立法會 Legislative Council

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Panel on Economic Development Meeting on 24 June 2019

Updated background brief on regulation of unmanned aircraft systems

Purpose

This paper provides background information on the regulation of unmanned aircraft systems ("UAS"), and summarizes the major views and concerns expressed by members of the Panel on Economic Development ("the Panel") on relevant matters in previous discussion.

Background

2. According to the prevailing laws, any operator of UAS, regardless of the weight of aircraft, 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 an aircraft weighing above 7 kilograms (without fuel) can only fly if it has a Certificate of Registration and a Certificate of Airworthiness issued by the Civil Aviation Department ("CAD"). Furthermore, Regulation 22 of the Air Transport (Licensing of Air Services) Regulations (Cap. 448A) requires that any person using a UAS of any weight for hire or reward must lodge an application with CAD before operations, and he/she must abide by the conditions of issue of the permit granted by CAD. 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 but not limited to the Telecommunications Ordinance (Cap. 106) and the Personal Data (Privacy) Ordinance (Cap. 486).

3. Despite the existence of the above provisions, there have been calls for a fundamental review of the current regime governing the use of UAS, which is considered rudimentary and cannot effectively cope with the regulatory

challenges brought by technological advancements and the proliferation of UAS over the years. To assist the Government in reviewing the effectiveness of the existing statutory requirements and exploring ways to refine the prevailing regulatory regime with a view to accommodating the technological development and diversified uses of UAS while further safeguarding public safety, CAD commissioned a consultant in March 2017 to conduct a study on the regulation of UAS.

4. The consultancy study observed that while there were no uniform standards, the international community generally adopted a risk-based approach to classify and regulate UAS. After evaluating the relevant risk factors and with due consideration to local conditions, the consultant made the following six key recommendations on the regulation of UAS in Hong Kong –

- (a) establishing a UAS owner registration system;
- (b) regulating UAS operations by risk-based classification;¹
- (c) prescribing training and assessment requirements;
- (d) providing drone maps for UAS operators;
- (e) prescribing insurance requirements for UAS; and
- (f) conducting further study on indoor operation of UAS.

5. After briefing the Panel on the progress of the consultancy study, CAD published a report on the consultancy study and launched a three-month public consultation exercise on the directions for regulating UAS from 3 April to 3 July 2018.²

6. The Administration advised in January 2019 that CAD was drawing up detailed proposals for an enhanced regulatory regime of UAS taking into account the recommendations of the consultancy study and the views gathered during the consultation exercise. CAD planned to consult the Legislative

¹ The proposed classification is as follows: (a) Category A which comprises two sub-categories viz "Category A1" (UAS weighing 250 g or less) and "Category A2" (UAS weighing more than 250 g but not exceeding 7 kg); (b) Category B which refers to UAS weigh over 7 kg but not exceeding 25 kg; and (c) Category C which covers UAS that weigh over 25 kg. Categories A, B and C are respectively regarded as "low-risk" operations, "regulated, lower risk" operations and "regulated, higher risk" operations.

² The consultancy report and the consultation paper are available in CAD's website at <u>https://www.cad.gov.hk/english/uas_view.html</u>.

Council ("LegCo") on the proposed legislative amendments for the enhanced regime of UAS in 2019.

Major views and concerns expressed by members

7. At the Panel meeting on 12 December 2017, the Administration briefed members on the progress of the consultancy study and the key recommendations made by the consultant regarding the regulation of UAS in Hong Kong. The Panel in general supported stepping up the regulation of UAS for safeguarding public safety, while some members expressed concern about the privacy issues arising from the use of UAS fitted with a camera and the possible difficulties in enforcing the recommendations made by the consultant.

