

Launch of the New Unmanned Aircraft System (Private) Licence

Telecommunications Regulatory Affairs Advisory Committee
3 February 2026



Background

Govt to launch designated spectrum for use by Unmanned Aircraft System (UAS) to support Hong Kong's development as a core hub for low-altitude applications

2025 Policy Address
(17 Sep 2025)

Communications Authority (CA) allocated spectrum in 1.4 GHz band to mobile service for use by UAS

Spectrum Release Plan
(10 July 2025)

New Licence Open for Application
(27 Oct 2025)

The New UAS (Private) Licence

CA created the UAS (Private) Licence in support of the development of low-altitude economy (LAE)

Purpose:

to cater for **potential UAS operators** (LAE Regulatory Sandbox pilot project proponents) to set up private radio systems using 1430 – 1444 MHz band (**1.4 GHz band**)

Consultation

In March 2025, OFCA invited views and comments from –

- members of TRAAC
- successful applicants of LAE Regulatory Sandbox pilot projects and other relevant stakeholders



Consultation completed in April 2025

- Respondents generally support the proposal
- Comments received mostly fall within
 - licensing aspects; and
 - spectrum & technical issues

Summary of Proposal for Consultation

Use of Designated Band

- same channel arrangement of the Chinese Mainland in 1.4 GHz band
- 1.4 GHz band divided into 7 channels (each with 2 MHz)

Annual Licence Fees

- fixed fee of \$20,000
- variable fee based on no. of base stations and UAS devices
- spectrum management fee

Licence Conditions, Period of Validity

- modelled based on the Localised Wireless Broadband System (Private) Licence
- new conditions on requirements on UAS devices
- 5 years, may extend for a period of up to 5 years (subject to CA's discretion)

Spectrum Assignment

- administrative assignment
- on non-exclusive, geographically sharing and first-come-first-served basis

Scope of Operations

- private radio systems operating in 1.4 GHz band
- along specific UAS flight paths approved by Civil Aviation Department (CAD)
- data-only communications, not for carrying real-time voice communications
- not using subscriber numbers
- system used by licensee only, not for provision of public services



1



2



5

4

3



Comments Received - Licensing Aspects

Comments

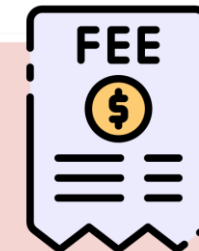
Licence should be able to opt for short, medium and long periods for different scenarios

OFCA's Responses

- The proposed licence term provides a reasonable period to encourage licensees to build and invest their private systems
- The new licence gives regulatory certainty on use of frequencies (medium and long term)
- Interested parties may apply for trial permit for no more than 6 months (short term)

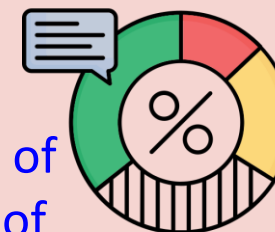
Comments

Licence fee should be proportionate to scale of UAS operations



OFCA's Responses

- Licence fee is to recover OFCA's administration cost of the licence
- Fee consists of (a) fixed fee; and (b) a number of variable fees that are proportionate with scale of UAS operations (e.g. no. of radio base stations installed)



Comments Received - Spectrum & Technical Issues

Comments

Hong Kong shall ensure compatibility of technical standards supporting the 1.4 GHz band with other local technical requirements

OFCA's Responses

Radio apparatus installed in UAS shall be of a type approved by CA

Comments

- (a) Use of 1.4 GHz band in Hong Kong should be compatible with that in the Chinese Mainland
- (b) Whether OFCA intends to coordinate spectrum use within neighbouring areas

OFCA's Responses

Hong Kong will adopt the same channel arrangement as that of the Chinese Mainland, i.e. 14 MHz of spectrum in 1.4 GHz band will be divided into 7 channels, each with 2 MHz bandwidth. OFCA will continue to coordinate with relevant Chinese Mainland authorities on use of spectrum in the band



Comments Received - Spectrum & Technical Issues

Comments

Should impose a cap to an applicant on no. of channels in 1.4 GHz band to be assigned

OFCA's Responses

- CA will take into account all relevant matters on a case-by-case basis
- no. of channels to be assigned to a licensee will depend on (a) scale of operation of the application with justifications; and (b) availability of spectrum in the 1.4 GHz band along the UAS flight paths concerned

