

GUIDANCE NOTE FOR SUBMISSION OF APPLICATIONS BY PUBLIC TELECOMMUNICATIONS OPERATORS FOR THE INSTALLATION OF RADIO BASE STATIONS FOR PUBLIC TELECOMMUNICATIONS SERVICES IN BUILDINGS AND ON ROOFTOPS

Some Public Telecommunications Services operators, including mobile services operators, provide their services by installing radio base stations in buildings and on rooftops.

2. The operators have to ensure that they meet the requirements of all relevant government departments and obtain approval from the Office of the Telecommunications Authority, Town Planning Board, Buildings Department and Lands Department, where necessary, before they would be allowed to install radio base stations on rooftops and/or mount the antennas on external walls of buildings. This Guidance Note is intended to provide the operators with information on the requirements and procedures for obtaining such approvals.

3. For installation of new radio base stations and reconfiguration of existing radio base stations involving changes in the structural design and planning perspective of the parent building and the change of land use, mobile services operators shall follow the “One-stop Application Procedure for Installation of Radio Base Stations by Mobile Services Operators (Part A)” of this Note.

4. For reconfiguration of existing radio base stations not involving changes mentioned in paragraph 3 above, mobile services operators shall follow the “One-stop Application Procedure for Installation of Radio Base Stations by Mobile Services Operators (Part B)” of this Note.

**Office of the Telecommunications Authority
December 2010**

One-stop Application Procedure for Installation of Radio Base Stations by Mobile Services Operators (Part A)

This procedure outlines the application procedure to be followed by the mobile services operators (hereinafter called the “operators”) for the installation of new radio base stations and the reconfiguration of existing radio base stations involving changes in the structural design and planning perspective of the parent building, and the change of land use. This procedure is issued without prejudice to the generality of the Telecommunications Ordinance and power exercisable by the Telecommunications Authority.

2. In the course of liaising with site owner or its agent, such as the landlord or the Incorporated Owners’ Committee, the operators are reminded to observe the requirements and conditions stipulated in the Deed of Mutual Covenants of the building. In this respect, the operators may seek advice and assistance from the relevant District Offices of the Home Affairs Department if necessary.

3. For the installation of a radio base station, the operators are reminded to consider the possible effect of radio-frequency radiation on flammable atmospheres due to the diesel fuel oil tank, if any, installed on the proposed rooftop. Reference can be made to the British Standard “BS6656”: “Prevention of Inadvertent Ignition of Flammable Atmospheres by Radio-frequency Radiation”.

APPLICATION PROCEDURE

4. In addition to the compliance with the requirements of OFTA in respect of frequency emission and non-ionizing radiation (NIR) safety, the operators must ensure that their installations of radio base stations comply with the requirements of the Buildings Department (BD), the Lands Department (Lands D) and the relevant statutory town plan. The requirements and application procedures of these departments are given in Annex 1 to Part A.

5. To streamline the application procedure, OFTA adopts a one-stop application arrangement under which the operators are required to declare the compliance status of their proposed radio base stations with the requirements of these Government departments concerned.

6. If an operator applies for setting up a radio base station at a particular location, the operator should submit the following information and declarations to OFTA:

- (a) The technical particulars of the proposed radio base station including the exact location, size and dimensions of equipment and antenna, operating frequencies and emission power, etc. as set out in Annex 2 to Part A.
- (b) A declaration form declaring the compliance of the proposed base station with

the requirements of OFTA, Lands D and relevant statutory town plan as set out in Annex 3 to Part A.

- (c) A declaration form declaring the compliance of the proposed base station with the requirements of BD as set out in Annex 4 to Part A.

7. OFTA will only start processing the application if the following declarations are received:

- (a) The operator has declared that the proposed base station complies with the requirements of OFTA, Lands D and relevant statutory town plan as set out in Annex 3 to Part A; and
- (b) Save as otherwise provided, the declaration on the compliance of the proposed base station with the building requirements as set out in Annex 4 to Part A has been made by an Authorized Person (AP).

Otherwise, OFTA will reject the application and the operator has to submit a fresh application to OFTA for re-consideration.

8. To shorten the overall processing time of base station application, OFTA and Lands D have adopted parallel processing of applications in cases where a temporary waiver is required. The operator should submit applications to OFTA and Lands D (if a temporary waiver is required) in parallel. OFTA will start processing the application upon receiving the operator's declaration that the related waiver application has been submitted to the Lands D. OFTA may, after being satisfied that all requirements concerning electromagnetic compatibility and radiation safety are met, grant an approval for the installation and operation of the radio base station prior to Lands D's decision on the related waiver application.

9. To ascertain that the proposed radio base station would not cause harmful radio interference with other telecommunications systems or services and would not pose any unacceptable non-ionization radiation hazards to personnel or residents in the vicinity, OFTA will assess the application based on the information provided in Annex 2 to Part A.

