



WEST AFRICAN POWER POOL
SYSTEME D'ECHANGES D'ENERGIE
ELECTRIQUE OUEST AFRICAIN

Annual Report 2020

West African Power Pool



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LIST OF ACRONYMS

AFC	Africa Finance Corporation
AFD	Agence Française de Développement
AfDB	African Development Bank
AKSA	AKSA Energy Company Limited
CEB	Communauté Electrique du Bénin
CEET	Compagnie Energie Electrique du Togo
CIE	Compagnie Ivoirienne d'Electricité
CI-ENERGIES	Côte d'Ivoire Energies
CLSG	Côte d'Ivoire-Liberia-Sierra Leone-Guinea Interconnection Project
EAGB	Empressa Publica de Electricidad e Agua de Guinée Bissau
ECG	Electricity Company of Ghana
ECOWAS	Economic Community of West African States
EDG -SA	Electricité de Guinée
EDM-SA	Energie du Mali
EDSA	Electricity Distribution Supply Authority
EIB	European Investment Bank
EMS	Energy Management System
ESIA	Environmental and Social Impact Assessment Study
EU	European Union
FAT	Factory Acceptance Test
GRIDCo	Ghana Grid Company
ICC	Information and Coordination Centre
IsDB	Islamic Development Bank
JIC	(Project) Joint Implementation Committee
LEC	Liberia Electricity Corporation
MMS	Market Management System
NAWEC	National Water and Electricity Company Ltd of The Gambia
NEPAD-IPPF	New Partnership for Africa Development / Infrastructure Project Preparatory Facility
NIGELEC	Société Nigérienne d'Electricité
OJT	On the Job Training
OMVG	Organisation pour la Mise en Valeur du fleuve Gambie
OMVS	Organisation pour la Mise en Valeur du fleuve Sénégal
PIPES	Planning, Investment Programming and Environmental Safeguard
PIU	Project Implementation Unit
PMU	Phasor Measurement Unit
SBEE	Société Béninoise d'Energie Electrique
Senelec	Société Nationale d'Electricité du Sénégal
SOGEM	Société de Gestion de l'Energie de Manantali
SONABEL	Société Nationale d'Electricité du Burkina
SPS	Special Protection Scheme
S/T	Show and Tell
SVC	Static Var Compensator
TCN	Transmission Company of Nigeria
TFP	Technical and Financial Partners
UEMOA/WAEMU	West African Economic and Monetary Union
USAID	United States Agency for International Development
VRA	Volta River Authority
WAMS	Wide Area Measurement system
WAPP	West African Power Pool
WB	World Bank



1. OVERVIEW OF WAPP ORGANISATION

The West African Power Pool (WAPP) was created by Decision A/DEC.5/12/99 of the 22nd Summit of the Authority of ECOWAS Heads of State and Government.







































The Articles of Agreement for the establishment and functioning of WAPP was adopted by Decision A/DEC.18/01/06 of the 29th Summit of the Authority of ECOWAS Heads of State and Government held in Niamey, which also granted the WAPP General Secretariat the status of a Specialized Institution of ECOWAS through Decision A/DEC.20/01/06.

A Headquarters Agreement was signed between WAPP and the Government of the Republic of Benin on the 5th of July 2006, conferring on WAPP the diplomatic privileges and immunities required to operate effectively. The headquarters of WAPP General Secretariat is presently located at PK6, Zone des Ambassades, Akpakpa, Cotonou, in Republic of Benin.

WAPP VISION: To integrate the operations of national power systems into a unified regional electricity market, which will, over the medium to long term, ensure the citizens of ECOWAS Member States with a stable and reliable electricity supply at competitive costs.

WAPP MISSION: To promote and develop infrastructure for power generation and transmission, as well as, to assure the coordination of electric power exchanges between ECOWAS Member States.

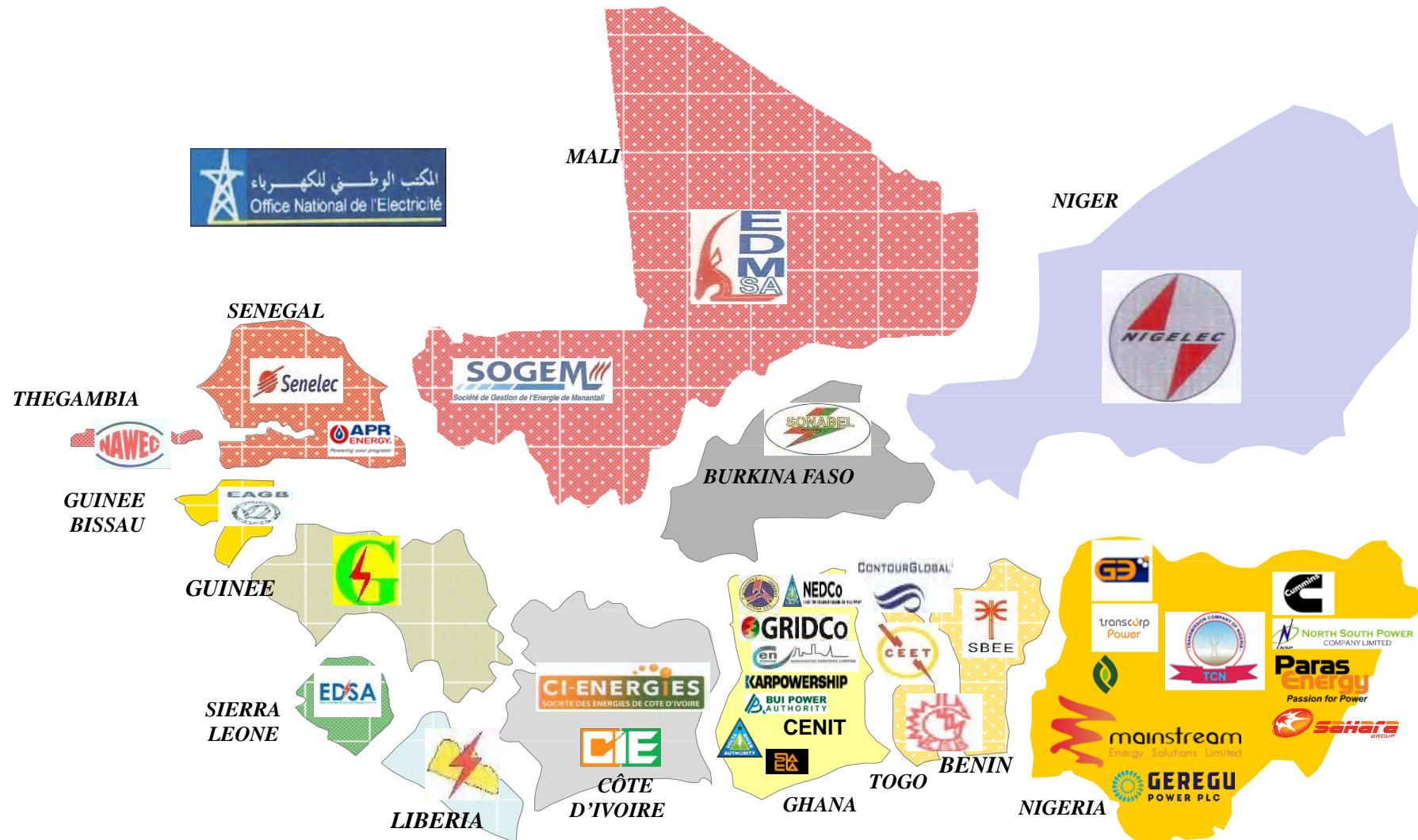
MEMBERS: since the General Assembly held on December 11th, 2020 in Lomé (Togo), the WAPP has 38 members including one observer member.

WAPP Member Utilities as at 31 December 2020					
1		Aksa Energy Company Ghana Ltd (Ghana)	20		Liberia Electricity Corporation (Libéria)
2		APR Energy (Sénégal)	21		Mainstream Energy Solutions Limited (Nigéria)
3		BUI Power Authority (Ghana)	22		National Water and Electricity Company Limited (Gambie)
4		CENIT Energy Limited (Ghana)	23		North South Power Company Ltd (Nigéria)
5		CenPOWER Generation Company Limited (Ghana)	24		Northern Electricity Distribution Company Ltd (Ghana)
6		Communauté Électrique du Bénin (Togo, Bénin)	25		*Office National de l'Electricité et de l'Eau Potable du Maroc (Maroc)
7		Compagnie Energie Electrique de Togo (Togo)	26		Pacific Energy Company Limited (Nigéria)
8		Compagnie Ivoirienne d'Electricité (Côte d'Ivoire)	27		Paras Energy and Natural Resources Development Ltd (Nigéria)
9		Contour Global (Togo)	28		Sahara Power Group Ltd (Nigeria)
10		Côte d'Ivoire Energies (Côte d'Ivoire)	29		SAPELE Power PLC (Nigéria)
11		Cummins Power Generation Ltd (Nigéria)	30		Société Béninoise d'Énergie Electrique (Bénin)
12		Empressa Publica de Electricidade e Agua de Guine-Bissau (Guinea Bissau)	31		Société de Gestion de l'Energie de Manantali (Mali, Senegal, Mauritanie, Guinée)
13		Electricité de Guinée (Guinea)	32		Société Nationale d'Electricité du Burkina (Burkina)
14		Electricity Company of Ghana (Ghana)	33		Société Nationale d'Electricité du Sénégal (Sénégal)
15		Electricity Distribution and Supply Company (Sierra Leone)	34		Société Nigérienne d'Electricité (Niger)
16		Energie du Mali-SA (Mali)	35		Sunon Asogli Power (Ghana) Ltd. (Ghana)
17		GEREGU Power Plc	36		Transcorp Power (Nigéria)
18		Ghana Grid Company (Ghana)	37		Transmission Company of Nigeria (Nigéria)
19		Karpowership Ghana Company Ltd (Ghana)	38		Volta River Authority (Ghana)

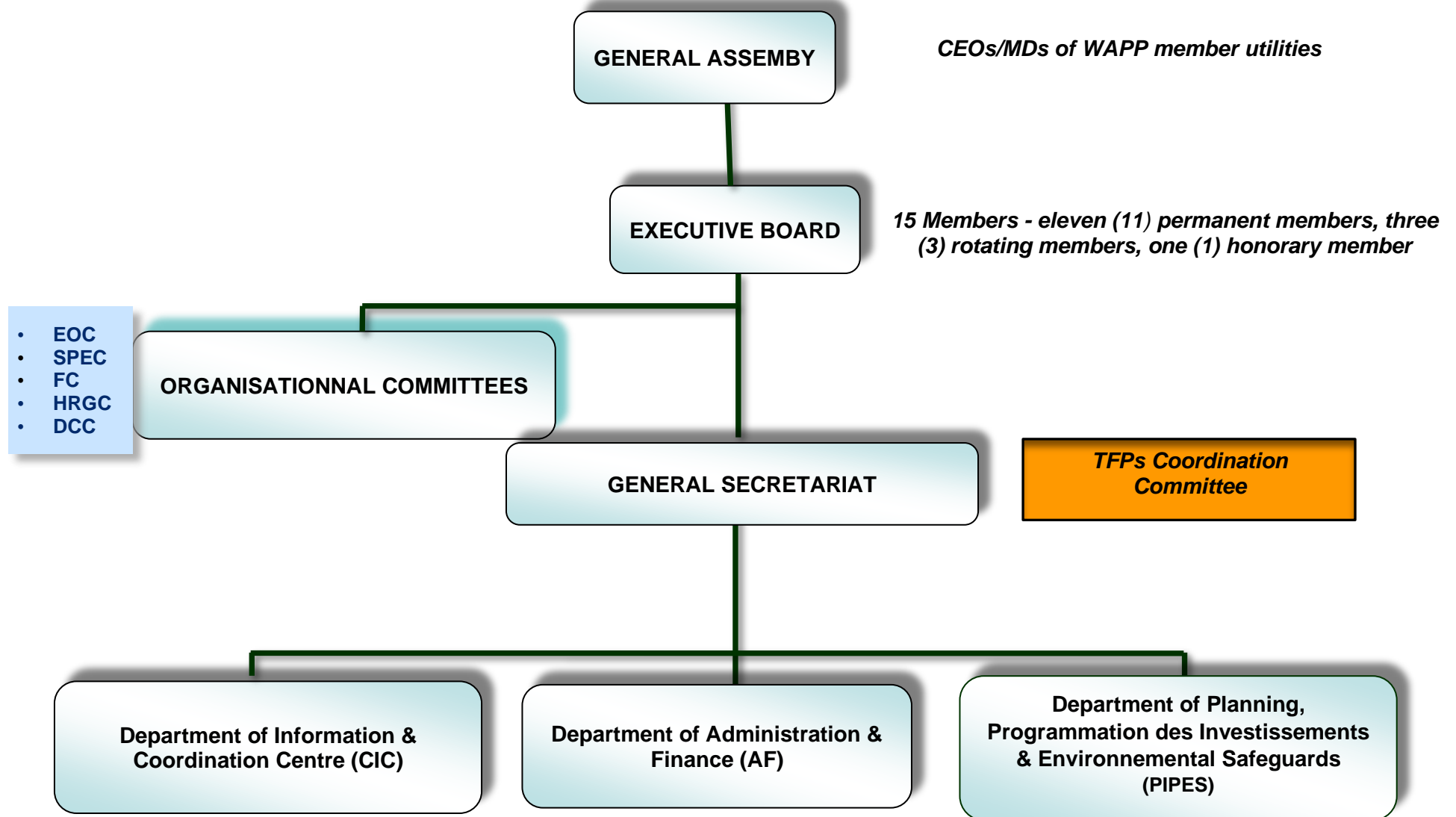
*Observer member

WAPP GOVERNANCE STRUCTURES: WAPP is made up of a total of four (4) governance structures: the General Assembly, the Executive Board, the Organisational Committees and the WAPP General Secretariat.

DIAGRAMMATIC REPRESENTATION OF WAPP MEMBERS



WAPP ORGANISATIONAL STRUCTURE



MEMBERS OF THE WAPP EXECUTIVE BOARD: The Executive Board consists of 15 Members - eleven (11) permanent members, three (3) rotating members and 1 honorary member.

