

Guidelines for Submission of Applications for Unmanned Aircraft System (Private) Licence

27 October 2025 (Issue 1)

Section I – Introduction

- 1.1 These Guidelines are issued under section 6D(2)(a) of the Telecommunications Ordinance (Cap. 106) (“TO”). They indicate the manner in which the Communications Authority (“CA”) will perform its function of determining applications for the Unmanned Aircraft System (“UAS”) (Private) Licence for the establishment, operation and maintenance of a private wireless telecommunications system through radiocommunications installations, apparatus, equipment and UAS devices¹ (“Private System”) operating at frequency channels in the 1430 – 1444 MHz band (“1.4 GHz band”) for UAS operations. The 1.4 GHz band is confined to use by projects under the Low-altitude Economy (“LAE”) Regulatory Sandbox². Successful applicants for the projects under the LAE Regulatory Sandbox who are interested in setting up the Private System and the assignment of the frequency channels in the 1.4 GHz band for UAS operations under the UAS (Private) Licence are invited to submit applications to CA in accordance with these Guidelines, which should be read in conjunction with the relevant policy and regulatory documents hereafter referred to.
- 1.2 All applications received will be evaluated on their merits having regard to the information provided as required in Section IV and to the broad licensing criteria outlined in Section V of these Guidelines.
- 1.3 Applicants should ensure that all information contained in their applications and any other subsequent submissions and representations are

¹ For the purpose of UAS (Private) Licence, UAS devices shall only include those devices that are controlled remotely or operate autonomously, and do not have any human pilot nor passenger on board.

² To foster innovation and facilitate the testing of potential application scenarios for low-altitude flying activities, the Government has launched the LAE Regulatory Sandbox in March 2025. The projects cover a wide range of fields and application scenarios, including emergency and rescue, logistics and distribution (such as the delivery of food, drugs and medical supplies), infrastructure inspection and safety maintenance, environmental monitoring, surveillance and low-altitude infrastructure.

correct and accurate in all respects, in reliance upon which CA will consider the applications. CA may cancel, withdraw or suspend the UAS (Private) Licence granted and/or the frequency assignment if any information submitted by the applicant is false or misleading.

- 1.4 Applications should be **submitted in triplicate** under confidential cover and reach the Office of the Communications Authority (“OFCA”) at the following postal 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: uas_private@ofca.gov.hk

- 1.5 Alternatively, applications can be made by using the online application form. The web-based application form can be found at https://www.ofca.gov.hk/en/electronic_services/licence/index.html. For online application, an applicant should submit, in addition to the supporting documents, a letter signed by a director, a company secretary or an authorised person of the applicant and bearing the company chop to confirm that the application and the submission of the application form (including the declaration of applicant therein) and the provision of the required information and supporting documents are approved by the applicant.
- 1.6 Applicants will receive acknowledgement of receipt of applications. CA may request the applicants to provide additional information to clarify or supplement their applications submitted.
- 1.7 CA reserves the right to disclose the name of the parties who have submitted applications. All other information received will be treated in confidence. Where CA proposes to disclose any information in an application which may be considered as commercially sensitive information, CA will give the applicant an opportunity to make representations on the proposed disclosure before CA makes a final decision on whether or not to disclose the information.

- 1.8 Nothing in these Guidelines should be taken to bind CA on the granting of any spectrum assignment and licence, the terms of any licence to be granted, or any particular course of action in relation to the handling of applications received. CA reserves the right not to accept any application submitted.

Section II – The Regulatory Framework under the UAS (Private) Licence

Introduction

- 2.1 The Government announced in the 2025 Policy Address to enhance core infrastructure facilities, which include, among others, by designating spectrum to advance Hong Kong as a major hub for low-altitude applications. The UAS (Private) Licence is created for the establishment, operation and maintenance of a Private System operating at frequency channel(s) in the 1.4 GHz band to enable data-only communications to and/or from radiocommunications installations, apparatus, equipment and UAS devices for unmanned aircraft operations by successful applicants for the projects under the LAE Regulatory Sandbox at specific UAS flight paths as approved by Civil Aviation Department (“CAD”). Nothing in the UAS (Private) Licence authorises the licensee to operate the Private System for carrying real-time voice communications or using any subscriber number, and provide any public telecommunications services. Applicants must secure CAD’s approval on specific flight paths so as to be eligible to be granted with the licence and use the relevant spectrum. Further, approvals from relevant government departments may still be needed prior to deployment of UAS operations.

