Examination of Estimates of Expenditure 2019-20

Reply Serial No.

CEDB(CIT)276

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2730)

<u>Head</u>: (168) Hong Kong Observatory

Subhead (No. & title): (-) -

Programme: (1) Weather Services

<u>Controlling Officer</u>: Director of the Hong Kong Observatory (SHUN Chi-ming)

<u>Director of Bureau</u>: Secretary for Commerce and Economic Development

Question:

Item 7

Conducting studies on topics related to tropical cyclone activities and extreme weather events

Please advise on the following:

- 1. Whether the above mentioned studies are carried out as internal studies or through the commissioning of consultants?
- 2. Name of the consultants (if any)?
- 3. How many studies are involved?
- 4. What are the content, expenditure required and year of completion of each study?
- 5. Will each of the study be promulgated to the public after its completion? If yes, what are the promulgation channels? If not, what are the reasons?

Asked by: Hon HUI Chi-fung (LegCo internal reference no.: 1)

Reply:

The Hong Kong Observatory (HKO) conducted a number of studies in 2018-19 relating to tropical cyclone activities and extreme weather events. These studies were carried out either with existing manpower and resources or in partnership with academic institutions. No consultant was commissioned to conduct these studies. The content, years of completion and channels for promulgating the research findings of these studies are shown in Annex 1. Conducting the above studies is part of HKO's day-to-day work. As the expenditure required has been subsumed under the regular provision for HKO, it is difficult to quantify the amount separately.

Content, years of completion and channels for promulgating research findings of HKO's studies in 2018-19 relating to tropical cyclone activities and extreme weather events

	Study content	Year of completion	Channel of promulgation
1	Analyzing the wind strength, storm surge and rainfall associated with Super Typhoon Mangkhut in 2018 and assessing the damages Mangkhut brought to Hong Kong	2018	HKO website
2	Application of aircraft observation assimilation in the forecast of Typhoon Nida	2018	Academic journal and HKO website
3	The first complete dropsonde observation of a tropical cyclone over the South China Sea by the HKO	2018	Academic journal and HKO website
4	Developing a spatial pressure field model for tropical cyclones	2019	Academic journal and HKO website
5	Observation and simulation of a tornado event in Hong Kong on 29 August 2018	2019	Academic journal and HKO website
6	Using a land use data related statistical model to assess the spatial variability of extreme hot weather conditions in Hong Kong	2019	Academic journal and HKO website