

# TENDER FOR THE SUPPLY, INSTALLATION, TESTING, COMMISSIONING, OPERATION AND MAINTENANCE SUPPORT SERVICES FOR STARLINK SATELLITE BROADBAND SERVICES WITH EXTENDED WI-FI COVERAGE FOR PROOF-OF-CONCEPT ("POC")

**Tender Briefing** 

4 December 2023

### **OBJECTIVE**



### Session 1

- Briefing on the project
- Q& A

### **Session 2**

**Tender Compliance** 

### **BACKGROUND**



In today's fast-paced, interconnected world, access to reliable and high-speed internet is essential for everyone. However, many regions, particularly remote and rural areas, continue to face challenges in securing access to broadband services.

Starlink, a project developed by SpaceX, offers a promising solution by leveraging its growing constellation of Low Earth Orbit ("LEO") satellites to provide high-speed broadband internet services with low latency globally, especially in areas with no coverage or limited coverage.

On 17 July 2023, Starlink Internet Services Malaysia ("SISM") has been awarded the Network Facilities Provider (I) and Network Service Provider (I) licenses to provide the first LEO Satellite Broadband Services in Malaysia.

The Malaysian Government through MCMC is conducting a POC at forty (40) sites to assess the feasibility of Starlink satellite broadband with extended Wi-Fi coverage services as an interim solution for one (1) year to address connectivity issues at selected locations.

### **BATCH 1 POC STATUS UPDATE**



- MCMC has purchased **10 units of HP Starlink Kit with 1 year priority subscription ("Batch 1")** to **assess the capabilities** and **identify the challenges** before acquiring the additional 30 units of Starlink for the subsequent POC ("Batch 2").
- Additionally, MCMC has conduct trial to extend the Wi-Fi coverage since the existing Starlink Wi-Fi router's coverage is limited.

No.	Location	State	Date
1.	UiTM Kuala Pilah	Negeri Sembilan	27 Jul 2023
2.	*Kampung Orang Asli (" <b>KOA</b> ") Hulu Kemensah, Gombak	Selangor	10 Aug 2023
3.	*KOA Tonggang, Tambun	Perak	28 Aug 2023
4.	KOA Sg. Temon, Johor Bahru	Johor	30 Aug 2023
5.	Sekolah Kebangsaan Malaing, Nabawan	Sabah	5 Sep 2023
6.	Kampung Puak, Bau, Kuching	Sarawak	6 Sep 2023
7.	Kampung Langsat, Ranau	Sabah	7 Sep 2023
8.	Rumah Menyimbang, Julau	Sarawak	14 Sep 2023
9.	SK Titom, Kuala Lipis	Pahang	10 Oct 2023
10.	Dewan Hajah Tuminah, Bagan Datuk	Perak	24 Oct 2023





# **TENDER REQUIREMENTS**



No.	Para/ Item	Tender Requirement	Remarks
1.	2.1	The Tenderer (as defined herein) is required to have a valid certificate of registration issued by the Companies Commission of Malaysia (hereinafter referred to as "CCM").	Mandatory
2.	2.2	The Tenderer shall be a valid Application Service Provider ("ASP") licence holder under the Communications and Multimedia Act 1998 ("Act") and shall maintain its validity of the licence throughout the tender evaluation period. A copy of <b>notification of registration of ASP licence</b> shall be included in the tender submission.	Mandatory
3.	2.3	The Tenderer also shall not owe any outstanding fees (licence, spectrum assignment and/or numbering assignment) to the Commission;	Mandatory
4.	2.4	The Tenderer shall be appointed by Starlink Internet Services Malaysia Sdn Bhd ("SISM") or SpaceX as an authorised reseller for Starlink Satellite Broadband Services in which the Tenderer is required to submit the <b>Letter of Authorisation</b> in the tender submission.	Mandatory
5	2.5	The Tenderer shall procure the bandwidth service directly from SISM, the locally licensed individual Network Service Provider, in which the Tenderer is required to submit a <b>Letter of Undertaking</b> in the tender submission.	Mandatory

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### **SCOPE OF WORK**

This tender consists of Part 1 and Part 2 for the supply, installation, testing, commissioning, operation and maintenance support services for the followings:

- ▶ Part 1 The leasing of Starlink Satellite Broadband Services with Extended Wi-Fi Coverage and its ancillaries for thirty (30) sites for one (1) year (Batch 2 of POC); and
- ➤ Part 2 The leasing of Extended Wi-Fi Coverage Services and its ancillaries for eight (8) sites for one (1) year (Batch 1 of POC).



