



Census and Statistics Department
Hong Kong Special Administrative Region

Experience Sharing Session:

Introduction of Hong Kong's Innovation Statistics

18 July 2019

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Background

- The Hong Kong Government has made substantial investment to enhance Hong Kong's innovation and technology (I&T) ecosystem
- Innovation and Technology Commission (ITC) was set up in Hong Kong in year 2000 to promote I&T and implement I&T policies
- Census and Statistics Department (C&SD) has been commissioned to compile statistical indicators for measuring the development of I&T in Hong Kong



Statistical Framework

Survey of Innovation Activities (SIA)

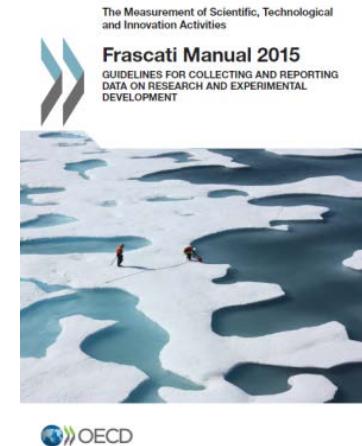
- Conducts annually as from 2002 (for **reference year 2001**) to collect information from business sector
- **Mandatory survey** conducted under Part III of Census and Statistics Ordinance (Chapter 316)
 - Business firms sampled for SIA are required to complete the questionnaire
 - Information collected should be kept in strict confidence and not be released to any unauthorised parties, including Government departments



Statistical Framework

International guidelines

- **Frascati Manual** of OECD
(for research and development (R&D) statistics)
- **Oslo Manual** of OECD and Eurostat
(for innovation statistics)



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Statistical Framework

Data items covered

- **General information:** nature of business, persons engaged, business receipts, etc.
- **R&D information:** R&D personnel, expenditure on R&D activities, funding sources, etc.
- **Innovation information:**
 - **Product and process innovations:** number of innovations, manpower, expenditure, factors hampering product and process innovations
 - **Organisational and marketing innovations:** type of innovation, objectives of innovation





Statistical Framework

Coverage of SIA

- The main sampling frame for SIA is the Central Register of Establishments (CRE), which is a comprehensive register maintained by C&SD and updated by reference to records of the Business Registration Office
- Some industries with relatively small economic contribution and presumably not so involved in R&D / innovation activities are not covered in SIA on cost-effectiveness and operational considerations





Statistical Framework

Coverage of SIA

- Sample contains:
 - Establishments identified as potential R&D / innovation performers
 - Other establishments are selected using stratified random sampling design by industry group and by employment size group
- Sample size for 2018 SIA: About 6 000 establishments



Statistical Framework

Data collection

- Questionnaires with explanatory notes are sent to the selected establishments in February / March of each survey period
- Field officers of C&SD visit / telephone respondents to assist them in completing the questionnaires if necessary, or verify the information contained in the completed questionnaires



Key Statistics

R&D activities

	2012	2017
➤ Gross domestic expenditure on R&D (GERD)*	HK\$ 14.8 billion	HK\$ 21.3 billion
<i>Of which: business sector</i>	<i>HK\$ 6.6 billion</i>	<i>HK\$ 9.4 billion</i>
➤ Ratio of GERD to GDP	0.73%	0.80%

* Covering business, government and higher education sectors.



Key Statistics

Innovation activities in the business sector

	2012	2017
➤ No. of business establishments having undertaken innovation activities	30 761	34 400
<i>% share in the business sector</i>	<i>10%</i>	<i>12%</i>
➤ Business expenditure on product and process innovations	HK\$ 15.8 billion	HK\$ 29.5 billion



~Thank you~



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