ACTUAL DIRECTIONS FOR IMPROVING THE SYSTEM OF COST ESTIMATING DOCUMENTS IN CONSTRUCTION BASED ON THE RESOURCE-ORIENTED MODEL BY STRATEGIC OBJECTS OF ENERGY SUPPLY

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Abstract: The paper tackles the problem of analysis the experience development of the integrated cost estimating documents on strategic objects of energy supply. The author adduces the research of the current estimate situation and regulatory framework. Then he is concerned about the development of methods for improvement indicators of the integrated cost of construction.

Key words: integrated cost estimating documents, construction, resource and technological models (RTM), aggregation techniques.

Widespread development of typification in construction design gives good possibilities for creating the integrated cost estimating documents for buildings in general. Such norms provide information about the volume of direct costs for the whole building and thus primarily simplify the process of determining the estimated cost.

Constructions of buildings and facilities are defined as the sets of works, the composition of which can be set previously. Such set can be estimated by creating the integrated cost estimating. The use of such rate is easy and convenient because rate multiplied by unit of measurement without detailed calculations.

The basis for development of the integrated estimate standards is to create resource and technological models (RTM) for each type of constructive solutions and in general for objects of capital construction. RTM allows to evaluate the cost of the project, which depends on the pricing factors. Also it helps to calculate

indices of changes in current level of prices relative to the baseline for the project as a whole, and for certain types of work or for certain types of resources [1].

RTM consists of two units:

1. Resource block that contains the project volumes in natural expression of materials, products and structures, normative value of labour costs of employees engaged in construction and need for machines and mechanisms.

2. Cost (price) block that includes cost value both on amount per unit volume of a resource (resource price) and the full volume of resource.

The application of RTM is possible in various stages of the investment cycle, ranging from the formative stage of investments to the creation of cost estimates.

The basis of integrated cost estimating documents can be used not only by clients, but also by designers, contractors and self-regulatory organizations [2]. Moreover, if the state customer accepts the resource prices on the basis of rates at the federal level, then other members of investment and construction process can use their corporate rates, coordinating resources specifications with a customer.

Experience showed that there are the following mistakes in practice:

- The calculation of conversion coefficients from physical volumes to the modified volume is done with the basic materials
- The process of creation and application of resource consumption standards in natural expression and the estimated costs.

In this regard, it is appropriate to aggregate volumes on the basis of combining materials into groups of similar materials according to different sorts and brands, etc. These approaches correspond to the requirements of normative documents [3]. Aggregation techniques may be conducted by using standardized nomenclature of construction materials, products and structures which are taken into account by RTM. Thus, the application of the integrated cost estimating documents based on the formation resource-oriented pricing system has a significant impact on the results of investment and construction projects.

Bibliography:

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