Use of Radio Spectrum on a Non-exclusive and Geographically Sharing and First-come-first served Basis

- 2.2 According to section 32H of the TO, CA is empowered to allocate and manage frequencies and bands of frequencies in all parts of the radio spectrum used in Hong Kong. In April 2007, the Government promulgated the Radio Spectrum Policy Framework³ for the management of radio spectrum in Hong Kong. As set out in the Radio Spectrum Policy Framework, there is no legitimate expectation that there will be any right of renewal or right of first refusal of any licence or spectrum assignment upon the expiry of a licence or spectrum assignment.
- 2.3 Taking into account the special nature and characteristics of UAS operations, frequency channels in the 1.4 GHz band will be restricted to be

³ The Radio Spectrum Policy Framework is available at:
<https://www.cedb.gov.hk/assets/resources/ccib/policies/spectrum.pdf>.

used by UAS operators along specific UAS flight paths to be approved by CAD and hence such channels can be shared among various UAS operations along different UAS flight paths with geographical separation. The spectrum will be assigned administratively to a licensee on a non-exclusive, geographically sharing and first-come-first-served basis having regard to the scale of operation of the application and the availability of spectrum in the 1.4 GHz band along the flight paths concerned (see also paragraph 3.2 below).

Use of Numbers

- 2.4 Pursuant to section 32F of the TO, CA has issued the “*Numbering Plan for Telecommunications Services in Hong Kong*” (“Hong Kong Numbering Plan”)⁴.
- 2.5 As the Private System established and maintained under the UAS (Private) Licence is for the licensee’s own data-only communications, and provision of public telecommunications services is not allowed, the licensee will not be allocated any subscriber numbers from the numbering plan of Hong Kong. Allocation of the other numbers and codes will be considered on a case-by-case basis in accordance with the relevant guidelines and codes of practices issued by CA⁵.

Technical Standards

- 2.6 Pursuant to section 32D of the TO, CA may from time to time prescribe standards and specifications of telecommunications networks, systems, installations, customer equipment and services, etc. Licensees are obliged to observe these specifications for the establishment and maintenance of their Private Systems, for example, Type Acceptance Criteria for Radio Equipment Operating in the 1430 – 1444 MHz Band for Unmanned

⁴ The Hong Kong Numbering Plan is available at:
https://www.ofca.gov.hk/filemanager/ofca/en/content_311/no_plan.pdf.

⁵ The code of practice relating to the use of numbers and codes in the Hong Kong Numbering Plan is available at: https://www.coms-auth.hk/filemanager/statement/en/upload/385/cop-numbering_e.pdf.

Aircraft System⁶. Applicants should refer to relevant specifications before submitting their applications.

Fit and Proper Person

- 2.7 The licensee and any person exercising control over the licensee shall be and remain a fit and proper person during the validity period of the licence. The factors that will be taken into consideration in determining whether the licensee or a person exercising control over it is fit and proper are set out in the relevant licence condition. The licensee shall have provided to CA a statutory declaration⁷ duly made by an authorised director, a secretary or a principal officer upon the date of issue of the licence, and shall provide such further declaration upon request by CA during the term of the licence.

⁶ TAC 013 – Type Acceptance Criteria for Radio Equipment Operating in the 1430 – 1444 MHz Band for Unmanned Aircraft System is available at:
https://www.ofca.gov.hk/filemanager/ofca/en/content_791/tac013.pdf.

