Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)215

CONTROLLING OFFICER'S REPLY

(Question Serial No. 0091)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Under this Programme, the Hong Kong Observatory provides weather forecasts and issue warnings to the public, special users, the shipping community and aviation groups in order to reduce loss of life and damage to property, and minimise disruption to economic and social activities during hazardous weather. In this connection, please inform this Committee:

a. of the number of operating staff and the average expenditure of the Dial-a-Weather System over the past 3 years;

b. further to the above, whether consideration will be given to upgrading the Dial-a-Weather System to a smart system in order to answer public enquiries on weather information; if so, the details; if not, the reasons;

c. of the amount of estimated expenditure earmarked for establishing a virtual training centre to strengthen co-operation on the provision of training for the meteorological personnel of Belt and Road countries; and

d. further to the above, of the detailed measures to be adopted to attract participants to take part in training.

Asked by: Hon KWOK Ling-lai, Lillian (LegCo internal reference no.: 17)

Reply:

The Dial-a-Weather service of the Hong Kong Observatory (HKO) is an interactive voice response system which provides automatic telephone answering service. The system runs automatically and no manual operation is required. As the expenditure on system maintenance has been subsumed under the regular provision for the HKO, a breakdown in this respect is not available. The HKO will, in the next system renewal, explore incorporating smart features such as speech recognition technology into the system to optimize the service.

The HKO will establish a virtual Meteorological Training Centre for Belt and Road (B&R) Countries in late 2024 to provide meteorological personnel from various B&R regions with online meteorological training and, where possible, face-to-face training for some of them. The HKO has earmarked $400,000 in 2024-25 to set up information technology facilities for the training centre under this project. The HKO plans to provide meteorological training in

collaboration with international organisations, such as training workshops jointly organised with the United Nations' World Meteorological Organization under its Voluntary Cooperation Programme, and promote the activities of the training centre to meteorological organisations in various regions through different international organisations and invite them to send personnel to participate online and offline.

- End -

Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)216

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2563)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

In 2020, the Hong Kong Observatory launched the chatbot service Dr Tin, which employs artificial intelligence to automatically answer a series of questions related to the weather or astronomy. In this connection, will the Government inform this Committee of the following:

(1) the weather and astronomical information currently available from Dr Tin;

(2) the additional weather and astronomical information to be provided by Dr Tin in the future plan;

(3) the respective numbers of responses made by Dr Tin in each of the past 5 years;

(4) the costs for developing Dr Tin at the time;

(5) the staffing establishment and the actual expenditure or revised estimate of expenditures for the operation and system maintenance of Dr Tin in the past 5 years; and

(6) whether the Government has any plans to add ethnic minority languages commonly used in Hong Kong to Dr Tin; if so, of the details; if not, the reasons for that?

Asked by: Hon LEE Tsz-king, Dominic (LegCo internal reference no.: 31)

Reply:

At present, the chatbot service Dr Tin provides information on local current weather, weather forecast, weather warnings, tidal information, Hong Kong standard time, weather forecasts of major world cities and sunrise or sunset time. The Hong Kong Observatory (HKO) will continue to enhance the contents with astronomical phenomena such as solar and lunar eclipses, and the Chinese agricultural calendar according to users' needs.

Since the launch of the service, the numbers of responses made by Dr Tin in 2020, 2021, 2022 and 2023 were 1 550 000, 1 100 000, 890 000 and 690 000 respectively.

The costs for developing the chatbot service Dr Tin was about $2.6 million at the time. The expenditure on the operation and maintenance of the chatbot system has been subsumed under the regular provision for the HKO, a breakdown in this respect is not available.

The HKO currently provides basic weather information in eight ethnic minority languages on its personalised weather website. Depending on the demand, technical feasibility and

resources required, the HKO will consider whether to provide chatbot service in ethnic minority languages commonly used in Hong Kong.

