



- RFP BRIEFING SESSION -

**INVITATION TO REGISTER INTEREST AND SUBMIT A DRAFT UNIVERSAL SERVICE PLAN
AS A UNIVERSAL SERVICE PROVIDER
UNDER THE COMMUNICATIONS AND MULTIMEDIA (UNIVERSAL SERVICE PROVISION) REGULATIONS 2002**

**FOR THE INSTALLATION OF NETWORK FACILITIES AND DEPLOYMENT OF NETWORK SERVICE FOR
THE PROVISIONING OF PUBLIC CELLULAR SERVICES
AT THE UNIVERSAL SERVICE TARGETS UNDER
THE NATIONAL FIBERISATION AND CONNECTIVITY PLAN 2 (NFCP 2) INITIATIVE
ISSUED ON 15 NOVEMBER 2019**

**Malaysian Communications and Multimedia Commission
Universal Service Provision Division
3 DECEMBER 2019**



**National Fiberisation and
Connectivity Plan (NFCP)**

INVITATION REF. NO: MCMC/USPD/PDUD (01)/NFCP2/TC/10/10(09)

NFCP WAS LAUNCHED ON 19 SEPTEMBER 2019



“

The NFCP facilitates digital connectivity and enables the Rakyat to enjoy holistic changes through initiatives such as fibre broadband accessibility and construction of communications towers. It is a catalyst to bridge the digital divide between the rural and urban areas, as well as providing equal opportunities for all

”

“

NFCP will chart a new era in Malaysia with a broadband coverage that is *robust, pervasive, high quality and affordable*. It will benefit the local communities, encouraging them to be involved in the digital economy, creating 20,000 job opportunities that involves the construction, operation and maintenance of digital infrastructure and at the same time, stimulate the nation's economic growth

”

Press release dated 19 September 2019: NFCP spurs economic competitiveness, enhanced standard of living for the Rakyat, towards shared prosperity

7 NFCP TARGETS



Why NFCP?

Catalysing Future Economic Growth



Address issues that hinder the widespread availability of high quality and affordable digital connectivity



Support the needs of the country moving forward and harness opportunities offered by new services / technologies



Provide clarity in terms of strategic directions for initiatives to support the digital economy and adoption of future technology

<https://www.nfcp.my>



Entry-level **fixed broadband package** at 1% of GNI by 2020



Gigabits availability in selected industrial areas by 2020 and to all State Capitals by 2023



100% availability for premises in State Capitals and selected high impact areas, such as public transportation hubs and ports, with a minimum speed of **500Mbps** by 2021



20% availability for premises in sub-urban and rural areas with **up to 500Mbps** by 2022



Fibre network passes 70% of schools, hospitals, libraries, police stations and post offices by 2022



Average speed of 30Mbps in 98% of populated areas by 2023

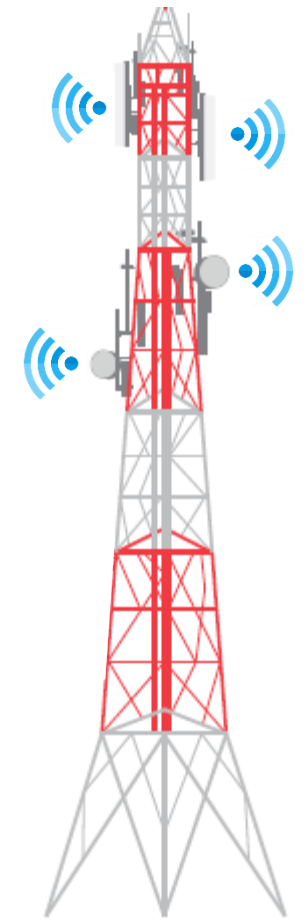


Improve **mobile coverage** along **Pan Borneo Highway** upon completion



1
**OVERVIEW OF
THE NFCP 2
PROJECT**

2
**SCOPE OF
WORK**



OVERVIEW OF THE NFCP 2 PROJECT

NFCP 2 is part of the Commission's efforts to plan and implement universal service provision in Malaysia, in accordance with the objectives as specified in subregulation 3(1) of the USP Regulations 2002

