Chapter 1

OVERVIEW OF CENTRAL AND WEST AFRICA

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1 OVERVIEW\(^2\)

i Electricity sector

As an overview, the electricity sector in each of the states has the following characteristics:

a the supply of electricity is among the weakest in the world,\(^3\) even compared with other states of the same income bracket;

b the cost of electricity is among the highest in the world as a result of the preponderance of thermal energy dependent on the price of oil;

c there is a precarious financial situation among public operators of electricity, who cannot pass on the increased costs of production to consumers;

d the power infrastructure is in a state of disrepair, which leads to significant energy losses; and

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\(^2\) This chapter covers the following countries: Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, the Democratic Republic of the Congo, Gabon, Guinea, the Ivory Coast, the Republic of the Congo, Mali, Niger, Senegal and Togo (individually referred to as ‘state’ or collectively as ‘states’). This overview is not intended to present a detailed description of all applicable regulations relating to electricity and hydrocarbons of each state, but rather to highlight the common principles and main trends in each of the states concerning the rules and functioning of these industries. However, this overview will not present local practices which may deviate from the applicable law, and a deep analysis of the texts and practices in these states will thus be necessary to acquire a thorough understanding of these sectors.

\(^3\) For instance, the electrification rate of the Member States of the ECOWAS is 17 per cent, compared with a global average of 80 per cent.
A growing demand colliding with a persistent shortfall in production and poor quality of services is causing chronic power cuts and slowing industrial development.

The current amount of investment only represents a small fraction of the sum needed to fill the gap between supply and demand. The use of private investment appears today to be the only way to significantly improve the performance of the electricity sector. Resources in the region (hydraulic, gas, solar, wind) remain largely underutilised and the question of their recovery is central.

In parallel with production capacity, the development of national transport networks and their interconnection is a key factor for both industrial (mining industry in particular) and remote rural community development.

African regional organisations have created a forum in which states agree to coordinate their national energy policies. Among the instruments of this coordination, the most relevant in the context of this study are:

a. the Convention dated 5 July 1996 governing the Economic Union of Central Africa (CAEU), adopted within the framework of the Economic and Monetary Community of Central Africa (CEMAC);\(^4\)

b. the Protocol dated 18 October 1983 on cooperation in energy between the members of the Economic Community of Central African States (ECCAS);\(^5\)

c. the A/P4/1/03 Energy Protocol, adopted by the Economic Community of West African States (ECOWAS)\(^6\) on 21 January 2003; and

d. the Additional Act No. 04/2001 dated 19 December 2001 on the adoption of a common energy policy of the West African Economic and Monetary Union (WAEMU).\(^7\)

The first reforms of the electricity sector, which were conducted to segment activities, introduce free competition and allow the participation of the private sector, appeared

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\(^4\) The CEMAC is composed of six Member States: Cameroon, Chad, the Central African Republic, Equatorial Guinea, Gabon and the Republic of the Congo.

\(^5\) The ECCAS is composed of 10 Member States: Angola, Burundi, Cameroon, the Central African Republic, Chad, the Republic of the Congo, the Democratic Republic of the Congo, Gabon, Equatorial Guinea and São Tomé and Príncipe. It can be noted that, through its Decision No. 15/CEEAC/CCEG/XIV/09 dated 24 October 2009, the ECCAS adopted the Central African Regional Electricity Market Code. This code, however, does not yet seem to have been implemented by the Member States.

\(^6\) The ECOWAS is composed of 15 Member States: Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea Bissau, the Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.

\(^7\) The WAEMU is composed of eight Member States: Benin, Burkina Faso, the Ivory Coast, Guinea Bissau, Mali, Niger, Senegal and Togo.
twenty years ago, primarily within the framework of these organisations. However, no French-speaking state seems yet to have fully completed the transition.

New power regulations are about to enter into force in the Ivory Coast and the Democratic Republic of the Congo (see outlook below), and have not been included in this overview.

ii Oil and gas sector

The legal systems in each of the states are civil law-based and reserve to the state the ownership of all natural resources located within its sub-soil, including hydrocarbons.

These systems provide for concession agreements or production sharing contracts to be concluded between the state and hydrocarbons title holders, as well as the principles on which they will interact with the mining titles to which they relate.

