ABSTRACT

The rapid growth of Internet users in Indonesia resulted governments need an adequate Broadband Wireless Access (BWA) information technology. The availability of frequency spectrum has been realized is a limited national resources, setting up and a serious structuring is required so it can be utilized optimally for the benefit of the wider community. Therefore, the auction process is the recommended alternative in the provision of BWA. This research takes a case on an auction process conducted by DITJEN POSTEL, by taking BWA auction bidders as the object of the research.Problems in the selection of the best bidder of this auction process that is not optimal because it uses only one criterion which is the price performance of bidders bidding that makes it so difficult to measure.Therefore this study aims to develop the concept of best bidder selection using the decision making system with the PROMETHEE method which is a multi-criteria decision making method. The first stage is the formation of an auction framework that combines the auction design of SMR e-auction and traditional auctions with PROMETHEE method as a tool for decision makers to determine the best bidders. The second phase is testing the auction framework that has been made by identifying the criteria, subcriteria, and alternatives which will be used for selecting the best bidders.There are two criteria, five sub-criteria, and six alternatives in this trial process. The results from these trials is the sequence of best bidders priorities with Indosat as the winner.

Keywords: auction, bidder, PROMETHEE