

Test Agreement

Test Description: **BSS IoT Solar Power Trial**



Test Agreement

Test Description: **nbn**TM BSS IoT Solar Power Trial

| Version | Description | Effective Date |
|---------|------------------------------|----------------|
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| | | |

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Environment

nbn asks that you consider the environment before printing this document.

Contents

| | |
|--|-----------|
| 1. Interpretation and definitions | 4 |
| 1.1 Interpretation | 4 |
| 1.2 Definitions | 5 |
| 2. Pre-conditions for participation | 6 |
| 3. Documentation | 6 |
| 4. Supply of the Test Product and the Test Activity | 6 |
| 5. Service Levels | 7 |
| 6. Test Participant's Obligations | 8 |
| 6.1 General Obligations | 8 |
| 6.2 Test Contact | 8 |
| 6.3 Reports | 8 |
| 6.4 Test Results | 8 |
| 7. Charges | 9 |
| 8. Term, termination and withdrawal | 9 |
| 8.1 Term and termination | 9 |
| 8.2 Cancellation by nbn | 9 |
| 8.3 Cancellations by Test Participant | 10 |
| 8.4 Obligations regarding termination of supply | 10 |
| 9. Indemnity | 10 |
| 10. Liability exclusion | 10 |
| 11. Test Participant Acknowledgements | 11 |
| Execution | 12 |
| Appendix A Test Products | 13 |
| 1. Test Products | 13 |
| 2. Test Product based on nbn™ IOT | 13 |
| Appendix B Solar Mount Solution Requirements | 16 |

Test Agreement

Test Description: **nbn**TM BSS IoT Solar Power Trial

Parties

- nbn co limited (ABN 86 136 533 741) of Level 13, 100 Mount Street, North Sydney NSW 2060 (**nbn**);
- <company name> (ABN **XX XXX XXX XXX**) of <address> (**Test Participant**).

Background

- A. A significant proportion of Australia's land mass is identified as being rural and remote where traditional fixed broadband connectivity is limited in its availability. To service users operating in these locations, technologies such as wireless and satellite are used to provide connectivity.
- B. Businesses operating in these areas include mining, agriculture, etc typically operating at sites with a large defined footprint.
- C. Emerging technologies such as autonomous machinery and remote sensing equipment to support these industries are being designed to operate in these types of locations and using a range of wireless technologies provide data back to command sites anywhere in the world.
- D. To support these emerging solutions communications technologies are required to operate by way of local area networks that support connectivity to End Users devices which may be operating at a considerable distance from the **nbn** device and existing power supplies.
- E. **nbn** has been approached to develop and make available to its customers a solar powered service in the nature of the Test Product to be used to evaluate the effectiveness of **nbn**TM IOT BSS connectivity when used in conjunction with End User Equipment to support farmers, mining companies and other businesses operating within a defined property.
- F. This document constitutes a Test Description for the purposes of the Standard Test Terms.
- G. The purpose of the Test is to enable **nbn** and Test Participant to test:
 - the capability of **nbn** and Test Participant to deliver the Test Product;
 - the performance and functionality of the Test Product; and
 - the capability of **nbn** and Test Participant to order, provision, support, and operate the Test Product.

1. Interpretation and definitions

1.1 Interpretation

For the purposes of this Test Description:

- (a) any capitalised term used but not defined in this Test Description has the meaning given to that term in the Standard Test Terms unless expressly specified otherwise; and
- (b) any capitalised term used but not defined in this Test Description or the Standard Test Terms has the meaning given to that term in the following order of precedence:

- (i) the standard form of access agreement version of the “**nbn**™ BSS Interim Launch Agreement” published on the **nbn** website from time to time; and
- (ii) the standard form of access agreement version of the WBA published on the **nbn** website from time to time.

1.2 Definitions

In this Test Description:

Agreement means this Test Description and the Standard Test Terms.

nbn™ BSS Interim Launch Agreement means the standard form of access agreement version of the “**nbn**™ BSS Interim Launch Agreement” published on the **nbn** website.

nbn Indemnified Parties means **nbn**, each of **nbn**’s Related Bodies Corporate, each of the Personnel of **nbn** and **nbn**’s Related Bodies Corporate, each of **nbn**’s subcontractors and each of the Personnel of each of **nbn**’s subcontractors.

Self-Installation Option has the meaning given in clause 4(c).

Solar Mount Solution means the equipment to be supplied and maintained by the Test Participant in accordance with the requirements set out in Appendix B.

