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ISDC Approach to Probabilistic Cost Risk Assessment

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Abstract

The existing ISDC cost format [1] was developed based on results of deterministic costing methods; the resulting estimate represents the best judgement by the estimator of the total expected cost, based on the boundary conditions established in the 'basis of estimate' document. On this basis, the project budget established in accordance with the ISDC is fully expected to be spent during project implementation.

The increasing use of probabilistic methods to consider the cost impact of risks, i.e. scenarios and discrete events not necessarily included with the basis of estimate will require that the ISDC cost presentation formats will need to be extended. In line with this approach, the project owner may establish a project budget that goes beyond the best judgement of the total expected cost, allowing a margin to address costs associated with risks events beyond the defined project scope. The degree of margin provided by the budget is a reflection of the 'risk appetite' of the project owner or responsible funding organisation.

This poster presents options for extension of the ISDC cost presentation format to take account of additional costs determined by probabilistic approaches. The proposed format includes results of sensitivity calculations, undertaken to determine the main cost drivers, and to determine which activities should be the subject of Monte Carlo analysis. It also includes an approach to presentation of the results that allows the funder to decide what level of risk to accept.

[1] OECD NUCLEAR ENERGY AGENCY, INTERNATIONAL ATOMIC ENERGY AGENCY, EUROPEAN COMMISSION, 'International Structure for Decommissioning Costing (ISDC) of Nuclear Installations'OECD/NEA No. 7088, (2012)ISDC.

Country or International Organization

Slovak Republic

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