- End -

Examination of Estimates of Expenditure 2024-25 | Reply Serial No. **EEB(E)217**

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1700)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

With climate change intensifying, it is likely that we will experience extreme weather more often. The Government has indicated that it will enhance its handling capabilities in respect of early warning, emergency preparedness, response and recovery to reduce the impact on society and protect people's safety. However, limited by technological constraints, there is room for improvement in respect of early-warning arrangements. In this connection, please inform this Committee of the following:

a) how the Hong Kong Observatory (HKO) arrived at 91 per cent of forecast accuracy as it stated;

b) why it is different from the 78 per cent of forecasts perceived as accurate by the public;

c) what software- or hardware-based measures will be implemented in the future to help narrow such a difference, or to further improve the weather forecast accuracy rate;

d) the impact on improving weather forecast accuracy by developing a cloud-based platform to manage and process high-volume meteorological data in-situ, and implementing the numerical weather prediction models on the high performance computer system respectively;

e) the impact on improving weather forecast accuracy by upgrading HKO's existing meteorological satellite reception systems to enable reception of the new Chinese Fengyun-4B (FY-4B) satellite data for enhancing weather monitoring.

Asked by: Hon LUK Hon-man, Benson (LegCo internal reference no.: 33)

Reply:

To assess the accuracy of weather forecasts, the Hong Kong Observatory (HKO) calculates the "percentage of accurate weather forecasts" using an objective verification method. This objective method takes into account the differences between the Local Weather Forecast and actual observations for each day of the year, including weather elements such as temperature, wind speed, cloud cover, visibility and rainfall to objectively calculate the accuracy of weather forecasts. In 2023, the "percentage of accurate weather forecasts" was 91 per cent.

In addition, the HKO conducts annual opinion surveys to collect feedback from users and understand their latest needs regarding weather services. Survey results show that, over the

past 5 years (2019 to 2023), the average percentage of forecasts perceived as accurate by the public was 78 per cent, which is slightly higher than the average of 77 per cent in the previous five-year period (2014 to 2018). According to the frequent users of the HKO's forecast services, such as airlines and ship captains, the accuracy of the HKO's weather forecasts was over 95 per cent.

As weather information becomes more widely available, the expectations of the public about weather forecast services continue to rise. The HKO will strive to enhance service quality and develop new services with reference to public opinions. These efforts include continuous introduction of new instruments and technologies, such as the application of new radar systems, artificial intelligence technology and big data, so as to support the operations of weather monitoring, forecasting and warning. The HKO also actively participates in the World Meteorological Organization of the United Nations to enhance exchange with members with advanced forecasting technology, ensuring that the overall service quality will keep abreast of the times.

A wide range of HKO services were awarded the International Organization for Standardization ISO 9001 Quality Management System (QMS) certification and the HKO has put in place a QMS to review its service quality and improve its public services. It will also continue to gauge opinions on its weather services from the public, including the Friends of the Observatory, a public group established in 1996 with more than 14 000 members as of today. Meanwhile, the HKO regularly meets with customer liaison groups from different sectors such as transport, logistics, fishery, shipping, aviation and broadcast media to discuss how to provide better meteorological services. On stepping up public education, continuous efforts will be made by the HKO to deepen public understanding on its services and the current technological constraints on weather forecasting through various channels, such as the "Cool Met Stuff" educational video series, Weather Notes, social media platforms and open days.

