Annex VI

Portfolio Committee on Electricity

Regional Association of Energy Regulator for Eastern and Southern Africa
(RAERESA)

Report on
"Electricity Regulatory Status"
Fact Sheet

August 2014



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Chapter 1 Introduction

According to the RAERESA Work Programme (Pillar 2), a task force should complete a survey of all 19 member countries of COMESA to determine how the energy sector is regulated and monitoring the compliance and enforcement of local energy market as well as the regional markets.

The work plan stated that "the survey will explore the current regulatory status of the electricity sector and the opportunities and difficulties of further market integration from legal, technical and financial aspects."

In this context a Fact Sheet has been designed and sent to the member countries in order to collect respondents from member Countries and make the necessary analysis and evaluation then come to the conclusions

The Fact Sheet has some basic information for the member countries for the last year (2012) concerning:

- *Generation Plants,*
- *Transmission Network,*
- *Interconnections,*
- *Distribution Network, and*
- *Market Information*

Appendix (1) shows the member countries system data.

The Fact Sheet also contains detailed information about the situation of legislative and regulatory framework, the financial viability of the power industries, the unbundling of the industries and how the process of removing obstacles to competition could take place in COMESA countries.

Many other areas have been addressed in the Fact Sheet to monitor the current status in each member country such as how electricity market could be access? Are the market agreements already in place?

All these monitored areas need to be carried out through the implementation of national markets depending on clear defined and transparent regulations. Therefore the Fact Sheet also contains other sections deal with the technical and commercial rules and agreements, the infrastructure requirements for market operation as well as the institutional agreements for the imports and exports of electricity through the interconnections within COMESA region.

Eleven indicators have been identifying to assess the current market and regulatory status as follows:

- *Legislative and regulatory framework*
- *Financial viability of the industry*
- *Unbundling of the industry*
- *Removing obstacles to competition*

- *Market access*
- *Market Arrangements*
- *Implementation of national market*
- *Regulations*
- *Technical and commercial rules and agreements*
- *Infrastructure requirements for market operation*
- *Imports and Exports*

Multiple questions per each indicator have been used to assess the current market and regulatory frame work. The detailed regulatory status Fact Sheet is attached as Appendix (2).

The main objectives of this report are to:

- ✓ Explore the current regulatory status of the electricity sectors in participating countries
- ✓ Explore opportunities and difficulties of further market integration from legal, technical and economic perspectives, focusing also on cross border exchange even in terms of transparent and non-discriminatory access and, possibly, cross border tariffs mechanisms.

The portfolio committee on electricity has received only 8 countries responses out of the 19 member countries; namely: Comoros, DRC, Egypt, Ethiopia, Kenya, Madagascar, Rwanda, and Sudan.

The report is organized as follows:

- Chapter 1 introduction and the scope of the report
- Chapter 2 summarizes the findings of the Fact sheet
- Chapter 3 a benchmarking for the regulatory progress in member countries
- Chapter 4 is conclusions
- Appendices (member countries system data, master copy of the Fact Sheet)

Chapter 2 Findings of the Fact Sheet

Following are the findings of the fact sheet based on the received responses from:

Egypt

Comoros

DRC

Ethiopia

Rwanda

Sudan

Madagascar

Kenya

(a) Legislative and regulatory framework

Definitions:

- Separation of policy and operation: Existence of comprehensive statement of government energy policy that supports market liberalisation and provides for autonomy in the operation of commercial enterprises.
- Legislative basis for regulatory agency: Primary legislation that establishes a regulatory agency.
- Legislative basis for market mechanisms: Primary legislation that permits market mechanisms to be implemented.
- Legislative basis for industrial restructuring: The law that defines the necessary market functions, the licensing of those functions and prescribes how existing entities are to be restructured to perform those functions.
- Provision for private participation: Market restructuring can occur within a wide range of public and private ownership, but competition will not exist without significant private participation. The law allows for effective private ownership of assets and management of activities particularly in production and supply.
- Competition rules: The rules to ensure fair competition and avoid market abuse

Topic / **Country**	**Separation of policy and operation**	**Legislative basis for regulatory agency**	**Legislative basis for market mechanisms**	**Legislative basis for industrial restructuring**	**Provision for private participation**	**Competition Rules**
Egypt	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Comoros	**Yes** Existence of a Comprehensive energy strategy that includes renewable energy. There is a specific strategy for geothermal.	**No** It is the state through the Ministry of Electricity that defines and directs all activities of the electricity sector. There is not a regulatory agency. It also lacks the statutory authority.	**Yes** There is a code of public market but no specific rules.	**Yes** Ordinance No. 03-004/PR from 5th of June 2003 on the establishment of Public, Industrial and Commercial Madji na Mwendje.	**Yes** Act No. 95-008 of 19th of June on concession or privatization of SOEs.	**No** We are not yet in a competitive situation. There are only 2 companies that operate independently in 2 different islands. The market is very small in an island context: the cost of electricity is expensive and electricity is sold at a loss but companies survive by state subsidies.

Topic / Country	Separation of policy and operation	Legislative basis for regulatory agency	Legislative basis for market mechanisms	Legislative basis for industrial restructuring	Provision for private participation	Competition Rules
DRC	**Yes** Law No. 08/007 of 7th of July 2008 Laying down general provisions on the transformation of Public enterprises.	**Yes** Draft on the power sector awaiting promulgation.	**Yes** Draft on the power sector awaiting promulgation.	**Yes** Law No. 08/007 of 7th of July 2008 Laying down general provisions on the transformation of Public enterprises.	**Yes** To take into account the draft law on the electricity sector awaiting promulgation.	**Yes** Provided in the bill relating to the electricity sector with the creation of structures that define the rules.
Ethiopia	**Yes**	**Yes**	**No**	**Yes**	**Yes**	**No**
Rwanda	**Yes** Draft National energy Policy of August 2012. Law 43/2000 establishing the Energy, Water and Sanitation Authority (in charge of operations).	**Yes** Revised law No. 9/2013 of 1/3/2013 establishing the Rwanda Utilities Regulatory Authority (RURA) for the regulation of certain public utilities.	**Yes** Law No. 21/2011 of 23/6/2011 governing electricity in Rwanda. A number of secondary legislations to operationalize the electricity law.	**Yes** Law No. 21/2011 of 23/6/2011 governing electricity in Rwanda.	**Yes** Law No. 21/2011 of 23/6/2011 governing electricity in Rwanda.	**Yes** Law No. 36/2012 of 21/9/2012 relating to competition and consumer protection.
Sudan	**No**	**Yes** Included within the electricity Act 2001.	**No**	**No**	**Yes** Included within the electricity Act 2001.	**No**
Madagascar	**Yes** Law No. 98-032 of 20th of January	**Yes** Law 98-032 on Reform of the	**Yes** Law No. 2004-009 of 24th of June 2004	**Yes** Law 98-032 on Reform of the	**Yes** Law No. 98-032 of 20th of January on	**Yes** Including Law No. 98-032 of 20th of January 1999 sets