### **POC LOCATIONS**

The POC locations are selected or identified based on the following factors:

- ✓ areas with no coverage or poor 4G coverage;
- ✓ there is an existing and stable commercial or non-commercial electricity supply;
- ✓ appropriate space for equipment installation and cable wiring; and
- ✓ places where the local population is concentrated and availability of public halls, mosques, schools, health centres or similar amenities for installation of internet hotspots.

PART 1

PART 2

# **TECHNICAL SPECIFICATIONS (1/10)**



No	Technical Specifications	
	ltem	
1.	<ul> <li>42.1. Starlink Satellite Broadband Service:</li> <li>42.1.1. The Successful Tenderer shall provide the Starlink Satellite Broadband Service as follows: <ul> <li>(a) Lease of thirty (30) units of Starlink High Performance ("HP") Kit;</li> <li>(b) Unlimited data with priority subscription plan (1 TB) for each of the thirty (30) units; and</li> <li>(c) Duration of lease and subscription is twelve (12) months.</li> </ul> </li> </ul>	
2.	<ul> <li>42.2. Extended Wi-Fi Coverage Service:</li> <li>42.2.1. The Successful Tenderer shall provide the Extended Wi-Fi Coverage Service as follows: <ul> <li>(a) Lease of Extended Wi-Fi Coverage service for thirty (30) sites;</li> <li>(b) Each site will have up to maximum three (3) sectorised Access Points (120 degree per sector) with minimum of 150m coverage radius per sector and Wi-Fi 6 Access Points for outdoor installation; and</li> <li>(c) Duration of lease is twelve (12) months.</li> </ul> </li> </ul>	

# **TECHNICAL SPECIFICATIONS (2/10)**



No	Technical Specifications	
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3.	42.3. Site survey:  42.3.1. The Successful Tenderer shall provide site survey services as follows:  (a) Undertake site surveys and site evaluations for the purpose of installing and deploying Starlink Satellite Broadband Services with Extended Wi-Fi Coverage to provide broadband coverage at the identified POC sites.  (b) Propose the most optimal network design and placement of Access Points (APs) to provide broadband coverage to the population (by specifically taking into consideration the population distribution) at all the identified POC sites;  (c) Submit site survey and evaluation report containing the following information, but not limited to:  i. The exact latitude and longitude for the deployment of each Starlink Broadband Satellite Service with Extended Wi-Fi Coverage and its ancillaries;  ii. The population coverage and distribution within the identified POC sites that will be served by the Starlink Broadband Satellite Services with Extended Wi-Fi Coverage and its ancillaries;  iii. To provide coverage simulation of the sites;  iv. Network diagram for the installation of Starlink Satellite Broadband Service with Extended Wi-Fi Coverage and its ancillaries;  v. The source of power supply to be provided by the site owner; and  vi. Comprehensive information on the site(s) and what is required for service provisioning at the location(s), such as the distance to the access road, relevant agency and local authority requirements (if applicable), and site(s) accessibility information.	

