

# Rebasing of Services Producer Price Indices to Base Year 2021

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## Introduction

The Singapore Department of Statistics (DOS) has rebased the following Services Producer Price Indices (SPPIs) to base year 2021:

- ❑ Telecommunication Services Price Index (TSPI)
- ❑ Computer Consultancy & Information Services Price Index (CISPI)
- ❑ Cargo Handling Price Index (CHPI)
- ❑ Warehousing & Storage Price Index (WSPI)

The rebasing exercise is conducted periodically to update the individual index structure and weights to the latest classification and market structure, while improving the coverage of service products to ensure representativeness of the current activities. It also enables DOS to review the company sample frame and introduce methodological improvements that enhance the data collection and compilation processes.

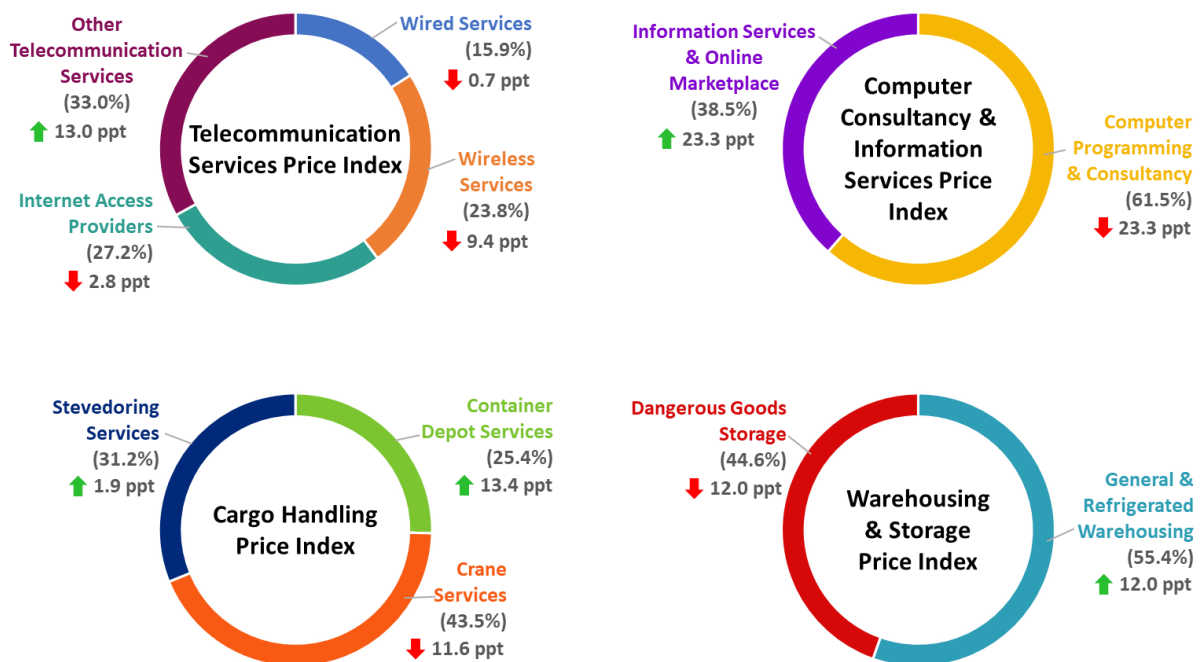
This article compares changes in weighting patterns and price trends from the previous base year (2016-2017) and highlights the key methodological improvements implemented for the rebased SPPIs.

## Changes in Weighting Pattern

The weights used in the SPPIs are derived from DOS’s surveys and supplemented with administrative data. Within the main indices of each SPPI, the weights are further distributed to the lower-level indices and service products based on the companies’ revenue contribution.

Chart 1 presents the index structures of the 2021-based TSPI, CISPI, CHPI and WSPI, together with the weights (in percentages) assigned to the main indices and their respective percentage-point (ppt) changes from the previous base year.

**Chart 1**  
 INDEX STRUCTURES OF 2021-BASED TSPI, CISPI<sup>1</sup>, CHPI AND WSPI



1 Cargo Survey Services was dropped in the 2021-based CHPI.

## TSPI

The weight shares of Wired Services and Internet Access Providers were relatively similar across both base years, while that for Wireless Services dropped due partially to a decrease in roaming revenue during Covid-19<sup>2</sup>. With the entry of new service-based operators into the industry, the weight share of Other Telecommunication Services<sup>3</sup> increased from 20.1 per cent to 33.0 per cent.

## CISPI

Information Services & Online Marketplace Price Index increased from 15.3 per cent to 38.5 per cent, attributed mainly to the addition of online marketplace services following changes to the Singapore Standard Industrial Classification (SSIC) 2020.

## CHPI

Crane Services continued to be the largest weight contributor at 43.5 per cent, followed by Stevedoring (31.2 per cent) and Container Depot Services (25.4 per cent). Although Container Depot Services remained the lowest weight contributor, its weight share had more than doubled from 12.0 per cent under the previous base year.

## WSPI

General & Refrigerated Warehousing displaced Dangerous Goods Storage as the more important weight contributor, in contrast to the weight distribution for the 2016-based WSPI. The shift in weights share could be attributed partly to the increase in the number of companies providing general & refrigerated warehousing services and the demand for such services, given the industry's lower barriers to entry.