By developing a cloud-based platform to manage and process high-volume meteorological data in-situ, forecast products can be generated for reference by forecasters in a more timely manner, thereby supporting weather forecast and warning operations. Concurrently, the use of a high performance computer system allows implementation of numerical weather prediction models with higher resolution and more sophisticated simulation of future weather changes, thereby supporting weather forecast and warning operations. Moreover, the HKO is upgrading the existing meteorological satellite reception system for reception of Fengyun-4B (FY-4B) satellite data. Located above the equator at the longitude of 105˚E, the FY-4B satellite enables the HKO to monitor the weather over different regions including Asia, Indian Ocean, South China Sea and the western North Pacific, etc. Apart from installing on-board a more advanced multi-channel radiation imager, the FY-4B satellite is also equipped with an atmospheric vertical sounder for measuring the vertical profiles of atmospheric temperatures and humidity which provides essential observation data for numerical weather prediction models. Furthermore, the High-speed Imager on board of the satellite can provide high resolution images covering an areal extent of 2 000 km x 2 000 km with an update frequency of less than 1 minute. This is very useful for monitoring the development of tropical cyclones and rainstorms. All the items above can help improve weather forecast accuracy, but their impacts cannot be individually quantified.

- End -

Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)218

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1539)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Many Hong Kong people are used to finding out weather conditions through the Hong Kong Observatory (HKO). With the introduction of the Dial-a-Weather service by the HKO in March 2005, members of the public can obtain various types of weather information through a telephone number. In this connection, will the Government advise on the following:

1. given that the usage of the Dial-a-Weather service in the past 3 years showed a continued downtrend, whether the Government has considered enhancing the attractiveness and usage of the service by launching publicity campaigns, updating the contents of information delivered over the telephone and adding new functions; if so, the specific plans; if not, the reasons for that; and
2. the manpower and expenditure involved in the Dial-a-Weather system each year?

Asked by: Hon TSE Wai-chuen, Tony (LegCo internal reference no.: 20)

Reply:

With the popularity of smartphones in recent years, members of the public can make use of the mobile application "MyObservatory" in addition to the Dial-a-Weather service when obtaining weather information by phone. Although it has become a trend in recent years to access weather information through mobile applications, the Hong Kong Observatory (HKO) appreciates that a number of users will continue to use the Dial-a-Weather service. The HKO will, in the next system renewal, explore incorporating smart features such as speech recognition technology into the system to optimize the service.

The Dial-a-Weather service is an interactive voice response system which provides automatic telephone answering service. The system runs automatically and manual operation is not required. As the expenditure on system maintenance has been subsumed under the regular provision for the HKO, a breakdown in this respect is not available.

- End -

Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)219

CONTROLLING OFFICER'S REPLY

(Question Serial No. 1413)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the Hong Kong Observatory (HKO)'s weather forecasts, will the Government inform this Committee of the following:

1. the ranks, the relevant expenditure and the proportion of the permanent posts and supernumerary posts in respect of the current 310 staff members responsible for weather services at the HKO;
2. the numbers of relevant updates and upgrades in respect of application of artificial intelligence and big data in the HKO's weather forecast system, the expenditure and the respective contents in the past 5 years and in the estimate for 2024-25;
3. the numbers of system updates and upgrades of the HKO's website and its mobile application, the expenditure and the respective contents in the past 5 years and in the estimate for 2024-25;
4. the estimated timetable and expenditure for adding voice function to the HKO chatbot in 2024-25;
5. the reasons for expecting a significant drop in the number of telephone enquiries answered in 2024 while the numbers of calls answered by the Dial-a-Weather system in 2023 and 2024 are similar;
6. the specific timetable and the expenditure involved for extending weather forecast range to 15 days; and
7. the total number of complaints received by the HKO in the past 5 years, including cases related to weather forecasts and warnings on hazardous weather.

Asked by: Hon YUNG Hoi-yan (LegCo internal reference no.: 15)

Reply:

1. At present, the staff of the Hong Kong Observatory (HKO) responsible for weather services include those from the grades of Scientific Officer, Experimental Officer, Radar Specialist Mechanic, Scientific Assistant, Executive Officer and Analyst Programmer, etc. The relevant estimated expenditure for 2024-25 is about $254.9 million, involving mainly permanent posts except 6 time-limited posts.

