# For discussion on 4 December 2023

## **Legislative Council Panel on Financial Affairs**

#### Plan for the 2026 Population Census

#### **PURPOSE**

This paper seeks Members' comments on the planned approach for conducting the 2026 Population Census (26C) by the Census and Statistics Department (C&SD).

#### **BACKGROUND**

- 2. Since 1961, C&SD has been conducting population censuses every ten years, and by-censuses between two full censuses. Population censuses and by-censuses aim to obtain up-to-date benchmark information on socio-economic characteristics of the population. The statistics are vital to the Government for planning and policy formulation, as well as to the private sector and academia for business and research purposes.
- 3. As a major step to modernise the population censuses and by-censuses, and to reduce their operational risks and costs in the long run, the following re-engineering initiatives will be implemented from 26C onwards
  - (a) conducting only a sample enumeration using the "long form" every five years, in lieu of a full census once every ten years and a sample basis by-census in between;
  - (b) extending the data collection period from 1.5 months to one year; and
  - (c) using more extensively government administrative data to supplement survey data.

#### **PUBLIC CONSULTATION**

Extensive consultation on the data topics of 26C has started since July 2023 with a view to ensuring that 26C can meet various data users' needs. It is an on-going process involving advisory and statutory bodies, selected organisations including non-governmental organisations and trade and organisations, relevant faculties/departments academic institutions, and government bureaux and departments (B/Ds). As for the new approach for 26C, C&SD has been collecting views from the Statistics Advisory Board through its regular meetings, and has briefed government B/Ds with general support indicated. We will further consult the academia (e.g. statistics departments and prominent researchers in universities) on the technical designs for 26C in 2024 to ensure that it will be conducted in an efficient and cost-effective manner. C&SD will deliberate views and suggestions received having regard to the operational efficiency and cost-effectiveness of conducting the population censuses before finalising the plan for 26C.

#### PLANNED APPROACH

## (a) Population coverage

5. The population coverage and the definition of the Hong Kong Resident Population<sup>1</sup> adopted in 26C will remain the same as the previous population censuses and by-censuses since 2001.

# (b) Sampling scheme

6. Previous population censuses were conducted once every ten years, which comprised a simple enumeration of about nine-tenths of the population using a "short form" questionnaire and a detailed enquiry of the remaining one-tenth population using a "long form" questionnaire; while by-censuses only used a "long form" questionnaire for one-tenth of the population. "Short form" covers only a few basic questions (e.g. year and month of birth, sex and ethnicity), and "long form" contains not only the questions asked in "short form" but also questions related to detailed characteristics of the population,

The concept of Hong Kong Resident Population, which comprises "Usual Residents" and "Mobile Residents", has been adopted to compile population estimates since August 2000. "Usual Residents" cover: (a) Hong Kong Permanent Residents who have stayed in Hong Kong for at least three months during the six months before or after the reference time-point; and (b) Hong Kong Non-permanent Residents who are in Hong Kong at the reference time-point. "Mobile Residents" are Hong Kong Permanent Residents who are similarly defined as in (a) above, except that their length of stay in Hong Kong is at least one month but less than three months.

households, and quarters (e.g. educational attainment, economic activity status and earnings from employment, type of accommodation, etc.). From 26C onwards, C&SD will adopt the sampling scheme same as previous by-censuses through selecting one-tenth of households for detailed enquiry using a questionnaire similar to the previous "long form". This ensures the statistical results will be consistent with those in the past.

7. Similar to the 2021 Population Census (21C), the sample design of 26C will take into account the prevalence of subdivided units and ethnic minorities in different geographical areas to ensure that sufficient sampled cases are available for relevant data analysis.

# (c) Extended data collection period

8. The data collection period of 26C will be extended from 1.5 months (usually in July and August) to a full year running from 1 January to 31 December 2026. This will create sufficient buffer to substantially mitigate the operational risks arising from uncontrollable events such as the outbreak of pandemic like COVID-19 pandemic as evidenced during 21C and extreme circumstances caused by inclement weather, which may at worst suspend the entire data collection work if the period is confined to a short span of 1.5 months. Spreading out the resource requirements including manpower, logistics support and computing capacity over a longer period can also avoid costly investments in meeting the otherwise inflated peak demands.

