# **Application for Assignment of Shared Spectrum** in the 26 GHz and 28 GHz Bands and Grant of Localised Wireless Broadband Service Licence

#### **NOTES**

The applicant should read the "Guidelines for Submission of Applications for Assignment of Shared Spectrum in the 26 GHz and 28 GHz Bands under the Localised Wireless Broadband Service Licence<sup>1</sup>" ("Guidelines") before completing this form. Definitions of terms in this application form follow those in the Guidelines. Please refer to paragraph 3.15 of the Guidelines for details on licence fees.

- 1. This application form MUST be completed in all parts in English. Incomplete application form may cause delay in processing. This form is used for new licence applications, as well as for applications for extension of existing licences upon expiry.
- 2. The completed application form, together with the required supporting documents, should be submitted in triplicate, under confidential cover to the Communications Authority ("CA") at the following address. An electronic copy of the application form and the supporting documents should also be provided and sent to the following email address.

Office of the Communications Authority 29th Floor, Wu Chung House 213 Queen's Road East Wanchai **Hong Kong** (Attn.: Head, Regulatory 2)

Email: apply-26-28GHz-shared-LWBS@ofca.gov.hk

- 3. The applicant may attach additional sheets of paper if the space provided in the application form is not enough. All documents submitted to the Office of Communications Authority ("OFCA") will not be returned.
- 4. Enquiries concerning the application should be sent by post or email to the above addresses.

The Localised Wireless Broadband Service Licence is created for the establishment, maintenance and operation of networks and systems for the provision of innovative public wireless broadband services in specified locations of the territory subject to a total network coverage of not exceeding 50 square kilometres. A licensee may be assigned up to 400 MHz of spectrum in the frequency range of 27.95 – 28.35 GHz on a non-exclusive and geographically sharing basis.

## SUPPLEMENTARY NOTES ON THE PROVISION OF PERSONAL DATA:

- 1. The provision of personal data in this application form is voluntary. If the applicant does not provide sufficient information, OFCA may not be able to process the application.
- 2. The personal data provided by the applicant will be used by OFCA for processing the application and by the CA for performing its functions, or exercising its powers under the Telecommunications Ordinance (Cap. 106) ("TO").
- 3. The personal data provided by the applicant in this form may be disclosed to other government departments/agencies in connection with the assessment of the application.
- 4. Personal data will be handled in accordance with the relevant provisions of the Personal Data (Privacy) Ordinance (Cap. 486).
- 5. The applicant has a right of request for access and correction with respect to her/his personal data. The right of access includes the right to obtain a copy of the personal data provided by the applicant, though a charge may be levied on obtaining such information.
- 6. Enquiries concerning the personal data collected by means of this form, including the making of request for access and correction, should be submitted in writing to the Personal Data Officer, Office of the Communications Authority, 29/F, Wu Chung House, 213 Queen's Road East, Wan Chai, Hong Kong; or sent by fax to 2187 3104.

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PART A	APPLICANT'S DETAILS	
1. Register (English (Chinese		
2. Register	2. Registered Office Address:	
3. Correspo (English (Chineso		
4. Compan	y Website:	
5. Telepho	ne Number (General):	
6. Fax Nun	nber (General):	
7. Contact	Person:	
8. Position	of Contact Person in the Company:	
9. Telepho	ne Number of the Contact Person:	
10. Mobile I	Number of the Contact Person:	
11. Fax Nun	11. Fax Number of the Contact Person:	
12. E-mail A	Address of the Contact Person:	

PA	ART B	SCOPE OF PROPOSED SERVICES
1.	to be pro	provide a brief and concise Executive Summary of the services proposed ovided by deploying the Shared Spectrum in the 26/28 GHz bands under ion for assignment.
2.	Shared S	specify clearly the scope of service proposed to be provided using the Spectrum in the 26/28 GHz bands under application and operated under BS Licence, as well as the identity and number of the target users and ers.
	·	applicants should be committed to the provision of the proposed services ng as detailed in their applications, submissions and representations.)