Topic Country	Separation of policy and operation	Legislative basis for regulatory agency	Legislative basis for market mechanisms	Legislative basis for industrial restructuring	Provision for private participation	Competition Rules
	1999 on the reform of the electricity sector in Madagascar has established market liberalization. The operation of commercial enterprises is itself governed by commercial law and company law.	Electricity Sector of 20th of January 1999. Decree No. 2001-173 of 28th of February 2001 laying down the conditions and procedures for application of the Act 98-032.	procurement Code	Electricity Sector on 20th of January 1999. Decree No. 2001-173 of 28th of February 2001 laying down the conditions and procedures for application of the Act 98-032. Letter of Industrial Policy (2007-2012).	the Reform of the Electricity Sector in Madagascar permits and encourages the active private ownership and private management activities (Article 2).	out the rules of competition operating contracts (Articles 9 and 13). As the competition in general, is governed by Law No. 2005-020 of 17 October 2005 on Competition and its implementing regulations.
Kenya	**Yes** Under revision to align with new constitution	**Yes**	**Yes**	**No** Being addressed during revision of policy and regulatory framework to align with new constitution	**Yes**	**No** To be developed by 2015

* If No please include the expected date for fulfillment with your comments if possible

(b) Financial viability of the industries

Definitions:

- Cost-reflective tariffs: Tariffs that recover the costs of the industry taken as a whole with adequate provision for new investment.
- Elimination of cross subsidies: Cross-subsidies lead to higher risks of inadequate revenues for market participants.
- Transparent subsidies to targeted groups: e.g., Life-line tariffs with transparent funding from the government budget.
- Reduction of non-technical losses: Efforts to reduce non-technical losses including government support for companies to collect revenues from delinquent customers or to reduce theft.
- Transitional commercial arrangements: Arrangements needed to be made for stranded assets or to recover rents.

Topic / Country	Cost-reflective tariffs	Elimination of cross subsidies	Transparent subsidies to targeted groups	Reduction of non-technical losses	Transitional commercial arrangements
Egypt	**Yes**	**No**	**No**	**Yes**	**No**
Comoros	**Yes** Law No. 94-0-36/AF of 21st of December 1994 on the Electrical Code Current Rates.	**No** Within the Electricity Company, the state subsidies still exist	**Yes**	**Yes**	**Yes**
DRC	**Yes** All mechanisms thereto are provided in the project on the electricity sector	**Yes**	**Yes**	**Yes**	**Yes**
Ethiopia	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Rwanda	**Yes** Comprehensive electricity tariff review/study is in pipeline.	**No** To be addressed by the study	**No** To be addressed by the study	**Yes** Audit commissioned by the State Owned Utility (EWSA) in December 2012 with the recommendation	**Yes**

Topic / Country	Cost-reflective tariffs	Elimination of cross subsidies	Transparent subsidies to targeted groups	Reduction of non-technical losses	Transitional commercial arrangements
				to be implemented.	
Sudan	**No**	**No**	**No**	**Yes** Payment meter introduce new covering 99.2% of the customers	**No**
Madagascar	**Yes** Act 98-032 – Article 52: "the level of regulated tariffs reflects the need to ensure the financial viability of operators". Decree No. 2001-849 of 26th of September 2001 portant terms and conditions of pricing power – Article 3: "regulated prices should reflect the economic costs of providing" "the economic costs are determined on the basis of	**Yes** Decree No. 2001-849 of 26th of September 2001 portant terms and conditions of pricing power – Article 3: "Regulated prices should reflect the economic costs of supply".	**Yes** Act 98-032 – Section 57 "the organization defines controller for residential users a first tranche of consumption whose price is supported by the following amounts of consumption, so that does not affect the financial balance of Dealers in Distribution". Decree No. 2001-849 of 26th of September 2001 on the terms and conditions of pricing electricity – Article 3 "regulated tariffs provide a social block for small consumers".	**Yes** Shares in the operator: - Continuation of Sweeps (fraud detection) at the customer - Extension of pre-payment meters	**Yes** Sale of Reformed materials and/or discarded.

Topic / Country	Cost-reflective tariffs	Elimination of cross subsidies	Transparent subsidies to targeted groups	Reduction of non-technical losses	Transitional commercial arrangements
	development plans which supply the projected demand to 15 years". Decree No. 3910/2009 of 17th of June 2009 laying down detailed rules for adjusting the rate of sale of electricity: Formula escalation rates based on changing economic parameters (parity major currencies $ & Euros; Index price of the CPI consumption price of Diesel Oil).				
Kenya	**Yes**	**No** May not be eliminated if national uniform tariffs are to be maintained	**Yes** Life line tariff exists for those consuming less than 150 units	**Yes** Mitigating policies are in place including pre-paid metering	**No** Kenya power network underdeveloped and no stranded assets but this is being addressed

- If No please include the expected date for fulfillment with your comments if possible

(c) Unbundling of the industries

Definitions:

- Disaggregating of activities: unbundling of the industries into generation, transmission and distribution.
- Transmission network operations and market functions: Transmission network functions are the transmission network asset management and operating the integrated power system. In a wholesale market environment, one further function is needed to operate the market. Those functions can be either lumped together or separated from one another. The decision is based on the local environment .e,g :,ISO, TSO
- Power Exchange: Liberalized markets where electricity is treated as a commodity allow financial trade in electricity, the establishment of a market place for this trade is a natural step.
- Balancing energy pricing: Balancing energy may be traded at regulated prices or at a spot price set through a bidding mechanism.
- Ancillary services trade: Ancillary services are a must for the secure and stable operation of power systems. Different legislative domains specify those services and their respective markets.