8. The Administration advised that privacy matters related to the use of UAS in Hong Kong were under the regulation of the Personal Data (Privacy) Ordinance (Cap. 486), which was enforced by the Office of the Privacy Commissioner for Personal Data ("PCPD"). PCPD had issued the "Guidance on CCTV Surveillance and Use of Drones" which offered advice on the use of UAS from the perspective of protection of personal data privacy. A response from PCPD concerning the related privacy matters was issued to members vide LC Paper No. CB(4)472/17-18(01).

9. Members considered it necessary for the Administration to ensure aviation safety and the protection of persons and properties on the ground in the new regulatory regime by prescribing limitations on the types of goods that UAS could carry and providing clear drone maps with delineation of no-fly zones to facilitate the safe operation of UAS. Some members also suggested establishing temporary no-fly zones at venues of major events. Since different government departments were involved in the formulation and enforcement of no-fly zones, members urged the Administration to enhance communication among bureau/departments in enforcing the relevant laws and consult the public on the mapping of no-fly zones.

10. A member shared the public views he had received earlier in this regard. While there were divided views on the regulation of UAS, respondents considered it important for the Administration to provide clear drone maps with delineation of no-fly zones. There were concerns about privacy protection and the purchase of third-party insurance by UAS owners. Some considered that should there be a licensing regime for UAS owners/operators, the registration procedures should be kept to the minimal and the assessment requirements should not be too stringent. Some suggested that UAS users should be required to register under their real names. Exemptions to certain requirements should be granted to racing drones which were operated in designated areas. Public education and publicity efforts should be stepped up to enhance public awareness of the new requirements. Concerns were also raised about the regulation of converted UAS and the UAS brought into Hong Kong by tourists.

11. The Panel passed a motion urging the Administration to conduct a comprehensive review and public consultation on the regulation of UAS with wording as follows –

"This Panel urges the Administration to commence review and look into the possibility of collecting views in public consultation on the following aspects:

- (a) to consider imposing registration requirement for all UAS with image capture functions or devices, regardless of their weights;
- (b) to explore the feasibility of requiring UAS to be equipped with suitable equipment (e.g. flight data recorder, long range identification system, etc.) and functions (e.g. capable of presetting flying altitude) before they can be operated, so as to enable relevant departments to effectively monitor UAS operations in future; and
- (c) to explore the possibility of collecting views on privacy issues relating to UAS in public consultation through inter-bureau/inter-departmental cooperation for seeking solutions to address issues of privacy and safety together, so that the regulatory policies of respective departments can complement one another."

Council questions

12. At the Council meetings of 24 May and 13 December 2017, 16 May 2018 and 23 January 2019, Hon Starry LEE, Hon Paul TSE, Hon CHAN Hak-kan and Hon Jeremy TAM raised questions relating to the use and regulation of UAS. Hyperlinks to the relevant written replies from the Administration are provided in the **Appendix**.

Latest development

13. At the meeting on 24 June 2019, the Administration will seek the Panel's views on the legislative proposal for regulating the operations of small unmanned aircraft, i.e. UAS weighing 25 kg or less, in Hong Kong.

Relevant papers

14. A list of relevant papers available on the LegCo Website (<u>http://www.legco.gov.hk</u>) is in the **Appendix**.

Council Business Division 4 <u>Legislative Council Secretariat</u> 19 June 2019

Appendix

Issued by	Meeting date/ Issue date	Paper
Panel on Economic Development	12 December 2017 (Item III)	Administration's paper Administration's follow-up paper Motion passed Administration's response to the motion passed Background brief Minutes
Council Meeting	24 May 2017	Councilquestionon"Regulationofunmannedaircraftsystems"raisedbyHonStarryLEE
	13 December 2017	Council question on "Using unmanned aircraft systems to conduct aerial photography" raised by Hon Paul TSE
	16 May 2018	Councilquestionon"Regulationofunmannedaircraftsystems"raisedbyHonCHANHak-kan
	23 January 2019	Councilquestionon"Preventingtheairport'soperationfrombeingaffectedbyunmannedaircraftsystems"raisedbyHonJeremyTAM