bundle versions

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When a new version is released, the oldest version of the three will be replaced by the new version.

A major release (i.e. a release which introduces significant changes to the existing functionality or new functionality) will result in the version of the bundle being increased by 1.0.

Any unscheduled releases (i.e. for defect resolution where a change to the schema is required) will result in the version of the bundle being increased by 0.1.

Any new functionality introduced in a new Bundle Version will only be available to HEIs who update their file format to the new version.

6. CoC Import

6.1 CoC File Import Overview

The file submitted can be made up of one or many types of CoC categories for any valid academic year (refer to Appendix B for the definition of valid academic years).

6.2 CoC File Import in Detail

The following sections provide further details on each type of CoC category.

Refer to Appendix A for the fields contained within each element.

6.2.1 Common CoC Details

This information is common to all CoCs submitted. It contains the following elements and must be supplied for all CoCs:

- General CoC information
- Student information
- Course information
- Course year information

The details of a CoC record contained within the import file are independent of any other CoCs in the same file – i.e. if more than one withdrawal CoC is included in a file, the students do not all need to be withdrawing from the same course, course year or relate to the same academic year.

6.2.2 Withdrawals

Withdrawal CoCs are raised when a student has withdrawn from a course. Details such as the reason for the withdrawal, the date when the student left the course and any changes to the tuition fee amounts need to be provided.

When submitted, a withdrawal CoC will automatically stop any further student support payments being made.

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6.2.3 Fee Changes

Fee Change CoCs are raised when either the tuition fee amount charged to the student or the tuition fee for which the student is liable needs to be changed.

6.2.4 Suspensions

A suspension CoC should be raised when a student has been suspended from the course which they are studying. Details such as the reason for the suspension, the date on which the student left the course and any changes to the tuition fee amounts need to be provided.

6.2.5 Resumptions

Resumption CoCs are raised when a student resumes their study after a period of suspension. Details such as any conditions which the student needs to meet before they can resume their course and the date on which they will resume their study need to be provided.

6.2.6 Repetitions

Repetition CoCs are raised when a student is required to repeat a period of study. This could relate to a single term or a year. Details such as the period of the course which is being repeated and the revised course end date need to be provided.

6.2.7 Transfers

There are two types of transfer which a student can make:

- A change of course or course year within the same HEI (where the original and destination HEIs are the same)
- A change of HEI (where the original and destination HEIs are different).

Both types of transfer can be submitted using this CoC category. Details such as the original and destination courses and HEIs need to be provided.

If the student is changing HEIs and the CoC is being submitted by the original HEI, the RoleInTransfer element should be entered as ‘Original’.

If the student is changing HEIs and the CoC is being submitted by the new HEI, the RoleInTransfer element should be entered as ‘Destination’.

If the student is changing course within the same HEI, the RoleInTransfer element should be entered as ‘Destination’.

If the student is changing course year within the same HEI, the RoleInTransfer element should be entered as ‘Destination’ and the CourseYear element (within the IndividualCoCStructure) should be entered with the new course year.

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7. Security & Validation

All transmissions between SLC and clients will be in HTTPS.

Authentication will follow the WS Security standards, specifically the UsernameToken profile used in the HEI Services Portal security system.

7.1 Authentication

As the users will be uploading the file from an HE Portal screen, the authentication carried out will be the validation of the username, password and secret answer which is currently implemented.

If the user fails authentication, the user will be asked to provide the correct login details. If three invalid attempts are made, the user account will be suspended.

Assistance on any issues relating to user accounts can be requested by contacting the HEI Services mailbox: HEI_Services@slc.co.uk

7.2 Business Authorisation

The authorisation which is carried out involves validation that the now authenticated user is submitting a file which holds their HEI code.

If the authorisation validation fails, a message will be displayed on the Import CoC Portal screen – "***The HEI Code contained in the submitted file is different to the HEI Code of the institution currently being administered. Please update the file and re-submit***".

7.3 Data Validation

When a file is submitted to SLC, validations will be run against the file to ensure that the data being submitted is valid. All validation will be carried out online.

There are two types of validation which will be carried out. These are detailed in the sections below.

7.3.1 Initial Format Validation

This validation process performs a number of checks on the submitted file. These are detailed in the sections below.

- **Duplicate File Validation -** This validation checks that the file submitted has not been submitted before. In order to do this, a checksum value is created from each file and the value is compared to previous submissions in the last 28 days to identify any duplicate checksum values.

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If the file is identified as a duplicate, a message will be displayed on the Import CoC Portal screen – "***This file has already been submitted. Please select another file***".

- **File Header Validation –** This validation will check that the StudentInformationService header record (root document element) included in the file is in the expected format with a valid namespace and attributes.

  If the StudentInformationService header record is not in the expected format, a message will be displayed on the Import CoC Portal screen – "***The StudentInformationService element does not meet the specified format. Please update the file and re-submit***".

- **Duplicate CoC Validation -** The Duplicate CoC Validation process checks that there are not any identicial CoCs contained in the file.

  If duplicate CoC details are found within the file, a message will be displayed on the Import CoC Portal screen – "***Duplicate records have been identified within the file. Please update the file and re-submit***".

