

**SCHEDULE
STATEMENT OF WORK TEMPLATE**

Statement of Work



TELEFÓNICA UK LIMITED

AND

Jacobs UK Ltd

**With reference to: Agreement for the Provision of Smartsteps Data,
Equipment and Services (Direct Version)**

and relating to

Provision of Movement Insights Data

STATEMENT OF WORK NUMBER: 002

1. General

This Statement of Work (“SOW”) forms part of the Agreement for the Provision of Smartsteps Data, Equipment and Services (Consultancy Version) between **Jacobs UK Limited** (the “Customer”) and **Telefónica UK Limited** (“O2”) dated 27 August 2020 (the “Agreement”). The SOW shall be read together with the terms and conditions contained within the Agreement. In the event of any conflict, the terms and conditions contained in the Agreement will prevail.

Any capitalised terms used and not otherwise defined in this SOW shall have the meaning set out in the Agreement.

The parties may execute this SOW using counterparts. Each counterpart will be deemed an original SOW for all purposes and shall together constitute one and the same SOW.

2. Term

This SOW shall commence following O2’s signature of this SOW (the “**Commencement Date**”) and, unless terminated earlier under the terms of the Agreement, shall continue for 12 months (the “**SOW Term**”).

3. Key Contacts:

For O2:

| Name | Contact Details |
|------------|---------------------------|
| [REDACTED] | [REDACTED]@telefonica.com |
| [REDACTED] | [REDACTED]@telefonica.com |
| [REDACTED] | [REDACTED]@telefonica.com |

For the Customer:

| Name | Contact Details |
|------------|-----------------------|
| [REDACTED] | [REDACTED]@jacobs.com |
| [REDACTED] | [REDACTED]@jacobs.com |

4. The Services

Brief overview of the Services

This SOW relates to the provision of data for the purposes agreed for the Project EDMOND Refresh (EDMOND 2).

The datasets are built through the analysis of mobile network events, created by a sample of 25 million handsets on the O2 mobile network which are then extrapolated to be representative of the UK population. The use of aggregated and anonymised mobile network data allows O2 to estimate macro movement of population throughout the UK. This dataset is fused with demographic insight created by O2 from sources such as: customers call behaviour; Smartphone browsing and app behaviour; customer phone type; customer contract data etc.

End User

This SOW is produced for the Customer to provide onward consultancy services in accordance with the Permitted Purpose to:

Transport for London, 5 Endeavour Square, London. E20 1JN. (the "End User")

Description of the Deliverables

The Movement Insights data will cover two separate datasets, namely:

1. Origin Destination Data
2. People Counts

The data will cover the following temporal periods:

- Delivery 1: 2016 OD Data: 4 weeks of Origin Destination data representing an average weekday Monday to Friday from September 2016
- Delivery 2: 2019 OD Data: 4 weeks of Origin Destination Data representing an average weekday* in September 2019
- Delivery 3: 2019 Movement Insights People Count data: 4 weeks of data from September 2019
- Delivery 4: 2023 OD Data representing an average weekday* defined from 01 April 2023 to 30 June 2023 for up to a total of 40 weekdays.
- Delivery 5: 2023 Movement Insights People Counts data for up to 1 calendar month, across a date range between 01 April 2023 to 30 June 2023

** See notes under following section for definition of Average Weekday for 2019 and 2023*

Deliverable 1, Deliverable 2 and Deliverable 4 - Origin Destination Data:

In this SOW the "Anonymised and Aggregated Data" will consist of Data created months of Data representing travel movements covering:

- an average weekday Monday to Friday from 05 September 2016 to 30 September 2016 inclusive
- an average weekday in September 2019 inclusive
- an average weekday defined from 01 April 2023 to 30 June 2023 for up to a total of 40 weekdays.

Average weekday definition:

* For deliverable 2 and Deliverable 4, the definition of the average weekday for the 2019 and 2023 Origin Destination data should be provided by the Customer, a minimum of 20 Working days prior to commencement. Should the definitions not be provided by this time, an average of Monday to Friday will be used for both 2019 and 2023.

This will be created by using the Data events collected from 25 million handsets on the O2 mobile network. The created Data is extrapolated to represent the UK over 12 population.

Non-typical days, such as school holidays and bank holidays, during these period will not be included. The days to be excluded shall be jointly agreed in writing, prior to the start of the project. If no days are agreed in writing before the start of the project, we will consider all days within the study period as typical days.