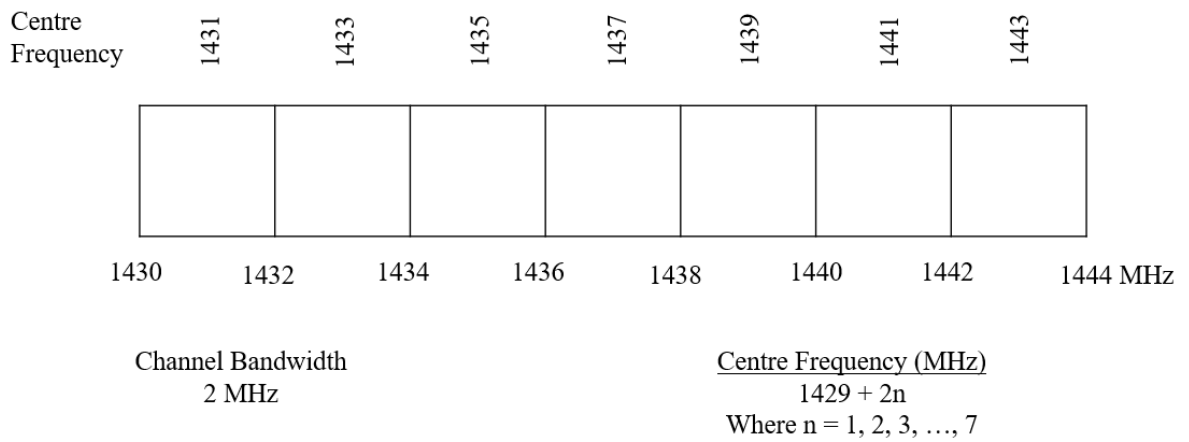
⁷ The declaration form is available at:
https://www.coms-auth.hk/filemanager/en/content_1781/FAPP_Statutory_Declaration.pdf.

Section III – Assignment of Spectrum and Licensing Arrangements

Spectrum Available for Application and Assignment

- 3.1 The 14 MHz of spectrum in the 1.4 GHz band is divided into seven channels, each with a bandwidth of 2 MHz as depicted in Figure 1 below.

Figure 1: Channel Arrangement in the 1.4 GHz Band



- 3.2 The frequency channels in the 1.4 GHz band will be assigned under the UAS (Private) Licence to a successful applicant on a non-exclusive, geographically sharing and first-come-first-served basis, subject to the scale of operation of the individual applications and the availability of spectrum in the 1.4 GHz band along the flight paths concerned. To ensure efficient use of spectrum, CA will take into account a number of factors including the proposed scope of the Private System, the number of UAS devices to be connected to the Private System, the locations of radio base stations and the intended radio coverage referencing to UAS flight paths as approved by CAD, applicant's justification for the proposed number of frequency channels and other relevant information to determine the number of frequency channels and frequency ranges to be assigned to the applicant. Given that UAS devices shall fly along specific approved UAS flight paths only, the frequency channels will not be assigned for use on a territory-wide basis. The applicant shall also demonstrate that the radiocommunications network infrastructure and radio coverage of its radiocommunications network are capable of supporting reliable operations of UAS along the entire flight paths as approved by CAD before commencement of the operations so as to ensure flight safety.

Eligible Applicants of Licence

- 3.3 An applicant of the UAS (Private) Licence shall be an entity registered in Hong Kong under the Companies Ordinance (Cap. 622) or the Business Registration Ordinance (Cap.310); or an organisation registered in Hong Kong under any other ordinances. There is no foreign ownership restriction. There is no pre-set limit on the number of UAS (Private) Licences to be issued. The applicant and any person exercising control over the applicant shall be and remain a fit and proper person as stipulated in paragraph 2.7 above.
- 3.4 Only successful applicants for projects under the LAE Regulatory Sandbox are eligible to apply for the UAS (Private) Licence. Applicants must secure CAD's approval on specific flight paths so as to be eligible to be granted a UAS (Private) Licence.