Permanent Members:

- TCN:	Chairperson
- CI-ENERGIES:	Vice-Chairperson
- WAPP Secretary General:	Member
- CEB:	Member
- EDG:	Member
- GRIDCO:	Member
- SBEE:	Member
- Senelec:	Member
- SOGEM:	Member
- SONABEL:	Member
- VRA:	Member

Rotating Members:

- EDM – SA:	Member
- Mainstream:	Member
- NEDCO:	Member

Honorary Member:

- Mr. Joseph MAKOU

Chairperson of the Executive Board



Eng Sule Ahmed ABDULAZIZ, CEO et MD TCN

Vice-Chairperson of the Executive Board



Mr. Amidou TRAORE, DG CI-ENERGIES

Permanent Members



Mr. Siengui A. KI, SG EEEOA



Mr. Karimou CHABI SIKA, DG CEB



Mr. Bangaly KONATE, DG EDG



Mr. J. AMOAKO-BAAH, CEO GRIDCO



Mr. Jacques Paradis, DG SBEE



Mr. Papa Mademba BITEYE, DG Senelec



Mr. Tamsir NDIAYE, DG SOGEM



Mr. Baba Ahmed COULIBALY, DG SONABEL



Mr. Emmanuel ANTWI-DARKWA, CEO VRA

Rotating Members



M. Oumar DIARRA, CEO EDM – SA



Mr. Lamu AUDU, CEO Mainstream



Mr. Osmani Aliduba AYUBA, MD NEDCO

Honorary Member



Mr. Joseph MAKOJU

2. KEY DEVELOPMENTS

2.1. Official recognition of the CIGRE West Africa National Committee

After its establishment in Abuja on 08 November 2019 on the margins of the WAPP General Assembly, the **CIGRE – West Africa National Committee. (CIGRE-WA)** was officially recognised by the CIGRE Central Bureau in August 2020. It is the second National Committee in Sub-Saharan Africa to join the CIGRE after that of South Africa in 1974.

The objective of CIGRE - WA is to facilitate and promote the sharing of technical knowledge and information among power system experts and operators as well as institutions and power utilities in West African countries.

CIGRE - WA is headquartered at the WAPP General Secretariat. On a transitional basis, the WAPP Executive Board Chairperson and the WAPP Secretary General are in charge of its functioning until the recruitment of permanent staff.

2.2. Admission of new members into WAPP

The 15th WAPP General Assembly was held on 11th December 2020 in Lomé (Togo) in hybrid form due to the COVID-19 pandemic: Members of the Executive Board, Chairpersons of the Organizational Committees who were able to make the trip to Lomé as well as some TFPs based in Lomé and the Power Utilities of Togo attended in-person while the other members took part by videoconference. The General Assembly was an opportunity to admit two new members into the WAPP:

- **BUI Power Authority (Ghana);**
- **GEREGU Power PLC (Nigeria).**

These new admissions brings the membership of the WAPP to 38.

The General Assembly also renewed the mandate of the WAPP Secretary General.

2.3. Grant of 300 million USD by the World Bank to 6 West African countries in support of development policies

The World Bank, in its willingness to support the implementation of the West African Regional Electricity Market, approved in July 2020, an **amount of US\$ 300 million as support towards Development Policy Financing to six (6#) countries that shall soon be interconnected and where the market shall be operational.** The involved countries are Burkina Faso, Côte d'Ivoire, Guinea, Liberia, Mali and Sierra Leone. This action is in support of the implementation of the **Directive on Securitization of Cross-Border Power Trade Transactions** adopted in December 2018 by the ECOWAS Council of Ministers. This funding shall help to:

- Enhance securitization of cross-border power trade transactions under the ECOWAS Regional Electricity Market;
- Support the implementation of low-cost investment plans that take into account regional options;
- Strengthen the financial solvency of power utilities.

3. MESSAGE FROM WAPP EXECUTIVE BOARD CHAIRPERSON



Eng. Sule Ahmed ABDULAZIZ,
Executive Board Chairperson

On behalf of the WAPP Executive Board, I am pleased to share with you the activities conducted during FY 2020, a year that can be considered as a difficult one due to the COVID-19 pandemic that affected the whole world.

Notwithstanding, the WAPP General Secretariat with the support of all of its member utilities demonstrated resilience, by adopting measures to counter the pandemic which includes adopting the use of communication technologies that allowed remote work to be done, this enabled the WAPP General Secretariat to carry out some activities quite successfully. However, activities that had to be carried out in the field, such as construction sites work, were more negatively impacted by the pandemic and therefore experienced delays.

The WAPP General Secretariat was able to organize all the statutory meetings of the Executive Board and the Organisational Committees by video-conference while the WAPP General Assembly was held in hybrid mode, with some members participating in-person in Lomé, Togo, while others participated through video-conference.

These statutory meetings enabled our Institution to achieve appreciable results. The Organisational Committees considered and validated a certain number of documents that were presented to and adopted by the Executive Board. Some of these

documents were presented to the General Assembly for final decision. These include, among others:

- The WAPP Grid Emission Factor (GEF) Update Study. The GEF is essential for power utilities within the sub-region to access financing from Climate Markets. The expiration of the previous GEF is at the end of February 2021.
- The WAPP Regional Transmission Pricing Model Study. The report produced by the Consultant contracted for this purpose, was validated by WAPP and transmitted to the Regional Regulatory Authority, ERERA.
- The West African Electricity Sub-Sector Skills Review Study. This study entailed a diagnostic analysis of the skills within the electricity sub-sector to identify gaps and take appropriate measures to fill them.
- The adoption of the first update of the WAPP Articles of Agreement. Over the years, decisions adopting amendments to these Articles of Agreement have been taken by successive General Assembly Sessions and these have been transposed into a new version of the Articles of Agreement.
- The adoption of the 2021 Work Programme and Associated Budget of the WAPP General Secretariat taking into account the adverse impact of the COVID-19 pandemic on the finances of WAPP member utilities. Consequently, the operating budget of the General Secretariat, funded exclusively by its members, was reduced by 8%.

Noteworthy among the good results achieved by WAPP during FY 2020 is the admission of two new members pursuant to the decision of the General Assembly held in December 2020 in Lomé. These new members are GEREPU Power Plc (Nigeria) and BUI Power Authority (Ghana).

Similarly, most of the studies and preparatory activities for the implementation of the priority projects featured in the ECOWAS Master Plan, and

the elaboration of the governance documents for the ECOWAS Regional Electricity Market was pursued without any major difficulties.

Concerning the regional market, I welcome the Grant from the World Bank awarded in July 2020 for the benefit of six (6#) ECOWAS Member States, in support of the implementation of the Directive on Securitization of Cross-Border Power Trade that was adopted in December 2018 by the ECOWAS Council of Ministers. I would like to seize this opportunity to thank the World Bank and to extend my appreciation to all WAPP Technical and Financial Partners for their invaluable support towards the implementation of energy projects within the sub-region.

Fieldworks that experienced implementation difficulties and delays due to the COVID-19 pandemic include the CLSG and OMVG Loop Projects which were supposed to have been completed in 2020 and would have resulted in the completion of the interconnection of all ECOWAS mainland countries. The updated schedule now foresees their completion in the course of 2022. The same applies to the ICC Project, which is also scheduled for completion in 2022. These three projects are essential for the kick-off of Market Phase 2, which is the competitive phase of the Regional Electricity Market.

However, there is hope that construction will resume at a good pace in 2021, as the pandemic is expected to slow down due to the announced vaccine solutions and continued compliance with COVID-19 countermeasures. In addition, some sites have experienced remarkable recovery since the end of 2020. I, therefore, ask all of our members to continue to work diligently to accelerate the pace of work so that the second phase of the regional market becomes a reality very soon.

Eng. Sule Ahmed ABDULAZIZ

4. MESSAGE FROM THE SECRETARY GENERAL



Siengui A. KI,
WAPP Secretary General

The year 2020 was an abnormal year for the General Secretariat and for all WAPP Members as they were adversely impacted by the Coronavirus COVID-19 pandemic. However, this did not prevent the WAPP General Secretariat from making strides towards the implementation of the Regional Competitive Electricity Market and leveraging the 2020 - 2023 WAPP Business Plan as a working and guiding instrument.

In its quest for ways and means to put in place a viable and sustainable regional electricity market, WAPP pursued its cooperation with the World Bank. This culminated in the granting by this institution in July 2020, of development policy support in the amount of US\$ 300 million to six (6#) countries that shall soon be interconnected and where the regional electricity market shall be operational (Burkina Faso, Côte d'Ivoire, Guinea, Liberia, Mali and Sierra Leone). This financing shall thus make it possible to:

- Enhance the securitization of cross-border power trade transactions within the ECOWAS Regional Electricity Market;
- Support the implementation of low-cost investment plans taking into account regional options;
- Enhance the financial solvency/creditworthiness of power utilities.

This support is an important step towards the implementation of the Directive on Securitization of Cross-Border Power Trade and should help transform WAPP member utilities into financially viable entities that are robust enough to participate effectively in the electricity market.

As a result of the COVID-19 pandemic, the projects that were expected to be completed by 2020 have all experienced delays.

As such, works on the CLSG Project (225 kV interconnection between Côte d'Ivoire, Liberia, Sierra Leone and Guinea) are now scheduled for completion in 2022 as well as the OMVG Loop (225 kV interconnection between Guinea, Guinea Bissau, The Gambia and Senegal). It should be recalled that completion of these two projects shall result in the interconnection of all of the mainland ECOWAS Member States being completely achieved.

The ICC (Information and Coordination Centre) Project has also experienced some significant delays, especially with regard to the civil engineering works, leading to a delay in the installation of the telecontrol equipment and market management equipment. Works are now expected to be completed in 2022.

The same applies to the WAPP Interconnected Power Systems Synchronization Project, which is not expected to be completed before 2022.

The projects that are in the preparation stage and for which it was possible to carry out activities by through video-conference are progressing satisfactorily.

This is the case for the preparations that were in progress to launch the construction of the WAPP North Core Project. Most of the Tenders have already been issued while the remaining Bidding Documents are being finalised. The process for the implementation of the Resettlement Action Plan (RAP) and the Environmental and Social Management Plan (ESMP) is underway with the signing of an MoU with TCN for Nigeria and the recruitment of Consultants for the other countries (Niger, Benin and Burkina Faso). It should also be noted that recruitment of additional staff for the

North Core Project Management Unit (PMU) is underway.

Besides, similar progress has also been made on the Guinea-Mali Interconnection Project, where evaluation of bids were already ongoing.

As per the Median Core Project, envisaged to link Nigeria, Benin, Togo, Ghana and Côte d'Ivoire as a first phase of the WAPP Transversal Backbone, the recruitment process for consultants to carry out the feasibility study, line route study and the environmental & social impact assessment study is being finalised.

With regards to the solar park projects, in addition to the two projects already under study since 2019 (150 MW regional solar parks in Burkina Faso and Mali), the consultant recruitment process was concluded for the regional solar park in The Gambia that permitted the kick-off of the studies in June 2020. For the regional solar park in Niger, the studies are expected to commence in the second Quarter of 2021.

The pre-investment studies are underway for the first priority project that was identified following completion of the study on the optimization of hydropower generation on the Saint Paul River in Liberia.

In terms of mobilising new funding, continued efforts were deployed by the WAPP General Secretariat towards its Technical and Financial Partners (TFPs). In 2020 though, the WAPP Coordination Meeting of TFPs that is customarily held in April each year could not take place due to the COVID-19 pandemic. A Coordination Meeting did however take place in December 2020 during the General Assembly held in Lomé and the discussions held made it possible to close the funding gap for pre-investment studies for certain projects such as the Côte d'Ivoire-Liberia Interconnection Reinforcement Project, the Ghana-Burkina Faso-Mali Interconnection Project as well as the Côte d'Ivoire-Burkina Faso Interconnection Reinforcement Project.

Following completion of the pre-investment studies for the Nigeria - Benin Interconnection Reinforcement Project, a first donors' roundtable meeting was organised in November 2020 during which some funding pledges were made. This first meeting shall be followed by others in order to fill the project financing gap preferably with attractive

conditions for the project beneficiary countries and utilities.

Our Institution's 15th General Assembly Session was held from 7th to 11th December 2020 in Lomé, Togo, in hybrid mode due to the COVID-19 pandemic. The Members of the Executive Board, the Chairpersons of the Organisational Committees who were able to travel to Lomé as well as some TFPs that were based in Lomé, including the Togolese power utilities, attended in-person while the other members took part in the sessions through videoconference.

This General Assembly was opportunity for the WAPP Executive Board to express once again, during the TFPs' coordination meeting, its satisfaction and sincere gratitude to the TFPs for their continuing support that has enabled WAPP to carry out a number of projects and reach closer its goal of establishing a competitive regional electricity market.

The General Assembly also welcomed two (2#) new members to the WAPP and renewed the Term of the Secretary General.

For my part, I would like to express my profound gratitude to the ECOWAS Commission, the WAPP Executive Board, the WAPP Member Utilities and the staff of the WAPP General Secretariat for all of their sacrifices and efforts deployed in the course of this difficult year, which have forestalled any halt in activities and ensured some advancement in the implementation of projects.

This is proof of our spirit of resilience. I am therefore optimistic for the new year 2021 and remain confident that together we shall strive to fast-track the implementation of the projects to ensure their completion soonest as this shall culminate in the launching of Phase 2 of the Regional Electricity Market.

I entreat you to an insightful perusal of this 2020 Annual Activity Report.

Siengui A. KI

5. IMPLEMENTATION OF PRIORITY PROJECTS

The priority projects concerned are those contained in the **2019 – 2023 ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure**. This Plan shall guide the implementation of the large-scale power transmission and interconnection lines of ECOWAS Member States as well as the major power generation plants.

Most of the activities related to priority projects are carried out by the PIPES Department.

5.1. Resources Mobilisation & Projects Preparation

Resource mobilisation is an important step in the preparation and implementation of the WAPP Priority Investment Programme and constitutes a key activity of the WAPP General Secretariat.

5.1.1. 330 kV Nigeria - Benin Interconnection Reinforcement Project

- Pre-investment studies financed by NEPAD-IPPF, USAID, GIZ and beneficiary utilities (CEB et TCN) are being finalized. These studies are experiencing delays partly because of the COVID-19 related health crisis;
- Estimated cost of works: 115.1 million Euros;
- First Donors' Roundtable held on 19th November 2020. 120.59 million Euros of funding pledges made;
- Expected commissioning: 2023.