7.3.2 Secondary File Format Validation

This validation will be carried out on the file and the results displayed on the Import Results Summary screen. It will involve the following:

- **Schema Validation** - Each XML message received will be validated against the schema to ensure that the format of the message is correct.

  If any errors are raised during the Schema validation, a generic message will be displayed on the Import CoC Portal screen – "***The selected file does not meet the specified format. Please update the file at line {0} and re-submit***" (where line {0} identifies the line number containing the error). If the error is not line specific, the error message will be "***The selected file does not meet the specified format. Please update the file and re-submit***".

  Details of the data type validations contained within the Schema are shown in Appendix B.

- **Forbidden Text Validation –** This validation will check that no forbidden text is present in the data values provided.

  If forbidden characters are found within the file, a message will be displayed on the Import CoC Portal screen – "***The selected file includes forbidden characters (< # \). Please update the file and re-submit***". The 'less than' character refers only to characters out with the XML tags. **Note:** for an ampersand to pass validation, amp; must be appended to it. For example, "Sport & Leisure".

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If a CoC fails either of these validations, the CoC details will not be saved into the system.

7.3.3 Business Rule Validation

Once the file submitted has successfully passed Format Validation, the business rule validations will be run.

Business rule validations are more detailed checks against the data for example; a business rule validation would check that the fee amount is greater than or equal to zero etc.

Details of the business rule validations for each element are shown in Appendix B.

If any errors are found during the business rule validation, the CoC details will be saved into the system and the status of the CoC will be set to “Failed”.

Note: Any CoCs included in the file submitted for SAAS students will be saved into the system and the status set to “Failed” and an error message shown on the individual CoC Summary page. This is because the system will not submit any CoCs for SAAS students to the Award Authorities.

7.4 Import Results Summary

If the Format Validation has passed, a summary of the results of the import will be shown on the CoC Import Results screen detailing the number of CoCs of each category which have passed validation (shown as “Successful” submissions) and the number which have failed Validation.

A total of the number of CoCs submitted will also be shown to enable HEIs to ensure that all CoCs submitted have been processed.

Note: The result details of the file submitted will not be stored and will only be available to view once the file has been submitted. There will be no way to retrieve this information once the user has navigated away from this page.

If any of the CoCs contained in the file have not passed business rule validation, the user can view the details of these submissions by selecting the **View** CoC screen from the menu navigation and selecting to filter the CoCs on either the Student Support Number or the status “Failed” for the academic year.

An example of the CoC Import Results screen is shown below:

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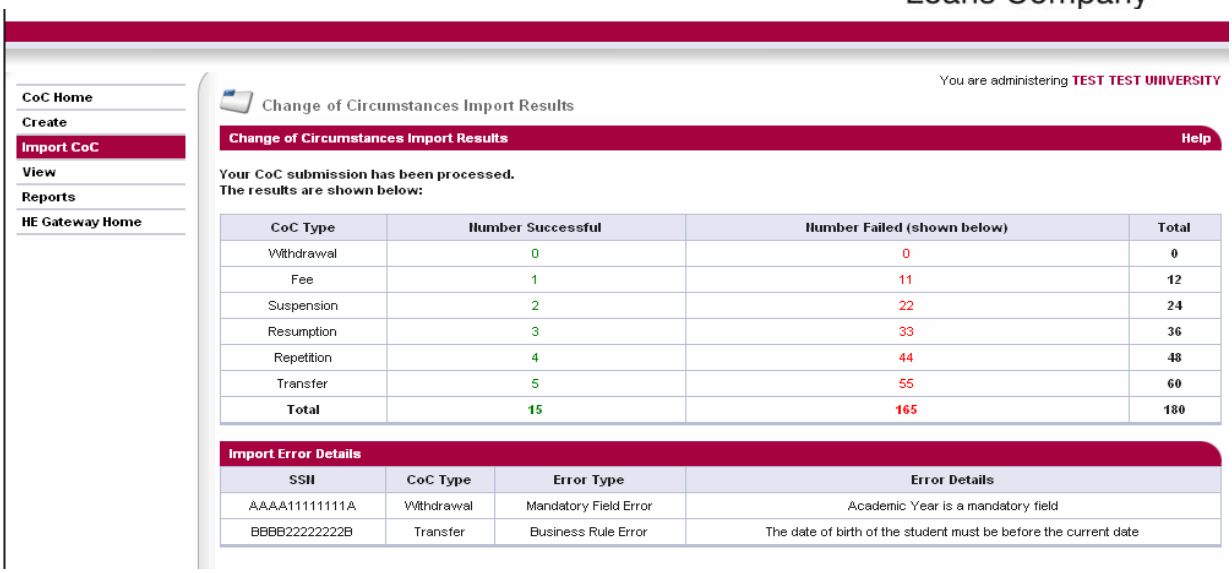

(Please note that this is a prototype of the screen and is not a final representation of the branding or positioning of the links on the page)

7.5 Submission of CoCs to Award Authorities

Once the CoC has passed all Format and Business Rule validations, the status of the CoC will be set to “Submitted” and the details of the CoC will be sent to the relevant Award Authority for processing.