8 The electricity sector is notably governed: in Benin, by the 2004 Agreement revising the Benin-Togo code of electricity and by Law No. 2006-16 dated 27 March 2007 establishing the code of electricity and complementing the Benin-Togo code of electricity; in Burkina Faso, by Law No. 027-2007/AN dated 20 November 2007 establishing the general regulation of the sub-sector of electricity and Decree No. 2008-370/PRES/PM/MCE/MEF/MCPEA/MATD establishing the granting conditions of licences and authorisations, of concession or farming agreements and of the declaration of facilities in the sub-sector of electricity; in Cameroon, by Law No. 2011/022 dated 14 December 2011 governing the electricity sector and Decree of Implementation No. 2012/2806/PM dated 24 September 2012; in Chad, by Law No. 14/PR/99 dated 15 June 1999 concerning the production, transmission and distribution of electric energy; in the Ivory Coast, by Law No. 85-583 dated 29 July 1985 organising the production, transmission and distribution of electric energy, soon to be replaced by the law passed on 27 February 2014 establishing the code of electricity (not yet published in the Official Journal at the time of writing); in the Democratic Republic of the Congo, by numerous regulations, including the Decree dated 2 June 1928 on the general conditions concerning electric energy, the Decree dated 31 July 1953 establishing provisions for the import and export of electric energy, the Order-Law No. 61-61 dated 26 February 1953 on the distribution of electric energy, and numerous ministerial orders dated 16 November 1994; in Gabon, by Law No. 08/93 setting the legal status of the production, transport and distribution of drinking water resources and electric energy; in Guinea, by Law No. L/93/039/CTRN concerning the production, transmission and distribution of electric energy, as well as Decree No. D/2001/098/PRG/SGG dated 18 December 2001 establishing the reorganisation of the electricity sector during the transitory period; in Mali, by Order No. 00-019 dated 15 March 2000 establishing the organisation of the electricity sector; in Niger, by Law No. 2003-004 dated 31 January 2004 establishing the code of electricity and its Decree of Implementation No. 2004-266/PRN/MME dated 14 September 2004; in the Central African Republic by Order No. 05.001 dated 1 January 2005 establishing the code of electricity; in the Republic of the Congo, by Law No. 14-2003 dated 10 April 2003 establishing the code of electricity; in Senegal, by Law No. 98-29 dated 14 April 1998 concerning the electricity sector, revised by Law No. 2002-01 dated 10 January 2002; in Togo, by the 2004 Agreement revising the Benin-Togo code of electricity, and by Law No. 2000-012 dated 18 July 2000 concerning the electricity sector.
The legislation also provides for detailed rules applicable to midstream and downstream sectors, which they regulate and generally subject to prior approval.

Half of the states do not produce hydrocarbons and are dependent on imports from neighbouring countries. Some of these states are in the process of amending or creating legislation to foster the development of the hydrocarbons sector so as to generate revenues from the exploitation of their oil and gas resources.

Interconnected cross-border oil and gas infrastructure is being operated, and projects are being developed or extended between a growing number of states which are likely to attract producers and have a positive impact on states’ revenues and local development, through both production of oil and gas and, ultimately, power generation.

New oil and gas regulations are about to enter into force in Niger (see outlook below) and have not been included in this overview.

II REGULATIONS

i National and regional regulators

Electricity sector

National regulation authorities

Except for Guinea, all the states’ legislation provides for the creation of a regulation authority in the electricity sector. Some of these national authorities may have only been set up very recently, or even not yet be effective.

Among the recurring missions of the various national regulation authorities, one may highlight the following:

a monitoring that operators comply with the applicable regulations;

b intervening in the setting or approval of electricity tariffs;

c ensuring compliance with competition rules in relation to power production, transport and distribution;

d preserving customers’ interests;

e promoting competition and private sector participation according to objective, transparent and nondiscriminatory (e.g., third-party access to transmission networks and customers’ access to the power supply) conditions;

f taking part in the awarding of contracts via the setting up of tendering processes;

g proposing amendments to the state relating to both the institutional and regulatory frameworks; and

h implementing dispute resolution mechanisms (such as conciliation or arbitration) between the electricity sector’s players (between operators or between operators and customers).

9 Guinea established a National Council for Power, a consultative body whose mission is to assist the minister in charge of energy on topics relating to energy policy.

10 It is common for the water sector to be under the supervision of the same authority.

11 For example, the regulation authority for the sub-sector of electricity in Benin has only been effective since July 2013.

12 As is the case in Chad.
Regional regulation authorities
Within the framework of the West African Power Pool (WAPP), in January 2008 the ECOWAS Conference of Heads of State established the ECOWAS Regional Electricity Regulatory Authority (RERA).\(^\text{13}\) This special body is in charge of setting up cross-border power exchange regulations as well as supporting the Member States’ national electricity regulators.