Comments

Spectrum in 1.4 GHz band should also be allocated for public services

OFCA's Responses

- While 1.4 GHz band provides an additional radiocommunications means for UAS, most UAS operations still make use of Wi-Fi and 4G/5G networks
- Current use of 1.4 GHz band for UAS in the Chinese Mainland is also confined to Govt departments and private UAS operations

Other Comments Received

Comments

- (a) It is important to invest in essential infrastructure (e.g. designated take-off and landing zones) for supporting effective deployment of UAS operations
- (b) Clear guidelines and safety standards of UAS operations should be set out

OFCA's Responses

- Relevant safety standards of UAS operations will be stipulated by relevant Govt departments as and when necessary

Comments

OFCA should enhance public awareness and understanding of the benefits of the UAS (Private) Licence

OFCA's Responses

OFCA will continue to make use of various publicity channels to enhance public awareness and understanding of UAS operations

UAS (Private) Licence (1)

Assignment Method of 1.4 GHz Band



Chinese Mainland

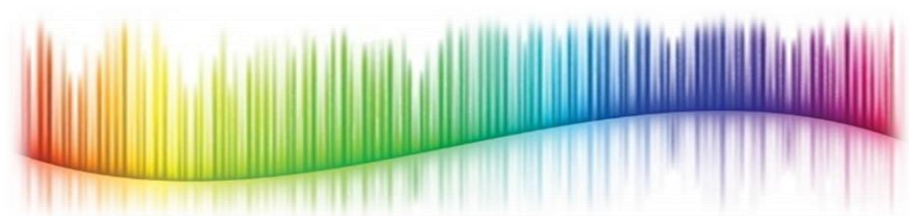
- the **only place** that has designated the 1.4 GHz band for UAS operations



Hong Kong

- majority of UAS devices support **Wi-Fi connection or 4G/5G network**
- 1.4 GHz band is **reusable and can be shared** among various UAS operations given the geographical separation between different flight paths

There is **unlikely to be competing demand** at this juncture for spectrum in 1.4 GHz band, thus it is appropriate to assign spectrum in 1.4 GHz band **administratively** under the UAS (Private) Licence



UAS (Private) Licence (2)

Scope of Operations

- **private** wireless telecommunications systems
- operating at assigned frequency channels in the 1.4 GHz band along **specific UAS flight paths approved by the CAD**
- **data-only** communications, but not carrying real-time voice communications
- not using any subscriber numbers
- system used by the licensee itself only



LAER Regulatory Sandbox-only Usage

- use of the 1.4 GHz band is **confined** to projects under the LAER Regulatory Sandbox. UAS (Private) Licence is **open for application to organisations participating in the LAER Regulatory Sandbox pilot projects**
- applicants must secure **CAD's approval on specific flight paths** and meet the regulatory requirements so as to be eligible to be granted with the new licence

Form and Conditions of New Licence

UAS (Private) Licence

Licence conditions

- Empowering CA to request the licensee to conduct trials and tests (Special Condition (SC) 11)
- Requirements of UAS devices to comply with relevant technical standards (SC 12)
- UAS device shall be affixed with identification label and be available for CA's inspection (SC 13)
- Fit and Proper Person Requirements (SC 14)

Schedules

- Schedule 1 - Scope and Description of the System
- Schedule 2 - Technical Particulars of Radio Stations and UAS Devices for the Operation of System

Diagram illustrating the hierarchy of licence conditions and schedules:

- Schedule 2
- Schedule 1
- Special Conditions
- General Conditions

TELECOMMUNICATIONS ORDINANCE
(Chapter 106)

UNMANNED AIRCRAFT SYSTEM (PRIVATE) LICENCE

DATE OF ISSUE: []

VALIDITY PERIOD: []

DATE OF EXTENSION (if applicable): []

PERIOD OF EXTENSION (if applicable): []

[Name]

of [Address]

(the "licensee") is licensed, subject to the following conditions set out in this licence –

