
[Home](#) > [Vol 9, No 2 \(2002\)](#) > [Saxena](#)Font Size:   

Integrated Multimedia Based Intelligent Group Decision Support System for Electrical Power Network

Ajay Kumar Saxena, S. O. Bhatnagar, P. K Saxena

Abstract

Electrical Power Network in recent time requires an intelligent, virtual environment based decision process for the coordination of all its individual elements and the interrelated tasks. Its ultimate goal is to achieve maximum productivity and efficiency through the efficient and effective application of generation, transmission, distribution, pricing and regulatory systems. However, the complexity of electrical power network and the presence of conflicting multiple goals and objectives postulated by various groups emphasized the need of an intelligent group decision support system approach in this field. In this paper, an Integrated Multimedia based Intelligent Group Decision Support System (IM1GDSS) is presented, and its main components are analyzed and discussed. In particular attention is focused on the Data Base, Model Base, Central Black Board (CBB) and Multicriteria Futuristic Decision Process (MFDP) module. The model base interacts with Electrical Power Network Load Forecasting and Planning (EPNLFP) Module; Resource Optimization, Modeling and Simulation (ROMAS) Module; Electrical Power Network Control and Evaluation Process (EPNCAEP) Module, and MFDP Module through CBB for strategic planning, management control, operational planning and transaction processing. The richness of multimedia channels adds a totally new dimension in a group decision making for Electrical Power Network. The proposed IMIGDSS is a user friendly, highly interactive group decision making system, based on efficient intelligent and multimedia communication support for group discussions, retrieval of content and multi criteria decision analysis.

Full Text: [PDF](#)

Reading Tools

[Review policy](#)
[About the author](#)
[How to cite item](#)
[Indexing metadata](#)
[Notify colleague*](#)
[Email the author*](#)
[Add comment*](#)
[RELATED ITEMS](#)
[Author's work](#)
[Book searches](#)
[Web search](#)* Requires [registration](#)

Search

 
Web [dl.acs.org.au](#)

About the ACS

- [Membership](#)
- [E-learning](#)
- [Scholarships](#)
- [Library](#)
- [Bookstore](#)