5.1.2. 225 kV Côte d'Ivoire - Liberia Interconnection Reinforcement Project

- The cost of the pre-investment studies is estimated at USD 3,427,993;
- NEPAD-IPPF funding of US\$1,786,148 for the Line Route & Environmental and Social Impact Assessment (ESIA) Studies;
- Funding to be sought in the amount of US\$1,567,837;
- Commitment by beneficiary utilities (LEC and CI-ENERGIES) to contribute to the financing of the study for an amount of US\$ 47,004 per utility;
- ToR for the pre-investment studies being finalized;
- Expected commissioning: 2025.

5.1.3. 330 kV Ghana – Burkina – Mali Interconnection Project

- The updated cost for the pre-investment studies is estimated at USD 4,659,124;
- NEPAD-IPPF funding of USD 583,300 is being finalized for the subsequent signing of the grant agreement;
- AFD funding in the amount of USD 2,500,000;
- WB funding in the amount of USD 1,545,124;
- Commitment by beneficiary utilities (GRIDCo, SONABEL and EDM-SA) to contribute to the funding of the study for an amount of USD 10,234 per utility;
- Length: approximately 600 km of line between Bolgatanga (Ghana) - Bobo Dioulasso (Burkina Faso) - Sikasso (Mali);
- ToR for the pre-investment studies currently being finalized;
- Due diligence underway for the recruitment of a sole Consultant to carry out the pre-investment studies;
- Expected commissioning: 2025.

5.1.4. 330 kV WAPP North Core Interconnection Project

- Interconnection linking Nigeria to Niger, Benin and Burkina Faso;
- Pre-investment studies completed;
- Total length: 875 km;
- Project cost: US\$ 697.7 million including rural electrification;
- Funding: AfDB, WB, AFD, EU and governments concerned by the project;
- Evaluation of the prequalification documents completed and prequalified firms notified;
- *No Objection* obtained for Bidding Documents for lines and tender calls launched;

- Bidding Documents for 225 kV lines to be built in the city of Ouagadougou submitted to the AFD for its *No Objection*;
- Bidding Documents for substations currently being reviewed by the Owners' Engineer;
- Recruitment of additional staff for the PMU is underway with signing of individual contracts with successful candidates;
- Recruitment of Consultants for the implementation of the RAP completed for three countries (Benin, Burkina Faso and Niger) and signing of contracts being finalised;
- Recruitment of Environmental and Social Assistants for the PMU field offices in Burkina Faso, Niger and Nigeria is underway;
- Expected commissioning: 2024.

5.1.5. 330 kV WAPP Median Core Interconnection Project

This project is the first segment of the East-West Transversal Backbone (Nigeria-Senegal). The project shall link Nigeria, Benin, Togo, Ghana and Côte d'Ivoire.

- Funding of pre-investment studies in the amount of 6.8 million USD by the World Bank;
- ToR for studies finalized;
- Recruitment of Consultants for the pre-investment studies being finalized;
- Expected commissioning: 2025.

5.1.6. 225 kV Guinea – Mali Interconnection Project

- Pre-investment studies completed on AfDB funding;
- Length of the N'Zérékoré - Fomi - Bamako line: 714 km;
- Cost: 361.32 million Euros (288.09 million Euros for Guinea and 73.23 million Euros for Mali) including rural electrification;
- Funding: WB, AfDB, EIB, EBID, EU, BOAD and the governments concerned by the project;
- Tender calls for the lines and substations launched and evaluations of bids ongoing;
- Tender calls for Lot P1 extension of Sanankoroba substation cancelled for lack

of information from the company TATA which is in charge of the design and construction of the substation;

- Updating of the Resettlement Action Plan (RAP) underway;
- Biodiversity studies in progress;
- Pre-investment studies completed for the Linsan - Fomi section in Guinea to enhance the profitability of the interconnection:
 - Length Linsan – Fomi: 350 km;
 - Cost: 170 million Euros including rural electrification;
 - Funding: EIB and Guinean Government
- Expected commissioning: 2023.

5.1.7. Côte d'Ivoire – Guinea Interconnection Project

- Funding for the pre-investment studies is being sought; estimated amount US\$5.44 million presented to the TFPs at the December 2020 round-table;
- ToR for pre-investment studies being finalized.
- Expected commissioning: 2025.

5.1.8. 150 MW Regional Solar Parks in Burkina Faso and Mali

These entail two projects consisting of the construction in Burkina Faso and Mali of regional solar parks of 150 MWp each.

- Pre-investment studies underway with World Bank funding;
- Multi-site and multi-phase approach for the construction of parks;
- "Plug and Play" concept: the energy evacuation facilities are built on public funding and the developers of the parks selected through auctions;
- Technical, economic and financial feasibility studies being finalized;
- Environmental and social impact studies and geotechnical studies in progress;
- Organization of auctions ongoing;
- Expected commissioning: 2022.

5.1.9. 150 MW Regional Solar Parks in The Gambia

The project is in its preparation phase with assistance from the World Bank.

- Technical, economic and financial feasibility studies in progress;
- Recruitment of the Consultant in charge of environmental and social impact studies and geotechnical studies underway with signing of the contract;
- Recruitment process for the Transaction Advisor has been launched;
- Expected commissioning: 2023.

5.1.10. 150 MW Regional Solar Parks in Niger

The project is in its preparation phase with assistance from the World Bank.

- Recruitment of the Consultant in charge of technical, economic and financial feasibility studies underway;
- Terms of reference for environmental and social impact studies and geotechnical studies sent to the World Bank on December 04, 2020 for no-objection;
- Expected commissioning: 2024.

5.1.11. Solar Radiation Measurement Campaign

This activity is being carried out within the framework of the World Bank's assistance to the WAPP General Secretariat for solar power development in Sub-Saharan Africa.



Measuring station example in Burkina Faso

- Recruitment of the Consultant in charge of the solar radiation measurement campaign finalized and the Contract signed in September 2020;
- Start of the data collection campaign in the different countries with a view to selecting the sites to host the measurement stations;
- Submission on December 17, 2020 of the English version of the data collection report

including the list of potential sites that can accommodate measurement stations;

- Meeting between the WAPP General Secretariat and the Consultant to be organized upon submission of the French version of the report;
- This activity is planned to be completed in 2023.

5.1.12. Climate Markets

In a bid to capitalize on the increased production of renewable energy in the ECOWAS energy mix, the WAPP Secretariat and World Bank have concluded a Memorandum of Understanding through which the World Bank provides technical and financial support to WAPP for the development of certain activities aimed at enabling WAPP member utilities to take advantage of the benefits offered by climate markets.

- Memorandum of Understanding signed on August 18, 2020;
- Three (3) main activities:
 1. Update of the standardized reference level of the WAPP grid emission factor (GEF) which will expire on February 26, 2021;
 2. Development of a monitoring, reporting and verification (MRV) framework; and
 3. Development of the carbon market.
- ToR for the Consultant reviewed and adopted by the Strategic Planning and Environmental Committee (SPEC);
- Consultant recruited by the World Bank (WB) and availed to the WAPP General Secretariat;
- WAPP General Secretariat organized the kick-off meeting for the Consultant's assignment. Given the transversal nature of the activity, this meeting brought together, in addition to the SPEC, the members of Engineering and Operating Committee (EOC);
- Schedule of services and data collection sheet adopted;
- Data collection carried out on 283 power plants in the continental ECOWAS countries;
- GEF feasibility study report validated by SPEC, EOC members and Designated

National Agencies (DNA) of the United Nations Framework Convention on Climate Change (UNFCCC);

- Preliminary values of the WAPP GEF obtained:
 - 0.583 tCO₂/MWh for the 1st, 2nd and 3rd credit period for Wind and Solar Energy Generation Projects;
 - 0.601 tCO₂/MWh for the 1st credit period for all projects except those for wind and solar energy generation;
 - 0.619 tCO₂/MWh for the 2nd and 3rd credit period for all projects except those for wind and solar energy generation.
- Due to the good quality of the data received and the rigorous evaluation carried out by the consultant, it can be estimated that the final updated regional GEF will remain within a limit of $\pm 8\%$.

5.2. Monitoring & Coordination of Projects

The WAPP General Secretariat monitored and coordinated activities for the implementation of the following projects:

5.2.1. 330 kV Aboadze-Prestea-Kumasi-Bolgatanga au Ghana Transmission Line Project

This project aims to reinforce Ghana's internal grid to allow greater transit capacity to the northern part of the country.

- Length: 798 km divided into 3 sections:
 - Aboadze – Prestea funded by Armandi;
 - Prestea – Kumasi funded by Korea Exim Bank;
 - Kumasi – Bolgatanga via Kintampo and Tamale funded by AFD.
- Commencement of works: 2015;
- Aboadze – Prestea and Prestea – Kumasi section already commissioned;
- Kintampo – Tamale - Bolgatanga and Aboadze - Prestea section already commissioned;
- Delays in works on Kumasi-Kintampo section; works still ongoing though work

has resumed in some localities in which GRIDCo is preparing to pay compensation.

5.2.2. 330 kV Volta (Ghana) – Lomé “C” (Togo) – Sakété (Benin) Interconnection Project

This project forms part of the WAPP Coastal Transmission Backbone and is from Ghana to Benin where it intersects with the Nigeria-Benin line.

- Length: 350 km;
- Funding: AfDB, WB, KfW and BOAD;
- Commencement of works in 2013;
- Completion of works in Ghana by 2015;
- Completion of works on Ghana/Togo border to Davié substation and commissioning of the section in April 2019;
- Davié - Togo / Benin border section (58.5 km): works have been completed but commissioning pending the end of works on the Togo / Benin border - Sakété section of line;
- Construction works completed on the Togo / Benin border - Sakété section and inspection in progress before commissioning;
- Overall project progress rate estimated at 97.94%;
- Expected commissioning in 2nd quarter of 2021.

5.2.3. 225 kV CLSG (Côte d'Ivoire - Liberia - Sierra Leone - Guinea) Interconnection Project

- Length: 1349 km;
- Funding: WB, AfDB, EIB, KfW and the governments concerned by the project;
- Commencement of works: 2017;
- Due to the COVID-19 related health crisis which has compelled companies to reduce the field teams, the commissioning dates have been revised:
- New schedule provides for the commissioning of the line in four (4) stages:
 - Stage 1: Man - Monrovia in February 2021;
 - Stage 2: Monrovia - Bumbuna between February-April 2021;

- Stage 3: Bumbuna - Kamakwie and Yekepa - N'Zérékoré between April-August 2021; and
 - Stage 4: Kamakwie - Linsan between 2021 - 2022 with the commissioning of the Linsan substation by the OMVG.
- Overall works progress rate estimated at above 89%.



Substations



Transmission lines



Tambacounda Substation



Soma Substation



Bissau Substation

5.2.4. OMVG Energy Project (Senegal, Gambia, Guinea and Guinea-Bissau)

The project comprises 3 components:

- **Kaléta hydropower development (240 MW)**, in operation since 2015:
 - Capacity: 240 MW.
- **225 kV interconnection loop of the four countries concerned:**
 - Length: 1677 km;
 - Funding: AfDB, WB, EIB, AFD, BOAD, KfW, IsDB, Kuwaiti Fund and the governments concerned by the project;
 - Commencement of works: 2017;
 - Works on the various lots are in progress on the various sites but at a slower pace due to restrictions related to COVID-19;

- Overall progress rate (engineering, procurement and construction & site installation) was estimated at 70% at the end of December 2020;
- New schedules provide for the full commissioning of the interconnection line in May 2022.

- 128 MW Sambangalou hydropower development project;

- Partnership agreement between OMVG and VINCI Group for the execution of the works;
- Update of the Detailed Engineering Design and review of the optimization of technical specifications for the equipment finalized;
- Environmental and social studies entrusted to the Environment Resources Management (ERM) Office have been completed;
- Commencement of works in 2021;
- Expected commissioning: 2024.

5.2.5. Adjarala Hydropower Development Project

This involves a dam located along the Togo/Benin border.

- Capacity: 147 MW;
- Funding: initial agreement between Exim Bank China and the Togolese and Beninese Governments; difficulties in the implementation of the agreement arose leading to cessation of project execution; search for new partners underway.

5.2.6. Souapiti & Amaria (Guinea) Hydropower Projects

❖ Souapiti

- Capacity: 450 MW;
- Funding: Exim Bank China and Guinean Government;
- Owing to the COVID-19 related health crisis which has compelled companies to reduce the number of local workers, the plants' commissioning dates have been revised:
- Rate of completion of civil works: 99%;
- Three groups installed and the first two in the test phase at 85 MW each;
- Group N°4, wheel and stator installed;
- Overall rate of progress of the work: more than 96%;
- New commissioning schedule for the generators is as follows:
 - G1 and G2: end of January 2021;
 - G3: end of February 2021; and
 - G4: end of March 2021.
- Completion of works: 2021.
- Construction works on the 225 kV Kaléta-Souapiti evacuation line completed and line in operation.



Rotor G4



Control Room

❖ Amaria

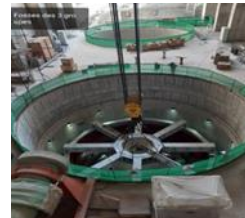
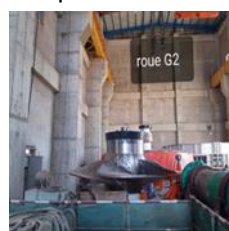
- Capacity: 300 MW;
- Funding: agreement between the Guinean Government and the company TBEA (China) for the development of the project;
- BOT contract;
- Commencement of the project implementation phase works for a duration of 4 years.

5.2.7. Gouina Hydropower Development Project

The project comprises 2 components:

❖ Construction of the Gouina Hydropower Dam

- Capacity: 140 MW;
- Funding: Exim Bank China;
- Construction works are underway at a very slow pace due to a reduction in the number of workers owing to the COVID-19 related health crisis;
- Overall completion rate estimated at about 75%;
- New commissioning schedule for the generators is as follows:
 - G 1: end of January 2021;
 - G 2: end of March 2021; and
 - G 3: end of May 2021
- Completion of works: 2021.



❖ 225 kV Kayes (Mali) – Tambacounda (Senegal) double-circuit line

- Length: 288.2 km;
- Funding: WB and SOGEM;
- Owing to the COVID-19 related health crisis which has compelled the companies to reduce the field teams, the commissioning dates have been revised:
- Overall progress rate (engineering, procurement and construction & site installation) estimated at about 55.4%;
- New schedule provides for commissioning in 2021.