2. In the past 5 years, the HKO has been developing artificial intelligence (AI) and big data analytics models to support weather monitoring, forecast and warnings. The analytics models are regularly updated and upgraded as necessary. For example, the Intelligent Meteorological Monitoring Assistant system developed by the HKO undergoes about 6 system upgrades per year on average for handling new data types and weather forecast scenarios. The HKO has also been developing new machine learning models to optimise its nowcasting system, and there were about 6 upgrades in the past 5 years. The use of AI-based weather prediction models is a popular meteorological research topic in recent years. Since mid-2023, the HKO has been conducting trials on AI-based weather prediction model to provide forecasts for wind direction, wind speed, temperature and sea-level pressure. The above system updates and upgrades were undertaken by the existing manpower and resources of the HKO, and the relevant expenditure has been subsumed under the establishment of and provision for the HKO. Therefore, no relevant breakdown is available.

   The HKO also applied to the Innovation, Technology and Industry Bureau for funding support of the project to develop a new AI-based atmospheric model system. The estimated expenditure of the project in 2024-25 is about $2.6 million.

3. A wide range of contents in the HKO website and mobile application system are updated regularly. For example, observation data such as the temperature, relative humidity and wind are updated every 10 minutes, while the local weather forecast and the 9-day weather forecast are updated every hour and twice a day respectively. When the HKO issues weather warnings or Special Weather Tips, the relevant contents on the website and mobile application will be updated immediately. In addition, the contents of weather programmes produced by the HKO, "Cool Met Stuff", etc. are updated daily or weekly on the website and mobile application according to programme schedules.

   In the past 5 years, the HKO conducted a host of system upgrades of its website and mobile application each year to launch new services or enrich service contents. A summary of the contents is set out in the table below:

Year	Details
2019-2020	- Enriched the contents of regional weather information, probability forecast of mean-sea-pressure under extended weather outlook service, and "Tidal Information" webpage provided on the website and mobile application - Enriched the interactive webpage Earth Weather with tropical cyclone forecast track, rain forecast and sea wave and swell forecast - Enriched the contents and features of the mobile application with Earth Weather, location-specific heavy rain information and lightning nowcast, and relaying government messages, etc. - Launched the Weather Website for Greater Bay Area - Launched the "Interactive Map of Storm Damage by Mangkhut" webpage and a new space weather webpage
2020-2021	- Enriched the contents of regional weather provided on the website and mobile application, and launched a trial chatbot service - Launched the "Hong Kong Hiking Trail Weather Service" webpage, panoramic virtual tours webpage and "Climate Change Impacts" webpage

	- Enhanced the weather satellite imagery on the HKO website and revamped the "Lightning Location Information Service" webpage - Enriched the mobile application with more information on Earth Weather, aviation weather, tide and storm track
2021-2022	- Enriched the website and mobile application with automatic weather forecasts for 100 cities in the Asia-Pacific region and computer-generated forecasts of mean sea-level pressure, and weather photos from Tai Mo Shan and Sai Kung - Launched a new personalised website which provides basic weather information in 8 ethnic minority languages and the "Hong Kong Observatory Open Day 2021" webpage - Launched a new geographic information system-enabled interactive map to display historical felt earth tremors in Hong Kong - Provided in the mobile application the probability of significant rain, weather information for outdoor photography, and a new feature "My Weather Observation" - Launched additional features on the panoramic virtual tours webpage to enhance public understanding of the HKO's facilities at outstations
2022-2023	- Enhanced the Meteorological Information for Fishermen on the website and mobile application with automatic sea-state forecasts and tropical cyclone tracks - Enhanced the website and mobile application to deliver messages of alerting the general public of prolonged heat situations in Special Weather Tips - Updated the mobile application with a new home screen design and to support push notification message of locally felt earth tremor - Enhanced the Weather Website for Greater Bay Area with visibility reports and forecast of over 600 grid points - Launched the "Hong Kong Observatory Open Day 2022" webpage - Enhanced the "Automatic Regional Weather Forecast in Hong Kong & Pearl River Delta Region" webpage with observations and automatic weather forecasts at several newly added urban-scale meteorological monitoring stations - Launched a gallery on the website to display photos of different weather phenomena collected via crowdsourcing
2023-2024	- Enhanced the regional relative humidity information and real-time weather photos provided on the website and mobile application - Enriched the Earth Weather on the website and mobile application by adding weather forecast products based on AI-based prediction models and sea current forecasts, as well as extending forecast range up to 15 days - Enriched the mobile application with a push notification feature for extremely hot weather, and with forecast traffic conditions of strategic/major roads in Hong Kong - Launched the "Historical Records of Using Typhoon Gun and Explosives as Tropical Cyclone Warning in Hong Kong during 1884-