Standard Test Terms means the agreement entitled “Test Agreement – Standard Test Terms” entered between **nbn** and Test Participant.

Test Activity has the meaning given in clause 4(b) and 4(c).

Test Contact means each person appointed by each of **nbn** and Test Participant as:

- (a) their single central contact point regarding the Test; and
- (b) any additional people appointed as contact points in relation to specific matters regarding the Test (such as operational or technical issues).

Test Connection means a fixed line or wi-fi based connection, and the associated local area network supplied by the Test Participant that connects the VSAT NTD to the Test End User Equipment.

Test End User Contract means a contract between Test Participant and End User which:

- a) permits **nbn** to supply a Test Product to the Test Location and conduct all related inspection, installation, maintenance and deinstallation works;
- b) obliges End User to provide or procure all reporting, feedback and any other assistance that **nbn** or Test Participant may reasonably require in connection with this Test;
- c) includes any necessary consents from End User to permit End User's confidential information and its Personnels’ Personal Information to be disclosed to and used and disclosed by **nbn** and its Personnel for the purposes of this Test; and
- d) obliges the End User to obtain any and all necessary consents, authorisations, licences and permits that may be required lawfully to enable it to use the Solar Mount Solution, Test Connection and Test End User Equipment for use in carrying out the Test Activity, and supply any mains power that End User may need to procure in order to carry out the Test Activity.

Test End User Equipment means each item that is used by an End User in connection with the **nbn**™ Network, the Test Activity or the Test Products and supplied by the End User or Test Participant , including routers, mobile devices and personal computers.

Test Location has the meaning set out in clause 4(a).

Test IAC means the IAC product component of the Test Product described in Appendix A.

Test Participant has the meaning given to that term in the "Parties" provision of this Agreement.

Test Product means a **nbn**[™] BSS IoT Test Product as described in Appendix A (which excludes, for clarity, the Solar Mount Solution, Test Connection and Test End User Equipment).

Test Term means the term of the Test as determined in accordance with clause 8.1.

Test UNI means the UNI product component of the Test Product described in Appendix A.

VSAT NTD Set 3 means a VSAT NTD of that name described in section 4.7 of the [nbn[™] BSS ILA Product Technical Specification](#).

VSAT NTD Set 7 means a VSAT NTD of that name described in section 4.7 of the [nbn[™] BSS ILA Product Technical Specification](#).

2. Pre-conditions for participation

To participate in this Test, Test Participant must by the date notified by **nbn**:

- (a) have responded to the EOI Request and been selected by **nbn** to participate in this Test;
- (b) have entered into the Standard Test Terms and this Test Description;
- (c) have completed the relevant on-boarding and certification activities required by **nbn** for this Test;
- (d) have in place (and maintain at all times during the Test Term) a Test End User Contract in respect of each End User;
- (e) be a party to a **nbn**[™] BSS Interim Launch Agreement and, at all such times, be fully compliant with the terms of that BSS-ILA; and
- (f) be a party to a WBA and, at all such times, be fully compliant with the terms of that WBA.

3. Documentation

- (a) **nbn** may, without limiting clause 8, immediately amend or replace this Test Description by giving notice to Test Participant.
- (b) If **nbn** provides notice under clause 3(a), the parties will use reasonable endeavours to work with each other for the purpose of avoiding any inconvenience to either party.

4. Supply of the Test Product and the Test Activity

- (a) Subject to clauses 4(b) to 4(f), **nbn** will supply a Test Product to Test Participant in respect of a location if:
 - (i) **nbn** has notified Test Participant that the Test Product is available in respect of a specified location; and

- (ii) Test Participant requests the supply of the Test Product to the location and confirms to **nbn** that Test Participant will supply a Downstream Product at that location,
 - ("Test Location").
- (b) To facilitate the Test:
 - (i) subject to clause 4(c), **nbn** will supply, install and assure an NTD outdoor component, a connecting cable and an NTD indoor component, to which **nbn** will supply a Test Product; and
 - (ii) the Test Participant must supply, install, maintain and assure the Solar Mount Solution (including the connection between the Solar Mount Solution and the VSAT NTD), the Test Connection, the Test End User Equipment, in accordance with **nbn**'s direction. Further details pertaining to the connection between the Solar Mount Solution and the VSAT NTD, and the Test Connection, will be set out in the Test Plan.