Erection of Towers

❖ **225 kV Manantali – Bamako (Kati) double-circuit line in Mali**

- Length: 279 km;
- Funding: AFD, EU and SOGEM;
- AFD's No-Objection has been obtained for the Bidding Documents;
- Tender calls launched and submission of tenders planned for February 2021 and site visit to be organised for tenderers in January 2021;
- Expected commissioning: 2023.

5.2.8. Optimal Development Plan for St. Paul River Cascade in Liberia and Feasibility Study for Selected Priority Project

This is a multi-phased project funded by the World Bank and coordinated by the WAPP General Secretariat. It was launched in 2017 and the following activities were carried out in 2020:

- Activities of the Consultant in charge of the feasibility study launched in July 2020;
- Review of various reports: the data collection report in November, the diagnostic report on the extension of the Mount Coffee hydropower dam also in November 2020, the site selection report in December 2020 and the technical specification report for the bidding documents of the access road of the SP2 component of the hydropower dam also in December 2020;
- Amendment to the contract of the consultant in charge of the feasibility study signed by the two parties on 13th November 2020 to allow additional disbursement on IDA grant H770-3A before its closure;
- Contracts of the various Experts of the panels, taking into account their implications in the review of the

deliverables expected from the feasibility study signed on 14 December 2020;

- Recruitment of the Transaction Advisor (STA) being finalized with signing of the contract;
- Amendment relating to the extension of the duration of the Contract of the Consultant in charge of technical assistance signed on 14 December 2020;
- First model of the website to be developed as part of this project issued by the Consultant in charge of technical assistance;
- Commissioning of this project planned for 2026. However, commissioning of the solar component planned for 2022/23.

5.3. Technical Cooperation

5.3.1. “Desert to Power” Initiative

The WAPP Secretariat held a technical meeting with the AfDB on 14th August 2020 within the framework of its initiative tagged "Desert to Power". The discussions made it possible to identify the development of the second phase of regional solar parks in Mali, Burkina Faso and Niger where the AfDB could provide support to the WAPP General Secretariat.

The WAPP General Secretariat also participated on 9th December 2020 in a virtual forum organized by the AfDB under the theme “Unlocking investment opportunities to boost regional projects in the G5 Sahel” during which the status of progress in the preparation of regional solar park projects in Mali, Burkina Faso and Niger was presented.

5.3.2. Development of a Continental Master Plan for the Generation and Transmission of Electrical Energy

The WAPP General Secretariat participated in the consultation meetings organized by the African Union Development Agency (AUDA-NEPAD), notably in the virtual meeting held on 24th September 2020 for the review of the recommendations resulting from the preliminary study conducted prior to the development of the continental master plan.

5.3.3. PIDA-PAP-2

As part of the project selection process for the priority action plan of the Program for Infrastructure Development in Africa (PIDA-PAP-2), following the submission of projects on the dedicated platform, the WAPP General Secretariat participated in virtual meetings organized by the selection committee.

5.4. Cooperation with ECOWAS

5.4.1. Virtual Consultation Meeting on Priority Projects of the ECOWAS Community Development Programme (CDP)

The WAPP General Secretariat participated in a virtual consultation meeting held on 11th September 2020 with the CDP coordination unit and during which the status of implementation of WAPP priority projects, scheduled to be presented to the roundtable within the framework of the ECOWAS CDP, was updated.

6. ESTABLISHMENT OF THE REGIONAL ELECTRICITY MARKET

The establishment of a competitive Regional Electricity Market is the ultimate goal set for WAPP by the ECOWAS Heads of State and Government.

The ICC, a Department within the WAPP General Secretariat, is in charge of activities related to the Regional Electricity Market. The WAPP Information and Coordination Center (WAPP ICC), in its effort to establish the regional electricity market implemented various activities primarily focused on the following strategic projects:

- Implementation of the WAPP ICC Project;
- Implementation of WAPP Market Roadmap;
- Implementation of the Project for Synchronization of WAPP Interconnected Power Systems;
- Distribution utilities performance improvement (distribution loss reduction project).

6.1. Implementation of ICC Project

The WAPP Information and Coordination Centre (ICC) Project is a European Union funded project which involves the construction of the ICC building at Calavi, supply/installation of SCADA / EMS / MMS / WAMS systems for Power System and Electricity Market Management.

The Objectives of the ICC Project are as follows:

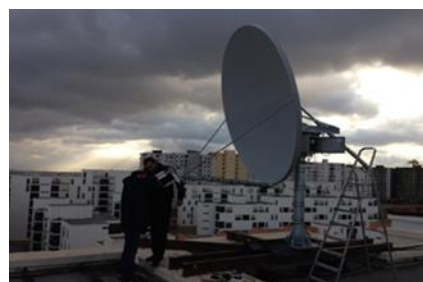
- ❖ Enable ICC to fully assume its role of Operator of the Interconnected Power System and the West African Regional Electricity Market;
- ❖ Put in place the infrastructure, technical equipment, organization and capacity building mechanisms required.

The WAPP General Secretariat carried out the following activities within the framework of the project:

- In January and February 2020, VSAT equipment was installed at CIE, EDM and Senelec.
- In September 2020, finalization of the civil works of the VSAT antenna in Lafiabougou, Mali.
- SDH telecommunication equipment is being deployed (October-November 2020) to the CEB sites in Benin and Togo. The SDH link between Davie (Togo) and Volta (Ghana) will still need to be implemented.

The status of implementation of ICC infrastructure is as follows:

- The percentage of completion for the ICC Building is estimated at 77%.
- The percentage of completion for Equipment of Building at Calavi is estimated at 65%.
- The overall percentage of completion of the ICC project till date is estimated at %.
- The estimated delays in the implementation of the ICC project milestones are as follows:
 - The WAPP ICC Building A (Technical Building) is expected to be completed by 23rd November 2020.
 - The WAPP ICC Building B (Administrative Building) is expected to be completed by April 2021.
 - SCADA/EMS/MMS/WAMS installations are expected to be completed by May 2022.
 - Site Acceptance Tests (SAT) and acceptance tests of entire project works are expected to be completed by August 2022.



Installation of a VSAT antenna on the top of the CIE building

6.2. Establishment of the Regional Electricity Market

The objective of the ECOWAS Regional Electricity Market is to establish a technical, organizational, legal and commercial environment to sell and purchase electricity transparently at competitive costs in the sub-region for the benefit of West Africa's population.

Following the official launch of the Regional Electricity Market in 2018, the activities carried out in 2020 are as follows:

- A meeting with the African Union and ERERA on monitoring the implementation of the continental transmission pricing methodology was organized from 3 to 7 February 2020 at the WAPP General Secretariat. The meeting reviewed and confirmed the conformity of the WAPP Regional Transmission Pricing Methodology with the Continental Transmission Pricing Methodology.
- An online technical cooperation meeting with ERERA was held on May 27, 2020 and June 2, 2020 on the operationalization of the Market Rules.
- An online meeting of the EOC working group was organized on May 28, 2020 to adopt the final report on the Regional Transmission Pricing Model.
- An online meeting of the EOC was organized on July 17, 2020 to:
 - Present the Final Report on the Regional Transmission Pricing Model (RTPM).
 - Present the proposed amendments to the Market Procedures (Article 8) on Admission of Participants to the Regional Electricity Market.
 - Present the proposed registration fee for Participants in the Regional Electricity Market.
 - Present the proposed list of Transmission System Operators (TSOs) and Power Purchase Agreement (PPA) holders existing prior to the launch of Phase I of the Market.

The various reports were adopted except for the proposed registration fees. The ICC was

requested to substantiate the assumptions for the calculations.

The 46th WAPP Executive Board Meeting held on October 21, 2020 adopted:

- The final report on the Regional Transmission Pricing Model (RTPM);
- The proposed Amendments to the Market Procedures (Article 8) on Admission of Participants to the Regional Electricity Market; and
- The proposed list of Transmission System Operators (TSOs) and Power Purchase Agreement (PPA) holders existing prior to the launch of Phase I of the Market.

6.3. WAPP Interconnected Power Systems Synchronisation Project

The WAPP ICC is currently implementing Phase II of the Synchronization Project.

It should be recalled that the Phase II of the project comprises two contracts:

- ❖ Contract #1: relating to the implementation of a special protection scheme (SPS), the installation and commissioning of twenty (20) Phasor Measurement Units (PMUs) to be integrated in the WAMS (Wide Area Monitoring System) of the ICC, the installation and commissioning of ± 30 MVar Static Var Compensators (SVC) at the 225/30 kV Matam substation in Senegal, including an extension of the substation.

The activities relating to Contract #1 and carried out over the last 12 months are as follows:

- The PMU installations have been completed in all countries except Nigeria where work is ongoing and Niger where work will commence immediately after Nigeria;
- All of the protection systems have been installed in Mali (in an EDM-SA substation);
- The SVC FAT is currently underway in China and the equipment is shipped in the first week of December 2020;

- The commissioning of the protection scheme and PMUs was scheduled for the end of November 2020 and the SVC in June 2021.

Contract #1 has a performance level of (65%).

❖ Contract #2 involves:

- Power System Stabilizer (PSS) Tuning, Testing of Governors in 29 power plants for 8 countries (Ghana, Nigeria, Togo, Niger, Cote D'Ivoire, Mali, Senegal and Burkina Faso).
- Change of Settings and Performing Synchronization Test".

The following activities were carried out under Contract #2:

- Data collection and site visits completed;
- Publication of the data collection and site visit report;
- Tests completed in two (2) power plants (Alaoji and Delta IV) in Nigeria;
- FAT performed on 2 PMUs under the project;
- Tests in the French-speaking zone planned for January 2021;
- Tests in Ghana and Nigeria planned for May 2021;
- First synchronization test planned for August 2021;
- Synchronization impact study planned for December 2021;
- Second synchronization test planned for April 2022.

Project completion scheduled for **July 2022**; Contract #2 currently estimated at a progress rate of **8%**.

6.4. Technical Working Group Activities

In order to implement recommendations related to system operations and planning operations, three EOC Technical Working Groups ["Load Frequency Control and Compliance Working Group" (LFCCWG), "System Reliability Assessment Working Group" (SRAWG), "System Protection Coordination Working Group" (SPCWG)] were set up. They are

required to define and take appropriate actions and measures recommended in the study report related to operations, operational planning, system protection and coordination, to ensure a safe and reliable operation of the interconnected power systems. This is to ensure successful and sustainable synchronization of the WAPP Interconnected Power System.

The output of activities carried out by the working groups over the past twelve (12#) months are as follows:

- Update of WAPP interconnected power system model;
- PST (phase shift transformer) location study;
- Under frequency load shedding (UFLS) study;
- Frequency performance analysis.

6.5. Implementation of Grid Code for WAPP Transmission Grid Systems

The objective is to develop a sub-regional transmission Grid Code, including a set of harmonized technical rules, which would help provide a clear legal framework for the development and operation of the sub-regional power system, facilitate the implementation of the ECOWAS Electricity Market, ensure system security, also facilitate the integration of renewable energy sources, promote competition and enable a more efficient use of the power system and resources.

The following activities were carried out:

- Evaluation of technical and financial proposals;
- Contract negotiation meeting and contract award;
- Kick-off meeting;
- Workshop to review the data collection report.

The Grid Code is expected to be completed by June 2021.

6.6. Certification of Member Utility Operators and WAPP Operators

The objective is to provide a common framework for the training and certification of

ICC operators and TSO control centre operators.

In this respect, the following activities were carried out:

- Elaboration of the inception report.
- Elaboration of the interim report.
- Elaboration of the draft final report.
- Elaboration of the training manual.
- Elaboration of the training modules.
- Recruitment and training of trainers for training and certification of operators.

6.7. Development of business processes and operating procedures

With RTEi technical assistance, the objective is to develop business processes and operating procedures to be used to coordinate the reliability of the WAPP interconnected transmission grid systems in collaboration with the TSOs.

In order to achieve this, the following activities are underway:

- Establishment of a roadmap for the development of operational procedures.
- Development of the common network model.
- Elaboration of the daily system operation report.
- Elaboration of the fault coordination plan.
- Calculation of the capacity for the year ahead.
- Elaboration of the procedure for reporting disturbances, etc.

6.8. Implementation of a renewable energy management system

This system will be integrated into the ICC's SCADA/EMS for the management of renewable energy sources in the WAPP Interconnected Power System.

The following activities have been carried out to date:

- Elaboration of Terms of Reference (TOR) for the recruitment of the Owner's Engineer;
- Contract negotiation meeting was held on October 2, 2020;

- Signing of contract with EDF-CIST which has kicked-off the review of GE's proposal for a renewable energy management system.

6.9. Consulting in Power Pool System

This project is currently completed and had as objective the provision of services as a power pool consultant in the framework of the development of the WAPP Regional Electricity Market and presented, among others, as deliverables:

- An organizational structure for the ICC (positions, qualifications, descriptions, etc.);
- A Synthesis of the Regional Market;
- Registration and conditions of participation in the Regional Electricity Market, etc.

6.10. RTEi Technical Assistance to WAPP ICC

In the framework of the EU-funded AGoSE program, RTE International has already initiated actions for the initial operationalization of the ICC such as:

- ❖ A proposed organizational structure for the ICC staff;
- ❖ Development of a working methodology with the various representatives (focal points) of the TSOs. In this context, several documents have already been produced and shared such as the;
 - "Limit of ownership and maintenance of equipment contributing to the operation of the ICC";
 - "Organization of curative maintenance" and;
 - "Organization for data updating".

These documents constitute the basis for the sustainability of the maintenance of the SCADA/EMS/MMS/WAMS systems and the ICC's Telecommunications.

A digital document management system is also being developed.



Site visit of ICC building in Calavi with GER SA

7. ADMINISTRATIVE AND FINANCIAL MANAGEMENT

The management of human, material and financial resources is core to the performance of any institution. Accordingly, during the period under review, the WAPP General Secretariat continued to ensure sound administrative and financial management with a view to optimizing its performance and achieving its priority objectives.

