Carbon Network Dashboard Service Schedule
Part B – Service Description

Section A The Service

1. STANDARD COMPONENTS OF THE SERVICE

BT will provide the Customer with the following Services in accordance with the details as set out in the Order:

1.1 **Carbon Network Dashboard**: access to the Service, via BT's My Account portal, will allow any authorised User to access a dashboard that captures the real-time power consumption data and energy consumption stats displayed by Device, Site, or at country level.

1.2 Based on the captured data, the Service will display performance insights, and capture relationships between Device parameters and energy consumption. The Service also provides reports, with system-generated recommendations for improvement, which the Customer can consider. These reports can be accessed via BT's My Account portal.

1.3 The power usage stats can be reported for maximum, minimum, average, total and latest (sampled power usage) in the selected time duration. The power usage data, the energy usage and Carbon Emission Factor of the energy (using available static and dynamic sources) will provide the carbon emission figures. The dashboard displays the top 10 Devices with the largest power and energy consumption.

1.4 The dashboard will provide insights to identify power efficient Device models.

1.5 The power/energy usage data is aggregated to provide the power usage stats of the Devices. The Device aggregation and reporting can be displayed against the following attributes/filters:

1.5.1 Device overview (top ten Devices in Customer's network);

1.5.2 Device model and product type;

1.5.3 country overview;

1.5.4 region overview;

1.5.5 executive overview;

1.5.6 Device refresh recommendations - comparative benchmarking of different models in terms of energy efficiency.

1.6 BT will:

1.6.1 collect power consumption data from network Devices using multiple methods (such as SNMP polling, CLI, and REST API). At present the Service covers Cisco routers, switches, wireless access points, data centre devices, SD-WAN and selective firewalls. The data is collected at 5-minute intervals per power supply;

1.6.2 aggregate the data per Device, per Device model, product type, country level and enterprise level;

1.6.3 derive energy consumption values in watts per hour from the power consumption value;

1.6.4 present the data in a single dashboard consisting of:

(a) the highest power and energy consuming Devices on the network in watts. This data is presented in tabular format which shows the model and IOS details of the Device, as well as in doughnut and line chart form. The line chart enables the Customer to pin-point the specific time/duration of changes in power consumption stats;

(b) aggregate data at country and enterprise level; and

(c) country aggregate.

1.6.5 provide a contextual level drill-down at:

(a) Device level – a report for different key metrics like Device reachability, availability, central processing units , memory, interface performance to the User. This will enable the User to co-relate power consumption with other key metrics to deduce the impact; and

(b) power / energy metric report – to understand trends and analyse the current value with the baseline to capture anomalies.

1.6.6 forecast data to the User to understand future value;

1.6.7 provide a heatmap template consisting of hourly aggregated data presented over time in a heatmap format to identify patterns;

1.6.8 make the data available to the User in the form of daily, weekly and monthly reports.

2. SERVICE MANAGEMENT BOUNDARY

2.1 BT's responsibility to provide and manage the Service is physically and logically limited to the Devices which are managed by BT;

the "**Service Management Boundary**."

2.2 BT will have no responsibility for the Service outside the Service Management Boundary.

2.3 BT does not make any representations, whether express or implied, about whether the Service will operate in combination with any Customer Equipment or other equipment and software.

3. ENABLING SERVICES

3.1 The Customer will have the following services in place that are necessary for the Service to function:

3.1.1 an Internet connection with suitable bandwidth to view results via the Service; and

3.1.2 Managed LAN or Customer premises equipment services from BT;

3.1.3 BT managed connectivity (for managed services such as monitoring) with firewall and ACL configured to enable the Customer's Device to be discovered with ICMP and SNMP mandatory protocols and the SSH Protocol with shared access conditions (credentials, communities etc.);

3.1.4 Onboarding of Customer on BT NPMD performance monitoring tool as part of the Customer managed service with BT (in accordance with Paragraph 3.1.2, if Customer's Devices not already being monitored on BT NPMD);

3.1.5 Availability of the MIB or mechanism to pull power consumption details from managed Devices; and

3.1.6 Device certifications for relevant MIBs to collect the power consumption data.

(each an "**Enabling Service**").

4. COMMISSIONING OF THE SERVICE

4.1 Before the Operational Service Date, BT will:

4.1.1 deliver and configure the Service;

4.1.2 conduct a series of standard tests on the Service to ensure that it is configured correctly;

4.1.3 connect the Service to each Enabling Service; and

4.1.4 on the date that BT has completed the activities in this paragraph 4.1, confirm to the Customer that the Service is available for performance of any Acceptance Tests.

5. ACCEPTANCE TESTS

5.1 The Customer will carry out the Acceptance Tests for the Service within five (5) Business Days after receiving notice from BT ("**Acceptance Test Period**").

5.2 The Service is accepted by the Customer if the Customer confirms acceptance in writing during the Acceptance Test Period or is treated as being accepted by the Customer if the Customer does not provide BT with notice to the contrary by the end of the Acceptance Test Period.

5.3 Subject to paragraph 5.4, the Operational Service Date will be the earlier of the following:

5.3.1 the date that the Customer confirms or BT deems acceptance of the Service in writing in accordance with paragraph 5.2;

5.3.2 the date of the first day following the Acceptance Test Period; or

5.3.3 the date the Customer starts to use the Service.

5.4 If, during the Acceptance Test Period, the Customer provides BT notice that the Acceptance Tests have not been passed, BT will remedy the non-conformance without undue delay and provide the Customer notice that BT has remedied the non-conformance and inform the Customer of the Operational Service Date.

Section B Service Management

6. INCIDENT MANAGEMENT

6.1 Where the Customer becomes aware of an issue with the Service, the Customer contact will report the issue to BT's service desk, via the BT My Account Portal. The Customer may raise Incidents with BT 24 hours a day, 7 days a week.

6.2 BT will:

6.2.1 create an Incident ticket;

6.2.2 provide regular updates via the BT My Account Portal;

6.2.3 carry out necessary diagnostics to identify the cause of the Incident and devise a plan to resolve it;

6.2.4 engage with the Customer contact if further information is required to assist the diagnosis and resolution of the Incident;

6.2.5 test and apply potential solutions to resolve the Incident; and

6.2.6 inform the Customer contact when the issue is resolved.

6.3 BT does not guarantee that the Service will be performed error-free or uninterrupted, or that BT will correct all errors in the Service. BT will endeavor to address Incidents as soon as BT reasonably can.

7. DASHBOARD AND REPORT CONTENT

7.1 Where the Customer requires any additional information in relation to the content of the reports or recommendations generated by the Service, the Customer may contact the Customer's BT account team.

7.2 The Customer will be provided with the Customer Handbook which contains dashboard and reporting content information.