No further changes to the CoC details can be made after this point by the user and there will be no further change to the status of the CoC within the HE Portal.

8. Data Volumes

A file which is submitted through the CoC Import screen must contain a minimum of 1 and a maximum of 500 CoCs.

There is however, no limit to the number of files which can be submitted by an HEI.

9. External Testing of the CoC File Upload

SLC will make a test environment available to HEIs on which they can test the interaction between their systems and SLCs systems.

The infrastructure and code deployed on this test system is a reproduction of SLCs live system. The data used in the system is dummy data which is representative of the live information held by SLC. No live data will be held on **or should be submitted to** this environment.

Assistance on any issues relating to testing can be requested by contacting the HEI Services mailbox: HEI_Services@slc.co.uk

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Appendix A – CoC File Upload Fields

General CoC Details

The following fields are included in the IndividualCoCStructure and should be provided for all CoCs submitted.

Element Name	Element Type	Element Description	Mandatory
AY	academicYearType	The academic year to which the CoC relates	Y
Student	StudentStructure	This structure provides the details of the Student to which the CoC relates (see Student Details section below)	Y
CourseDetails	CourseDetailsStructure	This structure provides the course details for the student to which the CoC relates (see Course Details section below)	Y
CourseYear	CourseYearStructure	This structure provides details on the year of the course of the student (see Course Year Details section below)	Y

Student Details

The following fields are included in the StudentStructure and should be provided for all CoCs submitted

Element Name	Element Type	Element Description	Mandatory
SSN	SSNType	The student support number which uniquely identifies the customer	Y
Forenames	ForenamesType	The forename of the customer	Y
Surname	SurnameType	The surname of the customer	Y
DateOfBirth	xs:date	Date of birth of the customer	N

Course Details

The following fields are included in the CourseDetailsStructure and should be provided for all CoCs submitted. If the CoC is a transfer then the original course details should be entered in this section.

Element Name	Element Type	Element Description	Mandatory
PartialCourseIdentifier	PartialCourseIdentifierStructure	This type allows the HEI to submit the Name of the course.	Y[1]
FullCourseIdentifier	FullCourseIdentifierStructure	This element type allows the HEI to	

[1] Although both elements are mandatory in isolation, only one of the two element types must be included in each submission.

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		submit the UcasCourseCode of the course	
MOA	MethodOfAttendanceType	The customers method of attendance	N

Full Course Identification

Element Name	Element Type	Element Description	Mandatory
UcasCourseCode	UcasCourseCodeType	The UCAS code of the course associated with the customer	Y[2]
SlcCourseCode	SlcCourseCodeType	The SLC code of the course associated with the customer	

[2] If the Full Course Identification is used, then although both elements are mandatory in isolation, only one of the two element types must be included in each submission

Partial Course Identification

Element Name	Element Type	Element Description	Mandatory
Name	CourseShortNameType	The short name of the course	Y

Course Year Details

As detailed in the General CoC Details section above, the IndividualCoCStructure must contain details of the year of the course which the customer is attending. The CourseYearStructure gives the choice of populating one of the following elements:

If the course year being attended is between 1 and 9 (inclusive) or is F (Foundation) then the ActualCourseYear element should be populated with the relevant number.

If the course year being attended is any other value than 0 to 9 or F, then the relevant value should be populated into the OtherCourseYear element.

Element Name	Element Type	Element Description	Mandatory
ActualCourseYear	CourseYearType	The year of the course which the customer is attending	Y
OtherCourseYear	OtherCourseYearType	The year of the course which the customer is attending. This element is used when the value is different than the usual values held in the ActualCourseYear	

Withdrawal CoCs

The following fields are included in the WithdrawCoCStructure.

Element Name	Element Type	Element Description	Mandatory
Reason	ReasonForWithdrawalType	The reason for withdrawal	Y

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DateStudentLeftCourse	xs:date	The date on which the customer left the course	Y
DateOfLastAttendance	xs:date	The last date on which the customer attended the course	Y
AcademicConsentGranted	xs:boolean	An indicator to show that the withdrawal reason has received approval by the HEI	N
TuitionFeeCharged	TuitionFeeType	The amount of tuition fees charged to the customer	Y
TuitionFeeLiability	TuitionFeeLiabilityType	The amount of tuition fees for which the customer is liable	Y
FurtherExplanation	FurtherExplanationType	The text contained in the attribute contains any further details which may help the Award Authority in reaching a decision on the CoC	N

Fee CoCs

The following fields are included in the FeeCoCStructure.

Element Name	Element Type	Element Description	Mandatory
RevisedTuitionFee	TuitionFeeType	The amount of tuition fees charged to the customer	Y
RevisedTuitionFeeLiability	TuitionFeeLiabilityType	The amount of tuition fees for which the customer is liable	Y
FurtherExplanation	FurtherExplanationType	The text contained in the attribute contains any further details which may help the Award Authority in reaching a decision on the CoC	N

Suspension CoCs

The following fields are included in the SuspensionCoCStructure.

