

Dear Sir/Madam,

Thank you for taking the time to read these instructions and participating in the Angel Trains Data Review Project.

The aim of the exercise is to consolidate the data that is available to Angel Trains' assets. This is intended with the purpose of mapping out what information Angel Trains' staff hold and how it can be better utilised in (for instance) saving costs to Angel by lowering the whole-life cost of its assets or enabling Angel to provide value added services to clients.

Below is a list of some of the data we would like to know about. This list is *not exhaustive* and therefore if you feel there is something you can contribute, please do so.

- Warranty data
- Supplier performance data
- OTMR data from trains under operation.
- Data from various sensors on board a train.
- Engineering incident reports.
- Technical specifications of rolling assets, likely to have been obtained when purchasing these.
- Regular communication from train operating companies (TOCs) regarding fleet status.
- Engineering survey reports.

In order to inform us of this data please fill out an online survey, the link is provided in the instructions below at step 1. This should take no longer than 15 minutes and is simply a high level survey. After the survey results are reviewed, you may be contacted to provide additional information.

Note: We are aware of centralised systems. You do not need to inform us in detail of any of the following systems:

- *Fleet Management System (FMS)*
- *Lease Management System*
- *Work Request Portal*
- *Warranty Portal*
- *Safety Incident Management System (SIMS)*
- *Engineering Change system*

The following are instructions on how to fill out the form.

1. Access the survey at <https://hackpartners.typeform.com/to/Zajrfl>
2. Fill out your name and office location, and proceed to the subsequent section on data.
3. Select Angel Trains' centralised systems that you use. You do not need to inform us about data sets from these systems in detail.

4. There are up to 5 slots for reporting data sets. If you have access to more than 5 data sets, please let us know using the option provided.
 - a. Please give the data set a name. This should be specific enough to make clear the intention. For instance, "OTMR Data from Class 537 Fleet by Virgin Trains"
 - b. Please provide the data source. This needs to indicate how the data is delivered to Angel. For instance, this could either be a direct web portal (in which case, please provide information on the portal) or is received via regular emails. Please also try and include a name for the provider, for instance a specific TOC.
 - c. Please provide a format for the data. This could be any of the ones listed in the options or a different one. If none of the options are suitable, please choose 'other' and provide a description of the format.
 - d. If there is a password associated with the data, please select 'yes' on encryption. Otherwise state 'no'.
 - e. Please choose a number on the scale (0 to 5) that indicates how useful you believe the data is to Angel.
 - f. If possible, please email us a sample of the data.
 - g. Please feel free to provide any further comments on the data set.
5. If you are aware of any other data sets within Angel Trains or in possession of your customers/suppliers you'd like to make us aware of, please use the text box to inform us.
6. Finally, if you have any additional comments regarding the survey, please use the subsequent textbox.

Here are three examples of what filling the data set information might look like:

Example 1

What is the name of the data set? - *OTMR Data for Virgin Pendolinos*

What is the source of the data? - *Direct feed from Virgin Trains*

What format is the data in? - *Database*

Is the data encrypted? - *Yes*

How useful is/could the data be to Angel Trains in your opinion? - *4 (option on scale 0 to 5)*

Example 2

What is the name of the data set? - *Engineering fault reports*

What is the source of the data? - *Email from Northern staff*

What format is the data in? - *Text files*

Is the data encrypted? - *No*

How useful is/could the data be to Angel Trains in your opinion? - 5 (option on scale 0 to 5)

Example 3

What is the name of the data set? - *Fleet component status*

What is the source of the data? - *Email from depot XYZ*

What format is the data in? - *Excel spread sheet*

Is the data encrypted? - *Yes*

How useful is/could the data be to Angel Trains in your opinion? - 4 (option on scale 0 to 5)

Thank you very much for taking the time to assist with this exercise. If you have any feedback or comments about the survey or exercise as a whole, please email James Brown (james.brown@angeltrains.co.uk), cc'ing in Asad Hussain of Hack Partners (asad@hackpartners.com).