The activities related to the management of human, administrative and financial resources carried out during the period are as follows:

7.1. Recruitments

Within the framework of the reinforcement of its workforce, the WAPP General Secretariat organized and completed recruitment processes for the following positions:

- An Internal Auditor for the Office of the Secretary General;
- A Resident Consultant Procurement Specialist to support the Procurement Department;
- A Communication Officer to ensure the proper management of the Institution's Communication Plan;
- An Accounting Officer to strengthen the Accounting and Finance Department;
- A USAID Program Management Specialist for the Administration and Finance Department;
- A Technical Project Coordinator to strengthen the team of Project Coordinators in the Planning, Investment Programming and Environmental Safeguards Department (PIPES);
- A Resident Consultant Environmental Safeguards Specialist to manage environmental and social issues arising from the implementation of projects and programs led by the Institution;
- An Expert in Electrical Energy to support the PIPES and ICC Departments.

7.2. Capacity Building

Within the framework of its capacity building program, the WAPP General Secretariat organized various activities consisting of the mobilization of financial resources, preparation of training projects, participation in training and exchange programs. These activities were carried out in accordance with the WAPP Annual Work Plan and those established under the Technical Assistance Agreements with Technical and Financial Partners (TFPs). Given the current development of the health situation due to

Covid-19, the implementation of some activities is experiencing delays.

7.2.1. Activities / Trainings carried out with WAPP's own funds

- Training of a Professional Staff and a Director on "Leadership and Results-Based Management and Performance Indicators" in December 2019;
- Training of three Professional Staff and one Director on "Mastering the Strategic Aspects of Contracts and Terms of Reference and on Negotiation Skills and Strategies" in December 2019;
- Internal training of all WAPP General Secretariat staff on "Computer Knowledge Management" in December 2019 and February 2020;
- Coaching-Training for the Personal Assistant to the Secretary General on "Place, Role and Responsibility of Cabinet Directors" in February 2020.

7.2.2. Activities and Training on TFP Financing for the WAPP General Secretariat Staff

❖ World Bank:



Training participants

- Two training sessions on "Identification, Preparation and Feasibility of a Power Project". The first session in French was held in January 2020 and the second session in English was held in February 2020. Nine professional staff

involved in project coordination and one Director participated in the training;



Group photo of trainees with trainers

- Internal training of a first group of staff from the WAPP General Secretariat on "WAPP Procurement Procedures". The training was provided by WAPP General Secretariat procurement specialists in February 2020. Participants have been organized into 3 groups according to the training modules. The first group consisted of 2 professional staff, 7 general services staff and 7 support staff;



View of the High Table



Group photo of participants

- Refresher session on the use of the TOMPRO project management software. Two Directors, nine professional staff and three general services staff were trained in the use of the software at the WAPP General Secretariat in March 2020.

7.2.3. Activities / Capacity Building on TFPs funding for the benefit of WAPP Member Utilities' Staff

❖ World Bank Funding:

- Training and Certification in Renewable Solar Energy for the Staff of Power Utilities and Energy Ministries of ECOWAS Member States:

In line with the objectives of the SAHEL Project (Phase 1) which is to promote the development of regional solar parks in West Africa, this training aims at training and certification in three (3) major areas of solar renewable energy (i) *Engineering* (ii) *Institutional, policy, regulatory framework and financial aspects* and (iii) *Operation, maintenance and performance monitoring* for the benefit of 110 staff of national power utilities, Ministries in charge of energy of ECOWAS Member States and the WAPP General Secretariat, 15% of which are women.

To this end, following a competitive international call for tenders, a contract was signed with the 2iE Regional Training Institute (Burkina Faso) and the project was launched on 13th November 2020 by videoconference.

The training sessions are scheduled to start in the 1st Quarter of 2021 and continue until the end of 2021.

- Creation of the CIGRE West Africa National Committee / Solar Development Project in Sub-Saharan Africa - Phase 1 (Sahel):

Following the 14th session of the WAPP General Assembly, a Constitutive General Assembly (CGA) of the CIGRE-WA National Committee (CIGRE WA NC) was organized on November 8, 2019 at the Hilton Hotel in Abuja, Nigeria. It allowed among others (i) the consideration and adoption of the Statutes by the 25 power utilities present, thus consecrating the creation of CIGRE-WA and (ii) the signing of said Statutes by the 23 members present.

Subsequently, the WAPP General Secretariat officially transmitted the application for recognition of the CIGRE WA

NC and its constituent instruments to the CIGRE governing body. On 26th August, 2020, the WAPP General Secretariat was informed by the Secretary General of CIGRE of the decision of its Board of Directors to officially and unanimously recognize the establishment of the CIGRE WA NC.

To date, the CIGRE WA NC has 25 collective members.

- **Training and Certification Program for Operators of the Regional Interconnected Power System (Information and Coordination Centre (ICC), Control Areas and National Dispatch Centres) / Integration and Technical Assistance Program (ITAP):**

Following an inventory of existing training and certification courses within the various WAPP member utilities, transmission system operators as well as the pedagogical and logistical capacities of the Regional Centres of Excellence (RCEs), the International Consultancy Firm RTEi finalized the study and produced its final report which was validated by the WAPP governing bodies and approved by the WAPP Executive Board. At the same time, the RTEi firm and the WAPP General Secretariat organized the selection, evaluation and recruitment of ten (10#) trainers from West African transmission system operators. These trainers then followed the training of trainers for a duration of four (4#) weeks via videoconference.

This project will continue in 2021 with the training of operators from the control centres of the control area countries and national dispatch centres.

- **Skills Review Study on the Electricity Sub-Sector in West Africa / Integration and Technical Assistance Program (ITAP):**

In a bid to conduct a diagnostic study of the skills in the electricity sub-sector of West Africa, the WAPP General Secretariat

recruited, on the basis of an international bidding process, the CPCS (Canada) firm that produced the various deliverables (inception, interim and final reports) which were examined by a Committee of Experts and submitted for adoption by the HRGC and the Executive Board.

From the conclusions and recommendations of this study, ten (10#) priority actions have been identified that need to be implemented to address the human resource gaps in the electricity sub-sector in Africa. The Executive Board instructed the WAPP General Secretariat to take appropriate steps to implement these priority actions.

❖ AfDB Funding

CLSG Project Capacity Building Program:

This program which started in 2014 was intended for power system stakeholders (Power utilities, Ministries in charge of Energy, Implementation Units) of countries of the Côte d'Ivoire - Liberia - Sierra Leone – Guinea (CLSG) Interconnection Project and the WAPP General Secretariat. It was wrapped up in October 2020.

However, the last activity consisted in the training of 119 staff including 105 staff from CI-ENERGIEES (Côte d'Ivoire) and 14 staff from the Guinean National Directorate for Energy (DNE). These trainings were organized in October 2020 at the Bingerville CME in Côte d'Ivoire and focused on the Management of Power Infrastructure Projects and on issues relating to Financial Structuring of PPP Projects as well as the Calculation of Power Grid Losses.

❖ **GIZ Funding / Project: "Promotion of a Climate Friendly Electricity Market (ProMERC)":**

The Administration and Finance Department collaborated with GIZ in the implementation of the following activities:

- **Training on Non-Technical Losses on Power Systems:**

Training sessions on this theme took place in October 2020 by videoconference. They benefited more than fifty (50#) Executives and Technicians from the WAPP General

Secretariat and WAPP member power distribution utilities. These trainings were prepared and delivered by the *Centre des Métiers de l'Electricité (CME)* in Bingerville (Côte d'Ivoire) and VRA Academy (Ghana).

- **2nd Coordination Meeting of RECs**
- **Establishment of the WAPP Network of Regional Centres of Excellence:**

The GIZ ProMerc Program recruited an Individual Consultant who prepared the Strategic Plan for the Regional Centres of Excellence Network. This Strategic Plan was reviewed by a Technical Committee composed of the Heads of the Centres of Excellence prior to its submission to the WAPP for adoption by its HRGC and Executive Board.

- **E-Learning Strategy for Regional Training Centres**

The GIZ ProMerc Program recruited a Consultant in Germany who prepared the E-learning Strategy for the RCEs. This strategy was reviewed by a Technical Committee composed of the Heads of the Centres of Excellence prior to its submission to the WAPP governing bodies, notably for adoption by the HRGC and the Executive Board.

7.3. Other Activities

Under the aegis of the Administration and Finance Department, the WAPP General Secretariat also organized the following activities:

- **Implementation of the WAPP Documentation and Archiving Policy** through the creation of a Steering Committee, Definition of the tasks and schedule of the Committee, Definition of the WAPP Document Management System By-Laws, Functional Specifications (Characteristics of Documents) as well as the Procedures for the creation and archiving of documents.
- **2019 CORONAVIRUS Pandemic management.** The year 2020 was shaken by the COVID-19 pandemic. From the outset of the said pandemic in Africa, the WAPP General Secretariat created a Management Committee to ensure the protection of employees and the implementation of the recommendations of ECOWAS, WHO and the Government of Benin under the strategies

for Response against the spread of the virus. Various preventive measures approved as part of the management of the pandemic were implemented and communication activities were carried out to sensitize staff on compliance with barrier measures including the wearing of face masks, hand washing and compliance with distancing measures.

7.4. Financial Management

The financial statements of the WAPP General Secretariat for Fiscal Year 2019 have been audited by the international audit firm, PricewaterhouseCoopers (PwC), Ghana.

The audit report indicates that the Financial Statements of the WAPP General Secretariat portrayed a true and fair view of the financial position of the Institution and that the financial performance of the WAPP and its cash flows for the period from 1st January to 31st December 2019 were consistent with the International Public Sector Accounting Standards (IPSAS / NICSP).

The audit report was thus validated by the Finance Committee and approved by the WAPP Executive Board.

The WAPP 2019 Financial Statements show a surplus of UA 321,728, mainly due to the increase in the payment of contribution arrears from member utilities.

In accordance with the requirements of the Technical and Financial Partners, the financial statements for FY 2019 have been audited for the following projects:

- a. Development of the Solar Project in Sub-Saharan Africa" financed by the World Bank and audited by the international audit firm, PricewaterhouseCoopers (PwC), Ghana;
- b. WAPP Integration and Technical Assistance Project (ITAP) financed by the World Bank and audited by the International Audit Firm, PricewaterhouseCoopers (PwC), Ghana;
- c. 330 kV WAPP Nigeria-Benin Interconnection Study and Reinforcement Project financed by GIZ and audited by BDO.

The audit reports were transmitted within the prescribed deadline to the concerned donors and were deemed compliant by the latter.

See Appendix 1 for more information on the audit and financial statements of the WAPP.

8. WAPP STATUTORY MEETINGS

In accordance with the statutes governing the Institution, WAPP ensured the organization of its annual statutory meetings. Summarized hereafter is an overview of the meetings held during 2020.

8.1. 15th General Assembly

The WAPP General Secretariat, in collaboration with the Ministry of Energy and Mines of Togo and the host companies that are “Compagnie Energie Electrique du Togo” (CEET) and “Communaute Electrique du Bénin” (CEB), organized the 15th Session of the General Assembly of the WAPP. It was held on December 11 in a hybrid form due to the COVID-19 pandemic. The Members of the Executive Board and the Chairpersons of the Organizational Committees who were able to travel to Lomé as well as some TFPs based in Lomé as well as Togo's electricity companies attended in-person at the Hotel 2 Février while the other members attended the session by videoconference. It was an opportunity for the WAPP General Secretariat to inform the WAPP Member utilities and the Technical and Financial Partners of the progress made as well as make recommendations for the further development of the Institution as well as the West African electricity sub-sector. The General Assembly was also occasion for the admission of two (2#) new members: (i) BUI Power Authority (Ghana), (ii) GREGU Power Ltd (Nigeria). The mandate of the WAPP Secretary General was also renewed.

In addition, the National Committee of CIGRE West Africa held its General Assembly on 11 December 2020 after that of the WAPP.

8.2. Executive Board Meetings

Despite the COVID-19 pandemic, four (4#) Executive Board meetings were organised, three being by videoconference:

- **45th Meeting** which took place on 16th May, 2020 via videoconference. It endorsed the withdrawal of Africa Finance Corporation (AFC) from the development of the 450 MW Maria Gleta (Benin) and Aboadze (Ghana) Regional Thermal Generation Projects.
- **46th Meeting** held on October 21, 2020 also via videoconference. It enabled the adoption of a number of documents including the skills review study report on the electricity sub-sector in West Africa, the

training and certification program for systems operators of the ICC, the Regional Control Areas and National Dispatch Centres and the Regional Transmission Pricing Model. It also enabled the election of the new Chairperson of the Executive Board and the renewal of the term of office of the Vice Chairperson.

- **47th Meeting.** It was held via videoconference on November 21, 2020 and considered the Work Programme and Associated Budget of the WAPP General Secretariat for the year 2021. The budget is balanced in income and expenditure at **UA 22,701,456**. The operating budget, the part borne by members' contributions, amounts to **UA 4,707,392**. The Board also approved the financial statements for the year 2019.
- **48th Meeting** held on December 9, 2020 in a hybrid form in Lomé as a prelude to the General Assembly. Among other things, it allowed the renewal of the mandate of the WAPP Secretary General and the adoption of the agenda of the General Assembly.

8.3. Activities of the Organisational Committees

8.3.1. Strategic Planning and Environmental Committee (SPEC)

The SPEC held several virtual meetings on the following topics:

- **WAPP Grid Emission Factor (GEF):** (i) August 17, 2020 to adopt the TORs for the recruitment of the study consultant; (ii) September 17-18, 2020 for the kick-off meeting and (iii) October 27-28, 2020 to review the Feasibility Study Report; the Feasibility Study was adopted.
- **WAPP Grid Code:** (i) June 30, 2020 for the launch of the study and (ii) November 3-4, 2020 for the validation of the data collected.
- **Solar radiation measurement campaign** on 5-6 November for the launch of the study.

The Engineering and Operating Committee (EOC) participated in these 3 series of meetings.

8.3.2. Engineering and Operating Committee (EOC)

In addition to its participation with the SPEC in the above-mentioned meetings, the EOC held virtual meetings to discuss the following issues:

- **Draft Final Report on the Regional Transmission Pricing Model (RTPM):** the meeting was held on May 28, 2020; July 17, 2020 meeting on the following issues:
- **Final Report on the Regional Transmission Pricing Model;**
- **Proposed Amendments to the Market Procedures (Article 8) on Admission of Participants to the Regional Electricity Market;**
- **Proposed Registration Fee for Participants in the Regional Electricity Market;**
- **Proposed list of Transmission System Operators (TSOs) and Power Purchase Agreement (PPA) holders existing prior to the launch of Phase I of the Market.**

Apart from the document relating to the proposed registration fees for participants in the Regional Market, the other documents were adopted by the EOC. As per the latter, the ICC was requested to substantiate its calculation assumptions.