	1937" webpage and the "Hong Kong Observatory 140th Anniversary" dedicated webpage - Further enhanced the "Automatic Regional Weather Forecast in Hong Kong & Pearl River Delta Region" webpage with observations and automatic weather forecasts at newly added urban-scale meteorological monitoring stations

In 2024-25, the HKO will continue to conduct system updates and upgrades of its website and mobile application, including the provision of more weather forecast products based on prediction models on the Earth Weather webpage and the addition of weather information of the Greater Bay Area cities on the mobile application.

The above system updates and upgrades of the website and mobile application were undertaken by the existing manpower and resources of the HKO, and the relevant expenditure has been subsumed under the establishment of and provision for the HKO. Therefore, no relevant breakdown is available.

4. The voice function will be added to the HKO chatbot in the second half of 2024, with the estimated expenditure of about $140,000 in 2024-25.

5. The HKO's Dial-a-Weather service is an interactive voice response system which provides automatic telephone answering service. The system runs automatically and manual operation is not required. The number of calls handled by the system was about 4 million in each of the past 2 years. The actual number of telephone enquiries answered manually varies from year to year, depending on the occurrence of weather events that arouse public concern in a particular year. In 2021 and 2022, the telephone enquiries answered manually were about 12 000 each year. Given that there were relatively more weather events of public concern in 2023, such as the issuance of Tropical Cyclone Warning Signal No. 10 for Saola and the issuance of Black Rainstorm Warning Signals in both September and October, the number of telephone enquiries answered manually in 2023 was higher than those in previous years. It is estimated that the number in 2024 will be similar to the figures of 2021 and 2022, i.e. 12 000.

6. In October 2023, the HKO extended the forecast range of weather forecast products on the Earth Weather webpage to 15 days. This was undertaken by the existing manpower and resources, and the relevant expenditure has been subsumed under the establishment of and provision for the HKO. Therefore, no relevant breakdown is available.

7. A total of 666 complaints were received by the HKO in the past 5 years. Among the 508 cases which were related to weather forecasts, 398 cases were related to warnings on adverse weather.

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Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)259

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3478)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Regarding the Cold Weather Warning, please advise on the respective figures on Cold Weather Warnings issued by the Hong Kong Observatory in the past 3 years (2021-22 to 2023-24), and the figures on those involving reported death of or damage to vegetables and fish. Please also provide the respective dates of warnings issued and reports received.

Asked by: Hon HO Chun-yin, Steven (LegCo internal reference no.: 49)

Reply:

The number and dates of Cold Weather Warnings issued by the Hong Kong Observatory in the past three years (2021-22 to 2023-24) are as follows:

Year	Numbers of Cold Weather Warnings issued and relevant dates	Numbers of reports involving losses of crops or deaths of fish[#]	Dates of reports[#]
2021-22	3 (26 to 28 December 2021) (29 January 2022 to 5 February 2022) (18 to 25 February 2022)	Crops: 1	24 February 2022
		Fish: 0	-
2022-23	7 (13 to 15 December 2022) (16 to 20 December 2022) (31 December 2022) (15 to 18 January 2023) (24 to 26 January 2023) (27 to 30 January 2023) (14 to 15 February 2023)	Crops: 3	19 December 2022 30 January 2023 31 January 2023
		Fish: 1	28 December 2022