The zonal definition will be supplied by the Customer at or before project commencement. Trips will be allocated to start and end zones based on a zone system covering the whole UK, comprised of groups of Medium Super Output Areas (MSOAs) across the defined study area and increasing to aggregations of Middle Super Output Areas (MSOAs), Districts, Counties and Regions outside the area. O2 will only provide the base data (including the Anonymised and Aggregated Data) to the Customer.

The study area is defined as the Greater London area and the M25.

For each 2016, 2019 and 2023, O2 shall provide a "point of interest (POI) precision score" for each of the zones defined and agreed. This score will reflect the expected accuracy of the mobile network in each of the defined project zones.

The output will be provided as a CSV file in the following format:

[client zone | POI precision score]

O2 shall provide the following Zonal Origin-Destination Matrices as follows:

1. Base Origin-Destination Matrix

O2 shall provide an origin-destination matrix for an average weekday (Monday to Friday for 2016) and average weekday for 2019 and 2023, during the defined study periods. The definition of the average weekday for 2019 and 2023 should be provided by the Customer, a minimum of 20 Working days prior to commencement.

For each period defined, the number of trips starting, ending or passing through the study area will be captured. The matrices will be segmented by: [start zone, end zone, mode of travel, purpose, and time of day]. The matrix will be provided as a CSV file in the following format:

[start zone | end_zone | mode of travel | purpose | time of day | number of trips]

The segmentations for each of the deliverables are defined as follows:

"Mode of Travel" will be segmented within the matrices in the following groups:

1. Road (motorised trips) further segmented into:
Heavy Vehicle Trips (HGV Drivers, Coach Drivers, etc.) &
Non-Heavy Vehicle Trips (Car, Motorcycle, etc.)
2. Public Transport (Rail)
3. Active travel (Walk/ Cycle combined).
4. All modes combined

**please note: to identify active travel trips we will use the slowest percentage of trips in each distance category. The output will not include any trips that are too short to be detected using mobile network data.*

"Purpose" will be segmented within the matrices in the following groups:

1. outbound home based work (OB_HBW)
2. inbound home based work (IB_HBW)
3. outbound home based other (OB_HBO)
4. inbound home based other (IB_HBO)
5. non-home based work (NHBW)
6. non-home based other (NHBO)

Additionally for 2023:

7. outbound home-based education (OB_HBE)
8. inbound home-based education (IB_HBE)

"Time of Day" will be segmented within the matrices in the following groups:

- 24-hour daily data (00:00 – 23:59);
- AM = 0700-1000 hrs;
- IP = 1000-1600 hrs;
- PM = 1600-1900 hrs;

- OP = 1900-0700 hrs;

Trips will be allocated to a time period based on the time they enter the cordon. This has been shown in the past to improve the usability of the Data since trips (for example) from Manchester Portsmouth may not penetrate the cordon until several hours after they start.

Deliverable 3 and Deliverable 5 - People Counts Data:

The number of people spending time in any UK location by hour, day and geographical area (MSOA). This is split by demographic data: Age bands and gender.

The data will cover the geographic area covered by the Greater London area and the M25.

This deliverable will be split by:

- Date
- Hour
- MSOA
- Age group
- Gender
- Type

The following table shows an example of the output

| Date | Hour | MSOA | Age | Gender | Type | People |
|----------|------|----------|-------|---------|----------|--------|
| 01/05/22 | 0 | 95AA01S1 | 18-24 | Female | Resident | 572 |
| 01/05/22 | 5 | 95AA01S1 | 18-24 | Female | Worker | 221 |
| 01/05/22 | 6 | 95AA01S1 | 18-24 | Female | Visitor | 26 |
| 01/05/22 | 7 | 95AA01S1 | 18-24 | Unknown | Resident | 373 |
| 01/05/22 | 8 | 95AA01S1 | 18-24 | Female | Worker | 64 |
| 01/05/22 | 9 | 95AA01S1 | 18-24 | Male | Visitor | 528 |
| 01/05/22 | 10 | 95AA01S1 | 18-24 | Male | Visitor | 248 |

The format and content of the segments in the analytics output will be as follows:

“Hour” will be categorised into:

- 0 (the time period from midnight until 5am)
- 5
- 6
- 7

etc. where the hour defined is the start hour, so 5 represents the hour from 05.00 to 06.00

Between midnight and 5am these hours will be aggregated. All other hours of the days will be separated.