# **TECHNICAL SPECIFICATIONS (3/10)**



No	Technical Specifications	
	ltem	
4.	<ul> <li>42.4. Installation, Testing and Commissioning ("ITC") and Decommissioning: 42.4.1. The Successful Tenderer shall provide ITC and Decommissioning services as follows: (a) The ITC for the Starlink Satellite Broadband Service with Extended Wi-Fi Coverage and its ancillaries at the thirty (30) POC sites nationwide; (b) The installation must include, but not limited, to the following accessories: i. Wall-mounted or rooftop pole/bracket on existing building/structure for Starlink antenna and APs; ii. Wall-mounted 6u rack (with front glass and lock) for Starlink Power Supply Unit (PSU), router, switch and other network element; iii. Cabling and its ancillaries including conduit for installation of Starlink Satellite Broadband Services with Extended Wi-Fi Coverage for installation up to cabling distance of 100m per AP; iv. Power supply cabling from all equipment to existing power supply source available on site. In the event non-commercial power supply is used, Uninterruptable Power Supply (UPS) shall be provided, if not readily available. The Starlink Satellite Broadband Service with Extended Wi-Fi Coverage shall be made available as long as there is no disruption in the power supply provided by the site owner;</li> <li>v. A4 sized placard with information as defined by MCMC to be displayed on the wall-mounted rack; and vi. Other relevant accessories.</li> </ul>	

# **TECHNICAL SPECIFICATIONS (4/10)**



No	Technical Specifications	
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4.	Cont  42.4. Installation, Testing and Commissioning ("ITC") and Decommissioning:  42.4.1. The tenderer shall provide ITC and Decommissioning services as follows:  (c) Starlink antenna, rack, APs and other network element shall be mounted on existing building/structure  (public halls, mosques, remote schools, health centers or similar amenities). The cabling distance between  Starlink antenna and PSU shall be within 25m, and between PSU/ Switch and APs shall be within 100m per AP.  The APs may be co-located with PSU/Switch or installed on adjacent building/structure within cabling distance of 100m per AP.  (d) The use of sky lift for the installation of the equipment, whenever necessary.  (e) The ITC for the thirty (30) sites shall be completed within four (4) months.  (f) The decommissioning of Starlink Satellite Broadband Service with Extended Wi-Fi Coverage and its ancillaries must restore the impacted area of the building/structure to its original state after the POC ends.  (g) The decommissioning for thirty (30) sites shall be completed within four (4) months after the POC ends.	

# **TECHNICAL SPECIFICATIONS (5/10)**



No	Technical Specifications		
	Item		
5.	<ul> <li>42.5. Operation and Maintenance Support Services: <ul> <li>42.5.1. The tenderer shall provide the operation and maintenance support services as follows:</li> <li>(a) Local Network Operation Centre: <ul> <li>i. Staffed with qualified personnel;</li> <li>ii. Operating 24 hours per day, 7 days a week; and</li> <li>iii. Dedicated Care Line.</li> </ul> </li> <li>(b) Maintenance: <ul> <li>i. Conduct corrective and preventive maintenance as and when required (to be defined by the Tenderer) to ensure continued performance.</li> </ul> </li> <li>(c) Hardware Immediate Replacement <ul> <li>i. Immediate replacement in case of equipment failure (to be defined by the Tenderer).</li> </ul> </li> <li>(d) Network Monitoring Services <ul> <li>i. Web filtering for prohibited or restricted content;</li> <li>ii. Traffic monitoring and data utilisation;</li> <li>iii. Performance monitoring and analytics;</li> <li>iv. Availability of remote network monitoring services by MCMC;</li> <li>v. Data and user account management; and</li> <li>vi. All data and information shall be kept and made available during the entire period of POC (20 months).</li> </ul> </li> </ul></li></ul>		

# **TECHNICAL SPECIFICATIONS (6/10)**



No	Technical Specifications		
	Item		
5.	CONT  42.5. Operation and Maintenance Support Services:  42.5.1. The tenderer shall provide the operation and maintenance support services as follows:  (e) Submission of the Tenderer's proposed SLA, incident, and request escalation flow;  (f) Network availability must be at least 98% of the time in a year, excluding any scheduled downtime;  (g) Other value-added services that may enhance the success of project may be proposed by the tenderer;  (h) The duration of the operation and maintenance support services is twelve (12) months; and  (i) For avoidance of doubt, the electricity bill shall be borne by the site owner.		

# **TECHNICAL SPECIFICATIONS (7/10)**



Part 2 - The leasing of Extended Wi-Fi Coverage Services and its ancillaries for eight (8) sites for one (1) year (Batch 1 of POC).

