

Data collection process for the ITT in-year collection

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

Summary of business requirements

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.

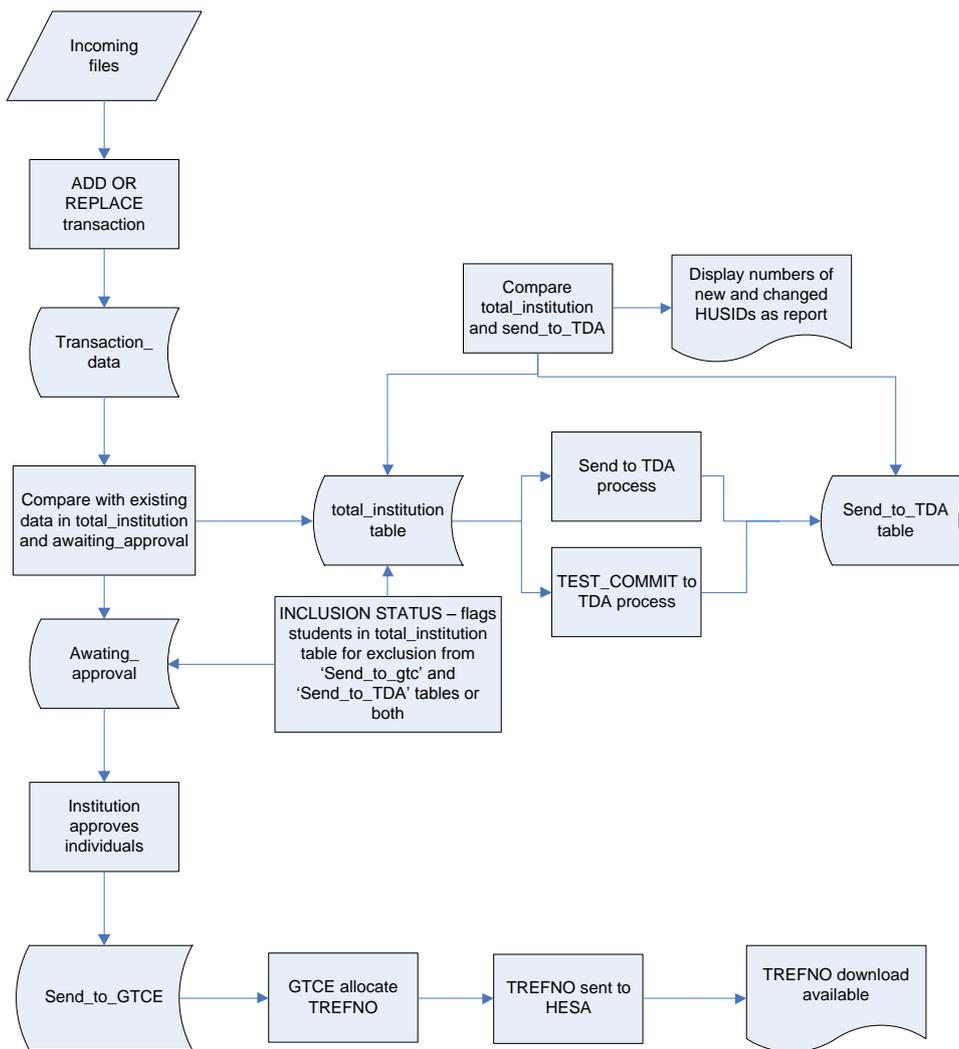
Both these business requirements will be met with a single data submission system at HESA.

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- A table that holds records for transmission to the GTCE [send_to_GTCE] – records can have status NEW, UPDATED, SUPERSEDED or DELETED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 against the ADD OR REPLACE transaction in the reports column of the transaction history accessible by selecting the below icons.

- 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 in the reports column of the transaction history accessible by selecting the following icon. 
-  This icon, in the reports column of the transaction history page 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’
- TDA approval users will have the option to ‘test approve the entire submission for transmission to TDA (TEST COMMIT to TDA)’ during the early part of the collection process. This facility will be removed after the October census date.
- As part of the ADD or REPLACE transaction, eligible records (as defined in the notes to developers) will be added to the ‘review all records awaiting provisional registration’ and ‘approve individual records to the GTCE’ table.

- 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 ,NINUMBER or TREFNO 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 Student.INDSLFCRT is completed with 'N' the record is not added to the review and approve tables as the student has indicated they are not eligible for registration with the GTCE.
 - 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, NINUMBER or TREFNO 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.

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 as 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 an 'inclusion' column 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. The inclusion options available to users are as follows:

1. Not excluded
2. Excluded from GTCE
3. Excluded from TDA
4. Excluded from both

3. Approval of records for Provisional Registration

Available to: HEI approval (GTCE) users
HESA users (read only)

Once a record has been submitted the "what can I do now?" box it will include a link to a report that provides the user with the ability to approve each record (via a check box) for transmission to GTCE at individual/course level.

Once the user selects approve, these records then moved from the 'review records awaiting approval' to the 'review records sent to GTCE'

On approval, these records are added to the 'send_to_GTCE' table with a datetime stamp and a NEW/UPDATE status and 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 that display are: HUSID, TREFNO, ITTKEY, OWNSTU, SURNAMES, FNAMES, BIRTHDTE, NIN, grouped by CTITLE]

Once records have been approved by the HEI they will appear in a table.

The first page will display the course title and a count of students on this course who have already been approved to the GTCE. The user can then select a course to view the details of the individual records on this course.

5. Download records that have been approved by the GTCE

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.

6. Mark return as ready for TEST COMMIT to TDA

Available to: HEI approval (TDA) users

For a limited time during the collection the “what can I do now?” box will also include an option to ‘TEST approve’ to the TDA, which will allow the user to 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. Data from a test commit however, is available for the TDA to view.

The option to TEST COMMIT will be available until shortly after the census date of the 2nd Wednesday in October (**specific date is agreed with the TDA prior to collection opening**) thereafter only full COMMITs will be available to the user.

*Institutions are reminded that they must process a full COMMIT by the 15 October 2011 deadline.

7. Mark return as ready for TDA processing

Available to: HEI approval (TDA) users

Following a successful ADD or REPLACE transaction the ‘what can I do now?’ box will include an option to 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. However HEI’s can continue to submit data.

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