Topic / Country	Disaggregating of activities	Transmission network operations and market functions	Power Exchange	Balancing energy pricing	Ancillary services trade
Egypt	**Yes**	**No**	**No**	**No**	**No**
Comoros	**No** This is the same company that operates all activities. We are about to establish a strategy the distribution and transfer of activities to the communities.	**No**	**No** It was one company that provides electricity	**No** It is regulated. This is the state that sets the prices. Reference: Law No. 94-036/AF of 21st of December 1994 in the Electrical Code.	**No**
DRC	**No** Regarding the breakdown of activities is when the law is enacted, with the creation of structures that will set the system to adopt.	**No**	**No**	**No**	**No**

Topic / Country	Disaggregating of activities	Transmission network operations and market functions	Power Exchange	Balancing energy pricing	Ancillary services trade
Ethiopia	**No**	**No**	**Yes**	**No**	**No**
Rwanda	**No** The State owned power utility is still vertically integrated but the number of IPPs is increasing	**Yes** Though the electricity law provides for whole sale competition market, Rwanda is still under the single buyer model with one transmission operator for the moment. As the electricity industry evolves and becomes mature, the electricity market will eventually turn into wholesale competition.	**No**	**Yes**	**Yes**
Sudan	**Yes** 3 Generation Co. + 1 Trans Co. + 1 Distribution Co.	**No**	**No** No Market	**No** No Market	**No**
Madagascar	**Yes** Act 98-032 Reform of the electricity sector of 20th of January 1999, Article 6 – the permissions or separate concessions are granted for each of the activities of production, transport and distribution. A single	**Yes** Act No. 98-032 – Article 16: "Provided that the capacity of the transmission network permit, the regulator body may possible allow certain categories of users of distributors and some producers to enter into	**Yes** The liberalized electricity market is governed by Law No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar	**Yes** The different types of price and terms of sale of energy are set by Law No. 98-032 of 20th of January on the reform of the electricity sector in Madagascar and by	**No** There are still no specific legislative areas for these services. But the auxiliary energy consumption of the electrical system is always recognized.

Topic Country	Disaggregating of activities	Transmission network operations and market functions	Power Exchange	Balancing energy pricing	Ancillary services trade
	operator can hold authorizations or concessions for the 3 activities. Decree No. 2001-173 of 28th of February 2001 Laying down the conditions and procedures for application of the Act 98-032	supply contracts directly with electricity between them. It defines the Dealer transport conditions in which the interconnected network concerned can be used to pass the flow of electricity produced under these contracts. It sets the transit fee in accordance with Article 58".		Decree No. 2001-849 of 26th of September 2001.	
Kenya	**Yes** Unbundling of distribution and retail services under consideration	**No**	**Yes**	**No**	**No**

(d) Removing obstacles to competition

Definitions:

- Break up of dominant positions: Indications of the manner in which dominant positions will be diminished.
- Electricity network extension: The transmission system owner should be obliged to provide a transmission system expansion plan with an indication of how congestion is to be relieved and adequate capacity to support new entrants is to be provided

Topic / Country	Break-up of dominant positions	Network extension
Egypt	**No**	**Yes**
Comoros	**No** It is still a Monopoly. Only MAMWE corporation (Grande Comore and Moheli) and EDA (Anjouan) holding activities related to electricity generation, transmission and distribution.	**No** Here the producer and the distributor is the same and the 2 components are integrated into a single expansion plan.
DRC	**Yes** To take into account the draft law on the electricity sector awaiting promulgation.	**Yes** Provided in the bill relating to the electricity sector with the creation of structures that define rules.
Ethiopia	**No**	**No**
Rwanda	**No** The electricity supply industry is vertically integrated with the state owned Utility (EWSA) being a major player with its own electricity generation, transmission and distribution facilities in Rwanda but IPPs are slowly growing in numbers.	**Yes**
Sudan	**No**	**Yes** Long and medium term plans are in place
Madagascar	**Yes** The Monopoly of the state on the electrical activity was abolished by Act No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar.	**Yes** The various expansion plans are governed by Law No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar:

Topic Country	Break-up of dominant positions	Network extension
	Including Law No. 98-032 of 20th of January 1999 sets out the rules of competition operating contracts (Articles 9 and 13). As the competition, in general, is governed by Law No. 2005-020 of 17th of October 2005 on competition and its implementing regulations	- Article 15: "the Transport Dealers are required to make the interconnection of new operators who demand. The terms and the allocation of costs of the connection and, if necessary, strengthening of the network are the subject negotiations between the 2 parties and are regulated by the agreement party, in accordance with the principles set by the regulator body." - Article 16: "Every Dealer or a system operator shall ensure network security, reliability and efficiency in the area it covers. It provides the function of dispatching. It develops a plan for the development of production in the network and implements the launch of tenders in accordance with Article 38. It takes all the necessary measures to ensure the availability of all necessary ancillary services to maintain a high level of reliability and security of the electric grid." - Article 38: "the organization regulator develops an indicative plan for the electricity sector, having identified in collaboration with local communities, Dealers and Permitees of the sector, industrials, traders and consumers needs and the implementation and expansion of production facilities plans, Transmission and Distribution of electricity in the territory of the republic of Madagascar. On the basis, it can be instructed by the government to develop a program to tender in the field of electrical energy"

Topic Country	Break-up of dominant positions	Network extension
Kenya	**No** May be achieved through the 5000+ MW by 2016 initiative under which majority of new generation is to be developed by private sector	**No** Government is funding most of the transmission network extensions

(e) Market access

Definitions:

- Definition of eligible consumers: The Law provision for the definition of consumers that may participate in a competitive market (eligible consumers). Precise definition would normally be the responsibility of the regulator under guidance from government.
- Definition of Use of System (UOS) charges: The defined mechanism for the determination of cost-reflective, non-discriminatory UOS charges initiated either by the regulator or by the transmission system owner.
- Procedures for congestion management: The defined mechanism for non-discriminatory access to networks (charging principles, the allocation of transmission rights and methods of congestion management) initiated either by the regulator or preferably by the transmission system owner subject to regulatory approval.
- Non-discriminatory operational rules: The defined mechanism for non-discriminatory operation of systems including dispatch of generating plant and balancing

Topic / Country	Definition of eligible consumers	Definition of Use of System charges	Procedures for congestion management	Non-discriminatory operational rules
Egypt	**Yes**	**Yes**	**No**	**No** (Drafted)
Comoros	**No** The regulatory agency is not yet created. No legislation has defined an eligible consumer	**Yes** Law No. 94-036/AF of 21th of December 1994, Electrical Code	**Yes**	**Yes**
DRC	**Yes** The Law relating to the electricity sector provides that: any operator in good standing with terms of reference has the right to conclude the contract for the purchase or supply of electricity	**Yes**	**Yes**	**Yes**
Ethiopia	**No**	**No**	**No**	**No**