No	Technical Specifications		
	ltem		
6.	<ul> <li>42.6. Extended Wi-Fi Coverage Service:</li> <li>42.6.1. The tenderer shall provide the Extended Wi-Fi Coverage Service as follows: <ul> <li>(a) Lease of Extended Wi-Fi Coverage services for eight (8) existing Starlink Satellite Broadband Services sites;</li> <li>(b) Each site will have up to maximum three (3) sectorised Access Points (120 degree per sector) with minimum 150m coverage per sector and Wi-Fi 6 for outdoor installation;</li> <li>(c) Duration of lease is up to twelve (12) months, matching the end subscription period of the existing Starlink Satellite Broadband Service.</li> </ul> </li> </ul>		
7.	<ul> <li>42.7. Site survey:</li> <li>42.7.1. The tenderer shall provide site survey services as follows: <ul> <li>(a) Undertake site surveys and site evaluations for the purpose of installing and deploying Extended Wi-Fi Coverage to provide extended coverage at the identified POC sites.</li> <li>(b) Propose the most optimal network design and placement of Access Points (APs) to provide coverage to the population (by specifically taking into consideration the population distribution) at all the identified POC sites;</li> <li>(c) Submit site survey and evaluations report containing the following information, but not limited to: <ul> <li>i. The exact latitude and longitude for each Extended Wi-Fi Coverage and its ancillaries;</li> <li>ii. The population coverage and distribution within the identified POC sites that will be served by the Extended Wi-Fi Coverage and its ancillaries;</li> <li>iii. To provide coverage simulation of the sites;</li> <li>iv. Network diagram for the installation of existing Starlink Satellite Broadband Service and the additional Extended Wi-Fi Coverage and its ancillaries;</li> <li>v. The source of power supply shall be provided by the site owner;</li> <li>vi. Comprehensive information on the site(s) and what is required for service provisioning at the location(s), such as the distance to the access road, relevant agency and local authority requirements (if applicable), and site(s) accessibility information.</li> </ul> </li> </ul></li></ul>		

# **TECHNICAL SPECIFICATIONS (8/10)**



Part 2 - The leasing of Extended Wi-Fi Coverage Services and its ancillaries for eight (8) sites for one (1) year (Batch 1 of POC).

No	Technical Specifications	
	ltem	
8	42.8. Installation, Testing and Commissioning ("ITC") and Decommissioning:  42.8.1. The tenderer shall provide ITC and Decommissioning services as follows:  (a) The ITC for the Extended Wi-Fi Coverage and its ancillaries at existing eight (8) POC sites nationwide;  (b) The installation must include, but not limited, to the following accessories:  i. Wall-mounted or rooftop pole/bracket on existing building/ structure for APs;  ii. Cabling and its ancillaries including conduit for installation of Extended Wi-Fi Coverage for installation up to cabling distance of 100m per AP;  iii. Power supply cabling from all equipment to existing power supply source available on site. In the event non-commercial power supply is used, Uninterruptable Power Supply (UPS) shall be provided, if not readily available. The Starlink Satellite Broadband Service with Extended Wi-Fi Coverage shall be made available as long as there is no power supply interruption; iv. A4 sized placard with information as defined by MCMC to be displayed on the wall-mounted rack; and v. Other relevant accessories.  (c) APs and other network element shall be mounted on existing building/ structure (public halls, mosques, remote schools, health centers or similar amenities). The cabling distance between Starlink antenna and PSU shall be within 25m, and between PSU/ Switch and APs shall be within 100m. The APs may be co-located with PSU/ Switch or adjacent building/structure within cabling distance of 100m per AP.  (d) The use of sky lift for the installation of the equipment, whenever necessary.  (e) The ITC for the eight (8) sites shall be completed within four (4) months.  (f) The decommissioning of Starlink Satellite Broadband Service with Extended Wi-Fi Coverage and its ancillaries must restore the impacted area of the building to its original state after the POC ended.	
	(g) The decommissioning for eight (8) sites shall be completed within four (4) months.	

