# Data Monitoring
## Analysis Database
# USER GUIDE

*Version 2.0 – 2016-11-24*

## CONTENTS

## I - LOGGING IN

To access the Data Monitoring website (DM), visit https://tads.tracsis.com/dm/. It is advised that the user uses an up-to-date browser, and Firefox or Chrome is recommended. JavaScript must also be enabled for the site to function correctly, which is usually enabled by default.

A username and password is required to access the site. The username will be the name of the region or the subcontractor (SubCon) accessing the site. A username and password should have been provided to you, contact a Regional Manager for permission.

There is no password reset system.

## II - USER TYPES & ACCESS

There are three different types of users with different levels of access to the website. These are listed below:

Admin          Able to view all pages on the website, create new user logins, and change region and subcontractor capacities (covered in the 'Forecast' chapter).

Region         Able to view all pages, edit data on the 'Jobs' page, and mark messages as read.

SubCon         Able to view the 'Jobs' and 'Forecast' pages, but only data related to the specific SubCon logged in will be shown. The SubCon will be able to add notes to jobs on the 'Jobs' page.

## III - JOBS

### USAGE

#### TABLE NAVIGATION

The user will be presented with a table split into 4 sections, the bottom-right of the table can be used to navigate through the data, the other 3 sections are frozen in place to help identify which row/column the user is looking at. The user may scroll left-right and top-bottom in the bottom-right section of the table, or use the scrollbars available.

#### DATA PREFERENCES

By default, the user will see the data for the region that they are logged in as. The user may use the filters towards the top of the page to change these parameters, which will refresh the page.

Select Preferences          REGION [ All ]

## PAGE NAVIGATION

The data is split up into pages, each with up to 100 rows of data. At the bottom of the screen the user can see how many rows of data are available. The user can click '<<' or '>>' to get the previous or next 100 rows of data, or use the dropdown menu to select a specific set of rows.



## TABLE FILTERS, SORTING, AND SEARCHING

The user can select multiple filters on the second row of the table. Click '[ Select Filter ]' to show a dropdown menu of the available options to filter the data with. When a filter is selected, the chosen filter for that column will be shown on the second row of the table (e.g. '[ No Blanks ]'). The user may filter multiple columns at once, and can undo specific column filters by clicking '[ Show All ]'.

The user can also sort the data by one column either Ascending or Descending, and Search for words within the filter by typing into the input box next to '[ Search ]'



## EDIT JOB

The user may click the Edit cell on a row to navigate to the 'Edit-Job' page, which displays a form with each parameter for the job. Once the user clicks 'Save' on this page, they will be taken back to the 'Jobs' page.

Alternatively, if the user selects the red 'Editing Disabled' button at the bottom of the page, it will turn enable real-time cell editing. With editing enabled, the user may click a cell to turn it into an input box. Once the user clicks the 'tick' symbol, the data will be sent to the server, and the cell will turn green if successful.

If the data fails to be updated on the server, the cell will turn red and an error message will appear. The user should try again and, if they are still connected to the internet, should email the site administrator.

## SURVEY TYPE AND SURVEY ELEMENTS

Selecting a cell in the Survey Type or Survey Elements columns on the Job page, or on the Edit/Add Job pages will bring up popup windows that give the user a chance to select one or the preset choices. Survey Type will let you select one of four choices, whereas Survey Elements will let you select many choices.



## ADD JOB

The user can click the 'Add Job' button at the bottom of the page navigate to the 'Add-Job' page, which displays a form with each parameter for the job. Once the user clicks 'Add Job' on this page, they will be taken back to the 'Jobs' page. The job must have a date, and a status of 'In-Progress' or 'Completed'. The

Job Number must contain one of the region identifiers (IRE, LON, MID, SCO, TAD, WAL), in the first position or the 6$^{th}$ position of the string (e.g. 'TAD-1234' or '1234-TAD').

## IMPORT JOB

The user can click the 'Import Job' button at the bottom of the page navigate to the 'Import-Job' page. It is recommended you Add or Edit Jobs instead of importing, and if you do need to import, to keep the number of jobs to a minimum.