10. OFTA will normally take about **10 working days** to process the application.

APPROVAL OF APPLICATION

11. OFTA may approve an application if:

- (a) the proposed radio base station complies with the requirements of frequency emission and radiation safety;
- (b) the operator has declared that the proposed radio base station:
 - i) is in compliance with the Government lease conditions governing the lot

on which the application building stands or a temporary waiver application covering the proposed radio base station has been submitted to the Lands D;
and

ii) has met the requirements of relevant statutory town plan;

and

- (c) subject to paragraph 9 of Annex 1 to Part A, an AP has declared that the proposed radio base station is in compliance with the building requirements and documentary evidence for approval/consent/acceptance of change in use granted by the Building Authority (BA) has been submitted for building works requiring approval and consent from the BA and/or constituting material change in use of the premises.

REVOCATION OF APPROVAL

12. If the operator or the AP is found making a false declaration in respect of a particular application, OFTA will reject the application if it is still under processing or will revoke the approval granted under such situation.

13. OFTA may also revoke the approval being granted if the waiver application mentioned in paragraph 11 (b) i) where required, is not eventually approved by Lands D.

ENQUIRIES

14. For any enquiries of this application procedure, please contact:

Office of the Telecommunications Authority
29/F., Wu Chung House
213 Queen's Road East
Wanchai
Hong Kong
(Attn.: Senior Telecommunications Engineer (Spectrum Planning))
Tel. No. 2961 6338
Fax. No. 2803 5113

Important Note:

The information submitted in relation with the applications will be used for the processing of the applications and may be passed on to other government departments for regulatory purposes. However, it remains the responsibility of operators to apply for respective approvals from the departments concerned even though information submitted may be passed on to another department. Any information claimed to be commercially confidential should be clearly marked as such and will be treated as such in accordance with applicable law."

Requirements and Application Procedures of Town Planning Board, Buildings Department and Lands Department

Town Planning Board (TPB)

Radio base station installed at a building to serve solely the occupiers within the building

If a radio base station (and its antenna) is to serve the occupiers of the building in which it is installed, the installation is considered as uses ancillary to the primary use of the concerned building and no separate planning permission is required from the TPB.

Radio base station installed at a building to serve customers outside of the building

2. A radio base station for public telecommunications services such as cellular base stations is considered as “Telecommunications Radio Base Station” which means any structure including an equipment cabinet not bigger than 5 metres x 4.5 metres x 3.5 metres (LxWxH) within or on the rooftop of a building, and antenna(s) not bigger than 0.6 metre x 0.6 metre x 2.5 metres (LxWxH), excluding pole, for planar shape or 0.8 metre in diameter for circular shape, at the side or on the rooftop of a building for the provision of public telecommunications services to serve the local district. A radio base station meeting the definition of “Telecommunications Radio Base Station” is a use always permitted within areas covered by Outline Zoning Plans (OZP) except in some conservation zones such as “Conservation Area”, “Coastal Protection Area”, “Site of Special Scientific Interest”, “Other Specified Uses” annotated “Comprehensive Development and Wetland Enhancement Area” and a few OZPs which are yet to be amended to incorporate the revised Master Schedule of Notes to Statutory Plans (the OZPs which are yet to be amended are listed out on the website of TPB). The operators can also obtain information from the following locations to find out whether the use of “Telecommunications Radio Base Station” at a particular site requires planning permission from the TPB:

The Planning Enquiry Counters of the Planning Department at
17/F., North Point Government Offices
333 Java Road
North Point
and
14/F., Sha Tin Government Offices
Sheung Wo Che Road
Sha Tin

Or
Relevant District Planning Office

3. A radio base station not meeting the definition of “Telecommunications Radio Base Station” is considered as a type of “Public Utility Installation”. Whether it will require planning permission from the TPB will depend on the provisions of the concerned statutory plan. Permission from the TPB is not required if “Public Utility Installation” is under Column 1 of the Notes, i.e. a use always permitted in the relevant zone of the statutory plan. Planning permission will be required if it is under Column 2 of the Notes for the relevant zone.

4. If TPB’s approval is required for the proposed installation under section 16 of the Town Planning Ordinance, the operators have to submit a planning application to the TPB providing the detailed information of the proposed installation including the exact location of the radio base station, site plans showing the layout and dimensions of the proposed installations and assessment on any environmental impact and health hazard.

5. Upon receipt of a planning application, the Planning Department will circulate the applications to other relevant Government departments for comments and arrange for TPB’s consideration **within two months** of their receipt. The Secretary of the TPB will inform the operators in writing of the TPB’s decision.

Buildings Department (BD)

6. The operators should refer to the attached “Guidance on the Installation of Telecommunications System on Roof and External Wall of Existing Building” for the installation of radio base station (Attachment 1).