(together, the **Test Activity**).
- (c) Test Participant may elect to install and assure the NTD outdoor component, connecting cable and NTD indoor component in accordance with the terms of the **nbn**TM BSS Interim Launch Agreement (**Self-Installation Option**).
- (d) The Test Participant must ensure that the Test End User Equipment is situated within the Test Location at all times.
- (e) Test Participant acknowledges and agrees that:
 - (i) the supply of each Test Product is subject to the availability of any relevant inputs in connection with that Test Product, including but not limited to:
 - (A) capacity on the BSS Network as relevant;
 - (B) any equipment, systems and infrastructure; and
 - (C) the ability of the Test Participant to supply and have available a suitable Solar Mount Solution for use with the Test Product as a part of the trial, at its own cost and risk.

at the time the Test Participant places an order and at all relevant times during the Test Term, as determined by **nbn** in its discretion; and
- (f) **nbn** may attend the Test Location to review whether the Solar Mount Solution, and the VSAT-NTD (if Test Participant has selected the Self-Installation Option), has been installed and supplied in accordance with the requirements set out by **nbn**.

5. Service Levels

- (a) No service levels, rebate or compensation of any kind, however described, is available or applicable in connection with this Test or the supply of any Test Product.
- (b) Test Participant acknowledges and agrees that the Test Product may not provide features, functionality, performance, capacity or reliability that are equivalent to a standard Carriage Service (including an internet access or broadband access service).
- (c) **nbn** may interrupt a Product supplied to Test Location to which **nbn** is also supplying or proposing to supply a Test Product and any such interruption will not constitute an Outage or a Service Fault.

6. Test Participant's Obligations

6.1 General Obligations

- (a) Test Participant must support and assist **nbn** with the conduct of this Test, including by doing any of the following where required by **nbn**:
 - (i) undertaking Test related activities (including manual processes) in timeframes determined by **nbn** (acting reasonably) and notified to Test Participant;
 - (ii) providing dedicated resources to work with **nbn** to resolve issues that may arise during this Test;
 - (iii) working collaboratively with **nbn** to refine this Test;
 - (iv) notifying **nbn** of any matter which Test Participant considers to be a material error, defect or deficiency in the products, processes or procedures the subject of this Test, as soon as reasonably practicable after becoming aware of that material error, defect or deficiency;
 - (v) without limiting clause 6.1(a)(iv), providing feedback, for the purposes of improving the products, processes or procedures the subject of this Test;
 - (vi) participating in periodic meetings with **nbn** to review test findings; and
 - (vii) performing any other activities as required by a Test Plan.
- (b) Test Participant acknowledges and agrees that **nbn** may:
 - (i) notify potential End Users that Test Participant may supply Downstream Products to the potential End Users; and
 - (ii) provide Test Participant's contact details to potential End Users.

6.2 Test Contact

- (a) Whenever requested by **nbn**, Test Participant must make its Test Contacts available to meet with **nbn's** Test Contacts (either in person or by videoconference) to discuss any matters relating to this Test.
- (b) **nbn** and Test Participant will provide telephone and email contact details of their Test Contacts to each other prior to the start of this Test and maintain and provide updates to these contact details for the duration of the Test Term.

6.3 Reports

- (a) Test Participant must provide **nbn** with feedback and reporting in the form, and at the times, defined in the Test Plan.
- (b) Test Participant must, where reasonably requested by **nbn** by giving 5 Business Days' notice:
 - (i) meet with **nbn** to review and evaluate the performance of any Test Products; and
 - (ii) use reasonable endeavours to assist **nbn** to obtain information regarding the performance of a Test Product, any infrastructure that is used to supply the Test Product, and **nbn's** relevant processes and procedures.

6.4 Test Results

- (a) Test Participant consents to **nbn** monitoring and recording, for the purposes of this Test, the usage of Test Products and Downstream Products.

- (b) Test Participant must provide information and feedback to **nbn** regarding the Test Products by:
 - (i) providing information directly to **nbn** as requested by **nbn**; and
 - (ii) immediately notifying **nbn** if Test Participant becomes aware of any actual or likely unexpected or unintended impact of this Test, including in respect of any person not actively participating in this Test.

7. Charges

- (a) Where the Test Participant:
 - (i) selects the Self-Installation Option, no charges will apply to this Test or the Supply of the Test Products; and
 - (ii) does not select the Self-Installation Option, Professional Services (but no other charges) will apply to this Test and the Test Products in accordance with section 20 of the **nbn**TM BSS – ILA Price List.
- (b) Up to \$1,500 of recurring Charges will be waived for the supply of any **nbn**TM BSS IOT Product which Test Participant acquires at a Test Location immediately prior to participating in this Test.
- (c) Each party to this Agreement will bear its own costs of participating in this Test.