Period of Validity of Licence and Spectrum Assignment

- 3.5 The UAS (Private) Licence with assignment of frequency channel(s) in the 1.4 GHz band will be valid for a period of five years, and may be extended at the discretion of CA for a further period of up to five years. Nevertheless, the period of validity of the UAS (Private) Licence will terminate at the same time when the tenure of the licensee's project approved under the LAE Regulatory Sandbox ends or is terminated, unless otherwise approved by CA. The assignment of frequency channel(s) shall not prejudice the generality of the power exercisable by CA under the TO including section 32H. For the avoidance of doubt, there is no legitimate expectation of any right of renewal or right of first refusal upon expiry of the licence or the spectrum assignments.

Licence Conditions

- 3.6 Licence conditions of the UAS (Private) Licence, as given in the sample UAS (Private) Licence published on CA's website⁸, include the General

⁸ The sample UAS (Private) Licence is available at:
https://www.coms-auth.hk/filemanager/common/licensing/sample_uas_private_licence.pdf.

Conditions and Special Conditions (“SCs”). CA may also impose additional SCs specific to each holder of UAS (Private) Licence as may be appropriate.

Scope of the Private System

- 3.7 The scope of the Private System licensed under the UAS (Private) Licence refers to a private wireless telecommunications system established and maintained through radiocommunications installations, apparatus, equipment and UAS devices operating at the frequencies and using technical parameters specified in Schedule 2 at specific flight paths as approved by CAD to enable data-only communications to and/or from such installations, apparatus, equipment and UAS devices for unmanned aircraft operations. The Private System is only for the licensee’s self-use. Nothing in the UAS (Private) Licence authorises the licensee to operate the system for carrying real-time voice communications or using any subscriber number, or to provide any public telecommunications services and other service subject to licensing under the TO or any other ordinance.
- 3.8 A UAS (Private) Licence contains a number of schedules providing the scope and description of the licensed system, the technical particulars of radio stations, UAS devices and the frequency channel(s) used for the operation of the licensed system, where applicable.

Payment of Licence Fee

- 3.9 The current annual licence fee payable on the issue and on each anniversary of the issue of a UAS (Private) Licence in each year while the licence remains in force shall be the sum of the items given in Table 1 below –

Table 1: Annual Licence Fee Schedule

	Particulars	Annual licence fee
1.	Fixed fee	HK\$20,000
2.	For the 1 st to the 50 th base station* installed	HK\$1,000 per base station

	Particulars	Annual licence fee
	For the 51 st to the 100 th base station* installed	HK\$500 per base station
	For the 101 st base station* installed and any additional base stations	HK\$100 per base station
3.	UAS Device fee	HK\$200 for each 100 devices or less used
4.	For every 1 kHz or part thereof of frequency then assigned to the licensee	HK\$46 [#]

Notes: (*) For details about the counting of the number of base stations, please refer to the circular letter regarding “Reporting of the Number of Customer Connections, Mobile Stations and Base Stations” issued on 28 April 2020⁹, which is also applicable to the UAS (Private) Licence.

(#) Since the frequency channels in 1.4 GHz band will be assigned on a non-exclusive and geographically sharing basis, the spectrum management fee will be proportionally reduced by a reduction factor taking into account the number of users that may be authorised to use that particular part of the radio frequency.

Control of Interference and Demonstration

3.10 The licensee is required to take all reasonable measures at its own cost to install, maintain and operate the Private System in such a manner not to cause any harmful interference to any lawful telecommunications services, systems or networks within or outside Hong Kong. If necessary, CA may issue relevant directions requiring the licensee to take such measures as may be necessary to prevent interference. The licensee shall also coordinate and agree with other licensees on the technical measures to be taken to minimise any mutual interference between them.

3.11 When required by CA, the licensee shall conduct demonstrations, trials and tests at its own cost to demonstrate to the satisfaction of CA its compliance with the licence condition regarding control of interference and any other applicable licence condition.

⁹ A copy of the circular letter is available at:
https://www.coms-auth.hk/filemanager/common/licensing/circular_20200428_2.pdf.