7. A radio base station constructed in the form of an equipment cabinet of size not exceeding 1.5 m (W) x 1.0 m (D) x 2.3 m (H) and solely for the purpose of housing transmission equipment is considered as plant and equipment installations which will not require the prior approval from the BD, the issuance of occupation permit (“OP”) nor inclusion in gross floor area (“GFA”) calculation. However, the construction of framework or concrete plinth for supporting the cabinet is building works subject to the control of the Buildings Ordinance. Structural details of such framework or concrete plinth should therefore be submitted to BD for approval.

8. Installation of antennas/transceivers of radio base station could be considered as building works exempted from the requirement for prior approval from the BD if the following conditions are certified to have been complied with by an Authorized Person/Registered Structural Engineer:

- (a) maximum size of the antenna/transceiver unit does not exceed 1.6 m (H) x 0.4 m (W) x 0.25 m (D);
- (b) maximum height of the antenna/transceiver unit and associated structure is not more than 2.5 m measured from the roof slab if it is fixed on roof and from the top of the wall on which it is mounted;
- (c) maximum loading intensity induced by the antenna/transceiver unit and

associated structure does not exceed the designed imposed load that can be taken by the structural elements of roof;

- (d) no parts of the antenna/transceiver and associated structures would project beyond the external wall;
- (e) the associated building works will not induce additional load to the cantilevered slab construction; and
- (f) antenna/transceiver unit and associated structures are securely fixed to the parent building and no structural alteration of the building is involved.

9. Notwithstanding paragraphs 7 and 8 above, the operator should ensure that the radio base station on roof shall not obstruct the means of escape of the building, the operation of fire service facilities or the fire service aerial ladders and the structural integrity of the parent structure has not been adversely affected. For radio base station housed within building, the installation should not constitute material change in use of the premises unless permission from the BA under BO s25 has been obtained and should not result in any contravention of the BO & Reg. For the micro-indoor radio base station housed within the building for indoor coverage with indoor antennas mounted on wall/ceiling, in view of their scale and nature, they are considered as equipment installation which would not constitute material change in use of the premises. In this connection, the declaration on the compliance with the building requirements as set out in Annex 4 to Part A is not required.

10. Erection of equipment room or shelter on the roof exceeding the size given in paragraph 7 above is considered as building works subject to control of the Buildings Ordinance. The operators should appoint an Authorized Person and a Registered Structural Engineer to submit the application on their behalf for Building Authority's approval. Upon receipt of the application, the BD will process the application in accordance with the provisions of the Buildings Ordinance (BO) and allied regulations including the procedures and statutory time limits. For alteration and addition works complying with the criteria set out in PNAP ADM-19, application for fast track processing of the proposal can be made and in which case concurrent application for approval and consent will be processed within 30 days.

11. For the submission to BD for approval, detailed structural analysis of the room/shelter and structural review of the parent building would not be required provided the equipment room/shelter complies with the following conditions:

- (a) the room/shelter is in the form of fibre-glass container of size not exceeding 2.5 m (L) x 2.0 m (W) x 2.3 m (H) [For a room/shelter of structural steel construction please refer to paragraph 4 of Attachment 1];
- (b) the maximum loading intensity exerted by the room/shelter and its enclosure does not exceed 1.5 kPa when installed on accessible roof or 0.75 kPa on inaccessible roof; and

- (c) the room/shelter is anchored to the structural frame of the parent building and there is no structural alteration involved

However, anchorage details of the equipment room/shelter should be provided and adequacy of anchorage resistance to wind force must be ensured.

12. The floor space of the equipment room/shelter is accountable for GFA under Building (Planning) Regulation 23(3)(a) and such equipment room/shelter requires issuance of an OP under section 21 of the BO.

13. The above-mentioned requirements are subject to changes when the Minor Works Control System (“MWCS”) comes into operation. Any building works requiring an OP, such as an equipment room/shelter on rooftop will not be covered by the MWCS. The commencement of these building works still requires the BD’s prior approval and consent, and issuance of OP before occupation is also required. Radio base station in the form of an equipment cabinet of size not exceeding 1.5 m (L) x 1.0 m (W) x 2.3 m (H) is considered to be a plant/equipment installation which has no GFA implication and the erection or alteration of the supporting structure for the cabinet on the roof of buildings will be designated as a Class I minor works item under the MWCS. On the other hand, erection or alteration of supporting structure for antenna/transceiver on roof of buildings will also be designated as Class I or Class III minor works according to the weight of the antenna/transceiver being over or not more than 150 Kg respectively.

Lands Department (Lands D)

14. The lease conditions of private lots usually restrict the use of building or buildings erected thereon to specific purposes. Other restrictions such as height restriction, maximum GFA and site coverage are not uncommon in nowadays Government leases. The operators are advised to enlist professional advice at the early stage to determine whether lease modification is required for the installation of radio base station. Paragraphs 15 to 19 below are general guidelines of Lands D requirements for installation of radio base station.