8.3.3. Finance Committee (FC)

The Finance Committee met twice during the year 2020. The first meeting was held on March 6-7, 2020 in Bamako, Mali, to review the status of implementation of the WAPP External Audit recommendations for fiscal year 2018 and to elect the Vice Chairperson of the Committee. As a

prelude to this meeting, the Finance Committee participated in the 2nd Forum of Finance Directors of WAPP Member Utilities held on March 4-5, 2020 also in Bamako.

The second meeting of the Committee was held on November 9-10, 2020 via videoconference to review and adopt the WAPP Financial Results for FY 2019 and the 2021 WAPP Work Programme and Associated Budget.

Given that PwC had issued an unqualified opinion on the WAPP FY 2019 Financial Statements, the Finance Committee approved them.

Regarding the draft Work Programme and Associated Budget for the year 2021, the Finance Committee adopted a balanced budget in income and expenditure of UA 22,701,456.

8.3.4. Human Resources and Governance Committee (HRGC)

The HRGC met by videoconference on August 18 and 19, 2020 to review and adopt the:

- Final Skills Review Study Report on the Electricity Sub-Sector in West Africa;
- updated WAPP Procurement Code;
- Training and Certification Program for System Operators of the WAPP Information and Coordination Centre and Control Areas.

The HRGC adopted all the documents submitted to it.

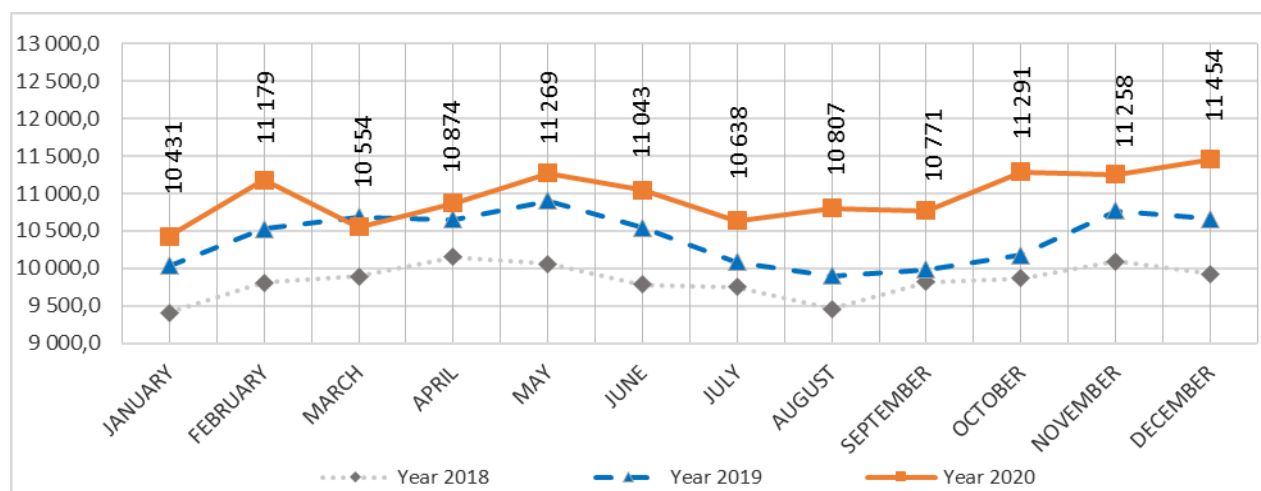
During its meeting held on December 7, 2020 as a prelude to the General Assembly, the HRGC adopted the first update of the WAPP Establishment Agreement.

9. OPERATING STATISTICS OF WAPP INTERCONNECTED POWER SYSTEM

- Characteristic Data of the WAPP Interconnected System

	Year 2018	Year 2019	Year 2020	Ratio 2019 vs 2020
Install Capacity (GW)	22,5	23,0	23,3	1,4%
Available Capacity (GW)	14,9	13,7	13,6	-0,5%
Peak Load (GW)	10,2	10,9	11,5	4,9%
Energy Generated (TWh)	67,5	70,0	75,3	7,5%
Energy Exchanged (TWh)	5,8	6,0	6,2	1,8%
Ratio Exchange vs Generated	8,6%	8,6%	8,2%	

- Monthly Peak Load (MW)



- Exchanged Energy by Country

	Import 2018	Export 2018	Import 2019	Export 2019	Import 2020	Export 2020
Nigeria	0,0	-2 397,0	0,0	-3 002,6	0,0	-2 327,2
Côte d'Ivoire	16,4	-1 205,5	77,6	-1 138,6	76,6	-1 234,8
Ghana	328,3	-282,2	143,8	-636,4	127,0	-1 235,4
Senegal	508,4	-85,5	338,2	-2,1	468,4	0,0
Burkina Faso	583,3	-0,1	783,4	-0,3	1 024,7	-0,2
Niger	801,3	0,0	984,2	0,0	1 048,8	0,0
Mali	998,5	0,0	1 186,0	0,0	1 302,2	0,0
Benin/Togo (CEB)	1 855,3	0,0	2 307,4	0,0	1 995,9	0,0
Sogem*	0,0	-1 103,5	0,0	-1 128,9	0,0	-1 057,2
EEEOA	5 091,4	-5 073,7	5 820,6	-5 908,9	6 043,5	-5 854,7

* Sogem Is not a country but a member utility (that belongs to the 3 countries of OMVS)

10. CONCLUSION AND OUTLOOK FOR 2021

Over the past 12 months, the WAPP General Secretariat has been selflessly and enthusiastically committed to carrying out the activities assigned to it, which has made it possible to achieve notable progress, despite a difficult context marked by the COVID 19 pandemic. Indeed, in addition to the results achieved for current project development activities, we can cite the official recognition by the CIGRE Central Bureau in August 2020 of the CIGRE West Africa National Committee. Mention should also be made of the granting of US\$ 300 million by the World Bank to 6 West African countries to support development policies within the framework of the implementation of the Directive on Securitization of Cross-border Power Trade.

This performance is attributable to all stakeholders involved in the development of WAPP and the West African power sector, notably the Technical and Financial Partners (TFPs), the ECOWAS Commission, the WAPP member utilities. Special thanks must be made to the WAPP member utilities which have, despite their financial situation made more difficult by the COVID 19 pandemic, continued to support the WAPP General Secretariat by ensuring regular payment of their contributions. Credit should also be given to all the staff members of the WAPP General Secretariat who despite the social distancing measures have spared no efforts in carrying out the daily tasks.

For the year 2021, in the hope of a decline in the pandemic, the General Secretariat will continue to deploy, with the support of the abovementioned stakeholders, every necessary effort for the reduction of the delays experienced in 2020 on the construction sites of the various WAPP priority projects for a quick start of the competitive phase of the Regional Electricity Market.

Thus for 2021, without being exhaustive, the WAPP will ensure the achievement of the following main specific objectives:

- ⇒ Continue mobilization of financing for priority projects' pre-investment and implementation studies;
- ⇒ Prepare pre-investment studies for priority projects;
- ⇒ Establish a framework for participation in the climate markets after the update of the WAPP Grid Emission Factor (GEF) study;
- ⇒ Continue the implementation of the ICC project in Calavi, Benin;
- ⇒ Prepare the relocation of the WAPP General Secretariat to the ICC premises in Calavi;
- ⇒ Coordinate and monitor the implementation of the WAPP interconnected power system synchronization project;
- ⇒ Implement the WAPP System Operator Certification Program;
- ⇒ Continue the implementation of the Regional Electricity Market Roadmap;
- ⇒ Develop a Regional Grid Code;
- ⇒ Organize a Distribution Loss Reduction Forum;
- ⇒ Strengthen the capacity of WAPP member utilities and WAPP General Secretariat staff;
- ⇒ Coordinate the interventions of the Technical and Financial Partners;
- ⇒ Strengthen cooperation with the ECOWAS Commission;
- ⇒ Renovate the current premises of the WAPP General Secretariat for return to the CEB;
- ⇒ Make the CIGRE West Africa National Committee functional;
- ⇒ Improve technical cooperation and strengthen exchange programs with stakeholders, regional and international institutions.

APPENDIX 1

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019



Contents	Page
General information	1
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Independent auditor's report on financial statements	3 - 5
Financial statements:	
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Statement of financial position	7
Statement of changes in net assets	8
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WEST AFRICAN POWER POOL
For the year ended 31 December 2019

GENERAL INFORMATION

**Executive Board
Members**

Sule Ahmed ABDULAZIZ	Chairman, appointed in June 2020
Usman Gur MOHAMMED	Chairman, retired in June 2020
Amidou TRAORE	Vice-Chairman
Siengui A. KI	Secretary General
Karimou CHABI SIKI	Member
Abdenbi ATTOU	Member, retired in February 2020
Jonathan AMOAKO-BAAH	Member
Laurent TOSSOU	Member, retired in November 2019
Papa Mademba BITEYE	Member
Tamsir NDIAYE	Member
Baba Ahmed COULIBALY	Member
Emmanuel ANTWI-DARKWA	Member
Joseph O. MAKOJU	Honorary Member
Mawussi KAKATSI	Member, retired in November 2019
Victor ONOJA	Member, retired in November 2019
Joe Lahai SORMANA	Member, retired in November 2019
Lamu AUDU	Member, appointed in November 2019
Osmani Aliduba AYUBA	Member, appointed in November 2019
Boubacar KEITA	Member, appointed in November 2019
Jacques PARADIS	Member, appointed in November 2019
Bangaly MATY	Member, appointed in February 2020

WAPP Secretariat

West African Power Pool
06 BP 2907 Cotonou
République du Benin

Auditor

PricewaterhouseCoopers
Chartered Accountants
PwC Tower
A4 Rangoon Lane,
Cantonment City
Accra-Ghana

Bankers

NSIA Bank, Benin
Ecobank, Benin

WEST AFRICAN POWER POOL
Annual Report
For the year ended 31 December 2019

REPORT OF THE EXECUTIVE BOARD

The Executive Board has the pleasure in submitting its report and the audited financial statements of the West African Power Pool (WAPP) for the year ended 31 December 2019.

Statement of Executive Board's responsibilities

The Executive Board is responsible for the preparation of financial statements for each financial year which gives a true and fair view of the state of affairs of the Organisation and of the surplus or deficit and cash flows for that year. In preparing these financial statements, the Executive Board has selected suitable accounting policies and then applied them consistently, made judgements and estimates that are reasonable and prudent and followed International Public Sector Accounting Standards (IPSAS).

The Executive Board is responsible for ensuring that the Organisation keeps proper accounting records that disclose with reasonable accuracy at any time the financial position of the Organisation. The Executive Board is also responsible for safeguarding the assets of the Organisation and taking reasonable steps for the prevention and detection of fraud and other irregularities.

Going Concern

The Executive Board has made an assessment of the Organisation's ability to continue as a going concern and have no reason to believe the Organisation will not be a going concern.

Principal activities

The principal activities of the Organisation are stated on page 10 of this report.

Financial results

The Statement of Financial Performance on page 6 shows a surplus of UA 321,728 (2018: UA 8,851 surplus) which has been transferred to accumulated fund.

Corporate social initiatives

There was no expenditure towards corporate social initiatives during the year.

Executive Board's professional development and training

The Board is kept abreast of applicable legislation and regulation, changes to rules, standards and codes, as well as relevant sector developments that could affect the Institution and its operations.

WEST AFRICAN POWER POOL
Annual Report
For the year ended 31 December 2019

REPORT OF EXECUTIVE BOARD (Cont'd)

Auditor

The auditor, PricewaterhouseCoopers has expressed willingness to continue in office as auditor of the Organisation.

BY ORDER OF THE EXECUTIVE BOARD:

Name: *Siengui A. KI*

Name: *Foga Sule Ahmed Abdulqiz*

Position: *SECRETARY GENERAL*

Position: *CHAIRMAN*

Signature:

30/11/.....2020



Signature:

30/11/.....2020



**INDEPENDENT AUDITOR'S REPORT
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL**

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Our opinion

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the West African Power Pool (WAPP) (the "Organisation") as at 31 December 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Public Sector Accounting Standards (IPSAS).

What we have audited

We have audited the financial statements of the West African Power Pool for the year ended 31 December 2019.

The financial statements comprise:

- the statement of financial position as at 31 December 2019;
- the statement of financial performance for the year then ended;
- the statement of changes in net assets for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Organisation in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) (the Code) issued by the International Ethics Standards Board for Accountants.. We have fulfilled our other ethical responsibilities in accordance with the Code.

Other information

The Executive Board is responsible for the other information. The other information comprises the Report of the Executive Board and the corporate information but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

**INDEPENDENT AUDITOR'S REPORT
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL**

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Other information

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Executive Board for the financial statements

The Executive Board is responsible for the preparation of financial statements that give a true and fair view in accordance with International Public Sector Accounting Standards (IPSAS) and for such internal control as the Executive Board determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Executive Board is responsible for assessing the Organisation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Executive Board intends to cease operations, or have no realistic alternative but to do so.

The Executive Board is responsible for overseeing the financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;

**INDEPENDENT AUDITOR'S REPORT
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL**

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)


Auditor's responsibilities for the audit of the financial statements (continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Executive Board;
- Conclude on the appropriateness of the Executive Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organisation to cease to continue as a going concern; and
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Executive Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Executive Board with a statement that we have complied with relevant ethical requirements regarding independence, and have communicated with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Hayfron Aboagye (ICAG/P/1502).


PricewaterhouseCoopers (ICAG/F/2020/028)
Chartered Accountants
Accra, Ghana
9 December 2020



WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

STATEMENT OF FINANCIAL PERFORMANCE

(All amounts are expressed in UA unless otherwise stated)

		<u>Year ended 31 December</u>	
	Note	2019	2018
Revenue			
Revenue from exchange transactions	3	5,414,970	4,740,713
Revenue from non-exchange transactions	4	<u>9,186</u>	<u>163,055</u>
Total Revenue		<u>5,424,156</u>	<u>4,903,768</u>
Expenses			
Personnel expenses	5	2,488,929	2,342,584
General expenses	6	614,244	423,733
Administrative expenses	7	817,608	803,709
Executive Board and Committee Meetings	8	<u>465,879</u>	<u>619,169</u>
Expenses before depreciation and impairment charge		<u>4,386,660</u>	<u>4,189,195</u>
Add: Depreciation charge for the period	9a	65,718	53,393
Add: Impairment charge	10	<u>400,236</u>	<u>241,937</u>
Total expenses		<u>4,852,614</u>	<u>4,484,525</u>
Net finance expense	11	<u>249,814</u>	<u>410,392</u>
Surplus/(deficit) for the year transferred to accumulated fund		<u>321,728</u>	<u>8,851</u>

The notes on pages 11-28 are an integral part of these financial statements.