On first use, click the 'Download Template' button to download a table with column names. Use it to fill in information about each job. You can then import the CSV directly into the website, which will clean and process the data.



A grid of input boxes should appear; the user may then edit any of these boxes before pressing the 'Import Data' button to save them to the server. Any errors occurred will appear in the 'Status' input box.

## DOWNLOAD TO CSV

The user can download the data available to them by clicking the 'Download to CSV' button, which will download the total number of rows shown according to the preferences set at the top of the page.

Warning - irregular symbols or formatting in the data can cause some errors in the CSV file.

## MESSAGE SYSTEM

If a SubCon adds or edits a cell in the 'General Notes (Supplier)' column on the 'Jobs' page, the region associated with that job will receive a message, and the change will be added to the 'Change Log' page.

## DAYS UNTIL DUE LOGIC

There is a 'Days Until Due' column displayed in the data, which is populated when the user visits the 'Jobs' page. The logic used to calculate this data is listed here:

- If the job status is set to 'Completed', this field will be set to '-'.

- If there is data in the 'Revised Client Deadline' field, it will use this data, otherwise it will use the data in the 'Client Deadline' field.
- If the data is not recognized as a 'yyyy-mm-dd' date, or there is no date, the 'Days Until Due' column will be set to '?'.
- A calculation is made to find the number of days between the deadline date and the current date. If the deadline has passed, this value will be a negative number.

## DATA SORTING LOGIC

The data is sorted by ID Descending, so most recent at the top. The data can be sorted by the user using the '[ Select Filter ]' buttons.

## IV - FORECAST

### USAGE

By default, the user will be presented with a table of options, a graph showing the Capacity (%) for each SubCon, and two tables listing capacity percentages for each day and week over the next 4 weeks from the current date.

The user can change the date of the start of the forecast at the top of the page by typing in a date (in the 'yyyy-mm-dd' format) and clicking the 'View' button. The forecast page only shows jobs that have correct deadline dates and analysis hours, for jobs that are not yet completed.

FROM: 2016-11-24    View

The user can change 'Display Type' by selecting 'Capacity (%)' or 'Hours'. If 'Capacity (%)' is selected, it will show the results as a percentage of the SubCon's or region's capacity, along with three coloured ranges to identify if a SubCon or region is close to capacity. If 'Hours' is selected, it will show the estimated hours between for each day up to and including the deadline day. For more information regarding the logic, see the other chapters below.

The user can change 'Department Type' by selecting 'Sub Con' or 'Region'. Selecting 'Sub Con' displays capacities or hours based on each SubCon's capacity and their estimated offshore analysis hours for each job. Selecting 'Region' displays capacities or hours based on each region's capacity and their estimated analysis hours for each job.

Both SubCons and Regions can be filtered out in both 'Department Type's, so that the user can see the capacity of one with jobs specific to the other (e.g. Show a SubCon's forecast but only for London jobs, or show London's forecast but only for jobs that go to a specific SubCon).

## UPDATING CAPACITIES

A user with access to the admin account can login and change the region and SubCon capacities on the 'Options' page.

## SUBCON FORECAST LOGIC

The logic for calculating the forecast figures for a specific SubCon is listed here:

- The job must not be completed, and the SubCon must not have delivered the data.
- The job must have a numeric value for estimated offshore analysis hours.
- The job must not have a value in the actual offshore analysis hours.
- Use the revised return date if there is one, otherwise use the return date given. This value must be a date format.
- Divide the number of estimated offshore analysis hours by the number of days between 'Sent Offshore Or UK Analysis' and the deadline, if there is a valid date, or 6 if not (5 days before deadline + deadline day), and spread the over the dates.
- For Capacity (%) forecast, lookup the pre-set capacity hours for that SubCon's week and divide by 7 to get the weekly average hours based on working 7-day weeks, and then divide that day's estimated hours by the day's capacity to get the percentage.