15. If a radio base station is to serve solely the occupiers of the building at which it is installed, the installation would normally be considered ancillary to the primary use of the concerned building and lease modification may not be required for the installation. However, the operator should ensure that the proposed installation will not breach other lease conditions such as height restriction, maximum GFA and site coverage limits etc. If any lease condition is not complied with, the operator needs to apply to the relevant District Lands Office (DLO) for a lease modification/temporary waiver in the same way as described in paragraph 17 to 19 below before he proceeds with the installation. For radio base station installed at a building to serve customers outside of the building, paragraphs 16 to 19 below apply.

Radio base station installed at a building that commercial use is permitted under lease

16. Lease modification of user restriction may not be required for the installation of

radio base station at a commercial building. However, the operator should ensure that the proposed installation would not breach other lease conditions such as height restriction, maximum GFA and site coverage limits etc.

Radio base station installed at a building that commercial use is not permitted under lease

17 If a radio base station serves customers outside of the building at which the equipment is installed, the installation of the equipment cannot be regarded as ancillary use to the building concerned but it is considered commercial in nature. In such cases and where they do not comply with the user restriction stipulated in the lease and/or is in breach of other lease conditions, before installing the equipment, the operators (after obtaining authorization from the owner of the premises concerned if the operator is not the owner) has to apply to the relevant DLO for a lease modification which would normally be in the form of temporary waiver.

18. Applications for temporary waivers should be accompanied by two sets of the following documents (all should be certified either by the Land Registry or by the solicitor acting for the applicant):

- (a) a computer printout containing the historical and current ownership particulars of the property concerned; and
- (b) complete copy of the Government land grant (including all modifications and attachments thereto) affecting the property concerned.

The applicant should also submit details of the proposed installation including sizes of hub units, equipment room/shelter and radio coverage of the proposed radio base station. In case the applicant is not the registered owner, an authorization letter signed by the registered owner should also be submitted.

19. To expedite the processing of temporary waiver application, a fast-track approach would be adopted in that the DLO will only consult OFTA upon receipt of the application for general advice including radiation safety. If there is no adverse comment on the application from OFTA, the DLO will assess the waiver fee and prepare the waiver documents and seek the necessary approval to the proposed temporary waiver. For simple and straightforward cases which involve no objection/adverse comment received by Lands D, it would normally take about **two months** to process the application from the date of receipt of waiver applications submitted by the registered owners/authorized agents together with all the necessary documents as detailed in paragraph 18. As the temporary waiver will be issued without consulting any other relevant Government departments, the applicant is reminded that he is responsible for obtaining all requisite licences and approvals from relevant Government departments or Authorities, including the TPB and the Building Authority, prior to installation and operation of the radio base station. If the applicant fails to do so or Lands D receives adverse comment from Government departments, the temporary waiver will be revoked and the waiver fee already paid shall not be refunded.

**Guidance on the Installation of Telecommunications System
on Roof and External Wall of Existing Building**

Introduction

A telecommunications system (radio base station) may comprise an equipment room/shelter which is a structure for housing power supply and transmission equipment and/or antennae which are fixed to roof parapet of a building or attached to supporting frames projecting from the external wall of a building.

General Advice

2. The radio base station should be properly designed and constructed in accordance with the provisions of the Buildings Ordinance and its allied regulations to ensure public safety. In particular, attention should be paid to the following in the design of the system.

Structural Design Requirements

3. For new telecommunications system proposed on existing building, the following guidelines on structural design and structural justifications are relevant:-

- (a) The RSE should check and confirm the structural stability and adequacy of the existing building;
- (b) Structural design and the design loading shall be in accordance with the Building (Construction) Regulations 1990, the relevant Codes of Practice and Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) currently in use;
- (c) The proposed materials for construction should satisfy the performance requirements prescribed in the Building (Construction) Regulations and PNAP APP-53;
- (d) The system (e.g. antennae, equipment room/shelter, built-up platform for equipment support) should be properly secured direct onto the structural beams, columns or walls of the existing building by using mechanical fixings or equivalent in such way that the resistance requirements as stipulated in Building (Construction) Regulation 15 are satisfied;
- (e) All new works so fixed onto existing building should not adversely affect the structural strength of the supporting structure and the integrity of the as-built structural system of the parent building;
- (f) No new telecommunications system should be designed to support on

cantilevered slab construction; and

- (g) The parts of existing building so affected should be structurally adequate to carry the additional loading imposed by the new works. Subject to item 4(b) above, justification by calculation may follow the design requirements and the acceptable standards in the original building codes based on which the existing building was designed. When the structural condition of the affected parts is in doubt, the RSE may be required to demonstrate by means of in-situ testing.