WEST AFRICAN POWER POOL*Financial Statements**For the year ended 31 December 2019***STATEMENT OF FINANCIAL POSITION**

(All amounts are expressed in UA unless otherwise stated)

	Note	At 31 December	
		2019	2018
Non current assets			
Property, plant and equipment	9a	390,835	343,113
Intangible assets	9b	-	16,916
		<u>390,835</u>	<u>360,029</u>
Current assets			
Cash and bank balances	12	723,886	926,145
Receivables from exchange transactions	13	596,005	164,909
Recoverable from non-exchange transactions	14	650,847	491,806
Prepayments	15	29,040	31,721
		<u>1,999,778</u>	<u>1,614,581</u>
Total assets		<u>2,390,613</u>	<u>1,974,610</u>
Current Liabilities			
Accounts payable	16	443,507	298,373
Non current liabilities			
Separation provision	17	31,409	82,268
Total liabilities		<u>474,916</u>	<u>380,641</u>
Net assets		<u>1,915,697</u>	<u>1,593,969</u>
Represented by:			
Accumulated Fund		<u>1,915,697</u>	<u>1,593,969</u>

The financial statements on pages 7 to 28 were approved by the Executive Board on 30/11/2020 and signed on their behalf by:

Name: Siengui A. KI

Name: Ange Sule Ahmed Abdulaziz

Position: SECRETARY GENERAL

Position: CHAIRMAN

Signature:
30/11/2020



Signature:
30/11/2020



WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

STATEMENT OF CHANGES IN NET ASSETS

(All amounts are expressed in UA unless otherwise stated)

Year ended December 31, 2019

Accumulated fund

Balance at January 1, 2019	1,593,969
Surplus for the year	<u>321,728</u>
Balance at December 31, 2019	<u>1,915,697</u>

Year ended December 31, 2018

Balance at January 1, 2018	1,585,118
Surplus for the year	<u>8,851</u>
Balance at December 31, 2018	<u>1,593,969</u>

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

STATEMENT OF CASH FLOWS

(All amounts are expressed in UA unless otherwise stated)

		<u>Year ended 31 December</u>	
	Note	2019	2018
Cash flows from operating activities			
Cash used in/(generated from) operations	18	(88,819)	<u>(170,365)</u>
Cash flows from investing activities			
Purchase of property, plant and equipment	9a	(113,440)	<u>-</u>
Net cash used in investing activities		(113,440)	<u>-</u>
Decrease in cash and cash equivalents		(202,259)	<u>(170,365)</u>
Movement in cash and cash equivalents			
Balance at beginning of year		926,145	1,096,510
Decrease in the year		(202,259)	<u>(170,365)</u>
Balance at end of year	12	<u>723,886</u>	<u>926,145</u>

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES

1. General and legal information

The West African Power Pool is a specialised institution of ECOWAS headquartered in the Republic of Benin.

The West African Power Pool (WAPP) was created by Decision A/DEC.5/12/99 during the 22nd Summit of the Authority of ECOWAS Heads of State and Government in order to address the issue of power supply deficiency within West Africa. The 29th Summit of the Authority of ECOWAS Heads of State and Government held in Niamey January 2006, adopted the Articles of Agreement establishing the new WAPP Organisation by Decision A/DEC.18/01/06. The new Organisation began actual operations in July 2006.

WAPP's mandate is to ensure the establishment of a Regional Electricity Market in West Africa in order to provide the citizens of the Community with increased access to stable and reliable electricity supply at competitive costs.

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The financial statements of WAPP have been in accordance with International Public Sector Accounting Standards (IPSAS). The measurement base applied is historical cost adjusted for revaluations of assets.

In the absence of an International Public Sector Accounting Standard that specifically applies to a transaction, other event or condition, management uses its judgement in developing and applying an accounting policy that results in information that is relevant to the decision-making needs of users that the financial statements:

- (i) represent faithfully the financial position, financial performance and cash flows of the entity;
- (ii) reflect the economic substance of transactions, other events and conditions and not merely the legal form;
- (iii) are neutral, i.e., free from bias;
- (iv) are prudent; and
- (v) are complete in all material respects.

The policies have been consistently applied to all years presented.

The preparation of financial statements in conformity with IPSAS requires the use of certain critical accounting estimates. It also requires Executive Board to exercise judgement in the process of applying the institution's accounting policies. Changes in assumptions may have a significant impact on the financial statements in the period the assumptions changed. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed appropriately.

NOTES (CONTINUED)

2. Summary of significant accounting policies (continued)

2.2 Adoption of newly published standards and interpretations and revised reporting standards and interpretations

a. New standards and amendments not applicable to the Institution

IPSAS 40, Public Sector Combinations

IPSAS 40, 'Public Sector Combinations' was issued by the International Public Sector Accounting Standards Board (IPSASB) in January 2017. The objective of the standard is to improve the relevance, faithful representation and comparability of the information that a reporting entity provides in its financial statements about a public sector combination and its effects. This standard is effective for financial statements beginning on or after 1 January 2019 and was not applicable the Institution in preparing its IPSAS financial statements for the year ended 31 December 2019.

b. Standards issued but not yet effective

IPSAS 36 (Amended), Long Term interest in Associates and Joint Ventures

Long-term Interests in Associates and Joint Ventures (Amendments to IPSAS 36) was issued in January 2019 by International Public Sector Accounting Standards Board (IPSASB). The objective is to make amendments to IPSAS to converge with the narrow-scope amendments to IAS 28, Investments in Associates and Joint Ventures, made by the IASB in Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28) (issued October 2017). An entity shall apply these amendments retrospectively in accordance with IPSAS 3, Accounting Policies, Changes in Accounting Estimates and Errors, for annual financial statements covering periods beginning on or after 1 January 2022 with an option for earlier adoption and have not been applied by the Institution in preparing its IPSAS financial statements for the year ended 31 December 2019.

IPSAS 41, Financial Instruments

IPSAS 41 'Financial Instruments' was issued by the International Public Sector Accounting Standards Board (IPSASB) in August 2018. The standard addresses the classification, measurement and derecognition of financial assets and financial liabilities, introduces new rules for hedge accounting and a new impairment model for financial assets. This standard is effective for financial statements beginning on or after 01 January 2022 and have not been applied by the Institution in preparing its IPSAS financial statements for the year ended 31 December 2019.

IPSAS 42, Social Benefits

IPSAS 42 'Social Benefits' was issued by the International Public Sector Accounting Standards Board (IPSASB) in January 2019. The standard provides guidance on accounting for social benefits expenditure. It defines social benefits as cash transfers paid to specific individuals and/or households to mitigate the effect of social risk. This standard is effective for financial statements beginning on or after 01 January 2022 and have not been applied by the Institution in preparing its IPSAS financial statements for the year ended 31 December 2019.

NOTES (CONTINUED)

2. Summary of significant accounting policies (continued)

2.3 Foreign currencies translation

(a) Functional and presentation currency

Items included in the financial statements are measured using the currency of the primary economic environment in which the Organisation operates (the functional currency which is FCFA). The financial statements are presented in Unit of Account (UA) which is the presentation currency of WAPP.

(b) Transactions and balances

Transactions during the period are translated into the presentation currency, Unit of Account (UA) using rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated into UA at the rates of exchange ruling at that date. Gains or losses realised or incurred are recognised in the statement of financial performance.

2.4 Financial instruments

Financial assets and liabilities are recognized by WAPP when the Organisation becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired, have been waived or have been transferred and the Organisation has transferred substantially all risks and rewards of ownership. Financial liabilities are derecognized when the obligation specified in the contract is discharged, waived, cancelled or expired. Financial assets and financial liabilities are initially recognised at fair value.

(i) Classification

Financial assets and liabilities have been recognised in the statement of financial position and measured in accordance with their classification. The classification of financial instruments at initial recognition depends on the purpose for which the financial instruments were acquired and their characteristics. At initial recognition, the Organisation classifies its financial instruments in the following categories:

Financial assets

Financial assets held at amortised costs: These are assets measured at fair value at initial recognition less principal repayments plus accrued interest, net of any impairment loss. WAPP's financial assets comprise cash at bank, receivables from exchange transactions, recoverable from non-exchange transactions and prepayments and are included in current assets due to their short-term nature. These assets are initially recognized at fair value (the amount expected to be received) plus any transaction cost, and subsequently measured at amortized cost using the effective interest method less any provision for impairment.

NOTES (CONTINUED)

2. Summary of significant accounting policies (continued)

2.4 Financial instruments (continued)

Financial liabilities

WAPP's financial liabilities represent mainly account payables and separation provision. These are initially recognised at fair value (the amount at which the obligation is expected to be settled) including any direct transaction cost and subsequently measured at amortised cost using the effective interest method. WAPP's financial liabilities are classified as current liabilities if payment is within twelve months. Otherwise, they are presented as non-current liabilities.

(ii) Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

(iii) Fair value

As at 31 December 2019, the carrying amounts of financial assets and liabilities held by WAPP approximate their fair values.

2.5 Property, Plant and Equipment

Property, plant and equipment (PPE) are stated at acquisition cost less accumulated depreciation and accumulated impairment losses.

Depreciation is calculated on the straight-line basis at rates estimated to write off the cost of each item over the estimated term of its useful life. A full year's depreciation is charged in the year of acquisition. No depreciation is charged in the year of disposal. The annual rates used for this purpose are as follows:

Computers	25%
Equipment	14.20%
Furniture and Fixtures:	
Residence	33.33%
Office	25%
Vehicles	20%
Building	2.86%

Impairment

The carrying values of PPE are reviewed for impairment if events or changes in circumstances indicate that they may not be recoverable. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Any provision for impairment is charged against the Statement of Financial Performance in the year in which the impairment is identified.

NOTES (CONTINUED)

Impairment (continued)

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are included in profit or loss.

2.6 Intangible assets

Intangible assets mainly comprise of patented and non-patented technology, know-how and software.

Intangible assets acquired separately are measured on initial recognition at cost.

Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

The carrying values of intangible assets are reviewed for indications of impairment annually, or the events or changes in circumstances indicate the carrying value may not be recoverable. If any such indication exists and where the carrying values exceed the estimated recoverable amounts, the assets are written down to their recovery amount.

An intangible asset is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the intangible asset (calculated as the difference between the net disposal proceeds and the carrying amount of the intangible asset) is included in surplus or deficit when the intangible asset is derecognised.

Intangible assets with finite lives are amortised over the useful economic life. Useful lives and methods of amortizations are reviewed, adjusted if appropriate, at each financial year-end. The annual rate used for this purpose is as follows:

Software	25%
----------	-----

2.7 Accounts receivables from exchange transactions

Receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts or losses. Allowance for loss is established based on a review of outstanding amounts at the reporting date in accordance with the below policy developed by the Finance Committee and approved by the Executive Board.

Provision for doubtful debts

Evaluation of the financial situation of all members before setting the applicable percentages below:

- 100% provision for the category of members in financial difficulty with claims (receivables) of two or more years.
- 40% provision for the category of members who have one-year old receivables.
- 20% provision for regular members in the payment of their arrears.

NOTES (CONTINUED)

2. Summary of significant accounting policies (continued)

2.8 Recoverable from non-exchange transactions

Recoverable from non-exchange transactions are recognized at fair value (the amount expected to be received) less any provision for impairment.

2.9 Cash and cash equivalents

For the purposes of the cash flow statement, cash and cash equivalents include cash in hand and deposits held at call with banks.

2.10 Employee benefits

WAPP's contribution to staff (except the Secretary General) retirement benefit schemes are recognised in the statement of financial performance as the obligation falls due. The scheme consists of a monthly contribution of 17% of employees' basic salary as pension fund by the employer.

WAPP sets aside 25% of the Secretary General's annual salary to cater for his separation payment at the end of his service period. This is recognised in the statements of financial performance annually.

2.11 Provision

Provision for liabilities and charges are recognised when WAPP has a present legal or constructive obligation as a result of a past event, and it is probable that WAPP will be required to settle the obligation. Provisions are measured at managements' best estimate of the expenditure required to settle the obligation at the date of the Statement of Financial Position.

2.12 Leases

Assets leased to or from third parties under agreements, which do not transfer substantially all the risks and rewards of ownership, are classified as operating leases. The Organisation is only involved in operating lease arrangements where it leases its assets to third parties or leases assets from third parties. Rental expense from leased assets of third parties are recognised in the statement of financial performance on a straight-line basis over the period of the lease.

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

2. Summary of significant accounting policies (continued)

2.13 Revenue recognition

Revenue from exchange transactions

Contributions from member utilities

Assessed contributions from member utilities are recognised when they are approved by the Executive Board. Unpaid contributions during the period are recognised as receivables after netting off any provisions.

Revenue from non - exchange transactions

Grants from donors

Donor grants are recognized as revenue to the extent they are used to meet expenditures in the reporting period. Unused grant income is recorded as liability (deferred income). Cash donations are recognised as income in the statement of financial performance when received.

2.14 Expenses

Expenses are recognised when the transaction or event causing the expense occurs. The Organisation's expenses consist of personnel expenses, general expenses, administrative expense and executive board and committee meetings expenses.

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

3. Revenue from exchange transactions

Contributions from members

This represents assessed contributions from member utilities approved by the Executive Board. An amount of UA 5,414,970 was recognized at the year ended 31 December 2019 (2018:UA 4,740,713).

4. Revenue from non- exchange transactions

Grants from donors

This represents financial assistance received from donors in cash to support WAPP Secretariat during the year. An amount of UA 9,186 was recognized at the year ended 31 December 2019 (2018:UA 163,055).