Element Name	Element Type	Element Description	Mandatory
DateStudentLeftCourse	xs:date	The date on which the student left the course	Y
DateOfLastAttendance	xs:date	The date on which the student last attended the course	Y
AcademicConsentGranted	xs:boolean	Confirmation of whether the HEI consented to the suspension	Y
TuitionFeeCharged	TuitionFeeType	The tuition fee amount to be charged to the customer	Y
TuitionFeeLiability	TuitionFeeLiabilityType	The amount of the tuition fee for which the customer is liable	Y
FurtherExplanation	FurtherExplanationType	The text contained in the attribute	N

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		contains any further details which may help the Award Authority in reaching a decision on the CoC	
OriginalCourseDuration	CourseYearType	The original duration of the course (in years)	N
DateOfReturn	xs:date	The date on which the student is due to return to the course	N
SuspensionReason	SuspensionReasonType	The reason why the student has been suspended	Y

Resumption CoCs

The following fields are included in the ResumptionCoCStructure.

Element Name	Element Type	Element Description	Mandatory
TuitionFeeCharged	TuitionFeeType	The tuition fee amount to be charged to the customer	Y
TuitionFeeLiability	TuitionFeeLiabilityType	The amount of the tuition fee for which the customer is liable	Y
CourseEndDate	xs:date	The date on which the course will finish	Y
DateOfResumption	xs:date	The date on which the student will be resuming their study	Y
ResumptionPlacementDetails	ResumptionPlacementDetailsType	Details of any placements which are due to be undertaken during the course year	N
ResumptionConditions	ResumptionConditionsStructure	Details the conditions which need to be met by the student before they can resume their study. See below	Y

The user can either enter a defined resumption condition into the ResumptionConditionStructure by using the DefaultResumptionCondition element or enter details of other conditions using the OtherResumptionConditions.

Default Resumption Conditions

Element Name	Element Type	Element Description	Mandatory
DefaultResumptionCondition	ResumptionConditionType	Details any conditions which the student must meet before they can resume their study	Y
OtherResumptionCondition	OtherResumptionConditionType	Allows the HEI to enter details of the resumption conditions if they are not one of the default conditions above	

Repetition CoCs

The following fields are included in the RepetitionCoCStructure.

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Element Name	Element Type	Element Description	Mandatory
TuitionFeeCharged	TuitionFeeType	The tuition fee amount to be charged to the customer	Y
TuitionFeeLiability	TuitionFeeLiabilityType	The amount of the tuition fee for which the customer is liable	Y
FurtherExplanation	FurtherExplanationType	The text contained in the attribute contains any further details which may help the Award Authority in reaching a decision on the CoC	N
CoursePeriodToRepeat	CoursePeriodToRepeatType	The period of the course which the student is repeating	Y
RepeatFromDate	xs:date	The date from which the student is repeating	Y
RepeatToDate	xs:date	The date to which the student is repeating	Y
ReasonsForRepeating	ReasonsForRepeatingType	The reason why the student is repeating the period of study	N
CourseEndDate	xs:date	The date on which the course will finish	Y

Transfer CoCs

The following fields are included in the TransferCoCStructure.

Element Name	Element Type	Element Description	Mandatory
RoleInTransfer	TransferRoleType	Confirmation of whether the student is transferring into or out of the submitting HEI	Y
AcademicConsentGranted	xs:boolean	Confirmation of whether the HEI consented to the transfer	N
DateOfConsent	xs:date	The date on which the HEI consented to the transfer	N
DestinationCourse	DesinationCourseStructure	The details of the course which the student is now attending	Y

Destination Course

The following fields are included in the DestinationCourseStructure. The details of the course which the student is transferring to should be entered into this section

Element Name	Element Type	Element Description	Mandatory
HostedBy	HEIDetailsStructure	The details of the HEI where the new course is being held	Y
Course	CourseDetailsStructure	The details of the course which the student will be attending	Y
DateOfFirstAttendance	xs:date	The date on which the student	Y

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		first attended the course	
TuitionFeeCharged	TuitionFeeType	The tuition fee amount to be charged to the customer	Y
TuitionFeeLiability	TuitionFeeLiabilityType	The amount of the tuition fee for which the customer is liable	Y
FurtherExplanation	FurtherExplanationType	Details the conditions which need to be met by the student before they can resume their study	N
CourseEndDate	xs:date	The date on which the course will finish	N

HEI Details

The HEIDetailsStructure is used in order to either fully or partially identify the HEI which the student is transferring both to and from – either the **FullInstitutionIdentifer** or the **PartialInstitutionIdentifier** element should be used but one must be provided

Element Name	Element Type	Element Description	Mandatory
PartialInstitutionIdentifier	PartialInstitutionIdentifierStructure	Used to identify the HEI when only the name of the HEI is known	Y
FullInstitutionIdentifier	FullInstitutionIdentifierStructure	Used to identify the HEI when either the SLC HEI Code or the UCAS HEI Code is known	

Partial Institution Identifier

Element Name	Element Type	Element Description	Mandatory
HeiName	xs:string	The name of the HEI	Y

Full Institution Identifier

Element Name	Element Type	Element Description	Mandatory
UcasHeiCode	UCASInstitutionCodeType	The unique identifier of the HEI provided by UCAS	Y
SlcHeiCode	HEICodeType	The unique identifier of the HEI provided by SLC	

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Appendix B – Format & Business Rule Validation

General CoC Details

The validation will be run on all CoCs submitted through the File Import function.