Oil and gas sector
National regulation authorities
Contrary to the electricity sector and with some notable exceptions,\(^\text{14}\) the hydrocarbons sector is not characterised by the existence of specific regulators that are independent from the sector’s supervisory authority (in most cases, the ministry in charge of energy or hydrocarbons).

This obviously does not mean that this sector is not regulated.\(^\text{15}\) The hydrocarbons sector is eminently strategic and constitutes one of the domains where the state fully

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\(^{13}\) The RERA was created by Additional Act No. A/SA.2/01/08 and is governed by Regulation of the Council of Ministers No. C/REG.27/12/07 dated 15 December 2007 relating to the composition, organisation and functioning of the RERA.

\(^{14}\) For example, the Authority for the Downstream Petroleum Sector Regulation (Chad), the Regulation Agency of the Petroleum Downstream Sector (Republic of the Congo), the National Office of Petroleum Products (Mali), and the National Committee for Hydrocarbons (Senegal).

exercises its sovereignty and the implementation and control of these regulations are often left to the central (ministry level) and local (prefecture level) authorities.

**Regional regulation authorities**

With the exception of cross-border projects that are likely to exist mainly for the purpose of transporting hydrocarbons,¹⁶ there is currently no regional authority regulating the hydrocarbons sector in the states concerned.

**ii Regulated activities**

**Electricity sector**

Electricity production, transmission and distribution is typically considered a public service¹⁷ and placed under the state’s authority. The electricity sector is, overall, open to the private sector, yet the above activities are regulated. Also, these activities are subject to obligations of regularity, continuity, permanence and equality of treatment, which are inherent to public service.

The public service of electricity can be delegated to private entities. Delegation occurs though a contract, the most usual form of which is, in the electricity sector, a concession contract (long-term lease contracts are also envisaged by some legislation).¹⁸ The public service concession holder is responsible for all operation and maintenance costs and, when acting as a concessionnaire, also for the financing of the infrastructure. It is remunerated essentially through fees paid by users. Long-term lease contracts, under which the state bears the responsibility for the investment, is generally reserved for the country’s national company.¹⁹

Generally, the public service concession holder must comply with the following obligations:

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¹⁶ The West African Pipeline Authority (WAPA) in particular regulates the project operated by the West African Gas Pipeline Company Limited (WAPCo).

¹⁷ Importing electricity is sometimes also considered as a public service.

¹⁸ Although the legislation of Cameroon, Mali, Niger, Senegal and Togo provides that the delegation of public service for electricity can only be established via concession agreements.

¹⁹ This is the case between Burkina Faso and Sonabel, for example.
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*a* guarantee a permanent and continuous supply of electricity under the best pricing conditions;

*b* comply with the principles of equality of treatment and electricity market access; and

*c* ensure a satisfactory coverage of power supply across the country.

The public service of electricity delegation is typically governed by a convention, including specifications, the purpose of which is to determine, in particular:

*a* the purpose, extent and duration of the relationship;

*b* the investment plan;

*c* the conditions relating to the maintenance of the infrastructure;

*d* the quality of the service;

*e* accounting and financial aspects;

*f* tariffs;

*g* the conditions of remuneration of the operator;

*h* the applicable tax regime; and

*i* termination events.

Legislation also allows private operators to access the sole power production sector. Independent power production by private operators is, therefore, possible in most of the states.

In order to carry out its activity, an independent producer must generally sign a concession contract with the state, as well as a power purchase agreement with the transmission and/or distribution network operator, as relevant. Legislation may also provide for the granting of licences or sometimes even mere authorisations, in particular when production facilities have a capacity below a certain threshold. The situation in Chad is, in fact, very specific, as the legislation provides that producing and selling electricity outside the framework of the public service is possible without formalities, other than a mere declaration.

*Oil and gas sector*

Of strategic importance to the economy and development policies, the oil and gas industries are particularly regulated. All the legislation indeed provides that the state is (and remains) the owner of the resources located in its sub-soil (including liquid and gaseous hydrocarbons), together with the right for the state to grant (and renew and withdraw as the case may be) all titles necessary for prospecting, exploring and exploiting these resources and monitor, on the one hand, the rational exploitation of these resources and, on the other hand, the conditions for their marketing. This combines further with strict monitoring of the upstream and downstream sub-sectors.