PAR	TC	SPECTRUM ASSIGNMENT	
pr fo st gr co F	. Please specify the amount of the Shared Spectrum applied for the provision of the proposed services, which will be subject to the overall spectrum cap of 400 MHz for assignment of the Shared Spectrum in the 26/28 GHz bands. In exercising the statutory powers under the TO for the management of radio spectrum including the granting of right to use spectrum, the CA shall take into account all relevant considerations as required by law and give due regard to the Radio Spectrum Policy Framework as promulgated by Hong Kong Government in April 2007 (https://www.cedb.gov.hk/assets/resources/ccib/policies/spectrum.pdf).		
		rovide justifications (including quantitative information, where applicable) mount of Shared Spectrum applied for.	
	(Notwithstanding the above application, for the avoidance of doubt, the CA has full discretion in determining any spectrum to be assigned to an applicant.)		

# **PART D**

#### **COMPANY STRUCTURE**

1. If the applicant is a company incorporated in Hong Kong, it is required to submit a copy of its Certificate of Incorporation and Business Registration Certificate. If the applicant is a company incorporated outside Hong Kong, the CA may also consider its application provided that it has registered under the Companies Ordinance (Cap. 622) as a non-Hong Kong company. In this connection, the applicant is required to submit a copy of its Certificate of Registration of Non-Hong Kong Company and Business Registration Certificate to the CA for examination.

2. Details on the corporate and shareholding structure including relationships with holding or related companies. The applicant is required to provide documents that it filed to the Companies Registry showing the authorised, issued and paidup share capital and the current shareholding structure of the company, e.g. a copy of Articles of Association of the company, or equivalent document(s), together with "Form NNC1 – Incorporation Form (Company Limited by Shares)" or "Form NNC1G – Incorporation Form (Company not Limited by Shares)", "Form NAR1 – Annual Return" or "Form NSC1 – Return of Allotment", if applicable.

3.	For the purpose of implementing the spectrum cap for assignment of the Shared Spectrum in the 26/28 GHz bands and the restriction on the aggregate area of network coverage, the applicant is required to provide information about the corporate and shareholding structure of the company in the format and level of details as shown in the <b>Annex</b> attached to this application form so as to assist the CA in assessing whether an applicant is a connected company in relation to another applicant / existing assignee(s) of the Shared Spectrum.
4.	Details on the composition of the company's Board of Directors and key officers.
5.	If the applicant (or its associated companies) currently holds any licences issued under the TO, please provide a list of such licences and licence numbers. If not applicable, please state "NIL".

# PART E

# ELIGIBLE APPLICANTS AND CONNECTED COMPANIES

1.	The applicant is required to declare (1) whether it is an assignee of the Non-shared Spectrum, and (2) whether it is aware of any actual or potential submission of applications for assignment of the Shared Spectrum by its connected companies. Please tick the appropriate boxes below.		
As of the date of signing this application form, I/We declare that:		of the date of signing this application form, I/We declare that:	
		I/We am/are <u>not</u> an assignee of the Non-shared Spectrum in the 26/28 GHz bands.	
		I/We am/are an assignee of the Non-shared Spectrum in the 26/28 GHz bands, with details of assignment as follows:	
	AN	ID,	
		I/We am/are <u>not</u> aware that our connected company(ies) has submitted or will submit application(s) for assignment of the Shared Spectrum in the 26/28 GHz bands, or is an existing assignee of the Shared Spectrum.	
		I/We am/are aware that our connected company(ies) has submitted or will submit application(s) for assignment of the Shared Spectrum in the 26/28 GHz bands, or is an existing assignee of the Shared Spectrum, with details as follows:	
		<ul><li>(a) Name of the connected company:</li><li>(English):</li><li>(Chinese):</li></ul>	
		(b) Relationship of the connected company with the applicant (please illustrate in details with diagram in the format as specified in the <b>Annex</b> ):	
	,	or the definition of "connected companies", please refer to paragraph 3.6 of Guidelines.)	

# PART F

#### FINANCIAL INFORMATION

- 1. The applicant must have sufficient financial capability and willingness to invest sufficient capital to provide satisfactory services as proposed. The following information should be provided -
  - (a) (i) The application should include copies of audited annual financial statements, including the auditor reports for each of the last three full financial years, together with the most recent interim results (if applicable). If the applicant is a newly-formed company, the application should also include directors' certificate of the amount of issued and paid-up share capital and bankers' confirmation of the amount of its deposits and/or available credit facilities; and
    - (ii) If the applicant is being financed by its holding company, a supporting letter from its holding company together with documentary evidence (e.g. audited financial statements) to demonstrate the financial capacity of its holding company is required.