Element Name	Format Validation	Business Rule Validation
AY	• Must be numeric (4 chars) - YYYY • Must be a non negative integer	• Must be between 2000 and current academic year + 1
Student	Refer to Student Details section below	Refer to Student Details section below
CourseDetails	Refer to Course Details section below	Refer to Course Details section below
CourseYear	Refer to Course Year Details section below	Refer to Course Year Details section below

Student Details

This validation will be run on all CoCs submitted through the File Import function.

Element Name	Format Validation	Business Rule Validation
SSN	• Must be alphanumeric (13 chars) • Can contain upper and lower case letters and/or numbers between 0 & 9 (inclusive) • Must be in the format XXXX99999999X (where X is a letter and 9 is a number)	• Must not start with the string "SAAS"
Surname	• Must be alphanumeric (between 1 & 50 chars)	N/A
Forenames	• Must be alphanumeric (between 1 & 50 chars)	N/A
DateOfBirth	• Must be in the format YYYY-MM-DD (10 chars)	• Date must be less than the current date

Course Details

This validation will be run on all CoCs submitted through the File Import function

Element Name	Format Validation	Business Rule Validation

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Element Name	Format Validation	Business Rule Validation
ParitalCourseIdentification	Refer to Partial Course Identification below	Refer to Partial and Full Course Identification below
FullCourseIdentification	Refer to Full Course Identification below	Refer to Partial and Full Course Identification below
MOA	• Must be alphanumeric (2 chars) • Must be one of the following values: • **FE – Full Time & Extended Att** • **FP – Full Time & Part-time Att** • **FS – Full Time plus Sandwich** • **FT – Full Time** • **PT – Part Time** • **OT - Other**	N/A

Partial Course Identification

This validation will be run on all elements populated in the Partial course identification elements

Element Name	Format Validation	Business Rule Validation
Name	• Must be alphanumeric (41 chars)	N/A

Full Course Identification

This validation will be run on all elements populated in the Full course identification elements

Element Name	Format Validation	Business Rule Validation
UcasCode	• Must be alphanumeric (4 chars)	N/A
SlcCourseCode	• Must be numeric (6 chars)	N/A
	•	

Course Year Details

This validation will be run on all CoCs submitted through the File Import function.

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Element Name	Format Validation	Business Rule Validation
CourseYear	• Must be alphanumeric (1 char) • Can contain numbers between 1 & 9 (inclusive) or F (Foundation)	N/A
OtherCourseYear	• Must be alphanumeric (1 char)	N/A

Withdrawal Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Withdraw”.

Element Name	Format Validation	Business Rule Validation
Reason	• Must be alphanumeric (12 chars) • Must be one of the following values: o academic o deceased o disciplinary o health o other	N/A
DateStudentLeftCourse	• Must be in the format YYYY-MM-DD (10 chars)	N/A
DateOfLastAttendance	• Must be in the format YYYY-MM-DD (10 chars)	N/A
AcademicConsentGranted	• Must be alphabetic (5 chars) • Must be one of the following values o TRUE o FALSE	N/A
TuitionFeeCharged	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
TuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
FurtherExplanation	• Must be alphanumeric (2000 chars)	N/A

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Fee Change Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Fees”.

Element Name	Format Validation	Business Rule Validation
RevisedTuitionFee	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
RevisedTuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
FurtherExplanation	• Must be alphanumeric (2000 chars)	N/A

Suspension Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Suspension”.

Element Name	Format Validation	Business Rule Validation
DateStudentLeftCourse	• Must be in the format YYYY-MM-DD (10 chars)	N/A
DateOfLastAttendance	• Must be in the format YYYY-MM-DD (10 chars)	N/A
AcademicConsentGranted	• Must be alphabetic (5 chars) • Must be one of the following values o TRUE o FALSE	N/A
TuitionFeeCharged	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
TuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
FurtherExplanation	• Must be alphanumeric (2000 chars)	N/A
OriginalCourseDuration	• Must be alphanumeric (1 char) • Can contain numbers between 1 & 9 (inclusive)	N/A
DateOfReturn	• Must be in the format YYYY-MM-DD (10 chars)	N/A

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Element Name	Format Validation	Business Rule Validation
SuspensionReason	• Must be alphanumeric (12 chars) • Must be one of the following values: o academic o disciplinary o health o other	N/A

Resumption Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Resumption”.

Element Name	Format Validation	Business Rule Validation
TuitionFeeCharged	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
TuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
CourseEndDate	• Must be in the format YYYY-MM-DD (10 chars)	N/A
DateOfResumption	• Must be in the format YYYY-MM-DD (10 chars)	N/A
ResumptionPlacementDetails	• Must be alphanumeric (1000 chars)	N/A
ResumptionConditions	Refer to Resumption Conditions below	N/A

Default Resumption Conditions

This validation will be run on all Resumption CoCs where the ResumptionConditionType is used.