“Age” will be categorised as:

- 18-24
- 25-34

- 35-44
- 45-54
- 55-64
- 65+
- Unknown age

“Gender” will be categorised as:

- Male
- Female
- Unknown

“Type” will be categorised as:

- Resident – based on where the user has spent most of their evening and night time in the latest historical month available
- Worker – based on where the user was seen the most during daytime in the working week in the latest historical month available
- Visitor

Note that Age & Gender are based on data supplied by customers when they take out a contract product. No Age & Gender data is collected for other products such as Pay As You Go. The Unknown category makes up around 55% of the users used in the analysis.

Delivery method:

The Deliverables will be loaded into a secure Azure Blob Storage site and the link to this will be provided to the customer at commencement. The data will be made available as CSV files or compressed CSV files, where gzip with utf-8 is used as the encoding method.

Deliverables 1 and 2 will be delivered within 40 Working Days following contract signature.

Deliverable 3 will be delivered within 20 Working Days following contract signature.

Deliverable 4 will be delivered 40 Working Days after the conclusion of the defined date range, and

Deliverable 5 is delivered on a weekly basis each Monday for the data ending the previous week when the data is available in 2023.

O2 will provide access to the Movement Insights data (Deliverables 3 and 5) for a period of 6 months from the initial date of delivery.

Permitted Purpose

The Services shall be used only by the End User solely and strictly for the following **Permitted Purpose**:

The **Permitted Purpose** of the base data Deliverables are for the provision to and use by Jacobs and TfL for the following purpose:

- To assist Jacobs UK Ltd to provide onward consultancy support to Transport for London in connection with the EDMOND/MoTiON travel demand refresh.
- The “unprocessed/original aggregated” data sets shall not be shared with other government departments, academic institutions or other third parties without specific consent from the Telefonica. This restriction does not apply to the final product (model and matrices), which can be made available to third parties under TfL’s standard license agreement.
- Where insights or Combined Materials are created by Jacobs UK Ltd, using the data, Telefonica should be credited as the underlying data source, stating ‘Anonymised and Aggregated data by O2’
- The insights derived from the unprocessed/original aggregated data as part of the EDMOND demand refresh project will only be shared in articles and publications with consent from Telefonica.

Other than as set out above, the Customer is not permitted to sell, commercially exploit and/or commercialise the Deliverables and/or any Combined Materials or to sub-license or transfer the Deliverables and/or Combined Materials to any third party.

5. Charges

The Charge for the Deliverables is [REDACTED]

The charges will be invoiced as follows:

- [REDACTED] at 10 Working Days after commencement
- [REDACTED] upon delivery of Deliverables 1 and 2
- [REDACTED] upon delivery of Deliverable 5
- [REDACTED] at 30 Working days after delivery of Deliverable 5.

6. Assumptions/Dependencies (if applicable)

The following assumptions and dependencies shall apply to the provision of the Services:

1. Certain dimension combinations will not be included in the Deliverables if volumes are below the disclosure control threshold. The disclosure control threshold requires behaviour to be exhibited by 10 or more individuals before the behaviours are disclosed. For the origin destination output, where outputs are reported as averages over a number of days, results lower than 2 will be rounded stochastically to either 0 or 2. For the People Counts outputs, results less than 10 will be rounded stochastically to either 0 or 10
2. Telefonica shall use reasonable endeavours to provide the Services within any time periods and/or by any date indicated to the Customer, but

all time periods and dates (including any target delivery dates) are estimates and except where explicitly stated Telefonica shall have no liability for any failure to meet any date or perform any of its obligations within the time period indicated.

3. All deliverables will be expanded to represent travel by the UK population over 12.
4. The underlying methodology such as expansion methodology may change from time to time as it is further enhanced and refined. This could include providing expanded international visit volumes. As this occurs over the lifetime of the project, O2 will communicate any changes to the Customer with 30 days advance notice prior to any updates.
5. We may need to include data from outside the contract period for outputs that cover more than one day to meet disclosure control rules

7. Additional T&C's (if applicable)

7.1 The following definitions shall apply to this SOW in addition to the definitions set out in clause 1 of the Agreement:

“Medium Super Output Area” shall have the same meaning as described by the Office for National Statistics

Approval

The Customer and O2 hereby agree to the terms of this Statement of Work.

SIGNED for and on behalf of **TELEFÓNICA UK LIMITED** by:

.....
Authorised Signatory

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Name

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Title

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Date

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