

NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

Estimation of Project Cost

PURPOSE

This note outlines the current approach and methodology for the estimation of project cost for public works projects.

COST ESTIMATION

2. Generally speaking, the project cost for public works projects comprises “Base Estimate”, “Project Contingency” and “Provision for Price Adjustment”. Details of the current approach and methodology for the estimation of project cost are set out in paragraphs 3 to 5 below.

BASE ESTIMATE

3. Base Estimate is the estimated basic cost of a project which includes construction cost in terms of labour, plant and materials, design and management fees of consultants as well as site supervision cost of resident site staff. In the estimation of construction cost, we make reference to the tender prices of recently awarded contracts of similar nature and unit rates of similar types of works, with due adjustment made having regard to the nature, uniqueness, difficulty and complexity of the project and relevant tender price index, labour wages and material cost indices. For the design and management fees as well as site supervision costs, we prepare the estimation based on the estimated manpower required and the salary level of the relevant staff.

/PROJECT

PROJECT CONTINGENCY

4. On top of the Base Estimate, we also allow in the project cost a provision for Project Contingency to cater for additional costs caused by unforeseen circumstances and unexpected ground conditions, higher-than-expected tender price, additional works to meet local concerns, possible claims during construction of the works, etc. We assess the risks and estimate the required contingency for a project in accordance with established guidelines and procedures. The Project Contingency normally represents about 10% of the project cost.

PROVISION FOR PRICE ADJUSTMENT

5. To cater for the movements in the costs of labour and materials during the contract period, we also allow in the project cost a provision for price adjustment. We adopt price adjustment factors derived from the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the relevant contract periods to convert the cost estimates of capital works projects from constant prices into money-of-the-day (MOD) prices. The difference between the MOD prices and the constant prices will be the provision for price adjustment to be included in the project cost estimate. We update the price adjustment factors to be used in funding applications regarding capital works projects to the Public Works Subcommittee and Finance Committee on a half-yearly basis. Regular updates are hence provided to Members on the latest set of price adjustment factors for converting the cost estimate of capital works projects. The last update was provided in October 2013 vide PWSCI(2013-14)7¹.

Development Bureau
Financial Services and the Treasury Bureau
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¹ Based on the latest updating exercise in October 2013, the prices of public sector building and construction output are assumed to increase by 6% per annum from 2013 to 2017 and 5% per annum from 2018 to 2023.