

# Data collection process for the ITT in-year collection

Version 4.0, 2010-06-30

This document describes the data collection process for the new ITT in-year collection and provides an overview of the requirements of the Aardvark implementation that will support this.

## Summary of business requirements

New legislative requirements for Provisional Registration mean that the GTCE require individual level data within 28 days of the student commencing on the course. Although the majority of ITT programmes begin in the Autumn, this does imply a potential stream of individual records throughout the year. In cases where records are re-submitted, the GTCE do not want the same person record multiple times unless there is a significant change [see below] from a previously submitted record.

The TDA require a submission from either the whole institution at the point of their census date to create the TDA ITT Trainee Numbers census. The TDA need the ability to handle re-submissions from institutions many times in order to correct fields relevant to funding calculations.

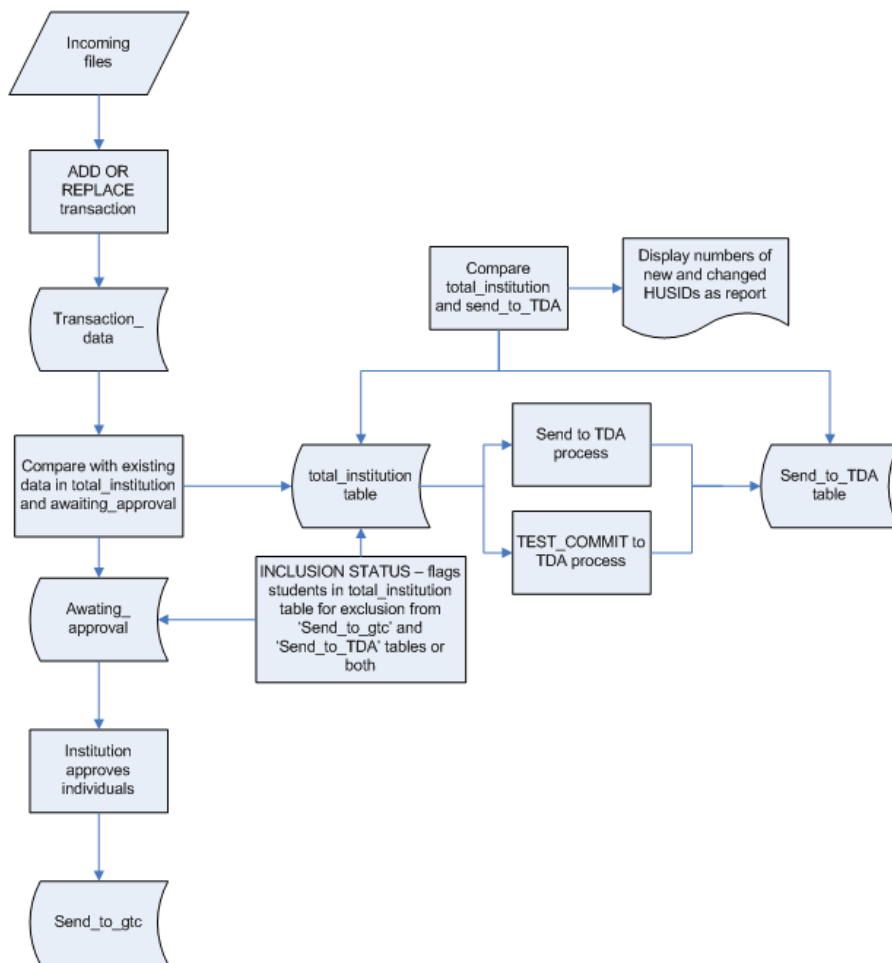
Both these business requirements will be met with a single data submission system at HESA.

## Tables

Within the system there will be six types of table:

- One table for each valid ADD OR REPLACE transaction
- A table for all institutions that holds all records for each HUSID [total\_institution]
- A table that holds records that are awaiting approval for transmission to the GTCE [awaiting\_approval]
- A table that holds records for transmission to the GTCE [send\_to\_GTCE] – records can have status NEW, UPDATED, SUPERSEDED or DELETED
- A table that holds a copy of the most recent data sent to TDA [send\_to\_TDA] – records can have the status NEW or UPDATED
- A table that holds details of individual records excluded from transmission to GTCE and/or TDA within the [total\_institution] table

## ITT In-year collection process



## HEI operations

All of the HEI operations are performed through the same Aardvark web interface that is used for all other HESA collections. HEI users log into the Aardvark system and select the ITT in-year collection from the list offered. The ITT in-year collection page for each institution follows the same pattern as for other collections:

- a status bar containing overall information about the user and the collection
- a “What can I do now?” section
- a transaction history
- links to help and support services

There will be three HEI user roles:

- **Submission user:** ability to submit, delete and commit data
- **Approval (GTCE) user:** has the authority to approve individual records for transmission to GTCE
- **Approval (TDA) user:** has the authority to approve data for transmission to the TDA

Any combination of these roles can be added to the same Aardvark user account.