20 This is the case in Benin, Burkina Faso (below a certain threshold), Cameroon (for independent production other than hydroelectricity), the Central African Republic, Mali (below a certain threshold), the Republic of the Congo, Senegal (for producing or selling electricity in general) and Togo.
**Distinction based on the nature of the substance concerned**

Traditionally, liquid and gaseous hydrocarbons were treated like any other mineral substances and generally subject to the provisions of mining law.

Legislation has evolved, in particular based on international practice, the development of production sharing systems (replacing concessionary systems), and specific tax regimes applicable to hydrocarbons exploration and exploitation.

**Distinction based on the sub-sector concerned**

Regulations (upstream and downstream) relating to hydrocarbons in most of the states are generally provided for in a unique legislative instrument enacting the country’s ‘petroleum’ or ‘hydrocarbons’ code.\(^{21}\) If so, midstream and downstream activities, the principles of which are provided for in said code, are regulated by implementing regulatory instruments (such as presidential decrees or ministerial orders). Some states enacted special legislative instruments dedicated to midstream/downstream activities, which notably regulate the refining, transport, storage, transformation, distribution and marketing of hydrocarbons.\(^{22}\)

**Hydrocarbons rights and titles**

Hydrocarbons titles are either exploration or exploitation titles.\(^{23}\) These titles are granted by the state\(^ {24}\) through administrative acts (generally ministerial orders or presidential decrees) to companies that demonstrate the technical and financial capacities required to carry out the necessary petroleum operations.\(^ {25}\)

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21 In general, the word ‘petroleum’ may be misleading, as this legislation also governs natural gas exploration and exploitation. Therefore, and unless otherwise provided, the words ‘petroleum’ and ‘hydrocarbons’ used in this chapter shall refer to both liquid and gaseous hydrocarbons.


23 The term of exploitation titles range from 20 to 35 years depending on the applicable legislation. States also regulate prospecting activities, which are generally non-ground disturbing and do not grant the holder the exclusive right to obtain an exploration or an exploitation title. This chapter does not cover such prospecting authorisations.

24 Authorities competent for granting these titles may vary from one country to another. Exploration titles are generally granted by the minister in charge of hydrocarbons, and exploitation titles are granted by the president.

25 Remarkably, certain legislation, e.g., that of Niger and the Republic of the Congo, provides that exploration and exploitation titles can only be granted to companies specialising in the hydrocarbons sector. Other legislation sets forth additional capacity-related conditions with respect to companies acting as operators.
In almost all the states, exploration permits and exploitation permits or concessions\textsuperscript{26} are granted within the context of concession agreements, while exclusive exploration and exploitation authorisations are granted within the context of production sharing contracts.

Remarkably, in almost all legislation the development of production sharing contracts has not resulted in the disappearance of exploration and/or exploitation administrative titles, and companies still have to apply for these in order to be authorised to carry out such activities.

Legislation provides that companies are prohibited to carry out exploration or exploitation works before being granted such titles. Equally, certain legislation may require that hydrocarbons titles (including exploration titles) be held by local companies. Other legislation will allow foreign companies to enter into petroleum contracts and hold a hydrocarbons title subject to creating a permanent establishment locally.

An exploration title holder is not allowed, \textit{per se}, to extract hydrocarbons. It will only be able to do so once granted an exploitation title. However, legislation often provides the possibility for the holder of an exploration title to apply for a temporary authorisation to exploit, which is limited in time and does not extend the term of validity of the exploration permit. This temporary authorisation aims to allow the holder of an exploration title to start the exploitation of wells it has discovered in exchange for pursuing the assessment and demarcation of these deposits\textsuperscript{27}.

Most of the states’ legislation provides for common provisions to be stipulated in, or common principles to apply to, petroleum contracts (mainly concession agreements and production sharing contracts), and in particular that they:

\begin{enumerate}
\item cover the perimeter of the hydrocarbons titles to which they refer (exploration title and, as the case may be, exploitation title);
\item are concluded for the term of the exploration title (and, as the case may be, exploitation title to which they apply);
\item set the minimum work obligations of the holder during the various phases of the project, as well as the conditions in which exploration and exploitation will be carried out;
\item provide for the stipulations relating to the transfer of rights and obligations deriving from the hydrocarbons titles;
\item set the tax and customs regime applicable to the holder;
\item set the obligation for the holder to respect local content;\textsuperscript{28}
\end{enumerate}

\textsuperscript{26} Both exploitation concessions and permits are exploitation titles, which derive from exploration permits. Exploitation concessions shall not be confused with the concession agreements which may attach to them.