Element Name	Format Validation	Business Rule Validation
DefaultResumptionCondition	• Must be alphanumeric (19 chars) • Must be one of the following values: o examination o medical certificate	N/A

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Other Resumption Conditions

This validation will be run on all Resumption CoCs where the OtherResumptionConditionType is used.

Element Name	Format Validation	Business Rule Validation
OtherResumptionCondition	• Must be alphanumeric (2000 chars)	N/A

Repetition Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Repetition”.

Element Name	Format Validation	Business Rule Validation
TuitionFeeCharged	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
TuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
FurtherExplanation	• Must be alphanumeric (2000 chars)	N/A
CoursePeriodToRepeat	• Must be alphanumeric (100 chars)	N/A
RepeatFromDate	• Must be in the format YYYY-MM-DD (10 chars)	N/A
RepeatToDate	• Must be in the format YYYY-MM-DD (10 chars)	• Must be greater than or equal to RepeastFromDate
ReasonsForRepeating	• Must be alphanumeric (2000 chars)	N/A
CourseEndDate	• Must be in the format YYYY-MM-DD (10 chars)	N/A

Transfer Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Transfer”.

Element Name	Format Validation	Business Rule Validation

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Element Name	Format Validation	Business Rule Validation
RoleInTrasfer	• Must be alphanumeric (11 chars) • Must be one of the following values: o original o destination	N/A
AcademicConsentGranted	• Must be alphabetic (5 chars) • Must be one of the following values o TRUE o FALSE	N/A
DateOfConsent	• Must be in the format YYYY-MM-DD (10 chars)	N/A
DestinationCourse	Refer to Destination Course below	N/A

Destination Course

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Transfer”.

Element Name	Format Validation	Business Rule Validation
HostedBy	Refer to HEI Details below	N/A
Course	Refer to Course Details above	N/A
DateOfFirstAttendance	• Must be in the format YYYY-MM-DD (10 chars)	N/A
TuitionFeeCharged	• Must be numeric (5 chars, 2 decimal places) • Must be a non negative integer	N/A
TuitionFeeLiability	• Must be numeric (4 chars, 2 decimal places) • Must be a non negative integer	• Must be lower than or equal to TuitionFeeCharged
FurtherExplanation	• Must be alphanumeric (2000 chars)	N/A
CourseEndDate	• Must be in the format YYYY-MM-DD (10 chars)	N/A

HEI Details

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Transfer”.

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Element Name	Format Validation	Business Rule Validation
PartialInstitutionIdentifier	Refer to Partial Institution Identifier below	N/A
FullInstitutionIdentifier	Refer to Full Institution Identifier below	N/A

Partial Institution Identifier

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Transfer” and the Partial Institution Identifier element is used.

Element Name	Format Validation	Business Rule Validation
HeiName	• Must be alphanumeric (50 chars)	N/A

Full Institution Identifier

This validation will be run on all CoCs where the ChangeOfCircumstanceStructure element is “Transfer” and the Full Institution Identifier element is used.

Element Name	Format Validation	Business Rule Validation
UcasHeiCode	• Must be alphanumeric (3 chars) • Must be in the format “X99” (where “X” is an alpha character and “9” is a number between 0 & 9)	N/A
SlcHeiCode	• Must be alphabetic (4 chars)	N/A

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Appendix C – Example of Valid XML Submission


```xml
<?xml version="1.0" encoding="UTF-8"?>

<StudentInformationService xmlns="http://www.slc.co.uk/hei"
xsi:schemaLocation="http://www.slc.co.uk/hei ./sis.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" SchemaVersion="3.0">
  <HeiCode>UNLE</HeiCode>
  <ChangeSubmission>
    <CoC>
      <Repetition>
        <AY>2009</AY>
        <Student>
          <SSN>SFDU09509601H</SSN>
          <Forenames>Johnny</Forenames>
          <Surname>Smith</Surname>
          <DateOfBirth>1990-02-09</DateOfBirth>
        </Student>
        <CourseDetails>
          <FullCourseIdentifier>
            <SlcCourseCode>169552</SlcCourseCode>
          </FullCourseIdentifier>
          <MOA>FT</MOA>
        </CourseDetails>
        <CourseYear>
          <OtherCourseYear>X</OtherCourseYear>
        </CourseYear>
                <TuitionFeeCharged>1000</TuitionFeeCharged>
                <TuitionFeeLiability>500.00</TuitionFeeLiability>
        <FurtherExplanation>
          This is a freeform text field to capture any further
          explanation as required
        </FurtherExplanation>
                <CoursePeriodToRepeat>WIN</CoursePeriodToRepeat>
                <RepeatFromDate>2010-01-01</RepeatFromDate>
                <RepeatToDate>2010-01-31</RepeatToDate>
                <ReasonsForRepeating>Epic Fail</ReasonsForRepeating>
                <CourseEndDate>2010-03-31</CourseEndDate>
      </Repetition>
```


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```
</CoC>

<CoC>
 <Transfer>
  <AY>2009</AY>
  <Student>
   <SSN>SFDU09509601H</SSN>
   <Forenames>John</Forenames>
   <Surname>Smith</Surname>
   <DateOfBirth>1990-02-08</DateOfBirth>
  </Student>
  <CourseDetails>
   <FullCourseIdentifier>
    <UcasCourseCode>G110</UcasCourseCode>
   </FullCourseIdentifier>
   <MOA>FT</MOA>
  </CourseDetails>
  <CourseYear>
   <OtherCourseYear>X</OtherCourseYear>
  </CourseYear>