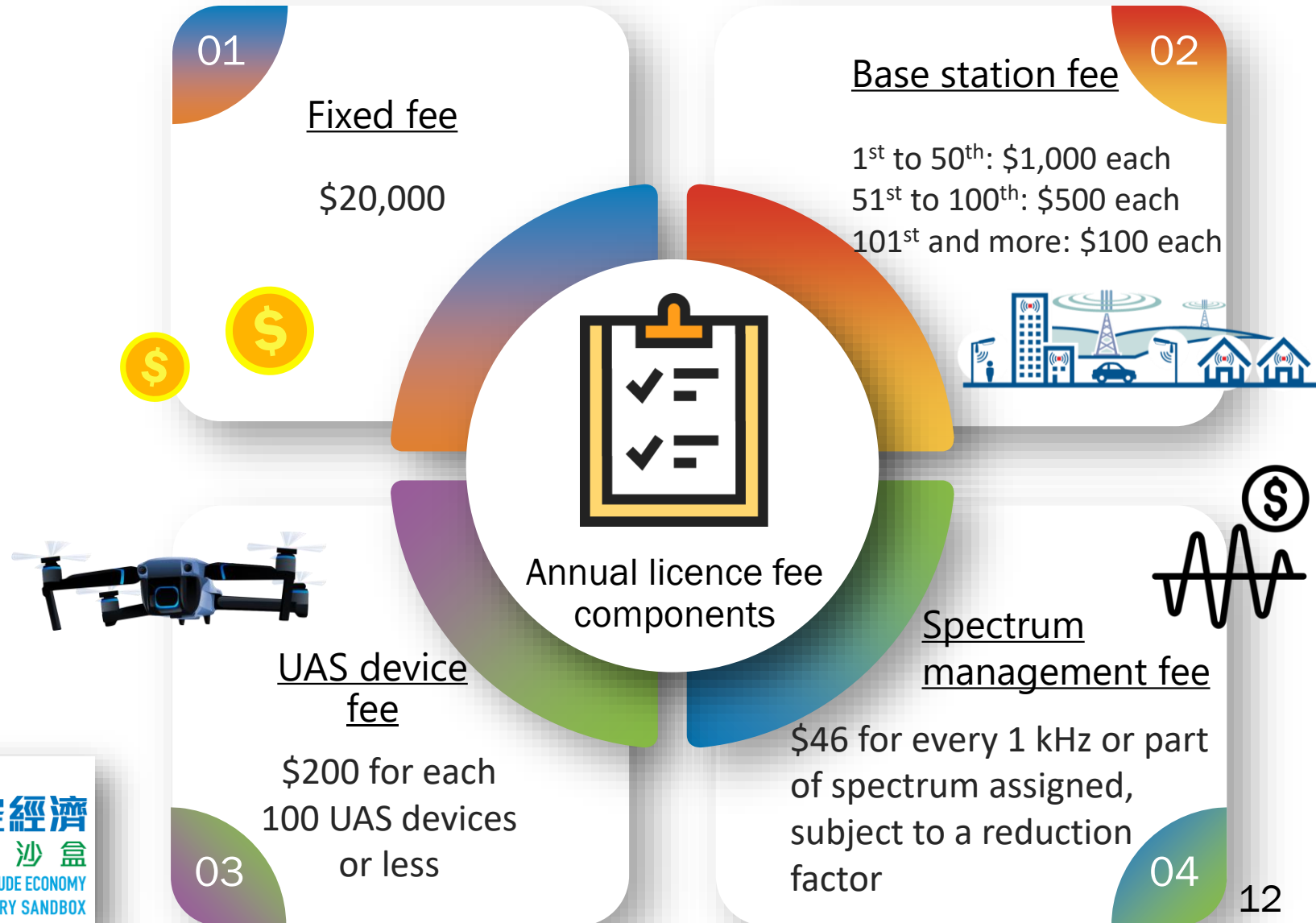
(a) to establish and maintain a private wireless telecommunications system (the "system"), the scope of which is described in Schedule 1; and

(b) to possess and use the radiocommunications installations and unmanned aircraft system ("UAS") devices described in Schedule 2 for the purpose of establishing and maintaining the system.

Period of Validity and Licence Fee

Period of Validity

- 5 years, with an extension of up to 5 years subject to CA's discretion.
- The period of validity **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



UAS (Private) Licence - Open for Application

Successful applicants for the projects under LAE Regulatory Sandbox are welcome to submit licence application to CA



Applicants must secure CAD's approval on specific flight paths so as to be eligible to be granted with a licence

Approvals from relevant govt departments may be needed prior to deployment of UAS operations



Thank You