\textsuperscript{27} Temporary authorisations to exploit are, for example, provided in the legislation of Benin, Cameroon, the Central African Republic and the Ivory Coast.

\textsuperscript{28} Such as engaging by preference with local contractors or hiring local employees.
provide for the participation of the state or state-owned entities in all or part of the petroleum operations and, as the case may be, to the capital of the holder; and may stipulate dispute resolution and, in particular, arbitration provisions.

These contracts are generally signed by the minister in charge of hydrocarbons before, depending on the applicable legislation, being approved by the President of the Republic by decree or ratified by an Act of Parliament.

Legislation also envisages (without necessarily regulating in detail) the conclusion of joint operating agreements when referring to the possibility for the title holder to ‘partner’ with other companies (including all national companies) with a view to carrying out oil operations.

The states’ legislation further provides that petroleum operations must be carried out diligently and in accordance with high quality standards applicable in the international oil and gas industry.

A number of states’ legislation provides for hydrocarbons titles to be granted under certain conditions via tendering processes.

Lastly, almost all of the state’s hydrocarbons legislation provides that petroleum contracts may provide for the stabilisation of the contractual conditions entered into with the title holder.

### iii Ownership, participation and restrictions

#### Ownership

**Electricity sector**

Facilities dedicated to the public service of electricity are generally part of the public domain, even when they are built by a private entity. Some states’ legislation provides, however, that facilities built by independent producers shall be governed by the private property regime.

**Oil and gas sector**

As most of the states have enacted French law-inspired legislation, their legislation reserves to the state the ownership of the natural resources located in its sub-soil,
including its territorial sea and exclusive economic zone.\textsuperscript{34} As mentioned, this results in any entity (including the owner of the land containing the subsoil in which such deposit is located) wishing to carry out exploration or exploitation works being obliged to obtain all necessary approvals and titles.

The states’ legislation also provides for specific rules applicable to the access or occupation of land required for carrying out the project, as well as the related rights and obligations of the holder within or outside the perimeter of its title.

Technically, the transfer of ownership of the hydrocarbons extracted shall be made in accordance with the provisions of the petroleum contract (which generally provides that it occurs when passing the well head) and will result in either a transfer of ownership of the entire hydrocarbons production to the holder of the hydrocarbons title in a concessionary system, or the transfer of defined percentages of the production to the benefit of both the holder and the state in a production sharing system.

\textbf{Participation}

\textit{Oil and gas sector}

States’ legislation generally provides that the state can directly, or through a national company, participate in all or part of the petroleum operations.

\textbf{Change of control/transfer}

\textit{Electricity sector}

Regulations applicable to the electricity sector rarely address the possibility for a concessionaire, licensee or authorisation holder to assign its rights to a third party. The issues relating to indirect transfers occurring at the concessionaire’s shareholders’ level are taken into account even less frequently.\textsuperscript{35} This, however, does not mean that transfers of rights are completely free. Indeed, given the public service nature of the activities relating to the electricity sector, agreements between the state and private operators are concluded \textit{intuitu personae}, and the question of direct or indirect transfers is very likely to be addressed in said agreements.

\textit{Oil and gas sector}

\textit{Assignment of the hydrocarbons title}

States’ legislation provides rules relating to the transfer of hydrocarbons titles which vary depending on whether they relate to an exploration title or an exploitation title. The states provide for compulsory rules governing the transfer to third parties of the hydrocarbons title held by the holder. Generally, such a transfer will have to be approved by the competent authority prior to the transfer. Legislation commonly provides that unapproved transfers are sanctioned (1) by the nullity of the act providing for this transfer; and (2) the possible withdrawal of the title.

\textsuperscript{34} Some states also refer to the continental shelf (the Ivory Coast, for instance).

\textsuperscript{35} Cameroon is one of the only states which addresses this issue and requires, for instance, a mere declaration to the Regulation Agency in case of changes in the concessionaire’s shareholding structure.
The transferee shall agree, without reservations or restrictions, to comply with the convention relating to the assigned title.

Change of control of the holder of the hydrocarbons titles/transfer of petroleum interests

Besides the assignment of hydrocarbons titles themselves, legislation generally provides for the possibility to transfer all or part of the rights and obligations deriving from the hydrocarbons titles and/or oil agreements. Most of the time, these transfers are conditional on prior authorisation. In addition and similarly to what is provided for with regard to assignments of hydrocarbons titles, legislation generally provides that unapproved transfers of such rights and obligations may be sanctioned (1) by the nullity of the act providing for such transfer; and (2) the possible withdrawal of the hydrocarbons title, and/or the termination of the oil agreement, from which these illegally transferred rights and obligations derive.