HEI users will only have access to the submission for their own institution.

The following options will be presented to HEI users.

## 1. Submission processing – the ADD OR REPLACE transaction

Available to: HEI submission users

The “what can I do now” box will include a transaction reached via a link ‘Send some or all of a submission to HESA’ which inserts *a file* to the system. A file can contain a single record, all records for an institution, or anything in between.

The ADD OR REPLACE transaction will perform the following processes:

- Upload the file through the web browser to the servers at HESA.
- Run validation – schema checks (which check valid entries and data structure) and business rules. If there are validation failures and/or warnings, these will be shown as a link against the ADD OR REPLACE transaction
- If valid, import the file to a table in Oracle. The system will hold a table for each valid ADD OR REPLACE transaction. The table will be named after the transaction number. Add a primary key of transaction number concatenated with the record number within the transaction.
- Create a one-dimensional frequency count report for the records in this transaction
- Create an icon that allows institutions to view their submitted file
- Add all of the records from the newly inserted data to total\_institution then remove (i.e. mark as ‘SUPERSEDED’) the oldest record (lowest primary key value) for any cases where two records have the same HUSID and differ in any respect. The newest record for that HUSID is marked as ‘UPDATED’. For all new HUSIDs (i.e. HUSID does not exist in total\_institution), mark record as ‘NEW’.
- Create a one-dimensional frequency count report for the whole institution. Delete any previous copies of this report – reached from ‘What can I do now’ via a link ‘View a summary if all record currently held by HESA’
- For records with Student.ITTCOMDATE in the current reporting period, or if Student.ITTCOMDATE is null then if Student.COMDATE is in the current reporting period, compare total\_institution with send\_to\_GTCE:
  - If the HUSID in total\_institution does not exist in send\_to\_GTCE and does not exist in awaiting\_approval then:
    - write to awaiting\_approval
    - mark as NEW
  - If the HUSID and UKPRN in total\_institution does exist in send\_to\_GTCE (i.e. that HUSID has already been approved), but the record differs in any of SURNAME, FNAMES, BIRTHDTE or NINUMBER then
    - write to awaiting\_approval and mark as ‘UPDATED’.
    - remove the oldest record (lowest primary key value) from awaiting\_approval for any cases where two records have the same HUSID
    - Mark the record for that HUSID in send\_to\_GTCE as ‘SUPERSEDED’ so that GTCE are aware of a potential change to this record.

- If the HUSID and UKPRN in total\_institution does exist in send\_to\_GTCE, but the record does not differ in any respect, there is no change to the awaiting\_approval table or the send\_to\_gtce table and no change to status (i.e. disregard true duplicates – there is a record in the transaction files that data were submitted, but TDA and GTCE processes should not be affected by resubmission of entirely unchanged records, so a NEW record will remain at status NEW)
- If the HUSID and UKPRN in total\_institution does exist in send\_to\_GTCE, but the record does not differ in any of SURNAME, FNAMES, BIRTHDTE or NINUMBER then there is no change to the awaiting\_approval table or the send\_to\_gtce table.
- The send\_to\_gtce table can contain records with the following statuses:
  - NEW for eligible HUSIDs that are immediately approved
  - UPDATED where a record that has differed in of SURNAME, FNAMES, BIRTHDTE or NINUMBER has been re-approved
  - SUPERSEDED for HUSIDS that are known to have changed in of SURNAME, FNAMES, BIRTHDTE or NINUMBER, but have not yet been re-approved.
  - DELETED where a HUSID was submitted in error and the whole transaction has been deleted

## 2. Review of total\_institution

Available to: HEI submission users

HEI approval (GTCE) users (read-only)

HEI approval (TDA) users (read-only)

HESA users

The “what can I do now” box will include a link to a report that provides the ability to review all the records currently held in total\_institution [fields PrimaryKey, HUSID, OWNSTU, name, ITTAIM, TTCID, [main] SBJCA, MODE, ENDDATE – grouped by CTITLE].