5. Personnel expenses

	2019	2018
Staff salaries	1,154,493	1,053,349
Salary for contractors and temporary staff	272,332	290,169
Initial travel and accommodation	5,415	42,386
Educational expenses	273,265	220,517
Other expenses	468,416	483,391
Pension fund contributions and contractors' gratuity	192,062	193,342
Separation provision for SG	20,135	20,135
Medical expenses	28,314	25,463
Training Costs	74,497	13,832
	<u>2,488,929</u>	<u>2,342,584</u>

6. General expenses

	2019	2018
Administration Expenses	99,001	95,343
Repairs and Maintenance	61,997	73,222
Utility Expenses	16,776	17,617
Rent	32,473	35,028
Transportation	85,341	87,720
Audit Fees and expenses	24,130	25,049
Legal fees	237,044	12,631
Consultancy services	2,109	22,764
Software licenses	55,373	27,009
Loss on Disposal of Non-current Asset	-	27,350
	<u>614,244</u>	<u>423,733</u>

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

7. Administrative expenses

Public Relations, Publicity and Adverts	44,778	71,996
Postages and Communications	56,610	74,830
Official Missions	593,082	491,308
Conference materials	4,233	943
Linguistic Services	35,159	40,391
Entertainment/ reception/ retreats	77,867	103,364
Recruitment	1,597	630
Technical Coop with International Organizations	4,282	20,247
	<u>817,608</u>	<u>803,709</u>

8. Executive Board and Committee expenses

Executive Board Meetings	245,206	163,453
Engineering and Operating Committee Meetings	73,658	117,925
Strategic Planning and Environmental Committee Meetings	42,939	183,342
Finance Committee Meetings	32,507	118,483
Human Resources and Governance Committee Meetings	71,287	22,843
Distribution and Commercial Committee	282	13,123
	<u>465,879</u>	<u>619,169</u>

9. a. Property, plant and equipment

Year ended 31 December 2019	Computers	Equipment and Furniture	Motor Vehicles	Buildings	Total
Cost					
At 1 January	216,772	108,462	528,062	335,161	1,188,457
Additions	-	-	113,440	-	113,440
Disposals	-	-	-	-	-
At 31 December	<u>216,772</u>	<u>108,462</u>	<u>641,502</u>	<u>335,161</u>	<u>1,301,897</u>
At 1 January	216,772	88,859	463,106	76,607	845,344
Charge for the year	-	6,535	49,607	9,576	65,718
Disposals	-	-	-	-	-
At 31 December	<u>216,772</u>	<u>95,394</u>	<u>512,713</u>	<u>86,183</u>	<u>911,062</u>
Net book amount at 31 December 2019	<u>-</u>	<u>13,068</u>	<u>128,789</u>	<u>248,978</u>	<u>390,835</u>

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For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

Year ended 31 December 2018	Computers	Equipment and Furniture	Motor Vehicles	Buildings	Total
Cost					
At 1 January	216,772	108,462	573,646	335,161	1,234,041
Disposals	—	—	(45,584)	—	(45,584)
At 31 December	<u>216,772</u>	<u>108,462</u>	<u>528,062</u>	<u>335,161</u>	<u>1,188,457</u>
Accumulated depreciation					
At 1 January	206,409	82,323	454,420	67,032	810,184
Charge for the year	10,363	6,536	26,919	9,575	53,393
Disposals	—	—	(18,233)	—	(18,233)
At 31 December	<u>216,772</u>	<u>88,859</u>	<u>463,106</u>	<u>76,607</u>	<u>845,344</u>
Net book amount at 31 December 2018	—	<u>19,603</u>	<u>64,956</u>	<u>258,554</u>	<u>343,113</u>

b. Intangible Assets

Intangible assets were fully amortised as at 01 January 2019. Capital work in progress with NBV of UA 16,914 in respect of the partial installation of an electronic filing system and Sun systems upgrade for WAPP was disposed off during the year under review.

10. Impairment charge

This represents provision for member contribution receivables as at each year end. An amount of UA (400,236) was recognized at the year ended 31 December 2019 (2018:UA (241,937)).

11. Net finance expense

	2019	2018
Bank Interest*	(27,780)	(18,606)
Bank charges	5,791	2,312
Exchange rate differences (losses)	<u>271,803</u>	<u>426,686</u>
	<u>249,814</u>	<u>410,392</u>

* Bank interest: This relates to interest earned on the accounts created for the fixed deposits of the Secretary General's separation payment at the end of his service period as well as fixed deposit for payment of staff salaries.

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Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

12. Cash and bank balances

Cash at bank	720,895	920,233
Cash on hand	<u>2,991</u>	<u>5,912</u>
	<u>723,886</u>	<u>926,145</u>

13. Receivables from exchange transactions

	2019	2018
Members' contribution receivable	2,563,955	2,688,665
Provision for doubtful debts	<u>(1,975,839)</u>	<u>(2,561,029)</u>
	588,116	127,636
Staff advances	<u>7,889</u>	<u>37,273</u>
	<u>596,005</u>	<u>164,909</u>

Following the revocation of the Nigeria Bulk Electricity Trading, GTG Energy Limited and GTS Engineering Services from WAPP membership by the 14th General Assembly, their outstanding receivables balances totalling UA 426,886 were written off during the year.

14. Recoverable from non - exchange transactions

These are expenses incurred on various donor funded projects which are yet to be refunded to WAPP.

Ecowas Guinea Bissau Project	-	5,256
Ecowas Guinea Conakry Project	-	11,013
World Bank Projects	394,764	31,704
North Core	-	11,659
Other Projects	<u>256,083</u>	<u>432,174</u>
	<u>650,847</u>	<u>491,806</u>

15. Prepayment

Insurance	4,719	3,210
Rent	12,251	12,480
Internet	<u>12,070</u>	<u>16,031</u>
	<u>29,040</u>	<u>31,721</u>

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Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

16. Accounts payables

Auditors Remuneration	16,680	16,455
Others*	<u>426,826</u>	<u>281,918</u>
	<u>443,507</u>	<u>298,373</u>

* Others: this includes payables to Benin telecom, staff refunds, Omed voyage, Afrivol among others for various services rendered to WAPP.

17. Separation provision

	Note	2019	2018
Balance as at January 1		82,268	55,697
Charge and interest for the year		<u>22,200</u>	<u>26,571</u>
		<u>104,468</u>	<u>82,268</u>
Payment to Secretary General		<u>(73,059)</u>	-
Balance as at 31 December		<u>31,409</u>	<u>82,268</u>

18. Cash generated from operations

Net surplus for the year		321,728	8,851
Adjustments for non-cash items:			
Depreciation of tangible assets and amortisation of intangible assets	9a and 9b	65,719	53,393
Amortisation of capital grant	9c	-	-
Loss on disposal of fixed assets		-	27,350
Capital Work-in-progress written off		16,914	-
Changes in working capital:			
(increase) /Decrease in Receivables from exchange transactions		(431,097)	113,486
(increase) in Recoverable from non-exchange transactions		(159,041)	(233,464)
Decrease in Prepayments		2,681	15,236
Decrease in accounts payables		145,136	(181,788)
Decrease/increase in separation provision		<u>(50,859)</u>	<u>26,571</u>
Cash used in/(generated from) operations		<u>(88,819)</u>	<u>(170,365)</u>

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Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

19. Related party transactions

a. Directors remuneration

Those in charge of governance for West African Power Pool (WAPP) is the Executive Board as indicated on page 1. Members of the board are entitled to payment of honoraria and other travel related expenses when participating in WAPP meetings or any other WAPP business.

b. Remuneration of key management personnel

Except the Secretary General who is remunerated by the organisation, no other board member received any remuneration or loans other than the above entitlements during the year under review. For the year under review, the Secretary General's total emolument was **UA 91,200** (2018: UA 91,192).

20. Financial risk management

The Organisation's activities expose it to a variety of financial risks: credit risk, liquidity risk and market risk.

The Organisation's overall risk management programme focuses on minimising the potential adverse effects on its financial performance. Financial risk management is overseen by the Finance Committee. The Organisation does not hedge any of its risk exposures.

20.1 Credit risk

Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions as well as credit exposures to customers, including outstanding receivables and committed transactions. Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Organisation.

The Organisation's maximum exposure to credit risk at the end of the reporting date is as follows:

	31 December 2019	31 December 2018
	UA	UA
Cash and bank balances	723,886	926,145
Receivables from exchange transactions	596,005	164,909
Recoverable from non-exchange transactions	650,847	491,806
Prepayments	<u>29,040</u>	<u>31,721</u>
	<u>1,999,778</u>	<u>1,614,581</u>

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

WAPP manages its exposure to credit risk by:

- Holding bank balances and short-term deposits (demand deposits) with reputable banking institutions registered in The Republic of Benin; and
- Maintaining credit control procedures over accounts receivable.

The Organisation has no credit risk exposures relating to off balance sheet items.

WAPP does not require any collateral or security to support financial instruments and other receivables it holds due to the low risk associated with the realisation of these instruments.

20.2 Liquidity risk

Liquidity risk is the risk that the Organisation will not be able to meet its financial obligations as they fall due. The Organisation manages liquidity risk by maintaining adequate cash reserves.

20.3 Market risk

The Organisation takes on exposure to market risks, which is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risks arise from open positions in interest rate, currency and equity products, all of which are exposed to general and specific market movements and changes in the level of volatility of market rates or prices such as interest rates, foreign exchange rates and equity prices. The objective of market risk measurement is to manage and control market risk exposures within acceptable limits while optimising the return on risk. The management is responsible for the development of detailed risk management policies and for day-to-day implementation of those policies.

20.3.1 Foreign exchange risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The positions of currencies held are monitored on a regular basis. The objective of monitoring the position in foreign currency is to manage foreign exchange risk due to movements in rates.

WAPP operates separate bank accounts in CFA and US\$ currencies. WAPP incurs currency risk as a result of the conversion of foreign currency balances held in these bank accounts to UA at period end. The currency risk associated with this balance is considered minimal and therefore WAPP does not hedge its foreign currency exposure. Foreign currency transactions are translated to UA at exchange rates at the dates of the transactions.

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

20.3.2 Interest rate risk

Interest rate risk is the exposure of current and future earnings to adverse changes in the level of interest rates. The Organisation does not hold any financial instrument subject to interest rate risk.

20.3.3 Price risk

The Organisation does not hold any financial instrument subject to price risk.

21. Capital commitments

There were no capital commitments at 31 December 2019 (2018: nil).

22. Contingent liabilities

The Organisation is involved in some ongoing legal suits at the Court of Justice of the Economic Community of West African States (ECOWAS) in Abuja, with possible financial impact totalling FCFA 473,027,360 in the event of adverse decisions against the Organisation.

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

Presentation of Budget Information in Financial Statements

Basis of preparation

The budget information has been prepared on a cash basis since it is the policy of WAPP to apply the cash basis of accounting for its budgets during the fiscal year.

On the other hand, the financial statements have been prepared on accrual basis of accounting. The accrual basis of accounting is one under which transactions, other events and conditions are recognised when they occur (and not only when cash or its equivalent is received or paid). Therefore, the concept recognises revenue when earned and expenses when incurred.

Key assumptions include:

- Funding available throughout the periods
- Member utilities will pay their contributions regularly

Budget Approval

WAPP's highest decision-making body is the General Assembly which provides the overall strategic direction of the institution and adoption of Executive Board's reports.

The functioning of WAPP is entrusted to the Executive Board whose functions include: "Examination and recommendation to the General Assembly, the entry, exit and re-entry of Members to the Pool, authorisation of major contracts, Approval or revision of the operating and capital budgets and any additional expenditure and approval of audit reports among others. The Executive Board reviews, approves or disapproves actions of the various Organisational Committees of WAPP.

The approval of the Budget by the Executive Board and its adoption at the General Assembly empowers the Secretariat (through the Secretary General), subject to any special conditions to:

- Commit and authorise expenditure and to make all payments to be borne by the Organisation, for the purposes assigned and within the limits of the appropriations and the commitment authority, as the case may be; and
- Provide the Executive Board with monthly budget and variance for review and approval.

WEST AFRICAN POWER POOL
Financial Statements
For the year ended 31 December 2019

NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

Comparison of budget and actual – WAAP as at 31 December 2019

Introduction

WAPP's financial statements are prepared on accrual basis whilst the budget is on cash basis. The Statement of Financial Position, Statement of Financial Performance, Statement of Changes in Net Assets and Statement of Cash Flow Statements are prepared on a full accrual basis. The financial statements and the budget are therefore prepared using different basis.

To enable users and funders derive the needed benefit and make this presentation useful, management has decided to present a budget/actual comparison. This form of presentation as indicated is to ensure management achieves the reporting requirement of IPSAS 24 and also meet the needs of stakeholders within the Pool for effective decision making.

The approved budget for the expense categories outlined below covers the fiscal period 1 January to 31 December 2019.

Budget/ Actual analysis for the year under review

The budget and actual analysis of WAPP is presented below.

DESCRIPTION	BUDGET	ACTUAL	VARIANCE	VARIANCE	COMMENTS (for budget overruns or non-budgeted)
	UA (1)	UA (2)	UA (3)=(1)-(2)	% (4)=(3)/ (1)	
Operating Revenue					
Contribution from members	4,830,417	5,414,970	(584,553)	12.1%	A
Grants	-	9,186	9,186		B
Operating Expenses					
Personnel Expenses	2,733,767	2,488,929	244,838	9%	
General Expenses	446,411	614,243	(167,832)	-37.60%	
Administrative Expenses	792,102	817,608	(25,506)	-3.22%	
Executive Board/Committee Meetings	788,228	465,879	322,349	-40.90%	C

WEST AFRICAN POWER POOL
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NOTES (CONTINUED)

(All amounts are expressed in UA unless otherwise stated)

CAPEX	69,909	113,440	(43,531)	-62%	D
TOTAL OPERATING AND CAPITAL EXPENSES	4,830,417	4,500,099	330,318	6.84%	Overall 93% of budgeted expenditure was actually incurred.

Explanations of significant deviations

A	Excess contributions by WAPP Member Utilities of Nigeria during the year.
B	Grant income from Karpowership in support of WAPP General Assembly and GRV Global Ltd in support of a training activity.
C	Decrease in Executive Board/Committee meeting expenditure is a result of GIZ and TCN financing of significant cost components of the WAPP 2019 General Assembly held in Abuja.
D	Excess relates to unutilised budgetary provision for same expenditure in 2018 financial year. The implementation this activity was spread over 2 years.