Lastly, states increasingly regulate the change of control of the hydrocarbons title holders and subject it to the prior approval of the competent authority.

Market access restrictions

Electricity sector

Production

Overall, access to the power production market is possible through a competitive tendering process. It is, however, common that, by way of exception, legislation relating to the electricity sector or public procurement authorises the implementation of a negotiated procedure. This exception is typically opened when urgency or general interest demand fast completion of a specific project. However, social conditions in Africa may easily constitute grounds of urgency and be likely to impede the full implementation of competition rules. This is particularly true in the field of power production, where concession agreements may be granted without a prior tendering process.

Transmission

Transmission is generally reserved for a single concessionaire. When this segment is opened to the private sector, it is fairly common that the national company’s monopoly will remain. 36 It can be further noted that the opening of this segment to the private sector is sometimes allowed in rural areas. 37

Distribution

Access to the power distribution market varies from one state to another. However, even when legislation opens this segment to the private sector, structural weaknesses of the

36 This is, for instance, the case in the Republic of the Congo, where SNE is responsible for transmission activities.

37 This is, for instance, the case in Gabon, insofar as the perimeter concerned is not covered by the concession of the Energy and Water Company of Gabon.
market do not always allow full implementation of such liberalisation. It is, therefore, common for de facto monopolies to survive the reforms.  

**Oil and gas sector**

Hydrocarbons law, like mining law, is a law of appropriation. States’ sovereignty over their resources prevents, by its nature, the implementation of any principle to allow third-party access to the resource. However, most of the applicable legislation imposes that non-discriminatory third-party access be granted to certain midstream/downstream oil and gas facilities and infrastructure (in particular in relation to transport, storage and distribution, etc.).

Lastly, certain legislation provides that the company holding an exploitation title is required to give priority to satisfying the needs of domestic consumption.

## III TRANSPORT AND DISTRIBUTION

### i Vertical integration

**Electricity sector**

To a large extent, states adopted regulations allowing either full or partial segmentation of production, transmission and distribution activities. Guinea remains a notable exception because it maintained full vertical integration of the electricity sector, which is fully operated by the company Electricité de Guinée.

The specific cases of Togo and Benin can also be mentioned, as they signed a treaty on 27 July 1968 for the purpose of creating a public international body, the Communauté Electrique du Bénin, which enjoys exclusivity for transmission and importation activities, as well as the purchase of electricity for both states.

### ii Transmission, transport and distribution access

**Electricity sector**

Third-party access to the transmission grid is guaranteed in law in almost every state. As such, the grid operator cannot refuse power producers the right to transmit their electricity through the grid.

Under such circumstances, the power grid operator cannot discriminate between operators on matters such as access to transmission capacities, quality of service, tariffs and, in general, treatment of such operators. It is also very common that regulations provide that the price of a connection shall be based on costs borne by the grid operator and a reasonable profit margin.

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38 This is, for example, the case in Cameroon, where AES-SONEL still enjoys a monopoly position for distribution activities by virtue of its concession agreement. Such a monopoly also exists in Burkina Faso to the benefit of SONABEL, and in the Republic of the Congo to the benefit of SNE.

39 Local and temporary delegation of the transmission activity is allowed, however.

40 Note that Cameroon does not have such an obligation provided in its regulation.
Restrictions may, however, be allowed when justified by technical reasons or capacity limitations, and tariff discrepancies may only be implemented if objective differences exist between power producers.

**Oil and gas sector**

Local activities for the transport and distribution of petroleum products are generally liberalised in the sense that private companies (the holder of the hydrocarbons title or a third party) can exercise them. These companies are, however, subject to obtaining approvals, which are generally granted for a limited period of time and likely to be renewed. However, exploitation titles typically confer on the title holder the right to transport its share of hydrocarbons.

Last, and subject to excess capacity being available, third parties may be granted the right to access transport infrastructure on a non-discriminatory basis.

**iii Terminalling, refining and processing**

**Oil and gas sector**

Hydrocarbons terminalling, refining and processing operations are generally liberalised and can be exercised by private companies (the holder of the hydrocarbons titles or a third party), which shall also obtain approvals generally granted for a limited period of time and likely to be renewed.