8. Term, termination and withdrawal

8.1 Term and termination

- (a) The supply of each Test Product under this Test Description:
 - (i) will start on the date specified in the applicable Test Plan or as otherwise agreed between **nbn** and Test Participant; and
 - (ii) will end on the earlier of:
 - (A) the date notified in a Cancellation Notice in respect of a Test relating to that Test Product issued in accordance with clause 4 of the Standard Test Terms; and
 - (B) the expiry or termination of this Test Description.
- (b) This Test Description will expire on 31 January 2022 unless:
 - (i) terminated earlier in accordance with this Agreement; or
 - (ii) extended by **nbn** by giving notice in writing to Test Participant prior to expiry, in which case this Test Description will expire on that extended date.

8.2 Cancellation by **nbn**

Without limiting **nbn**'s rights under the Standard Test Terms, if Test Participant breaches any provision of this Agreement during the Test Term (including failing to comply with any condition in clause 2), **nbn** may immediately:

- (a) cancel Test Participant's participation in any Test or any part of any Test under this Test Description;
- (b) cease supplying one or more of the Test Products to Test Participant;

- (c) terminate this Test Description; and
- (d) terminate this Agreement.

8.3 Cancellations by Test Participant

- (a) Subject to clauses 8.3(b) and 8.3(c), Test Participant may cancel the supply of a Test Product in respect of Test Location by giving **nbn** at least 10 Business Days' written notice.
- (b) If Test Participant cancels the supply of a Test Product under clause 8.3(a), Test Participant will inform **nbn** of the reason for the cancellation.
- (c) If Test Participant considers that the supply of a Test Product is resulting in an adverse impact on Test Participant's network or services:
 - (i) Test Participant will immediately notify **nbn**;
 - (ii) **nbn** will take reasonable steps to investigate and attempt to resolve the issue; and
 - (iii) Test Participant will provide **nbn** with all reasonably requested assistance in its investigation and resolution activities.

8.4 Obligations regarding termination of supply

If either party cancels or terminates the supply of a Test Product, this Test Description or this Agreement, the parties will use their reasonable endeavours to work with each other for the purpose of avoiding any inconvenience.

9. Indemnity

In addition to the indemnities provided by Test Participant to the **nbn** Indemnified Parties in the Standard Test Terms, Test Participant must pay to any **nbn** Indemnified Party on demand an amount equal to all Losses suffered or incurred by that **nbn** Indemnified Party arising from or in connection with any Claim (including but not limited to any Claim brought by any third party) arising from or in connection with Test Participant's participation in the Test and its performance of the Test Activity, to the extent that such Losses are caused by Test Participant's negligent act or omission, breach of this Agreement, breach of the **nbn**TM BSS Interim Launch Agreement, breach of the WBA or wilful misconduct.

10. Liability exclusion

- (a) Notwithstanding anything in the Standard Test Terms, to the full extent permitted by law, Test Participant:
 - (i) must not make a Claim against **nbn** for any Loss suffered or incurred by Test Participant in relation to this Test, the Test Products or this Agreement;
 - (ii) releases and forever discharges **nbn** from all Claims and Liabilities which Test Participant has (or at any time might have or may have had) in relation to this Test, the Test Products or this Agreement; and
 - (iii) indemnifies and holds each of the **nbn** Indemnified Parties harmless in respect of any Loss suffered or incurred as a result, or in connection with the supply of the Test Products, and any Test End User Equipment or **nbn**TM Equipment, other than in respect of **nbn**'s confidentiality obligations under this Agreement.
- (b) To the extent that clause 10(a) does not operate to exclude or limit a party's liability or to indemnify a party against Loss, clauses 10 to 11 of the Standard Test Terms will apply.