Identification Label of UAS Device and Inspection

- 3.12 In respect of a UAS device licensed under the UAS (Private) Licence, the licensee is required to affix an identification label as prescribed by CA. The UAS devices shall be available for CA's inspection.

Base Stations and their Locations

- 3.13 Base stations to be set up at the intended locations under the UAS (Private) Licence are subject to CA's approval. No approval will be granted for proposed base stations that fall outside those UAS flight paths as approved by CAD.

Section IV – Information to be Provided in Submitting the Application

Application Procedures

- 4.1 For an application for a new UAS (Private) Licence, the applicant should submit the full information specified in these Guidelines, in particular in paragraphs 4.3 to 4.14. Subject to the applicant satisfying the relevant licensing criteria set out in Section V, CA will consider granting a UAS (Private) Licence with frequency channel(s) in the 1.4 GHz band assigned to the applicant.
- 4.2 For an application for extension of UAS (Private) Licence in view of the expiry of the existing one, the licensee should submit to CA an application at least one year prior to the expiry of the UAS (Private) Licence, for continuing to operate the Private System specified under the scope of the existing licence. The application for licence extension should include full details as required for an application for a new UAS (Private) Licence. Subject to the discretion of CA, the UAS (Private) Licence may be extended for a further period of up to five years. Nevertheless, the period of validity of the UAS (Private) Licence will terminate at the same time when the tenure of the licensee's project approved under the LAE Regulatory Sandbox ends or is terminated, unless otherwise approved by CA. In general, CA will examine the application according to the similar criteria as for granting a UAS (Private) Licence to a new applicant.

Application Proposal

Company / Organisation Structure

- 4.3 UAS (Private) licensees shall be an entity registered in Hong Kong under the Companies Ordinance (Cap. 622) or the Business Registration Ordinance (Cap. 310) in Hong Kong; or an organisation registered in Hong Kong under any other ordinances. The application proposal should contain details of the company/organisation intended to be the assignee of the spectrum, including –

- (a) copies of the Certificate of Incorporation and the Business

Registration Certificate of the applicant (if the applicant is a company incorporated under the Companies Ordinance (Cap. 622) in Hong Kong);

- (b) copies of the Business Registration Certificate and current Certified Extracts of Information on the Business Register issued by the Business Registration Office, Hong Kong of the applicant (if the applicant operates in the form of sole proprietorship or partnership);
- (c) copies of the documentary proof that the organisation is registered in Hong Kong and proof of the applicant's address, if the applicant's status does not fall within those set out in sub-paragraphs (a) and (b) above; and
- (d) details on the composition of the company's Board of Directors or the organisation's governing board, management and key officers where applicable.

Scope of Proposed Private System

- 4.4 Proposals should contain an Executive Summary summarising in a concise manner the salient features of the Private System proposed to be operated under the UAS (Private) Licence.
- 4.5 The applicant should specify the scope of the Private System proposed to be operated in the 1.4 GHz band for UAS operations under the UAS (Private) Licence.
- 4.6 Proposals should include a detailed description of the Private System to be operated, number of base stations to be set up, and number of UAS devices to be put into operation.
- 4.7 The successful applicant should be committed to the operation of the proposed Private System in Hong Kong as detailed in its application, submissions and representations.

Application for Number of Frequency Channels

- 4.8 The applicant should specify the number of frequency channels in 1.4 GHz band applied for, with sound justifications provided. CA will determine

the amount of spectrum to be assigned to an applicant taking into account, amongst the others, the justifications provided.

Technical Details of the Facilities and UAS Devices

4.9 Proposal should give a detailed description of the proposed facilities and UAS devices, and should illustrate how such facilities and fleet of UAS devices are designed and implemented to ensure efficient and reliable operation of the Private System. The description should cover –

- (a) technical configuration including system layout and components with use of relevant diagram(s) for illustration, the technology to be employed, the likely choice of equipment and UAS devices, system design, capacity, and other technological characteristics;
- (b) facilities to be set up and number of UAS devices to be put into operation at the time of launch of system and expansion plan of such facilities and scale of fleet of UAS devices (if any) for the first three years of operation;
- (c) the planned location(s) of equipment to be installed and facilities for control and maintenance of UAS devices on ground;
- (d) the planned system management facilities; and
- (e) specifications with which the equipment would comply. The specification(s) should be standard(s) covering functional specifications(s), modulation, transmitter power, out-of-band and spurious emissions, antenna characteristics, etc., where applicable.

