

once target assessments have been completed, they will be rotated across the remainder of the assessor panel.

Annual assessor test

Assessors are required to complete an Annual Test to ensure they remain familiar with the key survey details. The test will normally take the form of a multiple choice style questionnaire where assessors are given a piece of information and then asked to select the correct option/answer for several possibilities. The questions will cover all aspects of the survey from the questionnaire itself to admin related areas. The results are analysed by the agency to determine areas that assessors required further training.

Quality Assurance (QA) reporting

The Quality Assurance Report checks agreed quality standards relating to fieldwork and flags issues for further investigation, either by TfL or by the agency Field Quality team.

Variability reporting

The Assessor Variability Report looks at questions by assessor and will indicate which assessors are scoring significantly higher or lower than other assessors for each measure. It also highlights if individual assessors may be scoring one or more of the CMSS measures inconsistently (i.e. interpreting rating scales in such a manner as to result in significantly higher or lower scores compared with all other assessors).

This report is used by the agency to target particular assessors who may require retraining or a spot check by a Fieldwork Quality Assessor. TfL also checks this report and feeds back to the agency any concerns they might have about the assessors flagged up in the report.

In order to pre-empt any concerns regarding variability in the final quarterly data, the agency runs the analysis on interim data. This enables any issues with individual assessor data to be identified prior to the completion of fieldwork and for remedial actions to be taken.

Agencies may suggest other methods of managing field quality, and the proposal should include complete details of how the agency will monitor assessor quality and how the agency deals with poor performance on the part of fieldworkers.

6.9 Assessor Performance Issues and Disciplinary Procedures

In general it is not possible to specify an exact number or percentage of instances of a particular error or issue that will trigger a formal investigation. The Field Quality Manager is responsible for recording and reviewing all instances of assessor non-performance (with input from FQAs, the agency project team, TfL team) and exercises judgement on the appropriate follow up actions.

Examples of Minor / Moderate / Major Performance Issues:

Minor

Issues which impact on the agency's administration of the project but which do not impact on data quality, for example:

- Delays submitting work;
- Fieldwork not completed on agreed date / time band, potentially leading to work having to be re-allocated;
- Used old version of questionnaire (assessment unable to be used);
- Incorrect fee claim submitted.

Moderate

Quality issues which need to be addressed quickly, but which do not endanger provision of reliable data in short-term, for example:

- Repeated above average proportion of invalid/missing train numbers;
- Repeated above average proportion of non-captured GPS;
- Assessor variability analysis reveals minor scoring irregularities;
- Repeated non-completion of questions without explanation;
- Suspected incorrect use of PDA functions;
- Fieldwork not carried out and no communication received;
- Repeated occurrence of minor issues.

Major

Fieldwork quality issues which could give rise to provision of incorrect data and therefore need to be addressed immediately before further work can be carried out, for example:

- Assessor variability analysis reveals major scoring irregularities;

- QA analysis reveals major irregularities in conducting assessments (e.g. non-authorized interaction with TfL staff, scoring combinations, time on platform);
- TSM reveals assessor is not following assessment procedures correctly;
- Repeated occurrence of moderate issues.

6.10 Accompanied assessments

Accompanied visits are offered to clients (typically managers involved in the day to day management of contracts or maintenance regimes) that want to get a better understanding of how assessors complete the survey.

A typical accompanied visit will involve looking in detail at a station and taking the delegates through the questionnaire in detail. The delegates can use this as an opportunity to ask the agency about how certain attributes are scored and what assessors will especially look for when scoring. The session may or may not also involve a train assessment. Up to 5 users may attend each session (if more people attend it is difficult to answer questions and keep the group together).

7. DATA PROCESSING

7.1 Data Transfer: Assessor to Agency

As soon as assessors have completed their questionnaire on the PDA, they submit the completed assessment data directly to a remote server. At this point the agency can view, access or download the data. The agency 'extracts' the data from the remote server on a continuous basis via an automatic data transfer programme. It is important that data is sent back quickly by the assessors in order to supply verified, cleaned and edited data to TfL within 48 hours of each assessment.

7.2 Data Verification and Validation

As the attributes measured are linked with the payment mechanism of third party suppliers, it is important that CMSS is conducted to the highest quality and with the greatest attention to detail. It is imperative that any changes to scores over time are due to changes in the quality of TfL's service to customers and not from issues in survey design.

Rigorous quality assurance processes must be put in place at all stages of the monitoring programme to ensure that the results are valid, robust and provide an accurate picture of what customers experience when they use public transport in London.