# (d) Experienced survey interviewers

9. With a longer data collection period, a much smaller, better-trained and more efficient team of interviewers can be deployed for collecting high quality data. About 200 non-civil service contract Survey Interviewers will be employed in 26C, replacing the need of hiring thousands of short-term and inexperienced Temporary Field Workers as in the past and achieving cost savings in total manpower.

## (e) More extensive use of administrative data

10. Comprehensive government administrative data can supplement survey data to enhance data quality and reduce reporting burden of the sampled households. In particular, anonymised passenger movement data obtained from the Immigration Department (ImmD) will be used in 26C to compile accurate population size and age-sex structure to serve as control totals for further statistical compilation. Simulation studies using the 21C data have confirmed the accuracy of the new approach. This also saves the need for

conducting the "short form" questionnaire for the remaining nine-tenths population in full censuses, hence achieving substantial savings in the long run.

11. C&SD has also been exploring with relevant B/Ds the feasibility of matching their administrative data with the census sample file using addresses of data holders, with a view to trimming some census questions (e.g. government subsidies and allowances received, rent and floor area of public housing units, etc.) to reduce the reporting burden.

## (f) Adoption of innovative technology

- 12. In 26C, innovative technology will be further adopted to improve operational efficiency and data quality, and to enhance user experience. Machine Learning models will be introduced for automatic coding of textual data on industry and occupation provided by households, and for automatic processing of aerial photos to enumerate marine population.
- 13. In line with Smart Government initiatives, 26C will continue to allow households to provide their data through multiple means, including online questionnaire, telephone interview and face-to-face interview using mobile tablets. For online questionnaire, iAM Smart will be incorporated to streamline the account registration process, and login using One-Time-Password without the need for remembering passwords and security questions and answers will also be supported.

# (g) Data topics

14. As a standing practice, C&SD has consulted key data users on the data topics for 26C since July 2023, covering some 200 parties including advisory and statutory bodies, non-governmental organisations, trade and industrial organisations, relevant faculties/departments in academic institutions and B/Ds.

15. After considering such factors as purposes of compiling the statistics, readiness, willingness and burden for the public to provide the data, and suitability for collecting the data via a population census, C&SD proposes to extend the scope of the existing questions on "elderly persons requiring long term care" to all persons aged 15 and above<sup>2</sup>. Besides, subject to the feasibility of compiling accurate headcounts from administrative data to serve as control totals, talents and imported labours admitted to Hong Kong under various schemes will be identified in 26C for better understanding of their

<sup>&</sup>lt;sup>2</sup> This effectively covers all persons as minors are assumed to require long-term care from their parents or guardians.

socio-economic characteristics. On the other hand, it is proposed that sub-questions on mode of transport for work and study be deleted from the list of data topics, as statistics collected through other means is more comprehensive and precise.

16. C&SD will carry out further research and stakeholder engagement before finalising the data topics, and plans to test the questionnaire in a small-scale pilot survey to be conducted in mid-2025. The recommended list of data topics for 26C is at **Annex**.

# (h) Data dissemination

- 17. Under the new approach of conducting population censuses, the summary results <sup>3</sup> for 26C will be released by August 2027, which is postponed for six months when compared to previous rounds of census/bycensus, since the data collection work for 26C will only be completed by December 2026 and there is the need to complete additional matching work with the administrative data. The detailed results by small geographical areas and population sub-groups, which are of greater policy and research value to the Government, academia and business sector, will be released by phase from September 2027, which is under the same schedule as previous rounds of census/by-census. Key user B/Ds of census results were consulted in September 2021 and are in general fine with the dissemination schedule.
- 18. C&SD will develop a wide range of statistical products and services for 26C to serve different users. Same as other official statistics, the results for 26C will be made available for free public use in accordance with the Government's open data policy. The results will also be disseminated in machine readable and geospatial formats, as well as through Application Programming Interface to facilitate data uses.

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Including population counts and basic demographic and socioeconomic characteristics of the population, such as age, sex, ethnicity, education, employment status and place of residence.

## (i) Data privacy

19. In line with the established practice, interviewers will not request respondents to show their identity cards or similar documents. In accordance with the Census and Statistics Ordinance (Cap. 316), no question other than the stipulated information will be asked, and any data related to identifiable individual households or persons will be given confidential treatment. C&SD will destroy all completed questionnaires and their copies that may lead to the identification of individual persons or households within one year after the end of the data collection period. Respondents will be notified of the purpose of the population census and their rights of access to and correction of their personal data according to the Personal Data Privacy Ordinance (Cap. 486).