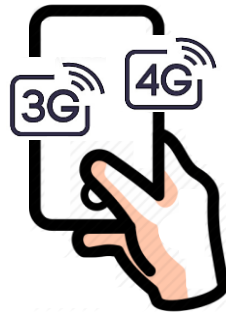
- The facilities and services are to be deployed at underserved areas, as defined in the USP Regulations 2002

Targets set out under the NFCP 2 project:



500*

Locations nationwide



Provisioning of public cellular services – minimum 3G and 4G services, via RAN sharing solution

30Mbps

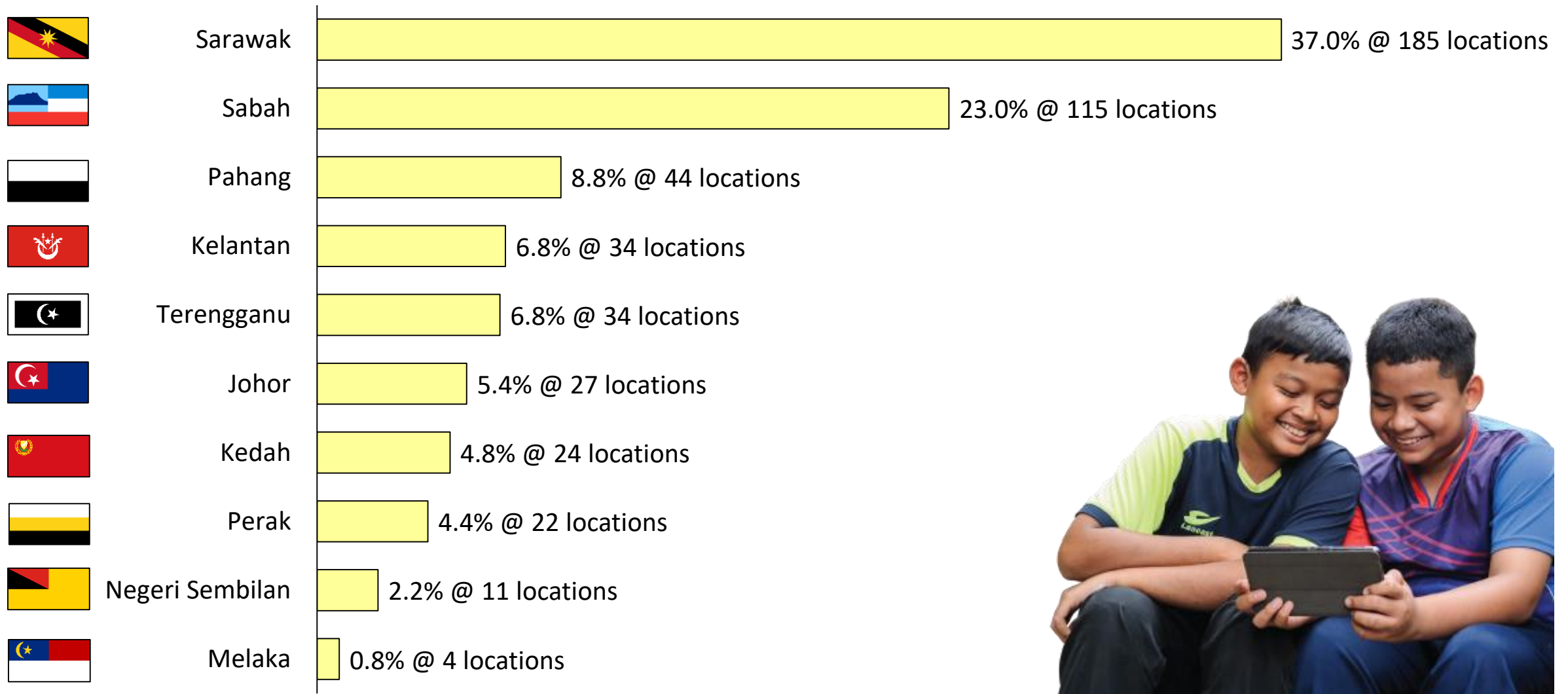
Average speed of 30Mbps (DL) / 20Mbps (UL)

95%  **98%**

To increase cellular coverage from 95% to 98% of populated areas by 2023 in Malaysia

*The number of locations may increase based on proposals received in the draft universal service plan(s) submissions for the NFCP 2 project by interested licensees