Year	Numbers of Cold Weather Warnings issued and relevant dates	Numbers of reports involving losses of crops or deaths of fish[#]	Dates of reports[#]
2023-24 (up to 11 March 2024)	6 (16 to 18 December 2023) (19 to 25 December 2023) (22 to 26 January 2024) (27 to 28 January 2024) (7 to 11 February 2024) (29 February 2024 to 3 March 2024)	Crops: 2	27 December 2023 25 January 2024
		Fish: 3	26 December 2023 29 December 2023 22 January 2024

[#] Figures provided by the Agriculture, Fisheries and Conservation Department.

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Examination of Estimates of Expenditure 2024-25 Reply Serial No.

EEB(E)260

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3663)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (-) Not specified

Programme: (1) Weather Services

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Environment and Ecology

Question:

Please set out in tabular form the sighting of an Unidentified Flying Object (UFO) in the 18 districts in Hong Kong recorded by the Hong Kong Observatory in the past 5 years. Which district and which time slot have recorded the highest number of UFO sightings?

Asked by: Hon TIK Chi-yuen (LegCo internal reference no.: 248)

Reply:

The Hong Kong Observatory received a total of 71 reports of Unidentified Flying Object (UFO) from members of the public from 2019 to 2023. The breakdown of reports each year by district is shown in Annex A, and the breakdown by time slot is shown in Annex B. Sha Tin and Islands are the districts with the highest numbers of UFO sightings (i.e. 8 reports of such sightings for each in the reporting period). The time slot from 10:00 p.m. to 11:59 p.m. has the highest number of UFO sightings (i.e. 12 reports of such sightings).

Annex A

Number of sightings of Unidentified Flying Object (UFO) by members of the public from 2019 to 2023 by district

District	Calendar year					Sub-total of each district in 2019-2023
	2019	2020	2021	2022	2023	
Hong Kong Island – Eastern	-	-	-	1	1	2
Hong Kong Island – Wan Chai	1	-	2	1	-	4
Hong Kong Island – Central and Western	1	-	1	3	-	5
Hong Kong Island –Southern	1	1	-	-	-	2
Kowloon East – Kwun Tong	-	-	1	-	1	2
Kowloon East – Wong Tai Sin	1	-	-	-	-	1
Kowloon West – Yau Tsim Mong	-	1	1	1	-	3
Kowloon West – Kowloon City	-	-	1	-	1	2
Kowloon West – Sham Shui Po	-	-	1	-	-	1
New Territories East – Sai Kung	-	1	1	-	1	3
New Territories East – Sha Tin	1	3	4	-	-	8
New Territories East – Tai Po	1	-	1	2	-	4
New Territories East – North	-	-	-	1	-	1
New Territories West – Kwai Tsing	-	-	-	2	-	2
New Territories West – Tsuen Wan	-	1	2	1	1	5
New Territories West – Tuen Mun	-	1	3	2	-	6
New Territories West – Yuen Long	1	1	-	-	-	2
New Territories West – Islands	1	1	3	2	1	8
Others (District not mentioned in reports)	4	1	1	3	1	10
Sub-total of all districts each year	12	11	22	19	7	-
Total	71					

Number of sightings of Unidentified Flying Object (UFO) by members of the public from 2019 to 2023 by time slot

Time Slot	Calendar year					Sub-total of each time slot in 2019-2023
	2019	**2020**	**2021**	**2022**	**2023**	
00:00 - 01:59	-	1	2	-	-	3
02:00 - 03:59	-	-	-	1	-	1
04:00 - 05:59	3	3	2	1	1	10
06:00 - 07:59	1	-	3	2	-	6
08:00 - 09:59	-	-	-	1	-	1
10:00 - 11:59	-	-	-	-	-	0
12:00 - 13:59	-	-	-	1	-	1
14:00 - 15:59	1	-	-	1	-	2
16:00 - 17:59	1	1	4	2	1	9
18:00 - 19:59	1	2	3	1	3	10
20:00 - 21:59	2	-	2	3	-	7
22:00 - 23:59	1	3	5	3	-	12
Others (time not mentioned in reports)	2	1	1	3	2	9
Sub-total of all time slots each year	12	11	22	19	7	-
Total	71					

- End -

Examination of Estimates of Expenditure 2024-25 Reply Serial No.