# (j) Information technology systems and services

- 20. 26C will be a complex operation of sizable scale. C&SD is required to make ready an integrated information technology (IT) system in early 2026, in order to support the multi-modal digitalised data collection work comprising the use of online questionnaire, telephone interview and face-to-face interview by interviewers using mobile tablets, as well as the subsequent data processing and dissemination work.
- 21. According to a feasibility study conducted by C&SD, the existing IT systems should be enhanced and consolidated into six IT sub-systems, while a new integrated platform for data collection should be developed at the same time. The study has also proposed the adoption of the Government Cloud Infrastructure Services for hosting public-facing application systems.
- 22. Upon the completion of 26C, the new data collection platform will be expanded and transformed into a Departmental Data Collection Platform (DDCP) for other surveys and the future population censuses conducted by C&SD. IT equipment used in 26C will also be re-deployed for use in DDCP and other IT projects. This implementation approach will enable faster service delivery and create synergy through optimising utilisation of resources.
- 23. It is estimated that the implementation of the proposed IT system for 26C and DDCP will involve a non-recurrent expenditure of about \$250 million from 2024-25 to 2028-29, covering equipment, system enhancement/development, cloud and security-related services and manpower. The recurrent maintenance cost beyond the project period will be absorbed by C&SD. We plan to seek funding approval from the Finance Committee of the Legislative Council in early 2024.

# **ADVICE SOUGHT**

24. Members are invited to comment on the plan of 26C as set out in paragraphs 5 to 23 above.

Financial Services and the Treasury Bureau Census and Statistics Department November 2023

#### Annex

# Recommended data topics for the 2026 Population Census (1)(2)

#### **Demographic and social characteristics**

- 1. Year and month of birth
- 2. Sex
- 3. Marital status
- Usual spoken language 4.
- Ability to speak other languages/dialects 5.
- Ability to read/write languages 6.
- 7. Nationality
- Ethnicity (including place of origin) 8.
- Place of birth 9.
- 10. Whether a person requiring care and the primary carer (expanded data topic)

#### **Educational characteristics**

- 11. School attendance
- 12. Educational attainment (highest level attended)
- 13. Educational attainment (highest level completed)
- 14. Field of education
- 15. Place of study

#### **Internal migration characteristics**

- 16. Whereabouts at census reference moment
- 17. Duration of residence in Hong Kong
- 18. Place of residence five years ago

#### **Economic characteristics**

- 19. Economic activity status
- 20. Industry
- 21. Occupation
- 22. Whether having secondary employment
- 23. Earnings from main employment
- 24. Earnings from other employment
- 25. Other cash income (including cash income from rent)
- 26. Hours of work
- 27. Place of work

# **Housing characteristics**

- 28. Type of quarters
- 29. Type of accommodation30. Whether the quarters is used as usual or occasional residence
- 31. Whether the quarters is a subdivided unit
- 32. Number of rooms in the residence (including living/dining rooms, bedrooms, other rooms, kitchens, bathrooms/toilets)
- 33. Floor area of accommodation
- 34. No. of households in quarters (derived)
- 35. No. of occupants in quarters (derived)
- 36. Tenure of accommodation
- 37. Rent (including rates, government rent and management fees)
- 38. Mortgage payment or loan payment

#### **Household characteristics**

- 39. Type of household
- 40. Relationship to head of household41. Whether a member of household
- 42. Household size (derived)
- 43. Household composition (derived)
- 44. Household income (derived)

Notes: (1) Aside from the above, the 2026 Population Census will also cover data topics for determining whether a person falls within the population coverage (i.e. "Total time stayed in Hong Kong in the past six months", "Total time to be stayed in Hong Kong in the coming six months", "Usual accommodation in Hong Kong at present", and "Reason for not staying in Hong Kong for some period"). Moreover, information on whether a person was admitted to Hong Kong through selected talent attraction and labour importation schemes will be collected with a view to better understanding their socio-economic characteristics, subject to the feasibility of compiling accurate headcounts from administrative data.

(2) Statistics at different geographical levels, such as the District Council districts, District Council geographical constituencies, new towns, tertiary planning unit groups and major housing estates, will be compiled under 26C.