- (b) A detailed financial plan (with inflation assumptions) for the proposed services and networks for the first five years of operation including -
  - (i) Breakdown of the planned capital expenditure ("CAPEX") and of working capital requirements for the first five years of operation;

(ii)	Projected profit and loss account including details of revenue, fixed and variable costs, balance sheet and budgeted cash flow statements, showing the amount of capital to be invested on an annual basis for the first five years of operation;
(iii)	Method of depreciation of assets;
(iv)	Projected volume of business and market share for the first five years of operation;
(v)	Forecast internal rate of return and payback period of the project;

(vi) Details of proposed financing structure, debt equity ratio of the project, credit facilities, repayment terms and schedule for loans and bonds, timing for injection of funding, and the level of shareholders' support to satisfy the CA that the applicant has sound financial backing to carry out the project; and

(vii) Sensitivity tests on the business plan showing the worst case scenario (the worst case being one beyond which the company would not wish to invest) and a scenario in which the projected revenue level falls to 80% of the basic assumptions, details of contingency financial arrangements, balance sheet, profit and loss account, cash flow statements, capital investment plan, internal rate of return and payback period of the project.

#### **PART G**

#### TECHNICAL DETAILS OF THE FACILITIES

- 1. The applicant should provide a detailed description of the proposed facilities and should illustrate how the proposed facilities are designed and implemented to ensure provision of good, efficient and continuous service. The description should cover -
  - (a) Technical configuration including network infrastructure and components with the aid of diagram(s), the technology to be employed, the likely choice of equipment, system design, capacity, how the network and its ancillary equipment and facilities are planned to meet the proposed capacity, connectivity to destinations outside Hong Kong (if applicable), and other technological characteristics;

(b)	Facilities upon launch of service and the facility expansion plan for the first five years of operation;
(c)	Planned location(s) of equipment to be installed;
(d)	Planned facilities and traffic management, signalling, metering and billing arrangements (where applicable) to be adopted; and
(e)	Specification(s) with which the equipment comply. The specification(s) should be widely recognised standard(s) covering functional specification(s), modulation, transmitting power, out-of-band and spurious emissions, antenna characteristics, etc., where applicable.

2.	The applicant should indicate the associated radiation and immunity characteristics of the Shared Spectrum under application, in particular if 5G technologies such as massive multiple-input multiple-output (MIMO) antennas are used.
3.	The applicant should provide the contingency plan for its proposed services in response to major breakdown or network/service outage in order to ensure sustainability of service delivery. It should include -
	(a) Brief description of the contingency plan and arrangement;
	(b) Designed level of resilience in terms of percentage of affected services recovered and the time within which the recovery will be completed;
	(c) Amount of backup capacity (relative to the capacity level required for normal operation) and the spare resources such as backhaul equipment for contingency connection;

(0	Prior and post arrangements for re-allocating resources, re-routing the affected traffic and acquisition of additional bandwidth to recover the affected services;
(6	Internal procedures for monitoring and reporting critical network outage, composition of the team responsible for handling the major incidents and the responsibility of the respective major team members; and
(f	Brief description of the action and procedures to (i) assess the impact of major incident; and (ii) disseminate the information to the management, OFCA and the customers.

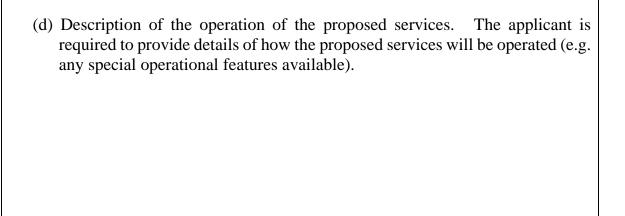
#### **PART H**

# DETAILS OF THE PROPOSED SERVICE

- 1. The applicant should provide a detailed description of the services proposed to be provided using the Shared Spectrum in the 26/28 GHz bands under application. The description should cover -
  - (a) Description of all services to be provided including the identity and number of the target users (including all end users of the services and the service providers making use of the services to serve their own customers) and customers, expected service launch date, the implementation schedule if the proposed services are to be introduced in phases, and plans for introduction of new services in the future;

