

**A PRELIMINARY INVESTIGATION ON AN  
INTRODUCTION TO THE ELECTRONIC  
PROCUREMENT SYSTEM:  
A CASE OF THE MINISTRY OF WATER SUPPLY AND  
DRAINAGE**

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Degree of Master of Science

Department of Building Economics

University of Moratuwa  
Sri Lanka

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Dissertation submitted in partial fulfillment of the requirements for the degree  
Master of Science

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## DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement of any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above candidate has carried out research for the Masters Dissertation under my supervision.

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## DEDICATION

I dedicate this piece of research  
to  
**the continuous impetus and courage I possessed,**  
which  
drove me up to the end of this utmost strive.



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## ABSTRACT

The Ministry of Water Supply and Drainage (MWS&D) has placed the highest priority to provide safe drinking water and adequate sanitation facilities to the community. It is imperative to ensure speed, transparency, and integrity in all the development spheres to achieve desired result, in line with on time completion, quality achievement, and cost efficiency when procuring goods, work, and consultancy and other services. The majority of water supply projects of the Ministry is based on funds from foreign funding agencies, however, it is a critical factor to work in compatibility with the funding agencies procurement policies due to the reason that inadequate capacities of manual procurement processes. Accordingly, this study explored the concept of e-procurement as an instrument to modernize, simplify, and improve the existing manual procurement process.

The case study approach was selected as the research methodology and officers of each and every profession of the MWS&D, NWS&DB, and registered contractors of the Ministry, were selected as the sample to collect data regarding the existing manual procurement process, gaps from the updated to existing system and requirements in order to strengthen and upgrade the existing system. Semi structured interviews and observations were carried out as techniques of main data collection. Experienced professionals in the field of procurement were consulted to ascertain their opinions on verification of the feasibility of the proposed e-procurement system. Findings of the study were analyzed and presented by using Content Analysis and Cognitive Mapping.

Results verified the possibility of introducing and implementing the e-procurement system to the MWS&D using resources and infrastructure available and the capacity and facilities of the Information Technology and legal sanction on e-documents under two phases.

**Key words:** Procurement, Manual Procurement Process, e-Procurement System, Information Technology

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## LIST OF ABBREVIATIONS

ADB	Asian Development Bank
CAPC	Cabinet Appointed Procurement Committee
DPC	Department Procurement Committee
e- GP	Electronic Government Procurement System
e- Procurement	Electronic Procurement
GLs	Guide Lines
GOSL	Government of Sri Lanka
IBRD	International Bank for Rehabilitation and Development (World Bank)
ICB	International Competitive Bidding
ICTAD	Institute of Construction Training and Development
IT	Information Technology
JBIC	Japanese Bank for International Cooperation
JICA	Japan International Cooperation Agency
MPF	Ministry of Public Finance
MWS&D	Ministry of Water Supply and Drainage
NCB	National Competitive Bidding
NPA	National Procurement Agency
NWS&DB	National Water Supply and Drainage Board
PC	Procurement Committee
PE	Procurement Entity
PSP	Procurement Service Provider
RPC	Regional Procurement Committee
SBDs	Standard Bidding Documents
SME	Small and Medium Enterprise
TEC	Technical Evaluation Committee
USAID	United State Agency for International Development
VFM	Value for Money
WB	World Bank



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