Topic Country	Definition of eligible consumers	Definition of Use of System charges	Procedures for congestion management	Non-discriminatory operational rules
Rwanda	**No** The electricity law provides for large scale customers but the concept is to be clearly defined while elaborating secondary legislations relating to tariff methodology	**No** To be addressed in the regulations on tariff methodology	**Yes** Catered for the Rwanda Grid Code	**Yes** Catered for the Rwanda Grid Code
Sudan	**No** No Market	**No** No Market	**No** No Market	**No** No Market
Madagascar	**Yes** Law No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar rather talks about end users that eligible consumers. They are all those who buy electric energy distributor (households, industries, etc)	**No** Law No. 98-032 Article 35: "The Body controller is responsible in particular: - Determine and publish in accordance with the tariff provisions of this Act and its implementing texts, regulated electricity and the amount of transit fees and supervise their correct application prices - To monitor the standards of service quality To monitor and enforce the principles of competition"	**Yes** Regulators approves the invoice templates and billing arrangements established by the operators, in accordance with the provisions of Law No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar.	**Yes** Law No. 98-032: Article 15: "the transport dealers have an obligation to make the interconnection of new operators who demand. The terms and the allocation of costs of the connection and if necessary, strengthening of the network are the subject of negotiations between the two parties and are regulated by agreement party, in accordance with the principles set by the regulator body" Article 16: "every dealer and system operator shall ensure network security, reliability and efficiency in the area it covers. It provides the function

Topic Country	Definition of eligible consumers	Definition of Use of System charges	Procedures for congestion management	Non-discriminatory operational rules
				of dispatching”
Kenya	**No** Work in progress, to be completed by 2015			

(f) Market Arrangements

Definitions:

- Definition of market form: A clear decision by government concerning the market form to be adopted and clear specification of responsibilities for design and implementation.
- Establishment of market rules: A clear and operational specification of rules for primary exchanges of electricity, ancillary services and balancing markets. These should normally be founded in consultation with industry and the regulator.
- Review and drafting of agreements: The codes and agreements to implement the market need to be drafted; the exact form of the agreements will depend upon the form of market that is selected
- Specification and implementation of settlement systems: A clear and operational specification of financial settlement systems based on consultation with industry and the regulator.

Topic / Country	Definition of market form	Establishment of market rules	Review and drafting of agreements	Settlement systems
Egypt	**Yes**	**Yes**	**Yes**	**No**
Comoros	**No** Law No. 94-036/AF of 21st of December 1994 Electrical Code.	**No** These rules are not developed because it is not yet an electricity trading system. It has a single operator in the 2 islands (Large Comore and Moheli) and another in third.	**No** Codes and agreement are not written because of the absence of these types of markets.	**No** There is not a regulatory agency.
DRC	**Yes**	**Yes**	**Yes**	**No**
Ethiopia	**No**	**No**	**No**	**No**
Rwanda	**Yes**	**Yes**	**Yes**	**Yes**
Sudan	**No** No Market	**No** No Market	**No** No Market	**No** No Market
Madagascar	**No** Madagascar not yet practices of "cross-border markets". Therefore, all the relevant provisions are still lacking.			
Kenya	**No** Work in progress, to be completed by 2015			

(g) Implementation of national market

Definitions:

- Official and political responsibility :A clear overall official and political responsibility and accountability
- Action plan: A clear and operational action plans with schedules and responsibilities known to participants
- Programme management : Adequate and effective programme management arrangements and implementation
- First operation of the market :An agreed date for first operation of the market

Topic / Country	Official and political responsibility	Action plan	Programme management	First operation of the market
Egypt	**Yes**	**No**	**No**	**No**
Comoros	**Yes**	**Yes**	**Yes**	**No**
DRC	**Yes**	**Yes**	**Yes**	**Yes**
Ethiopia	**No**	**No**	**No**	**No**
Rwanda	**Yes**	**Yes**	**Yes**	**No**
Sudan	**No** No Market	**No** No Market	**No** No Market	**No** No Market
Madagascar	**Yes** Promulgation in 2000 Frames and regulatory texts governing the electricity sector: Law 98-032, Decree 2001-173, 2011-803 Decree…	**Yes** Update letter energy policy (in progress)	**Yes** Indicative Sector Plans	**Yes** Year 2000
Kenya	**No**			

(h) Regulation

Definitions:

- Independence of regulator: Independence includes own funding and appropriate appointment procedures. It also means that regulatory decisions should not be capable of reversal by the Ministry.
- Powers to perform his duties: The adequate powers possessed by the regulator to make necessary determinations, powers to require the information on which to base determinations and powers to enforce compliance with determinations e.g. penalties, revocation of licences.
- Definition of regulatory principles: The regulator should operate within a clearly defined framework of duties and responsibilities, including reporting and accountability. The regulator should define procedures for working and principles upon which decisions shall be made.
- Regulatory capacities: The regulator should have sufficient staff with appropriate skills.

Topic / Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities
Egypt	**Yes**	**Yes**	**Yes**	**Yes**
Comoros	**No** There is no independent regulator for the control system is not yet implemented.	**No** The control system is not yet implemented	**No**	**No**
DRC	**Yes** Relating to the electricity sector law, provides for a regulatory authority which will be to control and promote competition, protect the interests of users, the settlement of disputes between operators and consumers, etc.	**Yes**	**Yes**	**Yes**
Ethiopia	**No**	**No**	**Yes**	Yes
Rwanda	**Yes** Reference to the Article 30 of the new RURA law No	**Yes** Catered for in the new RURA Law.	**Yes** Catered for in the new RURA Law.	**Yes**

Topic Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities
	09/2013 of 01/03/2013. Decision Nullification only when the security of Rwanda is at stake.			
Sudan	**No** The regulator is under the ministry	**No**	**No**	**No**
Madagascar	**Yes** Law No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar creates the controller and acquires independence of action and financial autonomy (cf. Article 34)	**Yes** Under the provisions of Act 98-032: - Article 34: "the body controller is a specialized technical consultative and executive body in the field of electricity with legal personality and financial autonomy. As appropriate, may consult all agencies and organizations in the execution of its mission." - Article 35: "the body controller also has powers of inspection, investigation, inquiry injunction and sanctions that enable it to ensure the proper functioning and transparency of the sector." - Article 47: "for the accomplishment of the tasks entrusted to it by this act.	**Yes** Regulatory principles are prescribed by Act No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar and its implementing regulations. The office of electricity regulation (ORE) operates on the basis of the provisions: - The reform act 98-032 electricity sector in Madagascar - Decree No. 2001-173 establishing the implementing rules of the Act 98-032 - Decree No. 2001-803 specifying the organization and operation of the controller	**Yes** The Office of Electricity Regulation (ORE) officially since 2005, with - An Electricity Council (governing body) of 7 members - An executive Secretariat (executive body) composed of qualified technical personnel: Electromechanical Engineers, Engineering-civil Engineer, planner electric power generation systems and networks, economist, financial, legal, software engineer, manager