(b) Please state clearly the intended coverage areas/locations for provision of the proposed services upon the commissioning of the facilities, using maps, coordinates and/or textual descriptions. If service users are expected to be connected to the networks of another applicant or LWBS licensee at other geographic locations, please include also the service areas of those other networks in the aggregate coverage area of the applicant. The aggregate coverage area should not exceed 50 square kilometres;

(c) Description of the arrangements for the provision of services to the public, including wholesale and/or retail services. The applicant should demonstrate that the rollout of its network or provision of its services is not primarily relying on the wholesale services of other operators' infrastructure or facilities; and



## **PART I**

## DETAILS OF THE TECHNICAL SUPPORT

- 1. The applicant should provide a detailed description of the technical support, including in particular operation of the network for deploying the Shared Spectrum in the 26/28 GHz bands under application. The description should cover -
  - (a) Description of the technical support facilities and maintenance centres which the applicant has set up or intends to set up in Hong Kong;

- (b) Description of the technical personnel including key management / engineering personnel, staffing levels and any principal contractors responsible for the design, construction, day-to-day operation and maintenance of the support facilities; and
- (c) Description of the system routine maintenance schedule / procedure with details.

# PART J RELEVANT EXPERIENCE IN TELECOMMUNICATIONS

1. The applicant must have the capability of running the proposed services to the satisfaction of the CA, including the expertise required for the operation of the proposed services. Details on the technical knowhow and any previous experience of the applicant, its shareholders and key personnel in establishing and running the proposed telecommunications networks and services, as well as information on the current status of these networks and services, should be given. Information should also be provided on the applicant and its shareholders' experience in running other relevant businesses in Hong Kong and/or other places.

#### **PART K**

#### **IMPLEMENTATION PLAN**

1. The applicant should provide an implementation plan for deployment of the Shared Spectrum in the 26/28 GHz bands under application, showing the key milestones of the implementation for the first three years starting from the date of spectrum assignment including, where applicable, (a) the network planning and the plan for installation of radio units; (b) placing of order for equipment; (c) delivery of equipment; (d) construction of equipment buildings/rooms; (e) installation of equipment; and (f) testing. The applicant shall adhere to this plan if the Shared Spectrum is assigned.

PART L	OTHER IN	FORMATION
	olicant may submit any other red helpful to the application.	information not specified above but is
PART M	DECLARAT	TION OF APPLICANT
To: The Communications Authority,  I/We hereby declare that the information and particulars provided by me/us in this form and in the documents submitted in support of the application are to the best of my/our knowledge, true, correct and complete, and any opinion expressed is honestly held. I/We understand that any untrue, incorrect and incomplete information in this form and the documents submitted may lead to rejection of the application.		
_	re with company chop: on behalf of the applicant)	
Signator	ry's full name in block letters:	
Position	held:	
Date:		

**Annex** 

# **Corporate and Shareholding Structure**

- 1. Please provide the following information regarding the ownership structure of the applicant, in the diagrammatic format as specified in paragraph 2 below:
  - (a) Detailed information on corporate and shareholding structures of the applicant including each person (which may be individual or body corporate):
    - (i) which has a shareholding of more than 15% in the applicant;
    - (ii) in which the applicant has a shareholding of more than 15%; and
    - (iii) which shareholding of more than 15% is held by another person who also holds a shareholding of more than 15% in the applicant.

Please also indicate which of the companies appeared in the corporate and shareholding structures are listed on a stock exchange ("Listed Companies"), the exchange on which they are listed, and the percentage of each class of their shares which form a public or free float. The latest annual reports and accounts of the applicant and the Listed Companies shall be provided.

(b) Detailed information of all parties who have a material interest, as defined in paragraph 3.6 of the Guidelines, in the applicant. The applicant should note that, a material interest in the form of an indirect interest (e.g. interest held through nominees or custodians) and a conditional entitlement (e.g. interest conditional on terms of a loan agreement) must be disclosed.

The information provided should state clearly the nature of the material interest (e.g. percentage shareholding, voting control, board representation, management agreement, etc.). If more than one factor apply, each of such factors should be clearly stated.