**iv Tariffs/rates**

**Electricity sector**

In general, the tariffs which are set within the framework of public service of electricity are regulated. National laws provide for joint action of both the regulation authority and the government in order to set a tariff which allows an acceptable financial balance for the public service delegation. However, in order to maintain a satisfactory level of access to electricity for the population, tariffs are greatly undervalued, to the point that electricity distributors fail to achieve a profit margin. For that matter, it is common for states to heavily subsidise the operators which suffer from these tariff policies.

On the other hand, independent power producers are generally allowed to freely negotiate their tariffs with the transmission or distribution operators within the framework of power purchase agreements. In such cases, the contract may be required to comply with specific instructions from the regulation authority.

**Oil and gas sector**

In general, prices of hydrocarbons produced in each of the states are determined in accordance with a complex regulation organising the setting of a reference pricing structure for petroleum and natural gas based on international market prices. A specific price structure can also apply in relation to the price of hydrocarbons designated for local market supply.
IV INTERCONNECTIONS AND REGIONAL POOLS

i Electricity sector
Within the states, electricity markets are underdeveloped. In Central and West Africa several regional initiatives aim at developing a regional energy market supported by interconnections between Member States, and at implementing power pools.

Central Africa
Within the framework of the CEMAC, the Regional Economic Program (REP) implements various actions aimed at interconnecting electric grids between Member States and developing hydroelectric potential up to the total capacity of 25,000MW by the year 2025. This should enable the creation of an energy self-sufficient region with the additional opportunity to sell any excess production to Nigeria and other West African countries via a connection to the West African Power Pool (for more information about the WAPP, see below).

In parallel to the CEMAC initiative above, the Economic Community of Central African States (ECCAS) created a specialised body called the Central Africa Power Pool (CAPP). This body is in charge of implementing the community’s energy policy, following up studies and construction works relating to the community's infrastructure, and organising the electricity exchange between Member States through the construction of a dozen regional projects.

West Africa
Within the framework of the ECOWAS and its REP, the Conference of Heads of State decided to implement the West African Power Pool. The objective is to reduce the region’s power production deficit by constructing interconnection infrastructure and developing electricity exchange between Member States. This system led to the implementation of a regional regulatory authority in 2008 (see above).41

Concerning the power grid, Mali is currently connected to Senegal, the Ivory Coast is connected to Burkina Faso and Ghana, and the latter is also connected to Togo and Benin. Other interconnection projects exist within the region, such as between the Ivory Coast, Liberia, Sierra Leone and Guinea; between Ghana, Burkina Faso and Mali; and between Guinea and Mali.

ii Oil and gas sector
Besides the Chad-Cameroon pipeline,42 the most significant example of cross-border interconnected infrastructure in relation to hydrocarbons is the Western African Gas Pipeline, which was created by international treaty and crosses four states including

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41 The Regional Electricity Regulatory Authority (RERA).
42 This pipeline has been co-operated since October 2003 by two transportation operators: COTCO (Cameroon Oil Transportation Company SA which is jointly owned by private investors and the states of Chad and Cameroon) and TOTCO (Tchad Oil Transportation Company SA, which is jointly owned by private investors and Chad).
Benin and Togo, and the operation of which, although managed by a private company, is regulated by a regional regulator instituted by the treaty: the Western African Pipeline Authority.\footnote{Taking into account the existence of significant oil and gas resources in the sub-region, and with a view to fostering the satisfaction of power requirements, the ECOWAS published a call for expression of interest in July 2013 in order to assess the possibility of expanding the WAGP to the coastal countries of the Community.}

The 258km Abidjan-Yamoussoukro pipeline will expand to Burkina Faso, with a view to redistributing hydrocarbons to Mali and Burkina Faso. Finally, in November 2013 the Ivory Coast and Burkina Faso authorities signed agreements intended to provide a general framework for the future construction of a gas pipeline linking the Ivory Coast to Burkina Faso for it to benefit from a natural gas supply.

Lastly, a Niger-Chad pipeline is expected to be built, from where the existing Chad-Cameroon pipeline will carry Niger’s oil (from the Agadem fields) to the coast of Cameroon. This project will allow the new oil-producing country to become an exporter of crude oil. A bilateral convention was signed to this effect in Yaoundé on 30 October 2013, which stipulates the conditions under which Niger’s oil will transit through the Chad-Cameroon pipeline.

V RENEWABLE ENERGY AND CONSERVATION

i Development of renewable energy

Although some states did adopt legislation promoting renewable energy sources,\footnote{As, for example, in Senegal, with Law No. 2010-21 dated 20 December 2010 relating to renewable energy and Law No. 2010-22 dated 15 December 2010 relating to the biofuel sector.} they do not have current practical implications as far as the energy sector is concerned.