Topic Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities
		The regulator agency may: 1) collect, both with administrations that legal people or permittees Dealers sector, all the information necessary to ensure compliance with the obligations imposed upon them, without being opposed to the regulator body with no limitation, 2) to proceed with the same natural or legal people investigations, 3) to carry all years of surveys of users at the expense of dealers or permittees to evaluate the quality of service. Actions, decisions, orders or sanctions pronounced by the regulator body may be appealed before the Council of State." N.B. Act No. 98-032 of 20th of January 1999 on the reform of the electricity sector in Madagascar provides the functions and prerogatives of the regulator, but the power to revoke the concessions and authorizations belongs to the	- Procedures Manual of the ORE - Internal regulations of the ORE	

Topic Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities
		licensing authority (Ministry of energy)		
Kenya	**Yes**			

(i) Technical and commercial rules and agreements

Definitions:

- Network Codes: Transmission and distribution codes need to be prepared and published
- Use of System agreements: Should be prepared and published
- Connection charges and procedures: Agreements should be prepared and published for connections to the transmission and distribution systems

Topic / Country	Network Codes	Use of System agreements for transmission network	Connection charges and procedures
Egypt	**Yes**	**Yes**	**Yes**
Comoros	**No** The network codes are not established but any relative activity defined in Law No. 94-036/AF of 21st of December 1994 Electrical Code.	**No** The network codes are not developed.	**No** These agreements do not exist
DRC	**Yes** Provided for in the law of the electricity sector	**Yes**	**Yes**
Ethiopia	**No**	**Yes**	**Yes**
Rwanda	**Yes** Catered for in the Rwanda Grid Code	**Yes** Catered for in the Rwanda Grid Code	**Yes** Catered for in the Rwanda Grid Code
Sudan	**Yes**	**Yes**	**Yes**
Madagascar	**No** Date not yet scheduled so far		
Kenya	**Yes**	**No**	**No**

(j) Infrastructure requirements for market operation

Definitions:

- Specification of system metering needs: The metering of exchanges between system-entities should be reviewed, deficiencies identified and remedies prescribed.
- Specification of consumer metering needs: The metering of consumers should be reviewed for consistency with eligibility and market arrangements, deficiencies identified and remedies prescribed.
- Specification of communication and IT requirements: The communication and IT infrastructure should be reviewed for consistency with eligibility and market arrangements, deficiencies identified and remedies prescribed.
- Procurement: Responsibilities for procurement need to be defined and finance arranged; includes procurement and commissioning of the IT

Topic / Country	Specification of system metering needs	Specification of consumer metering needs	Specification of communication and IT requirements	Procurement
Egypt	**No**	**No**	**No**	**No**
Comoros	**No** No exchange between entities because they don't exist.	**No**	**No**	**Yes**
DRC	**No** When the law on the electricity sector will be enacted, it is then that all operational structures are in place that assessment infrastructure needs will be.	**No**	**No**	**Yes**
Ethiopia	**No**	**No**	**No**	**No**
Rwanda	**Yes** Catered for in the Rwanda Grid Code	**Yes** Catered for in the Rwanda Grid Code	**Yes** Catered for in the Rwanda Grid Code	**Yes**
Sudan	**Yes**	**Yes**	**Yes**	**Yes**
Madagascar	**No**	**No**	**No**	**No**

(k) Imports and exports

Definitions:

- Institutional arrangements for use of interconnections: National rules on imports and exports and on the use of interconnections with neighbouring systems may need to be adjusted to allow economic trading.
- Charging arrangements: European experience has shown that it is difficult to implement rational solutions because of existing capacity entitlements and the issue has not been finally resolved. It is a topic which will require detailed examination among MPs at sub-regional and regional level.

Topic **Country**	**Interim arrangements for use of interconnections**	**Final arrangements for use of interconnections**	**Charging arrangements**
Egypt	**No**	**No**	**No**
Comoros	**No** There are no an Interconnection systems	**No** There are no an Interconnection systems	**No** There are no an Interconnection systems
DRC	**Yes** At present, our national electricity company has signed contracts with electricity companies in neighbouring countries with which there are exchanges.	**Yes** At the finish, it's still the electricity sector is the parliament which will give the final arraignments for the use of interconnections.	**Yes**
Ethiopia	**Yes**	**No**	**No**
Rwanda	**Yes**	**Yes**	**Yes**
Sudan	**Yes**	**Yes**	**Yes**
Madagascar	**No**	**No**	**No**
Kenya	**Yes**	**No**	**No**

Chapter 3 Benchmarking on Regulatory Progress in the Member Countries

Explanatory Note:

Eleven indicators have been examined to assess the status of Regulatory process and market implementation activities. These indicators include:

a) ***Legislative and regulatory framework***
b) ***Financial viability of the industries***
c) ***Unbundling of the industries***
d) ***Removing obstacles to competition***
e) ***Market access***
f) ***Market Arrangements***
g) ***Implementation of national market***
h) ***Regulation***
i) ***Technical and commercial rules and agreements***
j) ***Infrastructure requirements for market operation***
k) ***Imports and Exports***

Table 3.1 shows numbers of questions used to asses each indicator. The answer to these questions is either yes or no. A benchmarking scale has been proposed, this scale consists of four categories.

Table 3.2 shows the number of yes answers for each category. It should be noted that for imports and exports the first two questions are exclusive. Therefore the weight of a yes to any of these two questions has a double weight.

Table 3.1 Number of questions considered for each Indicator

Indicators	***Number of Questions***
Legislative and regulatory framework	***6***
Financial viability of the industries	***5***
Unbundling of the industries	***5***
Removing obstacles to competition	***2***
Market access	***4***
Market Arrangements	***4***
Implementation of national market	***4***
Implementation of national market	***4***
Regulation	***4***
Technical and commercial rules and agreements	***3***
Infrastructure requirements for market operation	***4***
Imports and exports	***3***

Table 3.2 Benchmarks level

Number of questions used in Evaluation	***Benchmarking Category based on number of yes***			
	Fulfilled	***In progress***	***Starting phase***	***Not yet***
6	6	2-5	1	0
5	5	2-4	1	0
4	4	2-3	1	0
3	3	2	1	0
2	2	1		0

Yes No



(a) Legislative and regulatory framework

Definitions:

- Separation of policy and operation: Existence of comprehensive statement of government energy policy that supports market liberalisation and provides for autonomy in the operation of commercial enterprises.
- Legislative basis for regulatory agency: Primary legislation that establishes a regulatory agency.
- Legislative basis for market mechanisms: Primary legislation that permits market mechanisms to be implemented.
- Legislative basis for industrial restructuring: The law that defines the necessary market functions, the licensing of those functions and prescribes how existing entities are to be restructured to perform those functions.
- Provision for private participation: Market restructuring can occur within a wide range of public and private ownership, but competition will not exist without significant private participation. The law allows for effective private ownership of assets and management of activities particularly in production and supply.
- Competition rules: The rules to ensure fair competition and avoid market abuse