## REGION FORECAST LOGIC

The logic for calculating the forecast figures for a specific SubCon is listed here:

- The job must not be completed, and the data must not have been sent to the PM.
- The job must have a numeric value for estimated analysis hours.
- The job must not have a value for actual analysis hours.
- Use the revised return date of the SubCon if there is one, otherwise use the return date given. This value must be a date format.
- Use the revised client deadline date if there is one, otherwise use the client deadline date. This value must be a date format.
- Calculate the difference in days between the SubCon delivery date and the client delivery date. Divide the number of estimated analysis hours by the number of working days not including weekends, and spread the resulting number over each weekday up to and including the deadline date.
- If SubCon delivery date is invalid, spread estimated analysis hours over 6 working days.
- For Capacity (%) forecast, lookup the pre-set capacity hours for that region's week and divide by 5 to get the weekly average hours based on working 5-day weeks, and then divide that day's estimated hours by the day's capacity to get the percentage.

## V - REPORT

### USAGE

By default, the user will be presented with job delivery statistics and hour estimate summaries for jobs related to their region and SubCons from the current date until a year ago. The user may change the data parameters, the region they are looking at, filter by survey types, and change how the line graphs are presented. By default, the region 'accordion' will be open first, followed by several closed 'accordions' containing data related to each SubCon.

The user will see a key with number of jobs and percentages alongside a pie-chart and line graph from the two dates specified. A comparison will be made between the delivery date and the client deadline date for every completed job. See the logic chapters below for more information. The line-graph will show the data by month, from the job with the earliest date to the job with the latest date, ignoring those within the user specified date range that has no data.

The region 'accordion' will display two tables, one summary for UK analysis hours and one summary for SubCon hours, and presents the user with a breakdown of total estimated and actual hours. See the logic chapters below for more information.

### DAYS LATE LOGIC

The logic for calculating the number of days late figures is listed here:

- The job must have be set to Completed and have a date sent to PM and a client date.
- The difference between the two dates is then calculated, and categorized into early, on-time, 7 or more days late, or x-days late.

### HOUR ESTIMATES LOGIC

The logic for calculating the estimated and actual hours figures is listed here:

- The job must have a number in the Estimated and Actual Hours columns for regions or SubCons.
- If estimate is greater than or equal to actual hours, place in the under estimate / on budget row.
- If estimate * 1.1 is greater than or equal to actual hours, place in the within 110% of estimate row.
- Otherwise place in the Over 110% of estimate row.
- The estimate and actual hours are added to one of the three categories.
- The total estimated hours are then subtracted by the total actual hours.
- If total estimate > actual, then the comment says 'overestimated', which suggests the region estimated more hours than was actually required.
- If total estimate < actual, then the comment says 'underestimated', which suggests the region underestimated how many hours were actually required.

## VI - MAP

By default, the user is presented with a map and one pin for each job where there is a latitude and a longitude, for all jobs that are 'In-Progress' for all regions and all survey types. The user can use the buttons located at the top of the page to show or hide different categories, or the dropdown menus to filter by specific years.
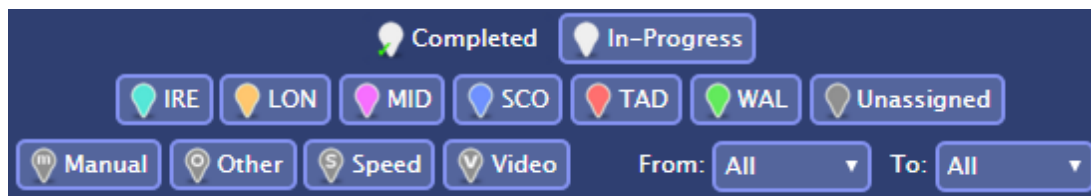


Every job pin can be clicked to display a popup box with job number, job name, client, and date added information, as well as a button to take the user to the 'Edit-Job' page.

The map will not show pins for jobs that have incorrect coordinate formats. Refer to Data Types for more information.

## VII - CHANGE LOG

The 'Change Log' page will display any comments added to jobs on the 'Jobs' page by SubCons related to the user's region by default. The user can filter by regions if required.

When a SubCon makes a change to a job, a message counter for the region related to that job will increase by one. If a user logs in and that region has un-read messages, a red circle with a number in will be displayed next to the region's name on the navigation bar. The user can then click this circle or the 'Change Log' button to view messages, and select the 'Mark as Read' button to reset the region's message counter to zero.