10 STATES / TOTAL 500 LOCATIONS UNDER NFCP 2 (1/2)



10 STATES / 29 CLUSTERS / TOTAL 500 LOCATIONS UNDER NFCP 2 (2/2)



| State | Cluster No. | Number of locations | Total |
|----------------------------|-------------|---------------------|-------|
| Johor (2 clusters) | C01 | 14 | 27 |
| | C02 | 13 | |
| Melaka and Negeri Sembilan | C03 | 15 | 15 |
| Kedah (2 clusters) | C04 | 14 | 24 |
| | C05 | 10 | |
| Kelantan (2 clusters) | C06 | 15 | 34 |
| | C07 | 19 | |
| Pahang (2 clusters) | C08 | 22 | 44 |
| | C09 | 22 | |
| Perak | C10 | 22 | 22 |
| Sabah (6 clusters) | C11 | 20 | 115 |
| | C12 | 18 | |
| | C13 | 20 | |
| | C14 | 20 | |
| | C15 | 20 | |
| | C16 | 17 | |

| State | Cluster No. | Number of locations | Total |
|----------------------------|-------------|---------------------|------------|
| Sarawak (11 clusters) | C17 | 18 | 185 |
| | C18 | 17 | |
| | C19 | 16 | |
| | C20 | 18 | |
| | C21 | 18 | |
| | C22 | 20 | |
| | C23 | 12 | |
| | C24 | 13 | |
| | C25 | 19 | |
| | C26 | 17 | |
| | C27 | 17 | |
| Terengganu (2 clusters) | C28 | 16 | 34 |
| | C29 | 18 | |
| Total | | | 500 |

- Specified locations have been identified in the RFP

Please refer to Appendix 1,
page 28-56 of the RFP



ELIGIBILITY CRITERIA

The Interested Licensee is required to hold:

1. Valid **Network Facilities Provider (Individual) [“NFP(I)”]** and **Network Service Provider (Individual) [“NSP(I)”]** licences issued under the Act.
2. The NFP(I) licence held by the Interested Licensee must allow the holder of the licence to own or provide ALL of the following network facilities under regulation 19 of the Communications and Multimedia (Licensing) Regulations 2000, as amended:
 - i. Fixed links and cables;
 - ii. Radiocommunications transmitters and links;
 - iii. Earth stations*;
 - iv. Towers, poles, ducts and pits to be used in conjunction with other network facilities;
 - v. The licensed area specified under both the NFP(I) licence and the NSP(I) licence shall be “Malaysia”; and
 - vi. There shall be no last mile limitation specified in the NFP(I) licence.



*Please refer to
subparagraph 4.1,
page 17-18 of the RFP*



3. Eligibility criteria under the Reg. 5(2)(ga) of the USP Regulations 2002:
 - i. Minimum 5 years of experience in the installation of network facilities and/or provisioning of network services for the deployment of public cellular services;
 - ii. Be able to show good track record of commercial deployment as a licensee under the Act;
 - iii. Must have a satisfactory track record of compliance under the Act and conduct as a licensee;
 - iv. Not owe any outstanding fees (licence, spectrum and/or numbering assignment) to the Commission;
 - v. Has duly submitted its Return of Net Revenue (RONR) forms to the Commission for each year without fail; and
 - vi. No outstanding USP Fund contribution

**For this particular network facility, an Interested Licensee that is not licensed to own or to provide such as a network facility in its NFP(I) licence, may collaborate with an existing licensee that owns or provides this network facility, in order to use such a network facility. Detailed information of the collaboration shall only be furnished to the Commission should the Interested Licensee be a Designated Universal Service Provider pursuant to this Invitation.*

