



WEST AFRICAN POWER POOL

SYSTEME D'ECHANGES D'ENERGIE ELECTRIQUE OUEST AFRICAIN

General Secretariat / Secrétariat Général

**FEASIBILITY STUDY AND BASIC DESIGN
TO ESTABLISH THE ICC FOR WAPP
INTERIM REPORT WORKSHOP**

Cotonou, 1st & 2nd December, 2008

I. INTRODUCTION

1. The West African Power Pool (WAPP) General Secretariat in collaboration with KEPCO organized at its Headquarters in Cotonou from the 1st – 2nd December 2008 a workshop of the taskforce of the Engineering and Operations Committee (EOC) to review the Interim report of the Feasibility Study & Basic Design Project of WAPP-Information and Coordination Center (ICC).

II. PARTICIPANTS

2. Present at this workshop were representatives of the following Utilities:
 - EDG
 - CIE
 - TCN
 - VRA
 - Senelec
3. Representatives from the WAPP Secretariat, the KEPCO Consulting Team, AETS/EU and NEXANT/USAID attended the workshop.
4. The list of participants is hereby attached as Annex A.

III. OPENING SESSION

5. The WAPP Secretary General, Mr. Amadou Diallo while declaring the workshop open welcomed and thanked electricity utility representatives for their co-operation and unrelenting support in ensuring the success of the WAPP. He also on behalf of the President of the ECOWAS Commission, Dr. Ibn Mohammed Chambas and the Chairman of the WAPP Executive Board, Dr. J.O. Makoju thanked the Korea Government for the grant provided for this Feasibility Study and Basic Design of the WAPP-ICC. He also thanked the Consultant, KEPCO, for being a reliable partner. Acknowledging the need to have the WAPP ICC functional by the end of 2009, he requested for speedy implementation of the Project which is an essential objective in the WAPP Business Plan.
6. Mr. Babatunde Adeyemo, Director of WAPP-ICC also welcomed the participants from WAPP Electricity Utilities and KEPCO Consulting Team. He requested for an interactive workshop with comments and contributions that will further improve the design for the WAPP-ICC.
7. Mr. Han Woong Kim, KEPCO Project Manager said Data have been collected from the five (5) Control Areas Centres (CACs) and National Control Centres (NCCs). These data have been put together to design the WAPP-ICC and hence the report being presented. Furthermore, he expressed the urgency to finalize the design as soon as possible as the Project is already behind schedule.

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IV. NOMINATION OF RAPORTEURS

8. Mr. Ademola Abogunrin of TCN and Mr. Ahoussou Kouadio of CIE were nominated as rapporteurs.

V. AGENDA OF THE WORKSHOP

9. The Workshop Agenda proposed by the WAPP Secretariat was adopted. The workshop Agenda is attached as Annex B.

VI. WAPP-ICC PROJECT OBJECTIVE

The three main objectives of the WAPP-ICC project are as follows:

- To conduct feasibility study and prepare the basic design and implementation plan for WAPP Information and Coordination Centre (ICC) which will promote operational and information sharing regarding the exchange of electric power between neighboring countries of ECOWAS.
- Improve technology of ECOWAS/WAPP related to power exchange by sharing Korea's experience and knowledge.
- Strengthen the relationship and cooperation between Korea and the member states of ECOWAS through the successful implementation of the Project.

VII. PRESENTATIONS

10. KEPCO Consulting Team made presentations on the following topics.

- Introduction and Project design summary
- Transmission System Consideration
- Basic Design of WAPP ICC System (Software)
- Basic Design of WAPP ICC System (Hardware)
- Design Concept of WAPP ICC System (Data Center)
- Datalink System via ICCP Protocol
- Email System between ICC and CACs
- Basic Design of Communication System (ICC-CACs)
- Basic Design of Communication System (ICC)

After detailed consideration of the presentations by the experts, with series of questions and responses from the Consultant, the participants came up with the following recommendations.

VIII. RECOMMENDATIONS

11. The consultant was asked to take into consideration changes in utility names and Network modifications in accordance with the updated WAPP Priority Projects.
12. It was agreed that Inter Control Centre Protocol (ICCP) should be used for data exchange between neighboring CACs and NCCs.

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13. It was agreed that the Implementation Plan (including costs) should be submitted by the consultant by the 9th of January 2009. This plan should be in phases to allow gradual implementation of the WAPP-ICC System in accordance with the readiness of the Priority Project. The Control Area Centres will be connected to the WAPP-ICC according to the following phases:
- Phase 1: CIE, TCN and VRA.
 - Phase 2: Senelec.
 - Phase 3: EDG (upon completion of CLSG and OMVG Projects).
14. It was adopted to use Optic Fibre as the primary medium and Digital Power Line Carrier (D-PLC) as backup to provide communication channel redundancy.
15. The ultimate communication system for the WAPP- ICC should be based on Optic fibre for both the primary and backup communication after the completion of the following Priority Projects: OMVG, OMVS, CLSG, CTB and the North Core.
16. A standby diesel generator with automatic changeover was recommended to be installed in addition to the UPS system.
17. The consultant shall submit the interim report by the 30th of January 2009.

IX. VOTE OF THANKS

18. The participants expressed their gratitude to KEPCO, the WAPP Secretary General and the entire staff of WAPP for the warm reception and arrangements made to facilitate the organization of the workshop and their stay in Cotonou.
19. A special appreciation and gratitude was also expressed to the Korean Diplomat, Mr. Park Young Sam the First Secretary and Consul of the Korean Embassy in Accra, Ghana and the KEPCO General Manager, Communication, Mr. Tae Sung Kim, for taking time to participate in the workshop.

Done in Cotonou, this day, 2nd Dec 2008.

The Chairman

Mr. Eric ASARE

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