

## LCQ21: Unmanned aircraft systems

Following is a question by the Hon Chan Hak-kan and a written reply by the Acting Secretary for Transport and Housing, Dr Raymond So Wai-man, in the Legislative Council today (May 16):

Question:

According to the existing legislation, any person must apply to the Civil Aviation Department before operating any unmanned aircraft system (UAS) weighing over seven kilogrammes (without fuel) or operating a UAS for reward. In recent years, while UASs have become increasingly versatile, the privacy and safety issues arising from the operation of UASs have aroused growing concern. In this connection, will the Government inform this Council:

(1) of the number of complaints about clandestine photo-taking by using UASs received by the authorities in the past three years; the follow-up actions taken by the authorities in respect of those complaints, and whether they have instituted prosecutions against the UAS operators concerned;

(2) as UASs are currently not allowed to be flown in areas such as the vicinity of an airport or aircraft approach and take-off paths and country parks, of the number of reports received by the authorities in the past three years about UASs intruding into the said no-fly zones; the follow-up actions taken by the authorities in respect of these cases, and whether they have instituted prosecutions against the UAS operators concerned; whether they will consider using new technological equipment (e.g. an electronic interference system) to prevent UASs from intruding into the no-fly zones; if so, of the details; if not, the reasons for that;

(3) given that more and more people operate UASs as a leisure activity, whether the authorities will consider relaxing the provision prohibiting the flying of UASs in country parks, or designating a park in which flying UASs is allowed; and

(4) given that UASs are currently deployed overseas for delivering goods by some companies, whether the authorities have plans to assist the relevant industry in Hong Kong in the development of that kind of service?

Reply:

President,

In Hong Kong, UAS are classified as aircraft and are governed, as far as aviation safety is concerned, by the civil aviation legislation. The Civil Aviation Department (CAD) is committed to ensuring aviation safety, including UAS operations, such that these operations are performed in compliance with flight safety rules. According to the prevailing laws, any operator of UAS, regardless of the weight of the UAS, must observe Article 48 of the Air

Navigation (Hong Kong) Order 1995 (Cap. 448C). Under this provision, a person shall not recklessly or negligently cause or permit an aircraft to endanger any person or property. Articles 3, 7 and 100 of Cap. 448C also provide that any person must apply to the CAD for a Certificate of Registration and a Certificate of Airworthiness for any UAS weighing more than seven kilograms (without fuel) before he/she could operate such aircraft in Hong Kong. Furthermore, Regulation 22 of the Air Transport (Licensing of Air Services) Regulations (Cap. 448A) requires that, regardless of the weight of the UAS, if a person uses a UAS for reward, he/she must lodge an application with the CAD before operating such aircraft and abide by the conditions stipulated in the permit granted by the CAD in providing the service. Apart from operating in a safe manner in accordance with the applicable civil aviation legislation, operators must also observe other relevant laws of Hong Kong, such as the Telecommunications Ordinance (Cap. 106).

At present, the CAD publishes safety guidelines and textual information in its website ([www.cad.gov.hk/english/Unmanned\\_Aircraft\\_Systems.html](http://www.cad.gov.hk/english/Unmanned_Aircraft_Systems.html)) on areas where UAS should not be flown. Such guidance serves to protect aircraft as well as other people and properties (e.g. UAS should not be flown in populated and congested areas, UAS should be operated 50 metres away from other person or structure, etc). In addition to the above, there may be other restrictions imposed by other government bureaux/departments, authorities or venue managers which may be applicable to UAS operations.

At the same time, the CAD will continue the promotion of safe UAS operations through various channels, including CAD's website, social media platform, etc. Since October 2016, the CAD has distributed over 33 800 safety leaflets to UAS operators as well as general public through major distributors, manufacturers, flying clubs/associations, Home Affairs Enquiry Centres of all 18 Districts. To reach out to a wider audience, the CAD launched a campaign to broadcast UAS safety messages through television and radio programmes in May 2017.

On the specific questions asked, our reply is as follows:

(1) to (2) The numbers of complaints of UAS operations received by the CAD in the past three years are as follows:

| Name of Department/Organization | Year/No. of Complaint Case |      |      |
|---------------------------------|----------------------------|------|------|
|                                 | 2015                       | 2016 | 2017 |
| CAD                             | 27                         | 47   | 60   |

Note: The Hong Kong Police Force does not keep record on the number of complaints on UAS operations.

Since 2017, the CAD has started categorising complaints received in relation to UAS. Complaints received in the year mainly involved UAS being operated at an inappropriate time, location and/or height. In addition, nine out of 60 complaints in 2017 concerned or involved privacy-related issues.

At present, the safety guidelines of the CAD list out areas where UAS shall not be flown or areas not suitable for UAS operations, for example, populated and congested areas, the Hong Kong International Airport, helipads, Victoria Harbour and its coastal area, etc. In 2017, the CAD received 41 complaints which related to UAS operations in areas specified in the abovementioned safety guidelines.

Upon receipt of complaints, the CAD will take appropriate follow-up actions which may include obtaining further information from the parties concerned, urging the parties concerned to comply with UAS safety guidelines and rules published by the CAD, requesting the relevant Police division to step up patrol. When needed, the CAD will refer the complaint case to the Police for follow up. In addition, CAD has been liaising with the Police and providing technical support to the Police in its enforcement action.

As regards prosecution, as of the first quarter of 2018, in the past three years, the Hong Kong Police Force has initiated prosecution on two cases. One case (which took place in 2017) was convicted and one case (which took place in 2016) was under trial by the court.

(2) to (4) To assist the Government to review the appropriateness and effectiveness of the existing statutory requirements and in exploring ways to refine the prevailing regulatory regime with a view to accommodating the technological development and diversified uses of UAS while safeguarding public safety, the CAD engaged a consultant in March 2017 to conduct a study on the regulation of UAS. In early April 2018, the CAD published the consultancy report ([www.cad.gov.hk/english/uas\\_view.html](http://www.cad.gov.hk/english/uas_view.html)) and launched a 3-month public consultation on six key proposals regarding the UAS regulatory regime, including the establishment of a UAS registration system, risk-based classification of UAS operations, training and assessment requirements, drone maps for UAS operators, insurance requirements for UAS, and indoor operations of UAS. Members of the public can also express their views on other UAS related issues. The CAD will study the public's views in consultation with relevant government bureaux/departments, with the aim of striking an appropriate balance between facilitating usage and development of UAS on the one hand and protecting public safety on the other. Subject to the outcome of the public consultation, the CAD will formulate a detailed proposal on the way forward.