

The application of the life cycle cost concept in government procurement

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Abstract. Government procurement introduce the concept of life cycle cost is of great significance. This paper analyzes the government procurement application situation and existing problems of life cycle cost. From the practical level, this paper analyzes the concept of life cycle cost in the government procurement budget, bidding and purchasing, contract signing and execution, procurement performance evaluation process, the application of finally advances some Suggestions on strengthening the application of life cycle cost concept, aims to improve the comprehensive benefit of government procurement, to a greater extent to realize government procurement of economic and social benefits.

Introduction

The product life cycle cost refers to the acquisition costs plus the cost of ownership (using cost). Acquisition costs include design, confirmation, subscription, purchase, receiving, storing, pay the cost; Ownership costs include installation, commissioning, operation, maintenance, service, upgrade, disposal costs. The application of life cycle cost has more than 50 years of history in the world, also has a mature research in the field of government procurement, in the guide of independent innovation, energy conservation, environmental protection, support the development of small and medium-sized enterprises such as yeast is of great significance.

In China 2020 years ago, the government promised to the Asia-Pacific economic cooperation (APEC) members peer open government procurement market, and is the entry into the WTO government procurement agreement negotiations of international background, the present paper introduced a concept of life cycle cost in the government procurement, for the parties to a government procurement experience, to adapt to the frontier competition environment, improve the international competitiveness of our country.

With the rapid development of our country government procurement, procurement and suppliers to accumulate advanced experience, to explore more effective and reasonable methods. Government procurement of some areas have begun to try to use the life cycle cost concept, through to the total life cycle cost considerations, the pursuit of comprehensive benefit maximization. Has now started trying to application of the concept of life cycle cost of government procurement link has the following several aspects.

Make the purchasing budget of government

According to the government procurement law "regulation, the current budget tend to consider the acquisition cost of products, this creates is difficult to be truly in the tender purchase whole life

cycle cost of purchasing. Introduced a concept of life cycle costs can be more comprehensive consideration of budgetary of factors: equipment purchase expense, consumables prices, wearing parts, maintenance services, the late disposal expenses, etc.

At present in the large laboratory equipment, medical equipment, environmental monitoring equipment, automotive, air conditioning and other aspects of government procurement, procurement people have started to adopt the method of refining the government procurement budget, serious assessment of purchasing cost and use cost, by comparing the purchasing cost and use cost proportion in the total cost, comprehensive, accurately reflect to test the effect of the life cycle cost. Through government procurement cost analysis, the budget of scientific, reasonable purchasing.

Bidding and purchasing phase

Public bidding phase began in the tender documents, how to write a tender documents, using the concept of life cycle cost key points based on the following three aspects

The purchase demand formulation

Procurement requirements based on the total life cycle cost considerations, should consider the life cycle of each link, including purchasing cost, installation commissioning and maintenance cost, training cost, consumables and parts price, etc., rather than merely focus on technical indicators. Corresponding to the tender documents for clear procurement costs should be a detailed list of the products to be purchased configuration demands and technical indicators; For using the cost, the use of the standard installation commissioning respectively technical specification and time limit, quality assurance period operation maintenance requirements, specific methods of training content, at the same time in the tender documents will of consumables and parts, discount rate, after-sales service and maintenance aspects specific requirements, in order to achieve comprehensive consideration to purchase of the product life cycle cost.

Detailed quotation

Specific procurement requirements, the tender documents also should make corresponding rules in terms of price, in the "bidding list" and "price list" of refinement of product price, including the price of the product, transportation and insurance, taxes, installation commissioning and warranty period d premiums, training, etc. At the same time also asked: d premium quoted separately after the warranty period (not included in the total price); choose and buy a separate quote separately (not included in the total price); Consumables and parts price or discount rate. Detailed quotation can be intuitive response bidding product whole life cycle cost.