# **TECHNICAL SPECIFICATIONS (9/10)**



Part 2 - The leasing of Extended Wi-Fi Coverage Services and its ancillaries for eight (8) sites for one (1) year (Batch 1 of POC).

No	Technical Specifications		
	Item		
9.	42.9. Operation and Maintenance Support Services:  42.9.1. The tenderer shall provide the operation and maintenance support services as follows:  (a) Local Network Operation Centre:  i. Staffed with qualified personnel;  ii. Operating 24 hours per day, 7 days a week; and  iii. Dedicated Care Line.  (b) Maintenance:  i. Conduct corrective and preventive maintenance as and when required (to be defined by the Tenderer) to ensure continued performance.  (c) Hardware Immediate Replacement  i. Immediate replacement in case of equipment failure (to be defined by the Tenderer).  (d) Network Monitoring Services  i. Web filtering for prohibited or restricted content;  ii. Traffic monitoring and data utilisation;  iii. Performance monitoring and analytics;  iv. Availability of remote network monitoring services by MCMC;  v. Data and user account management; and  vi. All data and information shall be kept and made available during the entire period of POC (20 months).		

# **TECHNICAL SPECIFICATIONS (10/10)**



Part 2 - The leasing of Extended Wi-Fi Coverage Services and its ancillaries for eight (8) sites for one (1) year (Batch 1 of POC).

No	Technical Specifications		
	Item		
9.	CONT  42.9. Operation and Maintenance Support Services:  42.9.1. The tenderer shall provide the operation and maintenance support services as follows:  (e) Submission of the Tenderer's propose SLA, incident, and request escalation flow.  (f) Network availability must be at least 98% of the time in a year, excluding any scheduled downtime.  (g) Other value-added services that may enhance the project's success may be proposed by the tenderer.  (h) The duration of the operation and maintenance support services is up to twelve (12) months, matching the end subscription period of the existing Starlink Satellite Broadband Service.  (i) For avoidance of doubt, the electricity bill shall be borne by the site owner.		

## **SCHEDULE OF PAYMENT**



No.	Payment Schedule	Payment (%)
1.	Upon proper execution and stamping of the Agreement, AND upon receipt of the Performance Bond	10
2.	Upon submission of site survey report for all sites (Part 1 and Part 2) subject to verification of the same by MCMC	10
3.	<ul> <li>Upon completion of the:</li> <li>a. Deployment and installation of the Starlink Satellite Broadband Services with Extended Wi-Fi Coverage and its ancillaries for the first 15 sites Part 1 and 8 sites Part 2; and</li> <li>b. The sites as stated in item (a) above being confirmed "on-air" and available for use by the end user.</li> <li>Subject to verification of the same by MCMC.</li> </ul>	20
4	<ul> <li>Upon completion of the:</li> <li>a. Deployment and installation of the Starlink Satellite Broadband Services with Extended Wi-Fi Coverage and its ancillaries for the next 15 sites Part 1; and</li> <li>b. The sites as stated in item (a) above being confirmed "on-air" and available for use by the end user.</li> <li>Subject to verification of the same by MCMC.</li> </ul>	20
5.	Upon submission of 1 <sup>st</sup> to 6 <sup>th</sup> operational report (as in paragraph 46.1.2) subject to verification of the same by MCMC.	15
6.	Upon submission of 7 <sup>th</sup> to 12 <sup>th</sup> operational report (as in paragraph 46.1.2) subject to verification of the same by MCMC.	15
7.	Upon completion of decommissioning of the Starlink Satellite Broadband Services with Extended Wi-Fi Coverage and its ancillaries for all sites, subject to verification of the same by MCMC.	10
	TOTAL	100

### PROPOSE PROJECT DEVELOPMENT TIMELINE



# PROJECT IMPLEMENTATION

- Installation, testing and commissioning period: 4 months
- All sites on-air



Jan 24'



Feb – May 24'



May 24'
- Sep 25'

# LOA, CONTRACT AND KICK-OFF

- LOA
- Project Kick-off
- Contract sign-off

# OPERATIONAL & CLOSURE

- Operational and maintenance: 12
   months
- Decommissioning of all sites: 4 months