The MRS guidelines on mystery shopping act as the base acceptable level of quality and quality checks for all the surveys, but additional checks, specific to the survey, will also need to be implemented by the successful agency.

7.2.1 Location validation

All assessment data must be validated to confirm that assessors are conducting assessments at the times and locations they should be. As this evidence is so important in terms of quality control, two sources are in use –Oyster card statements and GPS. If there is any problem with either (due to system failures), the other can be used to verify the assessment. The train and carriage numbers collected by assessors are also used to verify their presence for the assessment.

Oyster card Verification

All visit records submitted by assessors must be supported by Oyster records containing details of the specific stations, dates and times as reported in the data. All assessors are provided with a registered Oyster card to use while conducting assessments. TfL then provide the agency with a tracked Oyster output report, delivered daily by email, which enables the agency to confirm that this corresponds with the date and time of all station assessments on a route.

Verification of GPS Co-ordinates

In addition to the survey data contained within the questionnaire itself, assessors also use the PDA to record GPS coordinates for each station assessed. The data forms part of each completed visit record submitted. The coordinates recorded are automatically checked by the agency against a master list of station coordinates provided by TfL.

The record fails this validation if there is a difference of 0.2km+ between the recorded and TfL master coordinates. If the record is valid in respect of the other verifications, the record is deemed valid and the data may be reported. If the record is not supported by an Oyster statement, the data should not be reported. Where there is a valid Oyster statement but train or carriage numbers are invalid,

a manual inspection of the coordinates map is made to check the exact location recorded compared with the station.

Verification of Train and Carriage Numbers

All visits that record train data should have a valid train and carriage number entered by the assessor. The numbers entered for each record are automatically checked against the list of valid numbers as one of the initial checks on receipt of data from assessors.

If no train or carriage number has been entered, this is recorded on the Missing Numbers Log together with the reason provided by the assessor. Missing numbers are verified by the agency using 'Trackernet', which gathers real time train service information to provide both real time and post event train movement information. In the event of being unable to verify the train using Trackernet or obtain a satisfactory explanation to enable the record to be processed / included in the data for the wave concerned, the visit would be rejected and revisited.

The number of visits rejected due to lack of Oyster statement records or GPS coordinates is reported to TfL at the end of each quarter. All visits that are rejected, for this or other reasons, are revisited to complete the total sample and comply with survey quota requirements. The outcomes of these checks need to be included in the quarterly QA report.

7.2.2 Assessment data validation

Once the location of the assessment has been validated, assessment records are subject to the next stage of data quality checks to validate and confirm the integrity of the data:

1. Automated validation checks are run to ensure the data set is:
 - a) Complete
 - b) The assessment day and time-band are correct
2. Automated checks of survey quotas and assessor thresholds are then run to ensure the assessment is in accordance with these requirements.

Assessments failing validation checks are then subject to further manual investigation and actions before being approved or rejected.

The agency must complete all checks on the assessment data and upload the completed records within 48 hours of the assessment being undertaken. In the majority of cases this turnaround requirement is achievable, however if data

requires further verification or follow-up investigation with the assessor, then the records are withheld until this is complete. In all cases, quality of data records is the priority; hence data verification requirements will always take precedence over the 48 hour target for data turnaround.

7.3 Data Transfer to TfL

Interim survey data is made available to TfL on a continuous basis throughout the survey through direct web access to scored data files which are updated daily. Quarterly reports are uploaded to a File Transfer Protocol (FTP) facility, which has replaced the previous dedicated email inbox, and provides a faster and more secure means of transferring large data files.

7.4 Data Storage

It is important to retain various survey data and records for contractual purposes. The survey data and documentation is stored electronically and will be maintained in the agency electronic archive system for a minimum of 6 years. Survey data includes Oyster statement verification (which is now captured electronically), train and carriage numbers, assessor records and QA reports. Fieldwork allocation records held electronically are also stored for 6 years.

8. IMPLEMENTATION PROCESSES

8.1 Pilot

Although the method is not being changed for the new contract, the scale of the survey and the complexities of the routes mean that a pilot is required. This will give the successful agency an opportunity to test fieldwork procedures and data collection, and to streamline fieldwork liaison and documentation.

This should cover:

- Supply of the PDA hand-held data collection devices
- Programming and set up of the PDA questionnaire
- Briefing and training assessors to prepare them for fieldwork
- Field management and data collection
- Processing and checking the results