

## Session 11

# Data Collection with Internet

Macau S.A.R. of China  
Statistics and Census Service

# Outlines

- ▶ Overview in 2016 Population By-census
- ▶ Overview in Data Collection with Internet
- ▶ Steps for Complete Internet Questionnaire
- ▶ Steps for Verify Internet Questionnaire
- ▶ Internet Questionnaire System
- ▶ DSEC Mobile App
- ▶ Monitoring

# Overview in 2016 Population By-census

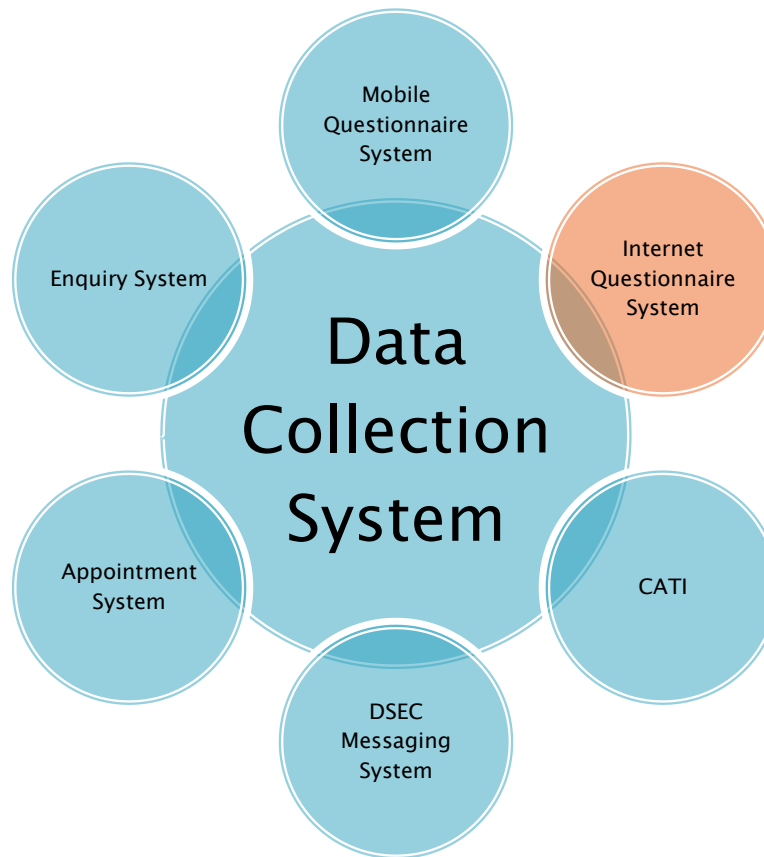
## Overview in 2016 Population By-census

- ▶ Conducted over a period of 15 days
- ▶ Sampling fraction of one-seventh
- ▶ About 33,000 housing units
- ▶ About 800 enumerators



2016  
中期人口統計  
INTERCENSOS

# Overview in data collection with Internet



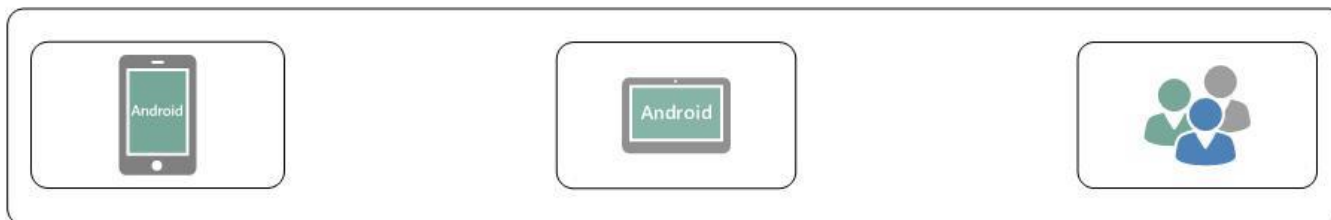
# Overview in data collection with Internet

## Overview in data collection with Internet

- ▶ Conducted over a period of 9 days
  - Within the face-to-face interview period
- ▶ About 16.9% collected by Internet
- ▶ Methods for data collection with Internet
  - Internet Questionnaire System
  - DSEC Mobile App
    - iOS
    - Android

# Overview in data collection with Internet

Internet Questionnaire System  
DSEC Mobile App



Restful API



Database API





# Steps for Complete Internet Questionnaire

# Steps for Complete Internet Questionnaire

1. Receive the notification letter
2. Activate the Internet Questionnaire
3. Receive the verification code by mobile
4. Fill the questionnaire by reference number and verification code
5. Complete the questionnaire
6. Will call the household later for data verification



# Steps for Verify Internet Questionnaire

1. Phone to the household for verification
2. Verify the verification code
3. Ask household basic characteristic data
4. Complete the verification

# Internet Questionnaire System

# Internet Questionnaire System

- ▶ Web
  - HTML5
  - AngularJS
- ▶ Responsive
  - Desktop
  - Mobile
- ▶ Multiple languages
- ▶ Questionnaire flow and validation
- ▶ Support Online and offline mode
- ▶ Data encryption

# Internet Questionnaire System

The screenshot shows a web browser window with the URL <https://www.dsec.gov.mo/QuestionnaireWeb/d8de/app/#/ThirdPart>. The page title is "2016 Population By-census (Ray) Not finished".

**Your year and month of birth (age 38)**

1 1980

**Are you living with your father or mother in this household?**  
If you are living with both, please provide information on either one.