Topic / Country	Separation of policy and operation	Legislative basis for regulatory agency	Legislative basis for market mechanisms	Legislative basis for industrial restructuring	Provision for private participation	Competition rules	Benchmarking
Egypt	○	○	●	○	○	○	**In Progress**
Comoros	○	●	○	○	○	●	**In Progress**
DRC	○	○	○	○	○	○	**Fulfilled**

Topic / Country	Separation of policy and operation	Legislative basis for regulatory agency	Legislative basis for market mechanisms	Legislative basis for industrial restructuring	Provision for private participation	Competition rules	Benchmarking
Ethiopia	○	○	●	○	○	●	**In progress**
Rwanda	○	○	○	○	○	○	**Fulfilled**
Sudan	●	○	●	●	○	●	**In Progress**
Madagascar	○	○	○	○	○	○	**Fulfilled**
Kenya	○	○	○	●	○	●	**In Progress**

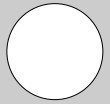
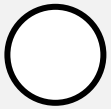
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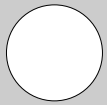
Fulfilled	***In progress***	***Starting phase***	***Not yet***
6/6	***From 5/6 till 2/6***	***1/6***	***0/6***

(b) Financial viability of the industries

Definitions:

- Cost-reflective tariffs: Tariffs that recover the costs of the industry taken as a whole with adequate provision for new investment.
- Elimination of cross subsidies: Cross-subsidies lead to higher risks of inadequate revenues for market participants.
- Transparent subsidies to targeted groups: e.g., Life-line tariffs with transparent funding from the government budget.
- Reduction of non-technical losses: Efforts to reduce non-technical losses including government support for companies to collect revenues from delinquent customers or to reduce theft.
- Transitional commercial arrangements: Arrangements needed to be made for stranded assets or to recover rents.

Topic / Country	Cost-reflective tariffs	Elimination of cross subsidies	Transparent subsidies to targeted groups	Reduction of non-technical losses	Transitional commercial arrangements	Benchmarking
Egypt						**In Progress**
Comoros						**In Progress**
DRC						**Fulfilled**
Ethiopia						**Fulfilled**
Rwanda						**In Progress**

Topic Country	Cost-reflective tariffs	Elimination of cross subsidies	Transparent subsidies to targeted groups	Reduction of non-technical losses	Transitional commercial arrangements	Benchmarking
Sudan						**Starting Phase**
Madagascar						**Fulfilled**
Kenya						**In Progress**

- If No please include the expected date for fulfillment with your comments if possible

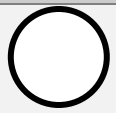
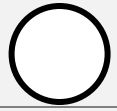
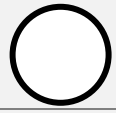
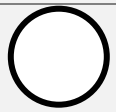
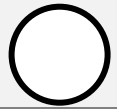
Fulfilled	***In progress***	***Starting phase***	***Not yet***
5/5	***From 4/5 till 2/5***	***1/5***	***0/5***

(c) Unbundling of the industries

Definitions:

- Disaggregating of activities: unbundling of the industries into generation, transmission and distribution.
- Transmission network operations and market functions: Transmission network functions are the transmission network asset management and operating the integrated power system. In a wholesale market environment, one further function is needed to operate the market. Those functions can be either lumped together or separated from one another. The decision is based on the local environment .e,g :,ISO, TSO
- Power Exchange: Liberalized markets where electricity is treated as a commodity allow financial trade in electricity, the establishment of a market place for this trade is a natural step.
- Balancing energy pricing: Balancing energy may be traded at regulated prices or at a spot price set through a bidding mechanism.
- Ancillary services trade: Ancillary services are a must for the secure and stable operation of power systems. Different legislative domains specify those services and their respective markets.

Topic / Country	Disaggregating of activities	Transmission network operations and market functions	Power Exchange	Balancing energy pricing	Ancillary services trade	Benchmarking
Egypt	○	●	●	●	●	**Starting Phase**
Comoros	●	●	●	●	●	**Not Yet**
DRC	●	●	●	●	●	**Not Yet**
Ethiopia	●	●	○	●	●	**Starting Phase**
Rwanda	●	○	●	○	○	**In Progress**

Topic / Country	Disaggregating of activities	Transmission network operations and market functions	Power Exchange	Balancing energy pricing	Ancillary services trade	Benchmarking
Sudan						**Starting Phase**
Madagascar						**In Progress**
Kenya						**In Progress**

Fulfilled
5/5

In progress
From 4/5 till 2/5

Starting phase
1/5

Not yet
0/5

(d) Removing obstacles to competition

Definitions:

- Break up of dominant positions: Indications of the manner in which dominant positions will be diminished.
- Electricity network extension: The transmission system owner should be obliged to provide a transmission system expansion plan with an indication of how congestion is to be relieved and adequate capacity to support new entrants is to be provided

Topic / Country	Break-up of dominant positions	Network extension	Benchmarking
Egypt	●	○	**In Progress**
Comoros	●	●	**Not Yet**
DRC	○	●	**In Progress**
Ethiopia	●	●	**Not Yet**
Rwanda	●	○	**In Progress**
Sudan	●	○	**In Progress**
Madagascar	○	○	**Fulfilled**

Topic Country	Break-up of dominant positions	Network extension	Benchmarking
Kenya			**In Progress**

(e) Market access

Definitions:

- Definition of eligible consumers: The Law provision for the definition of consumers that may participate in a competitive market (eligible consumers). Precise definition would normally be the responsibility of the regulator under guidance from government.
- Definition of Use of System (UOS) charges: The defined mechanism for the determination of cost-reflective, non-discriminatory UOS charges initiated either by the regulator or by the transmission system owner.
- Procedures for congestion management: The defined mechanism for non-discriminatory access to networks (charging principles, the allocation of transmission rights and methods of congestion management) initiated either by the regulator or preferably by the transmission system owner subject to regulatory approval.
- Non-discriminatory operational rules: The defined mechanism for non-discriminatory operation of systems including dispatch of generating plant and balancing

Topic / Country	Definition of eligible consumers	Definition of Use of System charges	Procedures for congestion management	Non-discriminatory operational rules	Benchmarking
Egypt	○	○	●	●	**In Progress**
Comoros	●	○	○	○	**In Progress**
DRC	○	○	○	○	**Fulfilled**
Ethiopia	●	●	●	●	**Not Yet**
Rwanda	●	●	○	○	**In Progress**