EIGHT KEY CHANGES UNDER NFCP 2 PROJECT

- To improve the efficiency of the investments made via the USP Fund



| No. | Key Changes | Subparagraph(s) in the RFP which can be referred to |
|-----|---|---|
| 1. | Combined scope of work <ul style="list-style-type: none"> No separation of Parts 1 and 2 | <i>Subparagraph 3.5, page 10-12</i> |
| 2. | Broad definition of site <ul style="list-style-type: none"> Means one tower or multiple towers at the specified location, and at any adjacent location(s) to the specified location | <i>Interpretation (r), page 7</i> |
| 3. | Average speed of 30Mbps | <i>Subparagraph 1.4, page 8</i> |
| 4. | Customised Bill of Quantity (BOQ) | <i>Interpretation (d), page 5</i> |
| 5. | Operational Expenditure (OPEX) for 5 years | <i>Subparagraph 3.22, page 15</i> |
| 6. | Encourage use of sustainable energy sources <ul style="list-style-type: none"> Through commercial power supply or other energy sources | <i>Subparagraph 3.3(f), page 10</i> |
| 7. | Self-declaration <ul style="list-style-type: none"> Dispensing with reports to facilitate faster project turnaround time and claim(s) processing. Template for declaration will be the form and format specified by the Commission to the Designated Universal Service Provider(s) (DUSP), in the Notification of Approval. | <i>Subparagraph 3.5 (10), page 11</i> |
| 8. | Audited income and expense statement for each year according to the International Standards on Auditing (ISA) on a yearly basis, for the entire Operational Period <ul style="list-style-type: none"> In order to have objective data to assess the financial viability of the service provisioning at all locations | <i>Subparagraph 3.22(c), page 15-16</i> |



1
OVERVIEW OF
THE NFCP 2
PROJECT



2
SCOPE OF
WORK



SCOPE OF WORK

RESPONSIBILITY OF THE DESIGNATED UNIVERSAL SERVICE PROVIDER(S)

Network facilities and network services to be provided

1. To design, supply and install tower(s) and its ancillaries; and
2. To design, supply, install, test, commission and operate network service equipment and services related to providing minimum 3G and 4G services under the concept of RAN sharing.

Please refer to subparagraph 2.1, page 9 of the RFP



Responsibility of the Designated Universal Service Provider

1. Conduct site survey and site evaluation
2. Land acquisition and tenancy agreement
3. Obtain necessary approval from local authorities
4. Installation of tower(s) and its ancillaries
5. Application and installation of uninterrupted power supply – service availability at all times
6. Network design and transmission for minimum 3G and 4G services
7. Installation of network service equipment, example radio network controller
8. Interoperability and integration with other cellular mobile networks
9. Testing and commissioning – from radio equipment at a site up to the core network
10. Submission of self-declaration to the Commission
11. Operations and maintenance for five (5) years
12. Submission of operations and maintenance report in the form and format specified by the Commission

Please refer to subparagraph 3.5, page 10-12 of the RFP



SCOPE OF WORK

TECHNICAL SPECIFICATIONS (1/2)

1. Conduct actual site survey and site evaluation – **latitude and longitude provided in the RFP are meant as reference point(s) only**
2. Provide a list of adjacent locations that has limited and/or no public cellular coverage – in addition to each specified locations in the UST
3. The specific locations that will be served by a particular tower(s)
4. The number of tower(s) with network services that are proposed to be deployed
5. The exact latitude and longitude for each tower that is proposed to be deployed
6. The population coverage and distribution that will be served by a particular tower(s)
7. The source of power supply
8. Comprehensive information on the sites and what is required for the service provisioning at the locations
9. Shall propose the most optimal network design – customised Bill of Quantity



Please refer to subparagraphs 3.2, 3.3 and 3.4, page 9-10 of the RFP

Please refer to Appendix 2, page 57 of the RFP

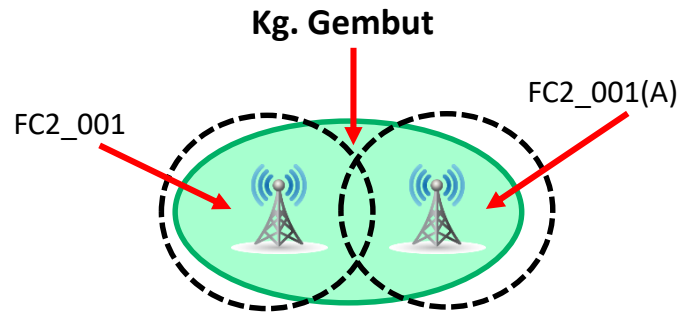


SCOPE OF WORK

TECHNICAL SPECIFICATIONS (2/2) - CONCEPT OF A SITE IN THIS RFP

EXAMPLE

Site ID: FC2_001 (Kg. Gembut, as specified in Cluster 1, page 28 of the RFP)



Explanation:

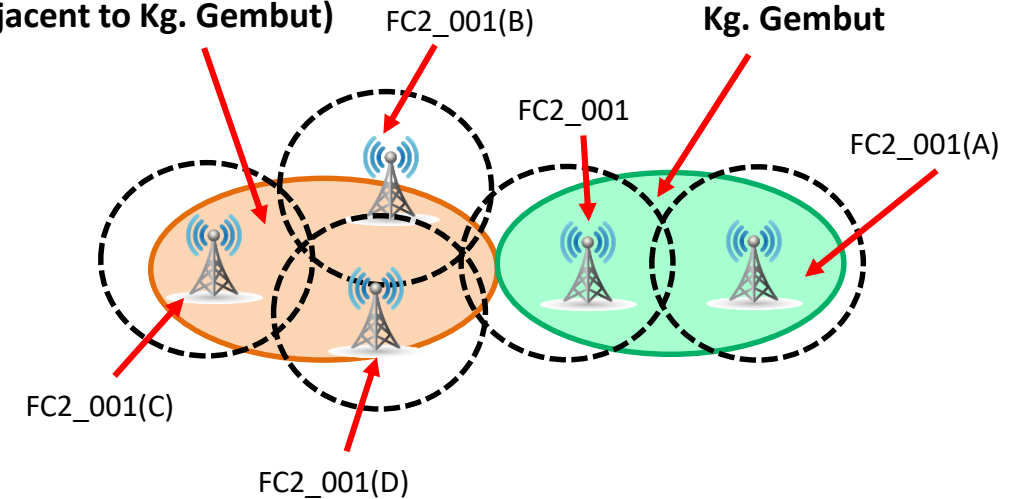
1. Specified location in the UST e.g. Kg. Gembut (FC2_001)
2. Upon actual site survey undertaken, the Interested Licensee proposes to have two (2) towers in total to cover Kg. Gembut
3. These 2 towers will constitute as one (1) site to serve Kg. Gembut

Please refer to Appendix 2, page 57 of the RFP



Kg. Padang

(adjacent to Kg. Gembut)