Comprehensive evaluation

Traditional evaluation system of competition tend to evolve for the purchase price, low cost advantage, and ignore the late use of maintenance costs. Considering the product purchase cost, on the basis of a comprehensive fully consider that installation, operation and maintenance costs, such as the lifecycle cost of purchasing, truly requires scientific setting evaluation factors: fully considering the purchasing cost and use cost.

The focus of attention from purchasing price to the total cost of ownership is often difficult. To

quantify the cost and consider the cost of time effect. Specific to the net present value method is adopted to evaluate life cycle cost. Net present value (NPV) method is used to convert future costs into today's equivalent cost, namely "current equivalent cost", to convert the "current" cost sum all of today's total cost or "pure" cost. The choice of suppliers should be the total cost of ownership of net present value of the lowest one. At present our country government procurement application of this method is more independent innovation products.

Contract signing and execution

Based on the concept of life cycle cost of the government procurement contract, it should be reasonable agreement in different stages of the life cycle cost, avoid disputes in the process of contract performance. Specific practices include: strictly according to the result of bidding procurement contract content and product prices; Clear the freight, insurance premium, taxes and other fees are included in the contract price; The cost of the installation and commissioning and standards and deadlines; Indicate the warranty period and warranty period of the rights and obligations of both parties. Clear consumables, wearing parts price or discount rate; At the same time complementary with earnest and progress in stages according to the implementation of the contract payment, constraints, party a and party b, guarantee contract carried out smoothly.

The procurement performance evaluation

For government procurement performance evaluation Jie Zi Lv significance has not only evaluation, achieve the lowest life cycle cost can we truly achieve the goal of improving the efficient use of government procurement funds. When purchasing should not only focus on product purchase cost, but also pay attention to the cost of other parts, such as the environmental costs, recycle and the disposal of the product, etc., to implement government procurement product whole life cycle of the lowest total cost. Only setting up reasonable performance evaluation factors, considering the reality of government procurement interests and long-term interests, local interests and overall interests, to scientific and rational use of fiscal funds, improve the efficiency of the use and management. Government procurement application significance of the concept of life cycle cost.

Based on life cycle cost considerations of government procurement in order to achieve energy saving, environmental protection, ecological, efficient target, should not only focus on the acquisition cost of products, but also pay attention to product run maintenance cost, environmental cost and disposal cost, etc. The competitiveness of the enterprises, therefore, the future can not only reflect on the function of the product and price, more attention should be paid to the follow-up of water saving, energy saving, multiple targets such as ecological environmental protection. Government procurement advocate the life cycle theory, and guide enterprise to achieve its strategic transformation and highly efficient production, promote enterprise independent innovation, low carbon environmental sustainable economic development. In the process of China's GPA accession negotiation at the same time, introduced a concept of life cycle cost, adopts the principle of "value", guidance on government procurement and suppliers of actual operation experience, to adapt to international competition environment.

Problems, difficulties and countermeasures

1, the whole life cycle considerations of the budget, the general time is longer, if it is the maximal

time conflict or contradiction with the current budget policy, in practice need to improve or improve the budget system, increase the content of the life cycle cost considerations.

2, product disposal costs are generally not in the account. Advice from asset management, ecological environmental protection and sustainable development. Aspects such as exhibition, in the policy or legal regulations of the state, give necessary support and specification.

3, based on life cycle cost considerations of government procurement in terms of performance evaluation, evaluation index set difficulty is larger.

This will need to get rid of the current main Jie Zi Lv as objective evaluation system, and to value the principle of consideration purchase comprehensive benefits, it also need to further improve on the system.

4, not all government procurement projects are suitable for the whole life cycle cost considerations, shall establish a suitable life cycle. Cost of purchasing products purchasing directory to point with surface, advance step by step.

Conclusions

The life cycle cost concept while start application in government procurement, but limited to the local link or some industries and products, experience is far from mature. With the development of government procurement in our country, I believe now that spark, in the near future can be start a prairie fire, concept of life cycle cost will play a valuable role in the field of government procurement.

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