Flight Paths of UAS Operations

4.10 The applicant should submit information about the UAS flight paths as approved by CAD for UAS operations under LAE Regulatory Sandbox projects and provide copies of documents in support of the approval granted by CAD.

Target System Operation Areas

4.11 Proposal in the application should indicate the target system operation areas

that shall be in-line with the UAS flight paths as approved by CAD.

Information about Essential Infrastructures to Facilitate UAS Operations

- 4.12 The applicant should provide information about essential infrastructures that it intends to set up or has already set up to facilitate its UAS operations. Such essential infrastructures include designated take-off and landing points, facilities for maintenance of UAS devices on ground, as well as ground control stations.

Implementation Plan

- 4.13 The applicant should include an implementation plan for deployment of the Private System using the frequency channel(s) under application, showing the key milestones of the implementation for the first three years starting from the issue date of the UAS (Private) Licence including where applicable (a) plan for deploying the Private System; (b) schedule for procuring and delivery of equipment and UAS devices; (c) schedule for establishment of the essential infrastructures to facilitate UAS operations; (d) installation of equipment and facilities; (e) testing and commissioning of the Private System; and (f) target launch date of the Private System. The applicant shall adhere to this plan if the UAS (Private) Licence is granted.

Liability Insurance Requirement

- 4.14 The applicant shall insure itself, throughout the licence validity period, against its third party liabilities in respect of personal injury, death and damage to property, arising out of or in connection with the installation, maintenance and operation of the system. The amount of insurance shall be at least HK\$10,000,000 per occurrence or such sum as CA may notify in writing in future. The applicant should submit the application together with documentary proof showing that arrangement has been made with an insurance company.

Other Information

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

Section V - Broad Licensing Criteria

5.1 The basis for assessment of applications will be the information supplied by the applicants in accordance with the requirements set out in Section IV of these Guidelines. CA reserves all rights not to accept applications which are substantially incomplete in this respect.

5.2 In considering the grant of a UAS (Private) Licence to an applicant for assignment of the frequency channel(s) in the 1.4 GHz band for UAS operations, CA will consider the following criteria –

(a) Technical Soundness

The proposed Private System must be technically sound, compatible with the local environment and be capable of serving the intended purposes. The proposed Private System must use spectrum efficiently needed for its UAS operations.

(b) Sound Justifications for Assigning the Number of Channels

The applicant must provide sound justifications substantiating the required number of frequency channels in the 1.4 GHz band in the application. If any assumptions, methodologies, estimations are adopted in the justifications, the applicant shall provide such information in detail in the application.

(c) Proven Managerial and Technical Expertise

The applicant must possess proven managerial and technical expertise to operate the proposed Private System in Hong Kong and/or other places.

(d) Implementation Schedule

The applicant should provide CA with its rollout plan for deployment of the Private System using the frequency channels in the 1.4 GHz band, including the target commencement date of system provisioning with the use of the assigned spectrum. The applicant should demonstrate its ability to manage such plan and the necessary

facilities and UAS devices.

(e) Quality of Application Proposal

CA will consider more favourably application proposals that are concise and clearly presented with each aspect well substantiated.

CA will take into account all relevant factors in its assessment of the application.

- 5.3 The licensing criteria set out in these Guidelines are not intended to be a definitive list of criteria. While evaluating whether the criteria have been satisfied, CA is entitled to determine the weight it will give to each individual matter as it considers appropriate in the circumstances, after taking into account relevant factors, and will decide each case based on its own merits.

Office of the Communications Authority
27 October 2025