Standard Details

4. Structural details of a typical equipment room/shelter of a radio base station currently used in the industry and general notes for structural steelwork are provided in the attached Appendix I and II for the reference of AP/RSE. To streamline the processing of structural submissions, while fixing details for the posts are required, structural design calculations for the proposed new structure will not be required if it is built in accordance with the structural details provided and the following conditions are complied with:

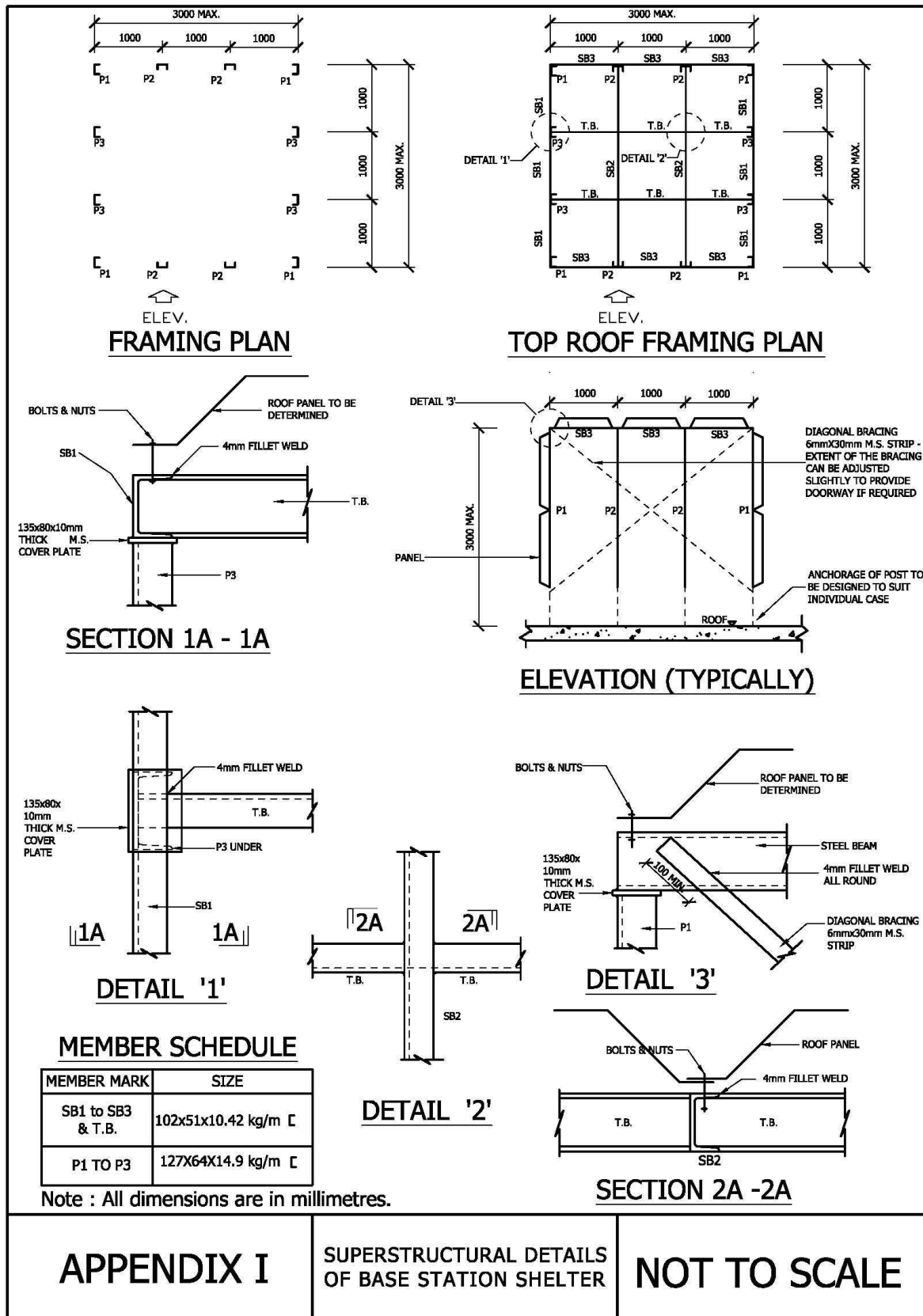
- (a) The maximum overall size of the equipment room/shelter does not exceed 3.0m x 3.0m in plan area and 3.0m in height;
- (b) The additional weight of the equipment room/shelter should be suitably spread out in such a way that it would not result in the designed superimposed loads to the roof being exceeded; and
- (c) The room/shelter is installed at a level not exceeding 100 m above the street level.