  <RoleInTransfer>original</RoleInTransfer>
  <AcademicConsentGranted>true</AcademicConsentGranted>
  <DateOfConsent>2010-03-30</DateOfConsent>
  <DestinationCourse>
     <HostedBy>
        <FullInstitutionIdentifier>
           <SlcHeiCode>MANU</SlcHeiCode>
        </FullInstitutionIdentifier>
     </HostedBy>
     <Course>
        <FullCourseIdentifier>
           <UcasCourseCode>G112</UcasCourseCode>
        </FullCourseIdentifier>
        <MOA>FT</MOA>
     </Course>
     <DateOfFirstAttendance>2010-04-01</DateOfFirstAttendance>
                 <TuitionFeeCharged>1500.</TuitionFeeCharged>
     <TuitionFeeLiability>350.00</TuitionFeeLiability>
```


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```
      <FurtherExplanation>
        This is a freeform text field to capture any further
        explanation as required
      </FurtherExplanation>
      <CourseEndDate>2010-03-31</CourseEndDate>
    </DestinationCourse>
  </Transfer>
</CoC>

<CoC>
  <Transfer>
    <AY>2009</AY>
    <Student>
      <SSN>SFDU09509601H</SSN>
      <Forenames>John</Forenames>
      <Surname>Smith</Surname>
      <DateOfBirth>1991-02-04</DateOfBirth>
    </Student>
    <CourseDetails>
      <FullCourseIdentifier>
        <UcasCourseCode>G11</UcasCourseCode>
      </FullCourseIdentifier>
      <MOA>FT</MOA>
    </CourseDetails>
    <CourseYear>
      <OtherCourseYear>X</OtherCourseYear>
    </CourseYear>

        <RoleInTransfer>destination</RoleInTransfer>
    <AcademicConsentGranted>true</AcademicConsentGranted>
    <DestinationCourse>
      <HostedBy>
        <FullInstitutionIdentifier>
          <SlcHeiCode>UNLE</SlcHeiCode>
        </FullInstitutionIdentifier>
      </HostedBy>
      <Course>
        <FullCourseIdentifier>
          <UcasCourseCode>G11</UcasCourseCode>
```


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```
        </FullCourseIdentifier>
        <MOA>FT</MOA>
      </Course>
      <DateOfFirstAttendance>2010-04-01</DateOfFirstAttendance>
          <TuitionFeeCharged>2500.0</TuitionFeeCharged>
      <TuitionFeeLiability>550.00</TuitionFeeLiability>
      <FurtherExplanation>
        This is a freeform text field to capture any further
        explanation as required
      </FurtherExplanation>
    </DestinationCourse>
  </Transfer>
</CoC>

<CoC>
  <Suspension>
    <AY>2009</AY>
    <Student>
      <SSN>SFDU09509601H</SSN>
      <Forenames>John</Forenames>
      <Surname>Smith</Surname>
      <DateOfBirth>1990-02-01</DateOfBirth>
    </Student>
    <CourseDetails>
      <FullCourseIdentifier>
        <UcasCourseCode>G110</UcasCourseCode>
      </FullCourseIdentifier>
      <MOA>FT</MOA>
    </CourseDetails>
    <CourseYear>
      <OtherCourseYear>X</OtherCourseYear>
    </CourseYear>

            <DateStudentLeftCourse>2010-03-30</DateStudentLeftCourse>
            <DateOfLastAttendance>2010-03-29</DateOfLastAttendance>
            <AcademicConsentGranted>true</AcademicConsentGranted>
            <TuitionFeeCharged>1500.00</TuitionFeeCharged>
            <TuitionFeeLiability>350.00</TuitionFeeLiability>
    <FurtherExplanation>
```


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This is a freeform text field to capture any further
explanation as required
</FurtherExplanation>
<OriginalCourseDuration>3</OriginalCourseDuration>
<DateOfReturn>2010-05-01</DateOfReturn>
<SuspensionReason>disciplinary</SuspensionReason>
</Suspension>
</CoC>

<CoC>
<Resumption>
<AY>2009</AY>
<Student>
<SSN>SFDU09509601H</SSN>
<Forenames>John</Forenames>
<Surname>Smith</Surname>
<DateOfBirth>1990-02-01</DateOfBirth>
</Student>
<CourseDetails>
<FullCourseIdentifier>
<UcasCourseCode>G110</UcasCourseCode>
</FullCourseIdentifier>
<MOA>FT</MOA>
</CourseDetails>
<CourseYear>
<OtherCourseYear>X</OtherCourseYear>
</CourseYear>
<TuitionFeeCharged>1000.00</TuitionFeeCharged>
<TuitionFeeLiability>500.00</TuitionFeeLiability>
<CourseEndDate>2010-03-31</CourseEndDate>
<DateOfResumption>2010-02-01</DateOfResumption>
<ResumptionPlacementDetails>Resumption Placement Details</ResumptionPlacementDetails>
<ResumptionConditions>
<DefaultResumptionCondition>examination</DefaultResumptionCondition>
</ResumptionConditions>
</Resumption>
</CoC>

<CoC>

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```
<Fees>
 <AY>2009</AY>
<Student>
 <SSN>SFDU09509601H</SSN>
 <Forenames>Myrtlhje</Forenames>
 <Surname>Mirth</Surname>
 <DateOfBirth>1990-01-01</DateOfBirth>
 </Student>

<CourseDetails>
<PartialCourseIdentifier>
<Name>Maths</Name>
</PartialCourseIdentifier>
<MOA>FT</MOA>
</CourseDetails>

 <CourseYear>
 <OtherCourseYear>X</OtherCourseYear>
 </CourseYear>
 <RevisedTuitionFee>2000.00</RevisedTuitionFee>
 <RevisedTuitionFeeLiability>1000.00</RevisedTuitionFeeLiability>
 <FurtherExplanation>This is a freeform text field to capture any further explanation as required.</FurtherExplanation>
 </Fees>
 </CoC>


 <CoC>
<Withdraw>
 <AY>2009</AY>
        <Student>
                <SSN>SFDU09509601H</SSN>
                <Forenames>Wilghvhliam</Forenames>
                <Surname>Mason</Surname>
                <DateOfBirth>1985-05-05</DateOfBirth>
 </Student>
 <CourseDetails>
        <FullCourseIdentifier>
                <UcasCourseCode>G111</UcasCourseCode>
        </FullCourseIdentifier>
```