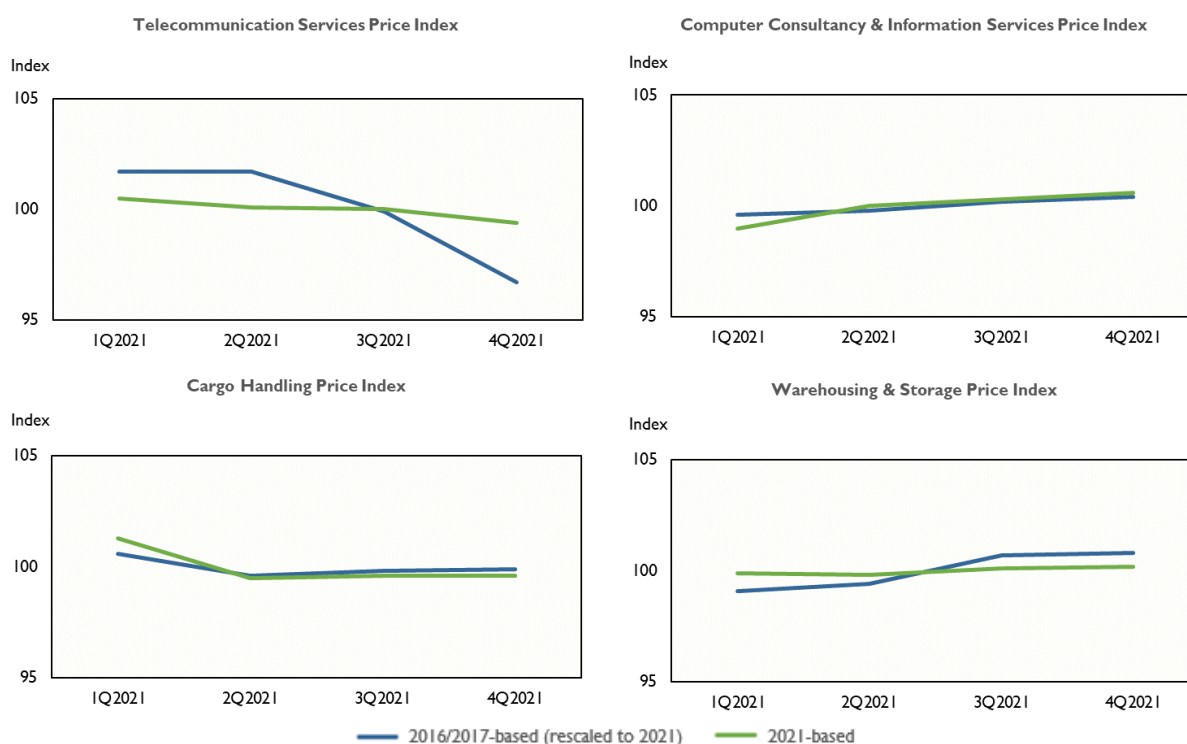
## Comparison of Price Trends

The overlapped period between the two base years for the four SPPIs covers the four quarters in 2021.

At the overall level, while the rebased price indices generally move in the same direction as compared to the previous base year, some magnitude differences in price movements are observed (Chart 2).

These can be attributed mainly to differences in the weighting pattern, the basket of service products and their associated price changes.

**Chart 2**  
COMPARISON OF 2021-BASED TSPI, CISPI, CHPI AND WSPI WITH PREVIOUS BASE YEAR



<sup>2</sup> The Straits Times, 14 Apr 2020: Telco shares are surprise losers as coronavirus lockdown drives Internet boom.

<sup>3</sup> Other Telecommunication Services refer to infrastructure and telecommunication support services.

## Key Improvements

### Updated Coverage of Service Products

Obsolete services and services which were no longer in scope were removed during the rebasing, and new services were included to keep the indices up to date and relevant. For example, services on asymmetric digital subscriber lines (TSPI) and cargo surveying (CHPI) were removed, while new services on 5G (TSPI) and online marketplaces (CISPI) were included to capture the current activities.

### Improved Pricing Methods

The service products and prices collected depend on a company’s pricing policies. Appropriate pricing methods were employed and further refined (in consultation with companies) to best measure price changes over consecutive periods. Table 1 presents the pricing methods and examples of prices collected.

### Streamlined Data Collection Process

During rebasing, internet prices are also used where relevant to further reduce respondent burden while

maintaining the scope of services covered in the index compilation.

To digitalise processes and increase operational efficiency, the data collection system was enhanced, allowing DOS to design survey forms and conduct routine price surveys unique to each SPPI. In addition to email and postal submissions, the Producer Price Indices E-Survey System provides respondents of the rebased SPPIs a secure mode of submission for their completed price surveys via the Internet or mobile devices at their convenience.

## Conclusion

The rebasing of the four SPPIs (TSPI, CISPI, CHPI and WSPI) to base year 2021 is crucial to ensure the relevance of these SPPIs in reflecting the latest market structure.

DOS is in the process of rebasing another three SPPIs to base year 2022, namely: the Accounting Services Price Index, Freight Forwarding Price Index and Sea Freight Transport Price Index. The rebased indices are expected to be made available by the 3<sup>rd</sup> quarter of 2023.

**Table 1**  
**PRICING METHODS AND EXAMPLES OF PRICES COLLECTED**

Pricing Method	Examples
Contract or Transacted Prices	Storage of standard type containers, crane services, data centres, etc.
Unit Value	Revenue and volume data of telecom services for businesses
Time-based	Charge-out rates of project managers, developers, etc.
Percentage Fees	Commission rates of online marketplaces by product groups
Consumer Prices	Business-to-consumer telecom service products and prices
List Prices	Cloud computing & hosting related service products and prices

**Information Papers on the Rebasing of the TSPI, CISPI, CHPI and WSPI are available on the SingStat Website!**

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Rebasing of TSPI



Rebasing of CISPI



Rebasing of CHPI and WSPI