Planning Requirements

5. From the planning perspective, the following points should be observed:

- (a) The proposed works should not obstruct any means of escape nor contravene the requirements on refuge floor as per paragraph 21 of the Code of Practice for the Provision of Means of Escape in Case of Fire;
- (b) The proposed works should not obstruct the lighting and ventilation provided to the parent or other buildings; and
- (c) The proposed works should not project over streets.

APPENDIX I



APPENDIX II

General Notes for Structural Steelwork

1. All design loading should conform to the requirement as specified in Hong Kong Building (Construction) Regulations 1990 and Code of Practice on Wind Effects Hong Kong 2004.
2. All structural steel shall be of Grade 235 minimum to BS EN standards or equivalent, and complying with the relevant reference material standards in Annex A1.1 of the Code of Practice for the Structural Use of Steel 2005.
3. The structural steel shall be cleaned of loose scale and rust, and shall be thoroughly coated with no less than two coats of zinc rich epoxy primer prior to erection.
4. The fabrication, erection and welding of structural steel shall conform to the Code of Practice for the Structural Use of Steel 2005.
5. For welding of structural steel works, welding procedures and welders should be assessed/tested in accordance with the appropriate provisions of the Annex A of the Code of Practice for the Structural Use of Steel 2005.
6. Except where otherwise stated in the details, 4mm continuous fillet welds should be used.
7. Certificate of origin and chemical composition of the structural steel to be used shall be submitted to the Authorized Person/Registered Structural Engineer prior to commencement of the steelwork fabrication.
8. Anchor bolts shall be of an accepted type[#] and the application and installation of the bolts are strictly in accordance with the manufacturer's recommendations.
9. All steelworks shall be fixed directly onto structural beams and/or wall and columns of existing building. Non-structural and architectural finishes should be removed wherever required before the erection and made good afterward. Any waterproofing to roof damaged during erection should be duly remedied.

Reference may be made to the central data bank for the types of anchor bolts accepted by the Buildings Department. Please refer to PNAP ADM-20 for further details about the central data bank.

Annex 2 to Part A

**Application for Inclusion of Technical Particulars of Radio Base Station
for Provision of Mobile Services under
Schedule 3 of Unified / Mobile Carrier Licence No.**

Base Station (BS) Number (if applicable)	
Cell ID	
Address	
Area / Sub-district	/
HK Grid East / North	/
Maximum ERP (dBW)	
Antenna Type / Gain (dB)	/
Antenna Height (m) Above Local Terrain	
Polarization	
Antenna Location (Floor)	
Class of Emission	
Transmitting Frequencies (MHz) Base : Mobile :	

Details of Antenna Sectors			
Sector	Antenna		
	Gain (dB)	Bearing (Degrees from the North)	Downtilt (Degrees)
1			
1S			
1B			
2			
2S			
3			
3S			
4			
4S			
5			
5S			
6			
6S			

Supplementary information to be supplied together with this application

- (1) Street map showing the location of the base station and the bearing of the antenna sectors.
- (2) Floor plans showing the locations of the equipment room/cabinet and antennas.
- (3) Layout plans showing the dimensions and mounting of the equipment cabinet and antennas.
- (4) For sites close to the Hong Kong/Mainland border (i.e. Tuen Mun, Yuen Long and North Region), map showing the prediction of field strength in the coverage area of the base station.

**Declaration by Licensee of Compliance with Requirements for Radiation Safety,
Government Lease Conditions and Statutory Town Plan**

(1) I undertake to

(a) conduct measurements on the non-ionizing electromagnetic field strength in the vicinity of the antennas of the *new base station/additions made to an existing base station (“the Device”) at the address of

with Cell ID _____

and ensure that the field strength is in full compliance with the requirements specified in the “Code of Practice for the Protection of Workers and Members of Public Against Non-Ionizing Radiation Hazards from Radio Transmitting Equipment” issued by OFTA before commencement of operation of the Device; and

(b) submit a report on the above measurements to OFTA, if the aggregate effective radiated power of the antenna exceeds 2 Watts, in a form which is specified by OFTA within four weeks from the commencement of operation of the Device.

(2) I declare that

(Tick whichever is appropriate)

- ☐ the antennas of the Device are not installed within a residential flat in a residential or residential/commercial building.
- ☐ the antennas of the Device are installed within a residential flat in a residential or residential / commercial building and at the time of submitting this application, the Licensee has obtained the necessary consent, authorization, approval or agreement in writing from:
 - (i) the owner of the flat where the Device is installed; and
 - (ii) the owners, the owners’ incorporation, the management committee, or the building management office of the building

for the installation and operation of the Device at the locations given in this application.