11. Test Participant Acknowledgements

Test Participant warrants and agrees that:

- (a) Test Participant has made and has relied on its own investigations, enquiries, knowledge and expertise in respect of all Tests, the Test Products, the Test Activity and this Agreement and its own evaluation of any material provided by **nbn** to Test Participant or its Personnel including before the date of this Agreement;
- (b) As part of its investigations and enquiries in respect of all Tests, the Test Products, the Test Activity and this Agreement, Test Participant or its representatives have had access to all documents and information they have requested from **nbn** or its Personnel;
- (c) Test Participant has knowledge and experience in relation to the provision of services similar to the Downstream Products and has had the benefit of independent legal, financial and technical advice relating to its proposed participation in this Test and its entry into this Agreement;
- (d) **nbn** has not made, and no Personnel of **nbn** have made, any warranty as to the performance of any Test Product provided to Test Participant or its Personnel before the date of this Agreement;
- (e) Test Participant is not entering into this Agreement in reliance on, and it may not rely on, any statement of opinion, statement of intention or any other warranty, representation or other statement made or purporting to be made by or on behalf of **nbn** or its or their Personnel, other than as expressly set out in this Agreement; and
- (f) Test Participant has obtained any and all necessary consents, authorisations, licences permits that may be required lawfully to enable it to supply and install the Solar Mount Solution and/or perform the Test Activity, and / or supply any mains power that may be required in order to carry out the Test Activity.

Execution

Executed as an agreement

Signed for **nbn co limited** by its authorised representatives:

Signature of authorised representative

Signature of authorised representative

Name of authorised representative

Name of authorised representative

Date of signature

Date of signature

Signed for < **Test Participant** > by its authorised representatives:

Signature of authorised representative

Signature of authorised representative

Name of authorised representative

Name of authorised representative

Date of signature

Date of signature

Appendix A Test Products

1. Test Products

The Test Product supplied to a Test Location will be supplied by means of the BSS Network as described in, subject to, and in accordance with, section 2 of this Appendix A.

2. Test Product based on nbn™ IOT

The Test Product:

- (a) is a Layer 3 virtual connection that carries traffic between a Test UNI used to serve Test Location and an Internet Point of Presence;
- (b) is supplied by means of the BSS Network using **nbn™** IOT as limited or varied by this Test Description;
- (c) enables Test Participant to supply a low bit rate Carriage Service or Content Service to Test End User Equipment owned or operated by Test Participants or End Users;
- (d) comprises two Test Product Components which Test Participant must acquire and optional or configurable Test Product Features as follows:

| Test Product Component (required) | Test Product Feature (optional / configurable) |
|-----------------------------------|--|
| Test IAC | VoIP Prioritisation Encryption Performance Enhancing Proxy Standard Reporting |
| Test UNI | IP Address (Mandatory - nbn provided) |

- (e) Without limiting any other provision of this Agreement the Test Product is subject to each limitation, qualification and exclusion of scope, feature, functionality and performance that applies to the **nbn™** IOT Product described in the **nbn™** BSS Interim Launch Agreement.

1.2 Test IAC

- (a) **Internet Access Connection** or **IAC** is an Ethernet-based Layer 3 virtual connection on the BSS Network that carries Test Participant traffic to and from a UNI used to serve a Test Location.
- (b) Test Participant must specify Product Features which Test Participant will acquire and which **nbn** will use to configure an IAC Product Component for each Test Location to which the relevant Test Product will be supplied
- (c) **nbn** will map one IAC to a UNI used to serve the relevant Test Location and will not map more than one IAC to the same UNI.
- (d) Subject to sections 6 and 10 of the **nbn™** BSS ILA Product Technical Specification, which apply to the Test Product, Test Participant must specify the IAC bandwidth profiles which the Test Participant will acquire, for the purposes of this Test, from the table below:

| | CIR/PIR | Forward (Mbps) | Return (Mbps) | In increments of (Mbps) |
|--------------|---------|----------------|---------------|-------------------------|
| Test Product | PIR | 0.05 – 2.00 | 0.05 – 2.00 | 0.01 |
| | CIR | 0.01 – 2.00 | 0.01 – 2.00 | 0.01 |

1.3 Test UNI

- (a) The **User Network Interface** or **UNI** is the physical port on the VSAT NTD to which **nbn** supplies a Test Product in respect of a Test Location.
- (b) Test Participant must order at least one UNI for each Test Location to which a Test Product will be supplied.
- (c) Further details of UNI particulars are set out at section 4 of the [nbn™ BSS ILA Product Technical Specification, which applies to the Test Product](#).
- (d) The UNI port has an electrical interface and will not be made available with an optical interface.
- (e) It is a condition of the supply of a UNI Product Component that Test Participant must also specify for the relevant Test Product, Product Features which Test Participant will acquire and which nbn will use to configure the IAC Product Component.