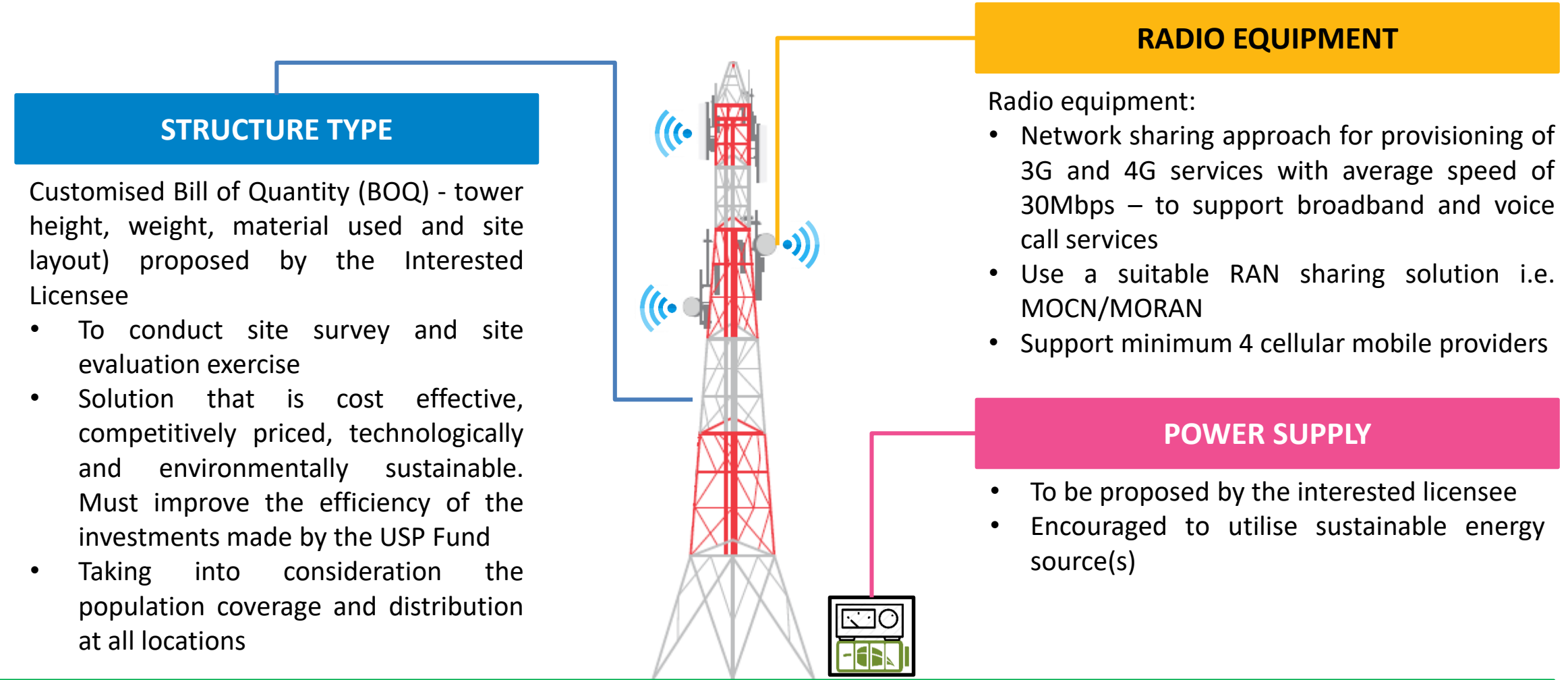


Explanation:

1. Specified location in the UST e.g. Kg. Gembut (FC2_001)
2. Upon actual site survey undertaken, the Interested Licensee proposes to have two (2) towers in total to cover Kg. Gembut, and proposes to have 3 towers in total to cover Kg. Padang, which is adjacent to Kg. Gembut
3. These 5 towers will constitute as one (1) site to serve Kg. Gembut and Kg. Padang
4. May submit proposal(s) to extend coverage to adjacent location at minimal or no cost

TECHNICAL AND FINANCIAL PROPOSAL

All interested licensees are invited to register interest and submit draft universal service plans (under Reg. 5 and Reg. 6) of the USP Regulations



STRUCTURE TYPE

Customised Bill of Quantity (BOQ) - tower height, weight, material used and site layout) proposed by the Interested Licensee

- To conduct site survey and site evaluation exercise
- Solution that is cost effective, competitively priced, technologically and environmentally sustainable. Must improve the efficiency of the investments made by the USP Fund
- Taking into consideration the population coverage and distribution at all locations

RADIO EQUIPMENT

Radio equipment:

- Network sharing approach for provisioning of 3G and 4G services with average speed of 30Mbps – to support broadband and voice call services
- Use a suitable RAN sharing solution i.e. MOCN/MORAN
- Support minimum 4 cellular mobile providers

POWER SUPPLY

- To be proposed by the interested licensee
- Encouraged to utilise sustainable energy source(s)

**NETWORK DIMENSIONING FOR NFCP 2
PROJECT:
AVERAGE SPEED OF 30MBPS**



NETWORK DIMENSIONING



❑ Service Providers need to dimension the network to provide acceptable and uninterrupted service in order to meet the following QoS standards:

- i. Throughput : Average throughput of 30Mbps per user during all three (3) peak hours defined below:
 - 7.00 am – 10.00 am
 - 2.00 pm – 3.00 pm
 - 8.00 pm – 10.00 pm

- ii. Latency : Must be not more than 80ms, 90% of the time
Must not be more than 280ms, 90% of the time (non-terrestrial backhaul)