(3) I also declare that

(a) (Tick whichever is appropriate)

- ☐ the Device and its antennas are in all respects in compliance with the Government lease conditions (including but not limited to the use, building height, gross floor area and site coverage); or
- ☐ a temporary waiver application covering the Device and its antennas has been submitted to the Lands Department (see Note¹ below)

; and

- (b) the Device and its antennas are in all respects in compliance with the relevant statutory town plan (if any), and if planning permission from the Town Planning Board is required for such station and antennae, such permission has been obtained (please attach the approval letter of the Town Planning Board).

(Authorized Signature)

(Printed Name)

(Position)

(Date)

For and on behalf of

(Name of the Licensee)

**** Delete whichever is inappropriate***

¹ Note: OFTA may revoke the approval for installation of the Device and its antennas concerned if the temporary wavier application is not approved by the Lands Department.

Annex 4 to Part A

Authorized Person's Declaration on Status of the Proposed Radio Base Station

I, _____ (_____)
(Surname) (Other Names) (Name in Chinese)
as holder of Hong Kong Identity Card number _____, and being the Authorized
Person registered under section 3 of the Buildings Ordinance (Chapter 123 of the Laws of Hong
Kong) hereby certify in respect of the application for *installation of a new radio base
station/additions made to an existing base station submitted by

(Name of the Licensee)

at

(Address of Premises for the Radio Base Station),

and

(Address of Premises for the Antennas)

that the proposed *new radio base station/additions made to an existing base station ("Proposed
Building Works") are *Category Aa/Ab/Ac / Category B / Category C works described hereunder.

Category A : Proposed Works to be Exempted Building Works/Non Building Works/ Works not Constituting Material Change in Use

- (a) The proposed installations of antenna/transceiver are certified to be exempted building works and the following conditions are certified to have been complied with:
- (i) maximum size of the antenna/transceiver unit does not exceed 1.6 m (H) x 0.4 m (W) x 0.25 m (D);
 - (ii) maximum height of the antenna/transceiver unit and associated structure is not more than 2.5 m measured from the roof slab if it is fixed on roof and from the top of the wall on which it is mounted;
 - (iii) maximum loading intensity induced by the antenna/transceiver unit and associated structure does not exceed the designed imposed load that can be taken by the structural elements of roof;
 - (iv) no parts of the antenna/transceiver and associated structures would project beyond the external wall;
 - (v) the associated building works will not induce additional load to the cantilevered slab construction;
 - (vi) antenna/transceiver unit and associated structures are securely fixed to the

parent building and no structural alteration of the building is involved; and.

(vii) the means of escape and the operation of fire service facilities are not affected.

(b) The proposed equipment cabinet on roof is certified to be non-building works and the following conditions are certified to have been complied with:

(i) the size of the cabinet is of size less than 1.5m(W) x 1.0m(D) x 2.3m(H) and solely for the purpose of housing transmission equipment;

(ii) the means of escape and the operation of fire service facilities are not affected; and

(iii) it is not located at the refuge area.

(c) The proposed radio base station installation within building does not constitute material change in use of the premises and does not result in any contravention of the BO.

Category B : Proposed Building Works requiring approval and consent for commencement/acceptance of change in use to be obtained from the Building Authority

The proposed installation of antenna / transceiver / equipment room/shelter / supporting framework / concrete plinth are certified to be building works requiring approval and consent for commencement as described under section 14(1) of the Buildings Ordinance. The required approval/consent for commencement *has been/will be obtained from the Building Authority before the commencement and carrying out of works at the above premises and copy of approval/consent letter from the Building Authority *is/will be submitted.

Category C : Proposed RBS installation within building constitutes material change in use and acceptance from the Building Authority is required : -

The proposed radio base station installation within building is certified to constitute material change in use which necessitates submission of notification to the Building Authority under BO s25. The required notification of change in use has been submitted to the Building Authority and copy of the acceptance letter from the Building Authority *is/will be submitted.

Date of this Declaration _____

(Authorized Person's Signature)

Certificate of Registration No. : _____

Date of Expiry of Registration : _____

* *Delete whichever is inappropriate*

One-Stop Application Procedure for Installation of Radio Base Stations by Mobile Services Operators (Part B)

This procedure outlines the application procedure to be followed by the mobile services operators (hereinafter called the “operators”) for the reconfiguration of existing radio base stations **NOT** involving changes in the structural design and planning perspective of the parent building, and the change of land use. This procedure is issued without prejudice to the generality of the Telecommunications Ordinance and power exercisable by the Telecommunications Authority.

2. In the course of liaising with site owner or its agent, such as the landlord or the Incorporated Owners’ Committee, the operators are reminded to observe the requirements and conditions stipulated in the Deed of Mutual Covenants of the building. In this respect, the operators may seek advice and assistance from the relevant District Offices of the Home Affairs Department if necessary.
3. For the installation of a radio base station, the operators are reminded to consider the possible effect of radio-frequency radiation on flammable atmospheres due to the diesel fuel oil tank, if any, installed on the proposed rooftop. Reference can be made to the British Standard “BS6656”: “Prevention of Inadvertent Ignition of Flammable Atmospheres by Radio-frequency Radiation”.

