

## Singapore Standard Classification of Individual Consumption According to Purpose

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### Introduction

The Singapore Department of Statistics (DOS) has recently completed the development of the Singapore Standard Classification of Individual Consumption According to Purpose (S-COICOP). Based on the United Nations (UN) Classification of Individual Consumption According to Purpose (COICOP), S-COICOP is designed for use in the classification of Private Consumption Expenditure (PCE) in the national accounts, as well as the classification of goods and services in the Consumer Price Index (CPI) basket and Household Expenditure Survey (HES).

This article provides some background on COICOP, explains the rationale for developing a COICOP-based classification for Singapore

use and also outlines the basic structure and principles of classification of S-COICOP.

### Background on COICOP

COICOP is one of the functional classifications in the UN 1993 System of National Accounts (SNA93). It is used to classify individual consumption expenditures of three institutional sectors, namely households, non-profit institutions serving households (NPISHs) and government. COICOP is described as a "functional" classification because it categorizes consumption expenditures according to their primary "functions" – in the sense of "purposes" or "objectives" – for example, housing, medical, transport, recreation and education.

COICOP is also recommended by the International Labour Office (ILO) for the compilation of the CPI. The ILO which is responsible for providing international best practice guidelines on CPI recognizes in its resolution that 'for the purposes of international comparisons, the [CPI] classification should also be reconcilable with the most recent version of the UN Classification of Individual Consumption According to Purpose (COICOP), at least at its division level'.

Similarly, COICOP is also intended for use in the classification of goods and services in the HES. This is supported by the ILO resolution which observes that 'there should be consistency between the classification used for index compilation and the one used for household expenditure statistics'.

### **Developing a Common COICOP-Based Classification for Singapore**

In 2006, DOS reviewed and assessed that the development of a common classification based on the UN COICOP for use in the compilation of PCE, CPI and HES would benefit both producers and users of the data. Some potential benefits of a common COICOP-based classification for Singapore use include :

- Enhanced data sharing among data producers. One of the most important applications of the CPI is the deflation of PCE in the national accounts. Hence,

the deflation of expenditures at the most detailed level is facilitated by a common classification of price indices on goods and services.

- A more integrated set of consumption, price and expenditure statistics. A harmonized classification system based on COICOP would help facilitate analyses on PCE, CPI and HES.
- Greater international comparability. Adopting a COICOP-based classification would align the relevant Singapore official statistics more closely to those of other countries that use a COICOP-based classification, such as Australia, Hong Kong and all the European Union member countries (including the United Kingdom).

### **S-COICOP – Structure and Principles of Classification**

S-COICOP is closely aligned to the basic framework of the UN COICOP. However, as with other national classifications, S-COICOP has adapted the UN COICOP as appropriate to better meet the requirements of Singapore's users and to take into account the local context. Compared to the UN classification which comprises 12 divisions at the first level (highest), 47 groups at the second level and 117 classes at the third level (lowest), the Singapore classification has 13 divisions, 45 groups and 109 classes (Table 1).

TABLE 1 FIRST LEVEL STRUCTURE OF UN COICOP AND S-COICOP

UN COICOP	S-COICOP
01 Food & Non-Alcoholic Beverages	01 Food & Non-Alcoholic Beverages
02 Alcoholic Beverages, Tobacco & Narcotics	02 Alcoholic Beverages & Tobacco
03 Clothing & Footwear	03 Clothing & Footwear
04 Housing, Water, Electricity, Gas & Other Fuels	04 Housing & Utilities
05 Furnishings, Household Equipment & Routine Household Maintenance	05 Furnishings, Household Equipment & Routine Household Maintenance
06 Health	06 Health
07 Transport	07 Transport
08 Communication	08 Communication
09 Recreation & Culture	09 Recreation & Culture
10 Education	10 Education
11 Restaurants & Hotels	11 Food Serving Services
	12 Accommodation Services
12 Miscellaneous Goods & Services	13 Miscellaneous Goods & Services

Key differences between the UN COICOP and S-COICOP include the following :

- Food Serving Services and Accommodation Services are elevated to the first or division level in S-COICOP to identify them as two separate major consumption purposes. At the class level, more breakdowns on food and beverage services and accommodation services are shown.
- Similar to other countries, Narcotics and Prostitution Services are excluded from S-COICOP for practical reasons.
- The Education division in S-COICOP includes 2 additional groups : Private Tuition and School Textbooks, Assessment Papers and Related Study Guides to reflect their importance in the Singapore context.

- Hospices, Nursing Homes, Convalescent and Rehabilitation Services is identified at the class level under the Health division as step-down care services in Singapore become increasingly important.

### **Classification by Purpose**

In line with the principles of the UN COICOP, S-COICOP categorizes consumption expenditures according to their primary "functions" or "purposes".

### **Multi-Purpose Goods and Services**

While most goods and services can be unambiguously assigned to a single purpose, some could plausibly be assigned to more than one purpose. Thus, for goods and services that are multi-purpose in nature, the general rule followed has been to assign them to the division that represents the predominant purpose. For example, food consumed at restaurants is assigned to *Food Serving Services* division not *Food and Non-Alcoholic Beverages* division.

### **Mixed Purpose Goods and Services**

Single outlays or expenditures may sometimes comprise a bundle of goods and services that serve two or more different purposes. Examples include the purchase of

an all-inclusive package holiday which may include payments for sightseeing, recreation, transport, accommodation and catering services.

For these expenditures, the need to obtain a "purpose" breakdown that is as precise as possible has to be balanced with practical considerations of data availability. As such, purchases for package holidays are classified under Package Holidays (under Recreation division) with no attempt to identify separate purposes such as transport, accommodation and catering.

Likewise, purchases of in-patient hospital services are classified under Hospital, Convalescent and Rehabilitation Services (under Health division) for practicality even though they include payments for hospital accommodation and catering services.

On the other hand, expenditures on educational services which may include payments for educational materials, boarding and transport services, should be classified as far as possible to their respective purposes such as Education, Accommodation Services and Transport.

### **The Next Step**

The development and adoption of a common COICOP-based classification for the collection, compilation and analysis of

consumption, price and expenditure statistics will yield significant benefits to both producers and users of the data. Particularly, it provides the basis for more integrated consumption, price and expenditure statistics, enhanced international comparability and data sharing.

Presently, the classification of PCE in the national accounts is already largely COICOP-based. Alignment to S-COICOP will require only relatively minor revisions, and these will be implemented in the next rebasing of the national accounts to reference year 2005 in early 2010.

DOS will also be using S-COICOP in the on-going HES 2007/08 where results will be ready towards end-2009. Thereafter, DOS will move towards using the S-COICOP classification for the CPI in its next rebasing using the HES 2007/08 results. The CPI with S-COICOP classification is expected to be ready in 2011.

Producers of these statistics will align existing classifications to S-COICOP as far as it is practically possible, taking into consideration data availability.

The use of a COICOP-based classification in national accounts, price and expenditure statistics is in line with international recommendations and best practices (SNA93 and ILO resolution) and the development of the S-COICOP is key to achieving this.

## References

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