SB148

CONTROLLING OFFICER'S REPLY

(Question Serial No. 2993)

Head: (168) Hong Kong Observatory

Subhead (No. & title): (000) Operational expenses

Programme: (2) Radiation Monitoring and Assessment

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Security

Question:

As stated under this Programme, the aim of the Hong Kong Observatory (HKO) is to organise training and exercises on radiation, assessment and protection, enhance radiation monitoring of sea water samples in local waters, and conduct outreach activities such as public and school talks. Despite that the discharge of nuclear-contaminated water from Japan keeps raising public concern, the estimated expenditure under this Programme of the HKO this year is $36.7 million, which is 2.4% lower than the original estimate last year. Will the Government inform this Committee of:

1. the major items for the reduction in the estimate;
2. whether the reduction in the estimate will affect the estimated expenditure on radiation monitoring of sea water samples in local waters?

Asked by: Hon CHAN Chun-ying (LegCo internal reference no.: 1)

Reply:

The estimated expenditure for 2024-25 under the "Radiation Monitoring and Assessment" programme is slightly lower than that for last year. This is mainly attributed to the difference in instruments that requiring replacement compared with last year, leading to a slight decrease in the corresponding one-off expenditure. In addition, the Observatory has enhanced the radiation monitoring of sea water samples in local waters through redeployment of internal resources. The relevant work does not involve additional expenditure.

- End -

Examination of Estimates of Expenditure 2024-25 Reply Serial No.

SB191

CONTROLLING OFFICER'S REPLY

(Question Serial No. 3606)

Head: (168) Hong Kong Observatory

Subhead (No. & title): ()

Programme: (2) Radiation Monitoring and Assessment

Controlling Officer: Director of the Hong Kong Observatory (Dr CHAN Pak-wai)

Director of Bureau: Secretary for Security

Question:

The Hong Kong Observatory (HKO) launched a School Community Ambient Radiation Measurement Pilot Programme (the Pilot Programme) named Gamma-Go in 2021. Will the Government inform this Committee of the following:

1. the numbers of participating schools and workshops organised in each year since the launch of the Pilot Programme;
2. given that the HKO is responsible for designing the portable Gamma-Go device required for the activities, the design, production costs and fees;
3. whether the data collected from on-site surveys and measurements under the Pilot Programme are open for public viewing; if not, whether the HKO will consider opening up the data to tie in with the Government's principle of open data; and
4. whether the Government has considered to regularise the Pilot Programme; if not, the expected completion date of the Pilot Programme?

Asked by: Hon LEUNG Hei, Edward (LegCo internal reference no.: 116)

Reply:

The Gamma-Go activity launched by the Hong Kong Observatory in 2021 has already been regularised. On average, around 30 workshops are held annually, with the participation of about 25 schools each year. As the expenditure on the design and production of the portable Gamma-Go devices has been subsumed under the regular provision for the Observatory, a breakdown of the relevant expenditure is not available.

The Gamma-Go activity aims to enhance students' understanding of radiation through lectures and practical activities. Participating schools will, based on their individual circumstances, arrange for students to practise measuring radiation levels at different times and in different scenarios, such as indoors, outdoors or at places with radiation sources (materials containing trace amounts of radiation for educational purposes). The data collected are mainly for educational purposes. In terms of open data, the Hong Kong Observatory regularly publishes on its website the real-time ambient gamma radiation levels of the 12 fixed monitoring stations in Hong Kong.

- End -