## VIII – VALID DATA FORMATS

Here is a table of columns alongside their acceptable formats. Any columns not displayed do not adhere to a particular format. Not following these formats may either not be accepted by the website, or cause jobs to be excluded from certain calculations.

| Column | Example | Valid Formats |
| --- | --- | --- |
| Job Number | 3000-TAD | Have a region code (LON, MID, SCO, TAD, WAL) either at the start of the string, or at the $6^{th} – 8^{th}$ letter position. |
| Status | In-Progress | In-Progress or Completed only. |
| Days Until Due | | Empty string only, the website calculates and replaces this value. |

| | | |
|---|---|---|
| **Latitude** | 51.803897 | Standard latitude numeric values only. Between -85 and 85. UK is around 52. |
| **Longitude** | -0.742739 | Standard longitude numeric values only. Between -180 and 180. UK is around -1. |
| **Survey Type** | Video | Manual, Speed, Video, and Other only. |
| **Survey Elements** | [Parking] | One or many of the preset choices enclosed in square brackets. |
| **Start Date** | 2016-01-01 | YYYY-MM-DD |
| **End Date** | 2016-01-01 | YYYY-MM-DD |
| **Footage – Raw Data In Office** | 2016-01-01 | YYYY-MM-DD |
| **Uploaded to Server** | 2016-01-01 | YYYY-MM-DD |
| **Sent Offshore Or UK Analysis** | 2016-01-01 | YYYY-MM-DD |
| **Footage Review Received** | 2016-01-01 | YYYY-MM-DD |
| **Est. Offshore Analysis Hrs** | 20 | Any positive numeric value. |
| **Act. Offshore Analysis Hours** | 20 | Any positive numeric value. |
| **Sub Contractor** | Senthil | ANA, Kripa, Manila, Senthil only. |
| **Return Date Given** | 2016-01-01 | YYYY-MM-DD |
| **Revised Return Date** | 2016-01-01 | YYYY-MM-DD |
| **Templates Sent** | 2016-01-01 | YYYY-MM-DD |
| **First Data Received From Offshore** | 2016-01-01 | YYYY-MM-DD |
| **Final Data Received From Offshore** | 2016-01-01 | YYYY-MM-DD |
| **Est. UK Analysis Hrs** | 20 | Any positive numeric value. |
| **Est. UK Hours** | 20 | Any positive numeric value. |
| **First Data Sent To PM** | 2016-01-01 | YYYY-MM-DD |
| **Last Data Sent To PM** | 2016-01-01 | YYYY-MM-DD |
| **Client Deadline** | 2016-01-01 | YYYY-MM-DD |
| **Revised Client Deadline** | 2016-01-01 | YYYY-MM-DD |

## IX – WHAT'S CHANGED?

| Page | Change |
|------|--------|
| **Jobs** | Previously hidden columns made visible (Total Survey Hours, Method Of Delivery, General Footage Notes, Client Queries) |
| **Jobs** | New column (Peer Review) |
| **Jobs** | Faster page navigation and removed Status and Date filters. |
| **Jobs** | Data now sorted by ID Descending and not Days Until Due by default. |
| **Jobs** | Data now sortable by column. |
| **Jobs** | Drop-down filter lists now have search functions. |
| **Jobs** | Highlight Errors button removed. |
| **Jobs** | New editable cell functionality. |
| **Jobs / Add Job / Edit Job** | Survey Type and Survey Elements now have window popups that require the user to select from preset choices. |
| **Jobs / Add Job / Edit Job / Import Job** | Improved data cleaning of erroneous symbols, spaces, and date formats. |
| **Import Job** | Now imports directly from CSV file. |
| **Forecast** | Improved User Interface |
| **Forecast** | Region forecasts now ignore Weekends. |
| **Forecast** | SubCon forecasts now include all 7 days. |
| **Forecast, Report** | Logic and calculation changes. |
| **Report** | Improved User Interface |
| **Report** | Line Graphs now set to display percentage by default, and can be toggled back to numbers. |
| **Map** | Pins now mapped correctly. Jobs without correct coordinates not displayed. |