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```
        <MOA>FT</MOA>
  </CourseDetails>
  <CourseYear>
  <ActualCourseYear>1</ActualCourseYear>
 </CourseYear>
<Reason>academic</Reason>
<DateStudentLeftCourse>2000-01-01</DateStudentLeftCourse>
<DateOfLastAttendance>2000-01-01</DateOfLastAttendance>
<AcademicConsentGranted>true</AcademicConsentGranted>
<TuitionFeeCharged>1000.00</TuitionFeeCharged>
<TuitionFeeLiability>120.00</TuitionFeeLiability>
<FurtherExplanation>This is a freeform text field to capture any further explanation as required.</FurtherExplanation>
</Withdraw>
  </CoC>

    <CoC>
<Withdraw>
  <AY>2009</AY>
        <Student>
                <SSN>SFDU09509601H</SSN>
                <Forenames>Wilghvhliam</Forenames>
                <Surname>Mason</Surname>
                <DateOfBirth>1985-05-05</DateOfBirth>
  </Student>
  <CourseDetails>
        <FullCourseIdentifier>
                <UcasCourseCode>G111</UcasCourseCode>
        </FullCourseIdentifier>
        <MOA>FT</MOA>
  </CourseDetails>
  <CourseYear>
  <ActualCourseYear>1</ActualCourseYear>
 </CourseYear>
<Reason>academic</Reason>
<DateStudentLeftCourse>2000-01-01</DateStudentLeftCourse>
<DateOfLastAttendance>2000-01-01</DateOfLastAttendance>
<AcademicConsentGranted>true</AcademicConsentGranted>
<TuitionFeeCharged>1000.00</TuitionFeeCharged>
<TuitionFeeLiability>120.00</TuitionFeeLiability>
```


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<FurtherExplanation>This is a freeform text field to capture any further explanation as required.</FurtherExplanation>

</Withdraw>

</CoC>

</ChangeSubmission>

</StudentInformationService>

Appendix D – Changes Required to update V2.0 to V3.0

In order to include allow backwards compatible changes in the future we are removing the version number from the .xsd filenames (sis and hei-types).

We have also changed

- the format of the UcasCourseCode field to a string of 4 characters
- added another field into the FullCourseIdentifier – the SlcCourseCode
- The name of the SIS Schema should be updated to sis.xsd (highlighted below)
- The version number in the highlighted areas below need to be updated to V3.0:

```
  <?xml version="1.0" encoding="UTF-8" ?>
- <StudentInformationService xmlns="http://www.slc.co.uk/hei" xsi:schemaLocation="http://www.slc.co.uk/hei ./sis.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" SchemaVersion="3.0">
    <HeiCode>UNLE</HeiCode>
  - <ChangeSubmission>
    - <CoC>
      - <Repetition>
          <AY>2009</AY>
        - <Student>
            <SSN>SFDU09509601H</SSN>
            <Forenames>Johnny</Forenames>
            <Surname>Smith</Surname>
            <DateOfBirth>1990-02-09</DateOfBirth>
          </Student>
        - <CourseDetails>
          - <FullCourseIdentifier>
              <UcasCourseCode>G/10</UcasCourseCode>
            </FullCourseIdentifier>
            <MOA>FT</MOA>
          </CourseDetails>
        - <CourseYear>
            <OtherCourseYear>X</OtherCourseYear>
          </CourseYear>
          <TuitionFeeCharged>1000</TuitionFeeCharged>
          <TuitionFeeLiability>500.00</TuitionFeeLiability>
          <FurtherExplanation>This is a freeform text field to capture any further explanation as required</FurtherExplanation>
```

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