For the avoidance of doubt, the applicant is required to provide information of each person (which may be individual or body corporate) who holds a material interest in it. For this purpose, the applicant may provide more than one diagram. (The applicant is not required to provide information of any other interest (e.g. shareholding of less than 25%) which does not amount to a material interest as defined in the Guidelines.)

2. The information required in this part of the application form should be provided in diagrammatic form, as follows. In providing the relevant information, references can be made to the illustrative example appended below.

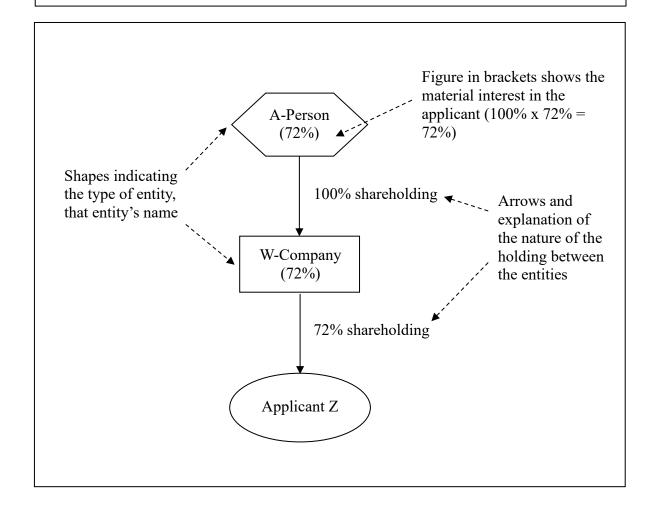
Applicant	
Company or other undertaking (e.g. partnership, trust). If the entity is not a company, please provide a numbered footnote explaining the entity's status	
Individuals/family	

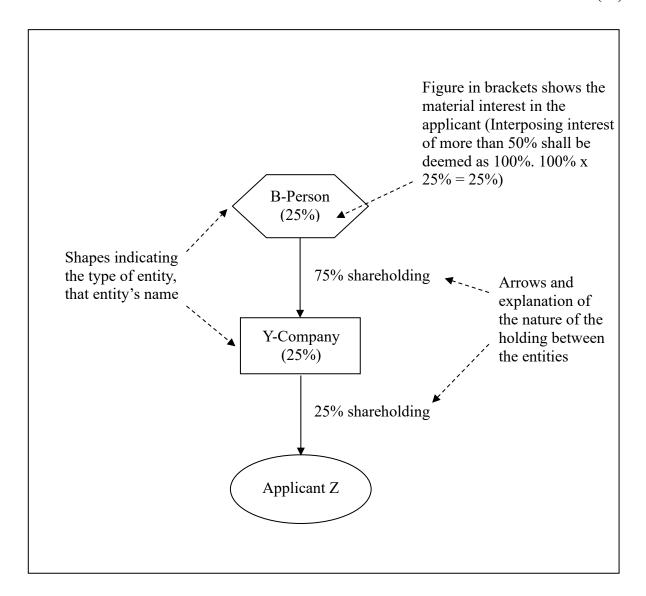
Each shape should contain the registered name of the relevant entity.

Links (whether by ownership or some other form of control or arrangement) between entities should be shown as an arrow between holder and held entities, together with a description of the amount of ownership or form of arrangement. Each entity's shape should also contain in brackets a figure (or other explanatory note) stating that entity's material interest in the applicant itself.

# *Illustrative example:*

Each of Person A, Person B, Company W and Company Y has more than 15% interest directly or indirectly in Applicant Z. Applicant Z must disclose the interest of Person A, Person B, Company W and Company Y in diagrams as follows:





Applicant Z, however, is not required to disclose the names of other shareholders who do not hold more than 15% interest in it (e.g. Person C holding the remaining 3% shareholding interest in Applicant Z).

For the avoidance of doubt, Applicant Z is required to disclose any body corporate in which it has a shareholding of more than 15%.

If the form of interest in the applicant is not readily explainable in the format set out above, provide additional arrows together with explanatory text either in the diagram or in a footnote.

If these diagrams do not fit legibly onto a single sheet of paper, please provide additional sheets (which can be larger than A4 if necessary) to make the requested information clear.