1.4 IP Address

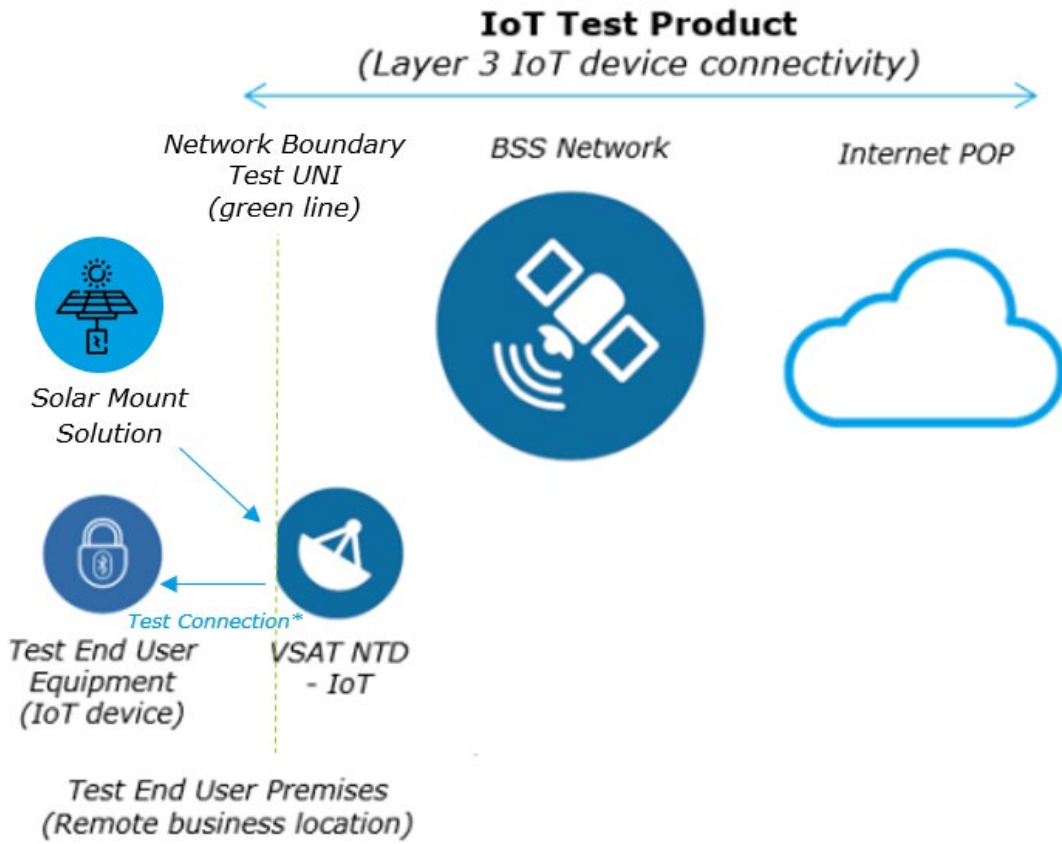
- (a) Each UNI will be provisioned with a public IP address supplied by **nbn** that Test Participant may use for IP-based communications beyond the BSS Network.
- (b) The particulars of the IP address provisioned in respect of a UNI depends on the functionality requested by Test Participant.
- (c) The Test Product will, by default, be supplied using Route Mode of UNI-D IP address allocation.

1.5 VSAT NTD Set

The Eligible VSAT NTD Set for use with the Test Product is either VSAT NTD Set 3 or VSAT NTD Set 7.

1.6 Network boundaries

The diagram below illustrates, at a high level, the IoT Test Product:



**Test Participant is responsible for providing the Test Connection. For example, this may be achieved (at the Test Participant's option, subject to the terms of this Agreement) through the use of a local area network established served by fixed line connection between the Test End User Equipment and the VSAT NTD, or via wifi access.*

Appendix B Solar Mount Solution Requirements

- Batteries – 2 x 12V
- Battery Balancer – acts to correct any imbalance in charge between the two 12V batteries
- Solar Panels – 2 x 125W 24V panels connected in series to provide sufficient voltage to charge the batteries
- Maximum Power Point Tracking (MPPT) Solar Controller – Regulates current and voltage from the solar panels to the batteries to provide safe charging.
- DC-DC Converter – Supplies a regulated 24V to the load
- Solar Monitoring – Provides cloud-based monitoring of solar performance (not pictured in diagram below) to be connected to the DC-DC Converter
- Mount – a suitable bracket or equivalent structure to mount the VSAT NTD allowing it to be connected to the solar power output

