# APPLICATION FOR WIRELESS INTERNET OF THINGS LICENCE

### NOTES

The applicant should read the <u>"Guidelines for Submission of Applications for Wireless</u> <u>Internet of Things Licence<sup>1</sup></u>" ("Guidelines") before completing this form. Definitions of terms in this application form follow those in the Guidelines. Please refer to the Annex to 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 29/F, Wu Chung House 213 Queen's Road East Wanchai Hong Kong (Attn.: Head, Regulatory 2)

Email: wiot@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 the Communications Authority ("OFCA") will not be returned.
- 4. Enquiries concerning the application should be sent by post or email to the above addresses.

<sup>&</sup>lt;sup>1</sup> The Wireless Internet of Things ("WIoT") Licence is created for the establishment, maintenance and operation of wireless networks and systems for the provision of WIoT services in Hong Kong based on wireless technologies operating in the 920 – 925 MHz band. The use of the frequency band is shared with other users in an uncoordinated manner and is not protected from any interference caused by other lawful telecommunications installations or radio equipment.

### 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.

PART A	APPLICANT'S DETAILS
1. Registered Company Name : (English): (Chinese):	
2. Registered Office Address:	
<ul><li>3. Correspondence Address: (English): (Chinese):</li></ul>	
4. Company Website:	
5. Telephone Number (General):	
6. Fax Number (General):	
7. Contact Person:	
8. Position of Contact Person in the Company:	
9. Telephone Number of the Contact Person:	
10. Mobile Number of the Contact Person:	
11. Fax Number of the Contact Person:	

12. E-mail Address of the Contact Person:

PART B	SCOPE OF PROPOSED SERVICES
1. Please	provide a brief and concise Executive Summary of the services proposed to vided under the Wireless Internet of Thing ("WIoT") Licence.
2. Please Licen	specify clearly the scope of service proposed to be provided under the WIoT e.
	l applicants should be committed to the provision of the proposed services in Hong etailed in their applications, submissions and representations.)

# PART C

# **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 of 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 paid-up 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. Details on the composition of the company's Board of Directors and key officers.

4. 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 D

### FINANCIAL INFORMATION

- 1. The applicant must have sufficient financial capability and willingness to invest sufficient capital to provide a satisfactory service 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 network 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 E

# TECHNICAL DETAILS OF THE FACILITIES

- 1. The applicant should give 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, 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) to which the equipment comply with. 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 state clearly the exact frequency band to be used for the provision of the proposed services. 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).
- 3. The applicant should provide full technical details, such as test report, measurement results, etc., providing an evaluation on the compatibility of the proposed facilities to use the concerned frequency band on a shared and uncoordinated manner, with a view to demonstrating that there will be no harmful interference to existing users operating in the frequency band stated in reply to paragraph 2 above.
- 4. The applicant should confirm whether and how it would conduct demonstration, trials and tests as required to ensure no harmful interference to existing users operating in the frequency band to be used for the provision of the proposed services. Detail plans of the demonstration, trial and tests should be provided.

5. 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;

(d) Prior and post arrangements for re-allocating resources, re-routing the affected traffic and acquisition of additional bandwidth to recover the affected services;

(e) 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 F

### DETAILS OF THE PROPOSED SERVICES

- 1. The applicant should provide a detailed description of the proposed services. The description should cover -
  - (a) Description of all services to be provided including the target customers, intended coverage areas upon the commissioning of the facilities, 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) 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

(c) Description of the operation of the proposed services. The applicant is required to provide details of how the proposed services will be operated (e.g. any special operational features available).

# PART G DETAILS OF THE TECHNICAL SUPPORT 1. The applicant should provide a detailed description of the technical support. 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 H 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 I

### **IMPLEMENTATION PLAN**

1. The applicant should provide an implementation plan, giving the key milestones of implementation for the first three years starting from the date of grant of the licence including, where applicable, (a) the network planning; (b) placing of order for equipment; (c) delivery of equipment; (d) acquisition of sites; (e) construction of equipment buildings/rooms; (f) installation of equipment; and (g) testing. The applicant shall adhere to this plan if the licence is subsequently granted.

# PART J

# **OTHER INFORMATION**

1. The applicant may submit any other information not specified above but is considered helpful to the application.

# PART K

### **DECLARATION OF APPLICANT**

To: The Communications Authority,

I/We hereby declare that the information and particulars given 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.