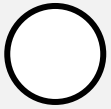
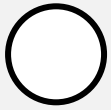
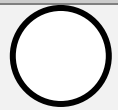
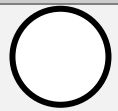
Topic / Country	Definition of eligible consumers	Definition of Use of System charges	Procedures for congestion management	Non-discriminatory operational rules	Benchmarking
Sudan					**Not Yet**
Madagascar					**In Progress**
Kenya					**Not Yet**

Fulfilled ***4/4*** | ***In progress*** ***From 3/4 till 2/4*** | ***Starting phase*** ***1/4*** | ***Not yet*** ***0/4***

(f) Market Arrangements

Definitions:

- Definition of market form: A clear decision by government concerning the market form to be adopted and clear specification of responsibilities for design and implementation.
- Establishment of market rules: A clear and operational specification of rules for primary exchanges of electricity, ancillary services and balancing markets. These should normally be founded in consultation with industry and the regulator.
- Review and drafting of agreements: The codes and agreements to implement the market need to be drafted; the exact form of the agreements will depend upon the form of market that is selected
- Specification and implementation of settlement systems: A clear and operational specification of financial settlement systems based on consultation with industry and the regulator.

Topic / Country	Definition of market form	Establishment of market rules	Review and drafting of agreements	Settlement systems	Benchmarking
Egypt					**In Progress**
Comoros					**Not Yet**
DRC					**Fulfilled**
Ethiopia					**Not Yet**
Rwanda					**Fulfilled**

Topic / Country	Definition of market form	Establishment of market rules	Review and drafting of agreements	Settlement systems	Benchmarking
Sudan					**Not Yet**
Madagascar					**Not Yet**
Kenya					**Not Yet**

Fulfilled
4/4

In progress
From 3/4 till 2/4

Starting phase
1/4

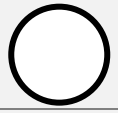
Not yet
0/4

(g) Implementation of national market

Definitions:

- Official and political responsibility :A clear overall official and political responsibility and accountability
- Action plan: A clear and operational action plans with schedules and responsibilities known to participants
- Programme management : Adequate and effective programme management arrangements and implementation
- First operation of the market :An agreed date for first operation of the market

Topic / Country	Official and political responsibility	Action plan	Program management	First operation of the market	Benchmarking
Egypt	○	●	●	●	**Starting Phase**
Comoros	○	○	○	●	**In Progress**
DRC	○	○	○	○	**Fulfilled**
Ethiopia	●	●	●	●	**Not Yet**
Rwanda	○	○	○	●	**In Progress**
Sudan	●	●	●	●	**Not Yet**

Topic Country	Official and political responsibility	Action plan	Program management	First operation of the market	Benchmarking
Madagascar					**Fulfilled**
Kenya					**Not Yet**

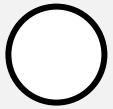
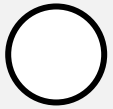
Fulfilled	*In progress*	*Starting phase*	*Not yet*
4/4	*From 3/4 till 2/4*	*1/4*	*0/4*

(h) Regulation

Definitions:

- Independence of regulator: Independence includes own funding and appropriate appointment procedures. It also means that regulatory decisions should not be capable of reversal by the Ministry.
- Powers to perform his duties: The adequate powers possessed by the regulator to make necessary determinations, powers to require the information on which to base determinations and powers to enforce compliance with determinations e.g. penalties, revocation of licences.
- Definition of regulatory principles: The regulator should operate within a clearly defined framework of duties and responsibilities, including reporting and accountability. The regulator should define procedures for working and principles upon which decisions shall be made.
- Regulatory capacities: The regulator should have sufficient staff with appropriate skills.

Topic / Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities	Benchmarking
Egypt	○	○	○	○	**Fulfilled**
Comoros	●	●	●	●	**Not Yet**
DRC	○	○	○	○	**Fulfilled**
Ethiopia	●	●	○	○	**In Progress**
Rwanda	○	○	○	○	**Fulfilled**
Sudan	●	●	●	●	**Not Yet**

Topic Country	Independence of regulator	Powers to perform his duties	Definition of regulatory principles	Regulatory capacities	Benchmarking
Madagascar					**Fulfilled**
Kenya					**Fulfilled**

Fulfilled
4/4

In progress
From 3/4 till 2/4

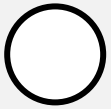
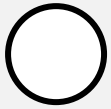
Starting phase
1/4

Not yet
0/4

(i) Technical and commercial rules and agreements

Definitions:

- Network Codes: Transmission and distribution codes need to be prepared and published
- Use of System agreements: Should be prepared and published
- Connection charges and procedures: Agreements should be prepared and published for connections to the transmission and distribution systems

Topic / Country	Network Codes	Use of System agreements for transmission network	Connection charges and procedures	Benchmarking
Egypt				**Fulfilled**
Comoros				**Not Yet**
DRC				**Fulfilled**
Ethiopia				**In Progress**
Rwanda				**Fulfilled**
Sudan				**Fulfilled**

Topic / Country	Network Codes	Use of System agreements for transmission network	Connection charges and procedures	Benchmarking
Madagascar				**Not Yet**
Kenya				**Starting Phase**

Fulfilled
3/3

In progress
2/3

Starting phase
1/3

Not yet
0/3

(j) Infrastructure requirements for market operation

Definitions:

- Specification of system metering needs: The metering of exchanges between system-entities should be reviewed, deficiencies identified and remedies prescribed.
- Specification of consumer metering needs: The metering of consumers should be reviewed for consistency with eligibility and market arrangements, deficiencies identified and remedies prescribed.
- Specification of communication and IT requirements: The communication and IT infrastructure should be reviewed for consistency with eligibility and market arrangements, deficiencies identified and remedies prescribed.
- Procurement: Responsibilities for procurement need to be defined and finance arranged; includes procurement and commissioning of the IT

Topic / Country	Specification of system metering needs	Specification of consumer metering needs	Specification of communication and IT requirements	Procurement	Benchmarking
Egypt	●	●	●	●	**Not Yet**
Comoros	●	●	●	○	**Starting Phase**
DRC	●	●	●	○	**Starting Phase**
Ethiopia	●	●	●	●	**Not Yet**
Rwanda	○	○	○	○	**Fulfilled**
Sudan	○	○	○	○	**Fulfilled**

Topic Country	Specification of system metering needs	Specification of consumer metering needs	Specification of communication and IT requirements	Procurement	Benchmarking
Madagascar					**Not Yet**
Kenya					**Not Yet**

Fulfilled
4/4

In progress
From 3/4 till 2/4

Starting phase
1/4

Not yet
0/4

(k) Imports and exports

Definitions:

- Institutional arrangements for use of interconnections: National rules on imports and exports and on the use of interconnections with neighbouring systems may need to be adjusted to allow economic trading.
- Charging arrangements: European experience has shown that it is difficult to implement rational solutions because of existing capacity entitlements and the issue has not been finally resolved. It is a topic which will require detailed examination among MPs at sub-regional and regional level.