# **TENDER COMPLIANCE**





URL : https://msmart.mcmc.gov.my/web/index.php



### **TENDER SUBMISSION**



#### **FINANCIAL**

Section 3

Section 4

Financial Checklist

APPENDIX A – F

### **Financial Submission:**

1 Original (hardcopy) + 1 Copy (hardcopy)

+ 1 digital copy of scanned documents in pdf format (CD or pen drive)

#### **TECHNICAL**

Section 5

**Technical Checklist** 

APPENDIX G-H

#### **Technical Submission:**

1 Original (hardcopy) + 1 Copy (hardcopy)

+ 1 digital copy of scanned documents in pdf format (CD or pen drive)

### **IMPORTANT NOTES**



- 1. All information and updates will be on MCMC website.
- 2. Attach the Tender Deposit to the Form of Tender Document (Appendix B). Tender submissions without the Tender Deposit shall be disqualified.
- 3. Be aware and comply with the required signatories. Please ensure that the Tenderer's official company stamps, and authorized signature appear on all pages of the Financial Submission only.
- 4. No company name/info in the Technical Submission. Failure to comply with this may invalidate the Tenderer's tender submission.
- 5. The MCMC Tender Secretariat will be the only point of contact for this project (<a href="mailto:tender@mcmc.gov.my">tender@mcmc.gov.my</a>).

### **TENDER TIMELINE**





**TENDER ISSUANCE** 

TENDER BRIEFING SESSION

# TENDER CLARIFICATION ENDS

- Before 5.00pm
- Strictly via email only to tender@mcmc.gov.my
- The consolidated Q&A will be published in MCMC website

# TENDER SUBMISSION / TENDER CLOSING DATE

- On or before 12.00pm
- MCMC CoE, Cyberjaya
- To complete
   Acknowledgement Form
   (2 copies)
- Late submission shall be rejected



# THANK YOU

# PART 1 LOCATIONS (1/2)



\* The proposed locations are subject to potential changes. Nevertheless, any new sites selected will closely align with the original locations and requirements. Approval for the new sites must be mutually agreed upon by both the Commission and the Successful Tenderer.

No.	Location	District	State
1	Perumahan Ladang Sedenak	Kulai	Johor
2	Kampung Tg. Olak	Muar	Johor
3	Kampung Tanah Lichin	Kuala Muda	Kedah
4	Kampung Serasa Baru, Sri Mahligai, Mukim Kemubu	Kuala Krai	Kelantan
5	Kampung Orang Asli Gapam Baru	Jasin	Melaka
6	UiTM Cawangan Raub, Pahang	Raub	Pahang
7	Kampung Orang Asli Kg Kerpal	Rompin	Pahang
8	Kampung Orang Asli Sungai Kenderong	<b>Batang Padang</b>	Perak
9	Kampung Orang Asli Batu 21	<b>Batang Padang</b>	Perak
10	UPSI campus, Perak	Tanjong Malim	Perak
11	Kuala Balung	Tawau	Sabah
12	Kampung Semayan, Pulau Banggi	Kudat	Sabah
13	Kampung Ruminding, Inanam	Tuaran	Sabah
14	Pos Kuala Abai	Kinabatangan	Sabah
15	Sekolah Kebangsaan Bonor	Keningau	Sabah

# PART 1 LOCATIONS (2/2)



\* The proposed locations are subject to potential changes. Nevertheless, any new sites selected will closely align with the original locations and requirements. Approval for the new sites must be mutually agreed upon by both the Commission and the Successful Tenderer.