VI THE YEAR IN REVIEW/CONCLUSIONS AND OUTLOOK

i Electricity sector

Projects based on regional initiatives

Almost two dozen power plant projects are currently ongoing in Central Africa among the CEMAC, including two gas plants in Cameroon (Kribi and Limbé) and one in the Republic of the Congo (Pointe Noire), as well as several hydroelectric dams in the Central African Republic (Loali 2 and Boali 3 extension) and the Republic of the Congo (Imboulou). Twelve similar projects are also scheduled within the framework of the ECCAS.

In West Africa, the Regional Initiative for Sustainable Energy identified more than one hundred projects directly related to the power sector and which are to be achieved by 2030, all within the framework of the West African Economic and Monetary Union (WAEMU), including interstate organisations such as the Organisation for the Development of the Senegal River (OMVS), the Organisation for the Development
of the Gambia River (OMVG), the WAPP and the Electrical Community of Benin. Production capacity should ultimately be multiplied by three.

**Rural electrification**

Populations’ access to power is a major concern which is shared by every state. Almost every state implemented a national agency for rural electrification which is in charge of conducting the necessary technical and economic studies, preparing the tendering processes for delegating the management of the rural electric grid, promoting new technologies and seeking finance. It should also be noted that, in the context of decentralisation, the management of power infrastructure in rural areas may be transferred to local authorities.

These agencies are typically supported by a rural electrification fund whose purpose is to help finance the connecting rural infrastructures. Such funds are financed by state allocations, lenders, gifts and bequests, loans, royalties, licence fees paid by operating companies and taxes paid by end users.

Regional initiatives for the electrification of rural areas also exist. For example, the CEMAC Energy Facility, which is part-financed by the EU-ACP Energy Facility,\(^\text{45}\) includes a ‘peri-urban electrification project’ component, which aims to reinforce the regional integration of energy policies in the context of the fight against poverty by improving access to electricity in peri-urban and rural areas within CEMAC countries.

**New regulations in the Ivory Coast and the Democratic Republic of the Congo**

2013 and the beginning of 2014 were marked by the adoption of two reforms in the power sector.

The Ivory Coast adopted a new electricity regulation on 27 February 2014. This regulation is yet to be published in the Official Gazette at the time of writing. It can, however, already be pointed out that the new code should open up to the private sector the organisation and management of the different segments of the power sector. These segments may now be licensed to one or more private operators. The new regulation also implements opportunities for the management of energy flows, as distinct from the transmission activity, which is carried out by the state. Furthermore, the right for third parties to access the transmission grid is to be implemented, along with a regulatory authority.

The Democratic Republic of the Congo is also in the process of adopting a new law governing the electricity sector. The draft law was adopted by the National Assembly and the Senate on 15 and 22 January 2014, and provides for an effective opening to the private sector for electricity production, transmission, distribution, importation and exportation activities. Better competition standards should be implemented as concessions and licences should be granted under transparent and non-discriminatory public procurement procedures. Third parties should also be granted access to

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\(^{45}\) The Energy Facility is a co-financing instrument which was established in 2005 in order to support projects aimed at increasing access to sustainable and affordable energy services for the poor living in rural and peri-urban areas in African, Caribbean and Pacific (ACP) countries.
transmission infrastructure on a non-discriminatory basis. From an institutional point of view, the Democratic Republic of the Congo is expected to follow the current trend with the implementation of a regulatory authority, as well as a public body in charge of electrification of rural areas.

ii Oil and gas sector

New legislation
The Parliament of Niger would have adopted an important amendment to its existing Petroleum Code on 7 April 2014. This amendment was not publicly available at the time this chapter was written.

A new Hydrocarbons Code would have been enacted in Gabon by Presidential Ordinance. Such Ordinance, which would still need to be ratified by the Gabonese Parliament to enter into force, would differ from the instrument that had been debated before the National Assembly over the past four years. The published version of this Ordinance was not available at the time this chapter was written and could not be commented on.

Draft amendments to applicable legislation
The Parliament of the Democratic Republic of the Congo is currently discussing a draft law establishing a general regime for hydrocarbons.

Calls for expression of interest
Remarkably, at the beginning of April 2014 the Government of Burkina Faso issued a call for expressions of interest in relation to the drafting of legislation governing the hydrocarbons sector and defining the national technical specifications for petroleum products and derived products.
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