

LCQ11: Application of technology in efforts to combat COVID-19 pandemic

Following is a question by the Hon Charles Mok and a written reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (June 3):

Question:

To tackle the coronavirus disease 2019 (COVID-19) pandemic, the Government has been issuing quarantine orders to persons arriving in Hong Kong, requiring them to undergo a 14-day compulsory quarantine at a designated place (home or other accommodation), and distributing to them an electronic/monitoring wristband that is paired with the "StayHomeSafe" mobile application, in order to ascertain that they are staying at the designated places. Moreover, the Innovation and Technology Commission launched a special call for trial projects under the Public Sector Trial Scheme to support product development and application of technology for the prevention and control of the epidemic. Regarding the application of technology in efforts to combat COVID-19 pandemic, will the Government inform this Council:

(1) of the respective numbers of arrivals to whom (i) Bluetooth Low Energy (BLE) positioning electronic wristbands, (ii) reusable BLE positioning electronic wristbands, and (iii) monitoring wristbands were distributed so far; the number of Hong Kong residents among them;

(2) of the types of information collected (including personal data) via the electronic wristbands and the "StayHomeSafe" mobile application and its retention period;

(3) as the Government has stated that the reusable electronic wristbands, upon recovery, may be used by government departments in other services, of a breakdown of the number of recycled wristbands by (i) government department and (ii) use; and

(4) of the number of applications received so far under the special call for trial projects, with a breakdown by (i) type of applicants (e.g. research and development (R&D) centres, universities, other designated public research institutions, all technology companies conducting R&D activities in Hong Kong) and (ii) progress of processing such applications ((a) being processed, (b) approved, and (c) rejected); the total amount of grants approved so far?

Reply:

President:

Our reply to the various parts of the question is as follows:

(1) Currently, the Government mainly uses Bluetooth Low Energy (BLE) electronic wristbands paired with the "StayHomeSafe" mobile app for monitoring persons under home quarantine. Surprise video calls are also made to ensure that persons under quarantine are staying at their dwelling places. Disposable monitoring wristbands printed with QR code have only been applied during the period from March 19 to 30.

Up to June 1, reusable electronic wristbands have been used by around 9 800 persons subject to home quarantine. 87 000 persons under home quarantine have used disposable electronic wristbands and 41 000 persons have used disposable monitoring wristbands printed with QR code. We do not have statistics on whether persons wearing electronic wristbands/monitoring wristbands under home quarantine are Hong Kong residents.

(2) The "StayHomeSafe" mobile app only stores the contact phone number provided by persons under quarantine to the Department of Health upon their arrival for issuing the compulsory quarantine order. It will not collect any personal data during its operation. The electronic wristband will only detect various electronic signals (including Bluetooth signal of the electronic wristband, WiFi and mobile network signals, etc.) and their strength and changes in the environment where persons under quarantine are staying. By means of artificial intelligence and big data analytics technologies, the mobile app will determine whether the persons under quarantine are staying at their designated dwelling places. Such data will be destroyed within three months after the completion of the 14-day quarantine period.

(3) The reusable electronic wristbands are still being used to support the home quarantine arrangement. After the epidemic, we will arrange the reusable electronic wristbands for other government departments to apply in other services, such as taking care of the elderly in need in residential care homes.

(4) To tackle the COVID-19 epidemic, the Innovation and Technology Commission (ITC) launched on March 9 a special call for trial projects under the Public Sector Trial Scheme of the Innovation and Technology Fund to support product development and application of technologies for the prevention and control of the epidemic. The target funding recipients are local research and development (R&D) centres, universities and other designated public research institutes, as well as all technology companies conducting R&D activities in Hong Kong. The aim of the call is not only to promote the realisation and commercialisation of local R&D outcomes, but also to encourage the public sector to use technologies for tackling the COVID-19 epidemic in Hong Kong.

The special call ended on April 10. The ITC received a total of 332 applications, amongst which 20 have been approved, involving a funding amount of \$35.6 million. 27 other applications are about to be rejected and three have been withdrawn. The ITC is now handling the remaining applications. The breakdown of applications received, approved, to be rejected, withdrawn and under processing by types of applicants is as follows:

(As at June 2, 2020)

| Applicant | Applications received | Approved | To be rejected | Withdrawn | Under Processing | Approved Funding Amount |
|---|-----------------------|----------|----------------|-----------|------------------|-------------------------|
| R&D centres | 11 | 0 | 0 | 0 | 11 | / |
| Universities | 76 | 14 | 3 | 0 | 59 | About \$27.7 million |
| Other designated public research institutes | 11 | 0 | 1 | 0 | 10 | / |
| Technology companies conducting R&D activities in Hong Kong | 234 | 6 | 23 | 3 | 202 | About \$7.9 million |
| Total | 332 | 20 | 27 | 3 | 282 | About \$35.6 million |