No.	Location	District	State
16	Sekolah Kebangsaan Longongan	Nabawan	Sabah
17	Sekolah Kebangsaan Luasong	Tawau	Sabah
18	Mini balairaya (Dewan Tagal), Kampung Mondikot	Papar	Sabah
19	Rh Kaya Ng Luba	Kapit	Sarawak
20	Kampung Engkasing	Limbang	Sarawak
21	Nanga Tapang Bunga	Lubok Antu	Sarawak
22	Sungai Setulan	Bintulu	Sarawak
23	Sekolah Kebangsaan Long Apu	Baram	Sarawak
24	31 Bridged Kem PLKN Junaco	Sibu	Sarawak
25	Sekolah Kebangsaan Ulu Entaih	Julau	Sarawak
26	Rumah Nyuak Anak Garau	Julau	Sarawak
27	UiTM Cawangan Mukah, Sarawak	Mukah	Sarawak
28	Kampung Orang Asli Kuang	Rawang	Selangor
29	PGA Bridged Tengah	Kuala Langat	Selangor
30	Ladang Risda Cheneh	Kemaman	Terengganu

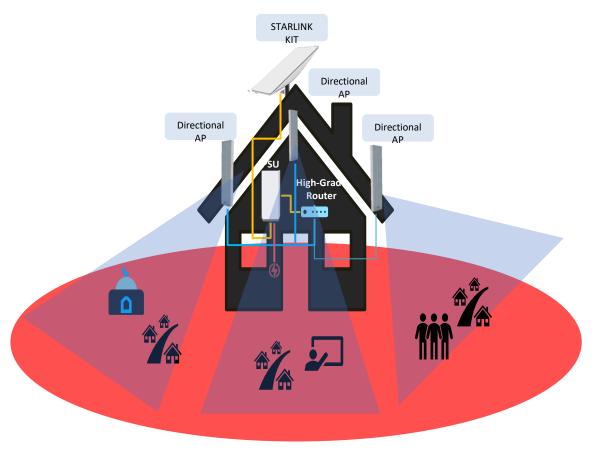
## **PART 2 LOCATIONS**



No.	Location	District	State	Latitude	Longitude	Starlink Service End Date
1	KOA Sg. Temon	Johor Bahru	Johor	1.46053	103.70394	28 August 2024
2	UiTM Kuala Pilah	Kuala Pilah	Negeri Sembilan	2.78894	102.2179375	28 August 2024
3	Sekolah Kebangsaan Titom	Kuala Lipis	Pahang	4.28113	101.51172	28 August 2024
4	Dewan Hajah Tuminah	Bagan Datuk	Perak	3.94346	100.74031	28 August 2024
5	Sekolah Kebangsaan Malaing	Nabawan	Sabah	4.95611	116.14081	28 August 2024
6	Kg. Langsat	Ranau	Sabah	6.05187	116.79754	28 August 2024
7	Kampung Puak	Bau	Sarawak	1.35476	110.14974	28 August 2024
8	Rumah Menyimbang Anak Lima	Julau	Sarawak	1.68756	111.72136	28 August 2024

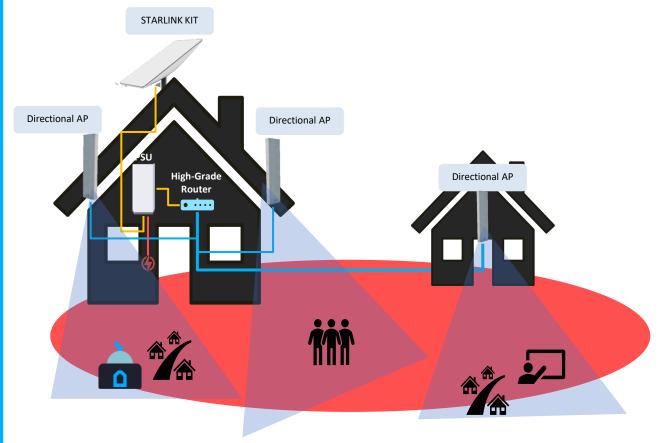
### **INSTALLATION CONFIGURATIONS**

STARLINK SATELLITE BROADBAND SERVICES WITH EXTENDED WI-FI COVERAGE (INSTALLATION: CO-LOCATED)



Directional AP: Min coverage 150m/AP

# STARLINK SATELLITE BROADBAND SERVICES WITH EXTENDED WI-FI COVERAGE (INSTALLATION: ADJACENT BUILDING)



Directional AP: Min coverage 150m/AP