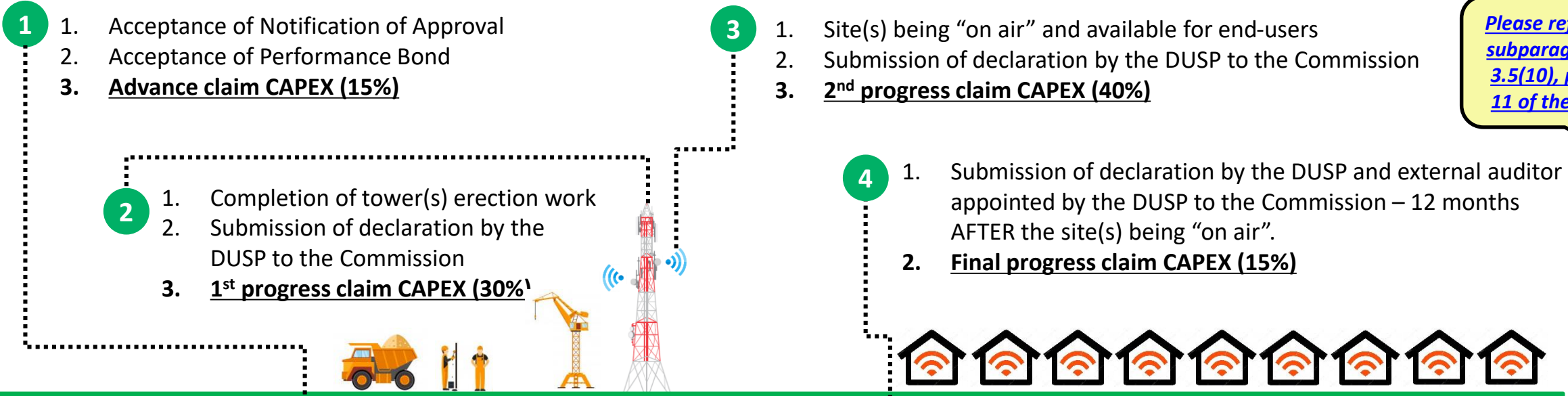
- iii. Subscribers : Target 60% of the subscribers within the identified UST location to get average throughput of 30Mbps at any point of time for minimum of four (4) concurrent mobile cellular operators

- iv. Signal strength : Average signal strength must be at least -98 dBm, 80% of the time within the coverage area

- v. Network availability : Must be at least 98% of the time in a year, excluding any scheduled downtime

KEY POINTS DURING IMPLEMENTATION AND OPERATIONAL PERIOD

Please refer to subparagraph 3.5(10), page 11 of the RFP



| | | | |
|-----------------------|-----------------------------|-----------|---|
| Performance Bond | 10% of total approved cost | | From the commencement date until expiry of 12 months, after the site being “on air” |
| Implementation Period | Report(s) on a weekly basis | 12 months | DUSP shall compile and maintained the Completion Report for minimum 7 years |
| Operational Period | | | Report(s) on a monthly basis – 5 years |
| OPEX | | | Quarterly claims – 5 years |

Pursuant to paragraph 18 of the Commission Determination on Universal Service Provision (Determination No. 6 of 2002), the ownership of the tower(s) and facilities at the USTs vests with the Designated Universal Service Provider (DUSP) from the inception of this Project.

CLARIFICATION NOTICE



i Please be informed that the Commission has made a clarification to the latitude and longitude of the location of Site ID FC2_160 in the said RFP, as shown below:

Initial latitude and longitude in the RFP is stated as follows:

| Cluster | State | Site ID | District | UST Name | Specified Location in the UST | Latitude | Longitude |
|---------|-------|---------|----------|----------|-------------------------------|----------|-----------|
| 10 | Perak | FC2_160 | Kampar | Teja | Kg. Sat | 4.485 | 101.234 |

This is to be substituted with the following latitude and longitude:

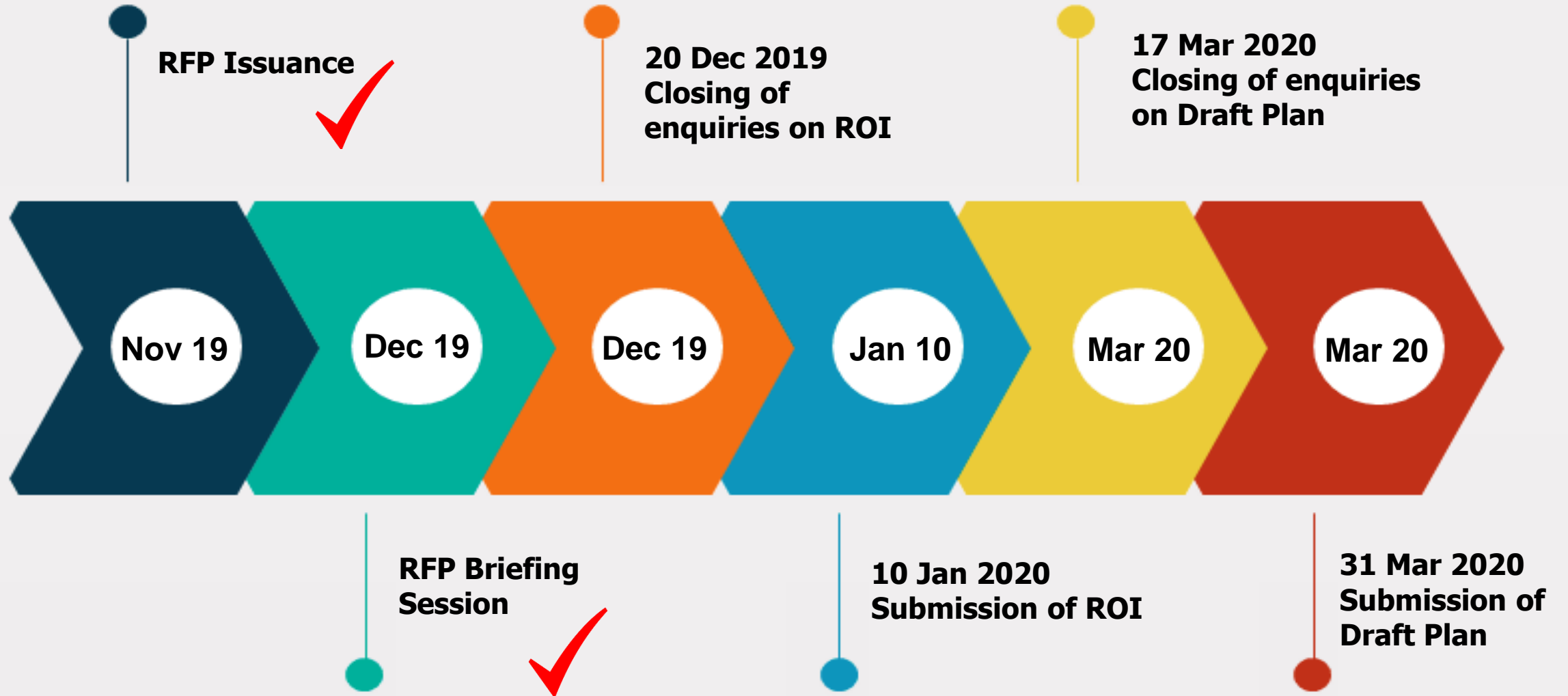
| Cluster | State | Site ID | District | UST Name | Specified Location in the UST | Latitude | Longitude |
|---------|-------|---------|---------------|----------|-------------------------------|----------|------------|
| 10 | Perak | FC2_160 | Batang Padang | Sungkai | Kg. Sat | 4.089360 | 101.436780 |



SECTION III – REGISTRATION OF INTEREST AND SUBMISSION OF THE DRAFT UNIVERSAL SERVICE PLAN

Procurement Division, MCMC
3 December 2019


NFCP2 RFP Timeline




Closing Date: **TENDER CLARIFICATION**


Strictly via email to tender@mcmc.gov.my

1 ROI

 Before 5:00pm

 On **20 Dec** 2019

2 DRAFT UNIVERSAL SERVICE PLAN

 Before 5:00pm

 On **17 March** 2020

DEC 2019

JAN 2020

FEB 2020

MAR 2020

Enquiries will be uploaded in MCMC Website.

<https://www.mcmc.gov.my/>

Closing Date: **SUBMISSIONS**

To complete **acknowledgement form**
at the counter provided.

1 ROI



From **9:00am to 12:00pm**



On **10 Jan 2020**



At **MCMC Old Building,**
Cyberjaya

2

DRAFT UNIVERSAL SERVICE PLAN



On or Before **12:00pm**



On **31 Mar 2020**



At **MCMC Old Building,**
Cyberjaya

JAN 2020

FEB 2020

MAR 2020

REQUIREMENT FOR DRAFT UNIVERSAL SERVICE PLAN SUBMISSION

Licensee's Information



1

✓ 1 Original

✓ 1 Digital Copy
(CD or Thumb drive)

Technical Submission



2

✓ 1 Original & 2 Copy

✓ 1 Digital Copy in PDF
format (CD or Thumb
drive)

Financial Submission



3

✓ 1 Original & 2 Copy

✓ 1 Digital Copy in
PDF format (CD or
Thumb drive)

To be submitted in sealed packages

Important Notes...



All information & updates are at MCMC Website



Draft Plans submission according to ROI



Be aware and comply with of the required signatories



No company name/info in Technical Submission



The MCMC Tender Secretariat will be the only **point of contact** for this project.

tender@mcmc.gov.my



THANK YOU