Yes  
 No

**Name of mother / father**

**Where were you on 7 August at 3:00 a.m.?**

Please select

**Where were you living for most of the time in the past 6 months?**

Please select

Please select

This address

Other place in Macao

<https://www.dsec.gov.mo/QuestionnaireWeb/d8de/app/#>

# DSEC Mobile App

# DSEC Mobile App

- ▶ Publication
  - Latest release
  - Indicators
  - Statistics publication
- ▶ Data Collection
  - Online Questionnaires
    - Internet Questionnaire System





# DSEC Mobile App



## Principal Indicators

Composite Consumer Price Index – Year-on-year... (Apr/2018)	2.88 %
Population Estimate (1st Quarter/2018)	656.7 '000
Overall unemployment rate (Feb - Apr/2018)	1.9 %
Gross revenue of games of chance (May/2018)	25,489 million MOP
Visitor arrivals (Apr/2018)	2,960,879 No.
Overall median monthly employment earnings (1st Quarter/2018)	16,000 MOP
Tax revenue from gaming sector (Apr/2018)	9,832 million MOP

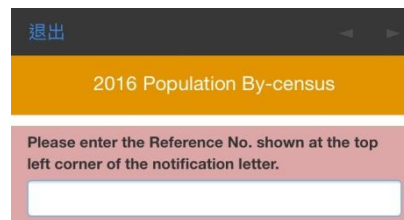


- Residential Property Pri... >  
2018/06/08 15:26
- External Merchandise T... >  
2018/05/31 09:17
- Package Tours and Hot... >  
2018/05/30 15:51
- MICE Statistics for the ... >  
2018/05/30 12:50
- Gross Domestic Produ... >  
2018/05/29 13:49
- Survey on Manpower ... >  
2018/05/29 11:54
- Employment Survey for... >  
2018/05/28 09:25
- Visitor Expenditure Sur... >  
2018/05/25 16:47
- Health Statistics 2017 >  
2018/05/24 12:58



Scan

2016 Population By-census  
2016/08/07 - 2018/06/25



# Monitoring

# Monitoring

- ▶ Progress report
  - Complete
  - In progress
  - Never
- ▶ Notify staff
  - DSEC Messaging System
- ▶ Reminder
  - Remind household a few days before deadline (SMS)

R-1 調查員進度表(累計)

組長: 601 6/30 13:01

項目	總數	調查員									
		60111	60112	60121	60122	60131	60132	60141	60142	60151	60152
<b>單位總數</b>	<b>540</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>
已歸檔	1	1	0	0	0	0	0	0	0	0	0
待編碼待覆核	20	19	1	0	0	0	0	0	0	0	0
未定結	15	11	4	0	0	0	0	0	0	0	0
從未採訪	504	23	49	54	54	54	54	54	54	54	54
已開通網上	4	2	2	0	0	0	0	0	0	0	0
已預約	4	4	0	0	0	0	0	0	0	0	0
沒有記錄	496	17	47	54	54	54	54	54	54	54	54
曾採訪比率(%)	6.7	57.4	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
從未採訪比率(%)	93.3	42.6	90.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>住戶總數</b>	<b>546</b>	<b>59</b>	<b>55</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>54</b>
已歸檔數目	1	1	0	0	0	0	0	0	0	0	0
(佔總數%)	0.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
網上填報	0	0	0	0	0	0	0	0	0	0	0
待編碼待覆核	25	23	2	0	0	0	0	0	0	0	0
網上填報	5	5	0	0	0	0	0	0	0	0	0
漏遞退回	1	1	0	0	0	0	0	0	0	0	0
未定結	15	11	4	0	0	0	0	0	0	0	0
從未採訪	504	23	49	54	54	54	54	54	54	54	54
已開通網上	4	2	2	0	0	0	0	0	0	0	0
已預約	4	4	0	0	0	0	0	0	0	0	0
沒有記錄	496	17	47	54	54	54	54	54	54	54	54
曾採訪總數	43	37	6	0	0	0	0	0	0	0	0
11 數目	6	6	0	0	0	0	0	0	0	0	0
佔總數%	14.0	16.2	0.0	-	-	-	-	-	-	-	-
12 已結案	0	0	0	0	0	0	0	0	0	0	0
未結案	18	14	4	0	0	0	0	0	0	0	0
13 已結案	1	1	0	0	0	0	0	0	0	0	0
未結案	0	0	0	0	0	0	0	0	0	0	0
15 已結案	0	0	0	0	0	0	0	0	0	0	0
未結案	0	0	0	0	0	0	0	0	0	0	0
16 已開通網上	8	7	1	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
17 已開通網上	1	0	1	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
19 已開通網上	0	0	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
VR 已開通網上	1	1	0	0	0	0	0	0	0	0	0
已預約	1	1	0	0	0	0	0	0	0	0	0
21 已開通網上	0	0	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
22 已開通網上	0	0	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
23 已開通網上	0	0	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
24 已開通網上	3	3	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
26 已開通網上	0	0	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
31 已開通網上	3	3	0	0	0	0	0	0	0	0	0
已預約	0	0	0	0	0	0	0	0	0	0	0
總人數	39	30	9	0	0	0	0	0	0	0	0
開通網上填報總數	10	8	2	0	0	0	0	0	0	0	0
已完竣填報	6	6	0	0	0	0	0	0	0	0	0
佔總數(%)	60.0	75.0	0.0	-	-	-	-	-	-	-	-
未完成填報	4	2	2	0	0	0	0	0	0	0	0
從未填報	0	0	0	0	0	0	0	0	0	0	0

# Thank You