Topic / Country	Interim arrangements for use of interconnections	Final arrangements for use of interconnections	Charging arrangements	Benchmarking
Egypt	●	●	●	**Not Yet**
Comoros	●	●	●	**Not Yet**
DRC	○	○	○	**Fulfilled**
Ethiopia	○	●	●	**Starting Phase**
Rwanda	○	○	○	**Fulfilled**
Sudan	○	○	○	**Fulfilled**
Madagascar	●	●	●	**Not Yet**

Topic Country	Interim arrangements for use of interconnections	Final arrangements for use of interconnections	Charging arrangements	Benchmarking
Kenya				**Starting Phase**

Fulfilled
3/3

In progress
2/3

Starting phase
1/3

Not yet
0/3

Chapter 4 Conclusions

This report is concerned with the data provided from only 8 members (out of 19 countries of COMESA), namely: Comoros, DRC, Egypt, Ethiopia, Madagascar, Kenya, Rwanda and Sudan. The data obtained through the questionnaire has the potential of being as a ground of a benchmarking program for COMESA region. The approach adopted in this report is to classify the answers into Yes or No clusters. An overall statistics is provided. Accordingly, the following table presents a summary of the benchmarking study.

The Table shows that the mentioned countries either fulfilled or are still in the process of the establishment of the legislative framework for liberalized electricity markets. However, all countries, except Sudan, are still in the process of making the electricity industry financially viable. Only Sudan is facing this challenge and considered to be in the early Starting Phase.

Concerning the industries' unbundling, only Madagascar has the privilege of fulfilling this challenge, while Rwanda and Kenya are considered to be in the process of unbundling. Unfortunately, Egypt, Ethiopia and Sudan are still in the early starting phase of the process, whereas Comoros and DRC haven't yet even started the unbundling process.

Again, only Madagascar has the privilege of completion of removing the obstacles of competition. On the other hand, Comoros and Ethiopia haven't yet started this process. Fortunately, the other countries are started the process and considered to be in the road of releasing the competition.

DRC is considered to be the first country to fulfill the requirements for market access, followed by the other countries which are still in the process of fulfilling these requirements. However, Ethiopia, Sudan and Kenya haven't started yet to fulfill these requirements.

Concerning the market arrangements, DRC and Rwanda have the lead of fulfilling these arrangements. Only Egypt is considered to be in process of making these arrangements, whereas all the remaining countries haven't started yet.

Moreover, DRC and Madagascar have the lead in fulfillment of national market implementation, whereas Comoros and Rwanda are still in progress. However, Egypt is considered to be in the early starting phase whereas, Ethiopia, Sudan and Kenya haven't yet even started to go for a national market.

On the other hand, most of countries have completed the requirements for regulation. However, only Ethiopia is considered to be in the process for establishing the required regulations, whereas Comoros and Sudan haven't started yet.

Concerning the technical and commercial rules and agreements, most of countries have fulfilled these requirements. However, only Ethiopia is considered to be in progress. Kenya is considered to be in the Early starting phase, whereas Comoros and Madagascar haven't started yet.

Also, Sudan and Rwanda have completed the infrastructure requirements for market operation. The remaining countries are either in the starting phase such as Comoros and DRC, or haven't even started yet such as Egypt, Ethiopia, Madagascar and Kenya.

Finally, if the member countries gave more attention to the imports and exports, they would find that DRC, Rwanda and Sudan are in the lead. However, Egypt, Comoros and Madagascar haven't yet started importing or exporting. Only, Ethiopia and Kenya are considered to be in the starting phase of having imports and exports. All the countries either fulfilled or still in the process of the establishment of the legislative framework for liberalized electricity markets

In Conclusion

Most of COMESA Member States have set up independent regulatory authorities to make objective, and consistent regulatory decisions. However, still regulators meet some reluctance that limiting the effectiveness of sector regulation.

One way forward is through benchmarking process. It is understood that developing credible and effective regulation takes time and needs much iteration and it has a learning curve.

Most of the surveyed countries are still facing the challenge in a way or another in developing their regulation and building competitive markets. The industry unbundling question is still on the table for all countries except for Madagascar.

Still competition is facing obstacles in most of the respondent countries. Market access is still an issue in countries that are not strongly had legal framework and the necessary legislations. Most of the member countries have not fully defined their market arrangements.

All countries are in different stages on route to set their codes and technical agreements. Cross border trade is far from mature for the entire respondent group.

Summary table for Regulatory and Market Implementation Benchmarking

Country	*Legislative and regulatory framework*	*Financial viability of the industries*	*Unbundling of the industries*	*Removing obstacles to competition*	*Market access*	*Market Arrangements*	*Implementation of national market*	*Regulation*	*Technical and commercial rules and agreements*	*Infrastructure requirements for market operation*	*Imports and exports*
Egypt	In Progress	In Progress	Starting Phase	In Progress	In Progress	In Progress	Starting Phase	Fulfilled	Fulfilled	Not Yet	Not Yet
Comoros	In Progress	In Progress	Not Yet	Not Yet	In Progress	Not Yet	In Progress	Not Yet	Not Yet	Starting Phase	Not Yet
DRC	Fulfilled	Fulfilled	Not Yet	In Progress	Fulfilled	Fulfilled	Fulfilled	Fulfilled	Fulfilled	Starting Phase	Fulfilled
Ethiopia	In Progress	Fulfilled	Starting Phase	Not Yet	Not Yet	Not Yet	Not Yet	In Progress	In Progress	Not Yet	Starting Phase
Rwanda	Fulfilled	In Progress	In Progress	In Progress	In Progress	Fulfilled	In Progress	Fulfilled	Fulfilled	Fulfilled	Fulfilled
Sudan	In Progress	Starting Phase	Starting Phase	In Progress	Not Yet	Not Yet	Not Yet	Not Yet	Fulfilled	Fulfilled	Fulfilled
Madagascar	Fulfilled	Fulfilled	Fulfilled	Fulfilled	In Progress	Not Yet	Fulfilled	Fulfilled	Not Yet	Not Yet	Not Yet
Kenya	In Progress	In Progress	In Progress	In Progress	Not Yet	Not Yet	Not Yet	Fulfilled	Starting Phase	Not Yet	Starting Phase