APPLICATION PROCEDURE

4. If an operator applies for re-configuring an existing radio base station at a particular location, the operator should submit the following information and declarations to the Office of the Telecommunications Authority (OFTA):
 - (a) The technical particulars of the proposed base station including the exact location, size and dimensions of equipment and antenna, operating frequencies and emission power, etc. as set out in Annex 1 to Part B.
 - (b) A declaration form declaring the compliance of the proposed base station with the requirements of OFTA as set out in Annex 2 to Part B.
5. To ascertain that the proposed radio base station would not cause harmful radio interference with other telecommunications systems or services and would not pose any unacceptable non-ionization radiation hazards to personnel or residents in the vicinity, OFTA will assess the application based on the information provided in Annex 1 to Part B.
6. OFTA will normally take about **10 working days** to process the application.

APPROVAL OF APPLICATION

7. OFTA may approve an application if the proposed radio base station complies with the requirements of frequency emission and radiation safety.

REVOCATION OF APPROVAL

8. If the operators is found making a false declaration in respect of a particular application, OFTA will reject the application if it is still under processing or will revoke the approval granted under such situation.

9. OFTA may reject the application or revoke the approval granted if the base station is found involving changes mentioned in paragraph 1 above.

ENQUIRIES

10. For any enquiries of this application procedure, please contact:

Office of the Telecommunications Authority
29/F., Wu Chung House
213 Queen's Road East
Wanchai
Hong Kong
(Attn.: Senior Telecommunications Engineer (Spectrum Planning))
Tel. No. 2961 6338
Fax. No. 2803 5113

Important Note:

The information submitted in relation with the applications will be used for the processing of the applications and may be passed on to other government departments for regulatory purposes. However, it remains the responsibility of operators to apply for respective approvals from the departments concerned even though information submitted may be passed on to another department. Any information claimed to be commercially confidential should be clearly marked as such and will be treated as such in accordance with applicable law."

Annex 1 to Part B

**Application for Inclusion of Technical Particulars of Radio Base Station
for Provision of Mobile Services under
Schedule 3 of Unified / Mobile Carrier Licence No.**

Base Station (BS) Number (if applicable)	
Co-siting BS (if applicable) System No. / BS No.	/
Cell ID	
Address	
Area / Sub-district	/
HK Grid East / North	/
Maximum ERP (dBW)	
Antenna Type / Gain (dB)	/
Antenna Height (m) Above Local Terrain	
Polarization	
Antenna Location (Floor)	
Class of Emission	
Transmitting Frequencies (MHz) Base : Mobile :	

Details of Antenna Sectors			
Sector	Antenna		
	Gain (dB)	Bearing (Degrees from the North)	Downtilt (Degrees)
1			
1S			
1B			
2			
2S			
3			
3S			
4			
4S			
5			
5S			
6			
6S			

Supplementary information to be supplied together with this application

- (1) Street map showing the location of the base station and the bearing of the antenna sectors.
- (2) Floor plans showing the locations of the equipment room/cabinet and antennas.
- (3) Layout plans showing the dimensions and mounting of the equipment cabinet and antennas.
- (4) For sites close to the Hong Kong/Mainland border (i.e. Tuen Mun, Yuen Long and North Region), map showing the prediction of field strength in the coverage area of the base station.

Annex 2 to Part B

Declaration by Licensee of Compliance with Requirements for Radiation Safety

(1) I undertake to

(a) conduct measurements on the non-ionizing electromagnetic field strength in the vicinity of the antennas of the base station with details given in Annex 1 to Part B and ensure that the field strength is in full compliance with the requirements specified in the “Code of Practice for the Protection of Workers and Members of Public Against Non-Ionizing Radiation Hazards from Radio Transmitting Equipment” issued by OFTA before commencement of operation of the base station; and

(b) submit a report on the above measurements to OFTA, if the aggregate effective radiated power of the antenna exceeds 2 Watts, in a form which is specified by OFTA within four weeks from the commencement of operation of the base station.

(2) I declare that

(Tick whichever is appropriate)

- ☐ the antennas of the base station are not installed within a residential flat in a residential or residential/commercial building.
- ☐ the antennas of the base station are installed within a residential flat in a residential or residential / commercial building and at the time of submitting this application, the Licensee has obtained the necessary consent, authorization, approval or agreement in writing from:
- (i) the owner of the flat where the base station is installed; and
 - (ii) the owners, the owners’ incorporation, the management committee, or the building management office of the building

for the installation and operation of the base station with details given in Annex 1 to Part B.

(Authorized Signature)

(Printed Name)

(Position)

(Date)

For and on behalf of

(Name of the Licensee)