All records will be flagged either NEW, UPDATED, SUPERSEDED or DELETED; NEW or UPDATED records will be visible, SUPERSEDED and DELETED records will not be visible.

Included within total\_institution is a column 'F\_INCLUSION\_STATUS', which allows users to exclude individual students from the ‘Approval of records for Provisional Registration’ and/or ‘Mark return as ready for TDA processing’ transactions.

### 2a Maintenance of total\_institution

Available to: HESA users

HESA users will need the ability to mark an individual transaction as deleted in order to remove students who have been sent in error. When this is done:

- If a record within this transaction is marked as deleted in total\_institution and it exists in send\_to\_GTCE then write another record to send\_to\_GTCE with a status of DELETE, mark the older record as SUPERSEDED.
- If a record within this transaction is marked as deleted in total\_institution and it exists in awaiting\_approval then mark it as deleted in awaiting\_approval.

### **3. Approval of records for Provisional Registration**

Available to: HEI approval (GTCE) users

HESA users (read only)

The “what can I do now” box will include a link to a report that provides the user with the ability to approve each record (checkbox) for transmission to GTCE.

The user hits an APPROVE button which:

- Adds these records to the *send\_to\_GTCE* table with a datetime stamp and a NEW/UPDATE status .
- Removes these records from the awaiting\_approval table

### **4. Review records that have been sent to GTCE**

Available to: HEI submission users

HEI approval (GTCE) users

HESA users

The “what can I do now” box will include a link to a simple read-only report that lists all of the records that have been collected from *send\_to\_GTCE* for the user’s institution. [Fields to display: HUSID, OWNSTU, SURNAMES, FNAMES, BIRTHDTE, NIN, grouped by CTITLE ]

### **5. Mark return as ready for TDA processing**

Available to: HEI approval (TDA) users

The “what can I do now” box will include an option to review institution-level frequency counts and then approve the data for transmission to TDA.

This institution-level approval process (COMMIT\_TO\_TDA) is independent of the individual-level approval process required for the GTCE data.

Once this is done, no further transmissions to TDA can take place until TDA have re-set the system to make available this process.

### **6. Mark return as ready for TEST COMMIT to TDA**

Available to: HEI approval (TDA) users

The “what can I do now” box will include an option to ‘TEST COMMIT’, which will allow the user to review institution-level frequency counts and then approve the data for transmission to TDA as a ‘TEST COMMIT’. Institution’s can ‘TEST COMMIT’ again after sending revised/amended data submissions and without the need for TDA to process a DECOMMIT. This option will be available until 15 October 2010; there after only full COMMITs will be available to the user.

\*Institutions are reminded that they must process a full COMMIT by the 15 October 2010 deadline.

### **7. Download records that have been approved**

Available to: HEI submission users

HEI approval (GTCE) users

When HESA has received Teacher Reference Numbers from the GTCE the “what can I do now” box will include an option to download the records which have been provisionally registered with the GTCE. Institutions will be able to download the data, including the Teacher Reference Number assigned to the student and incorporate these into local systems.

### **TDA operations:**

TDA users will be able to log into the system to view the status of individual returns for any institution. TDA users will be able to perform one transaction, which re-sets the Aardvark system to allow transmission of files to the TDA.

TDA will be able to view a count of the new, updated and deleted records held at HESA [in total\_institution] compared with those in the last transmission to TDA [send\_to\_TDA].

#### **1. TDA collection of records**

The TDA system polls a web service on the HESA system and receives data for any institutions that are flagged as ready for TDA processing. Flag is reset after collection of data.

TDA system generates funding reports based on this data and makes these reports available via a web service for the HESA system to request.

TDA will be provided with records with status of NEW or UPDATED.

### **GTCE operations:**

GTCE users will be able to log into the system to view the status of individual returns for any institution. GTCE users will not be able to perform any transactions on the system.

#### **1. GTCE collection of records**

The GTCE system polls a web service on the HESA system and receives any data that has not yet been transmitted. These will be separate files for NEW, UPDATE, SUPERSEDED and DELETE. Each record is time-stamped on the send\_to\_GTCE table to indicate that it has been sent.

### **HESA operations:**

HESA liaison users will have the ability to see all institutions and to perform any transaction.

HESA standard users will be able to log into the system to view the status of individual returns for any institution; they will not be able to perform any transactions on the system.