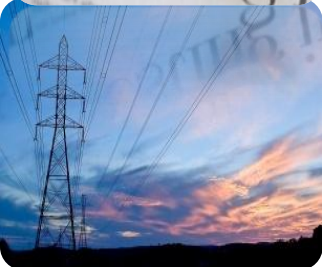
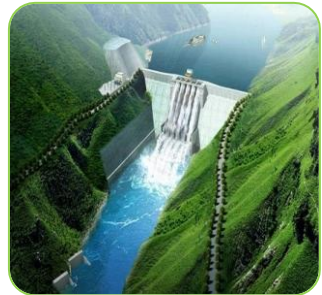


# Key findings of the SARI/EI study On

*Developing the Model Framework for Trading License Regime and Guidelines for grant of Trading License to initiate/advance power trading in SA countries and facilitate Cross Border Electricity Trade (CBET) in the SA region*

**19<sup>th</sup> July 2017**

**Pokhara, Nepal**



## Agenda

1

Background

2

Introduction to Power Trading License Framework

3

Key Findings

4

Trading License Framework and Guidelines

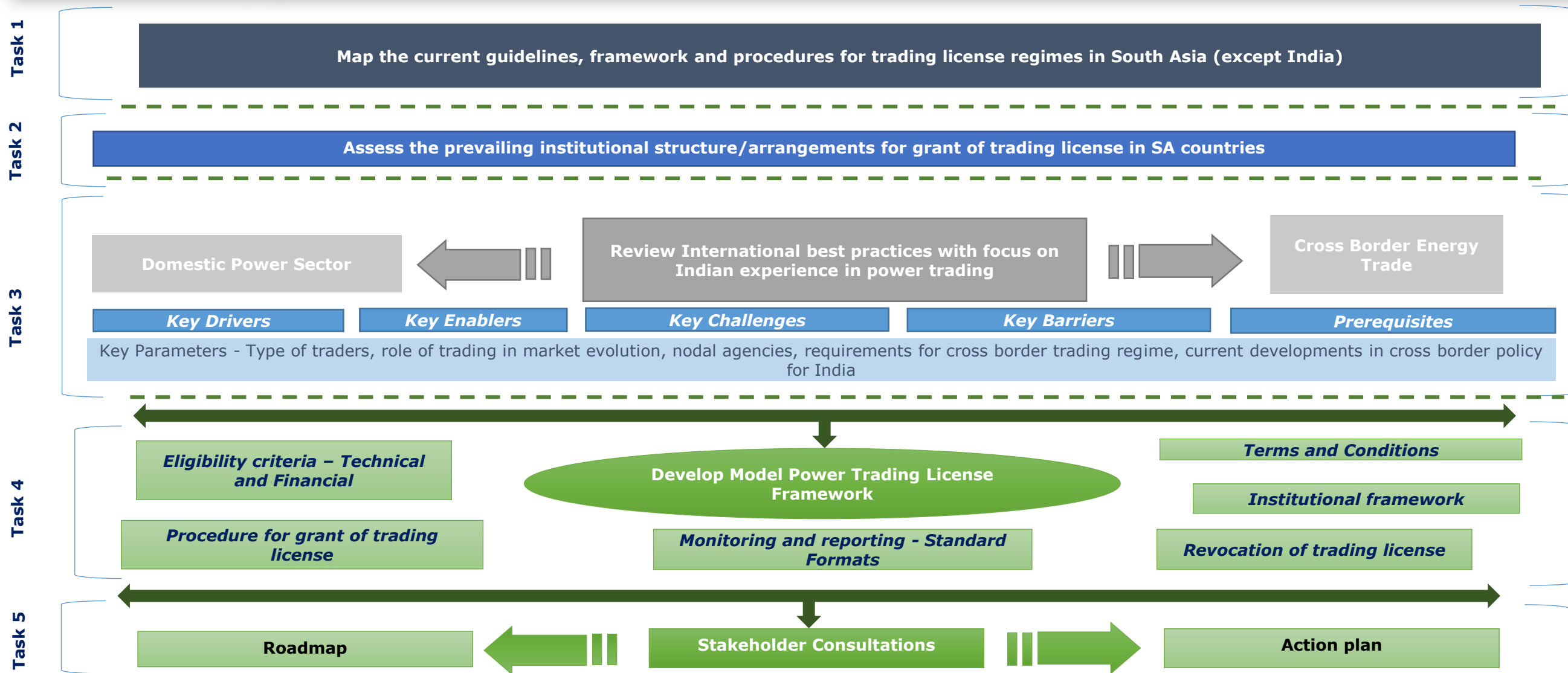


# Key Objectives

## **Developing model framework for Trading License Regime and Guidelines for grant of Trading License**

- Regional framework for power trading is in nascent stage
- India has an evolved power trading market which has well established framework, regulations and procedures relating to trading licence regimes
- A long term roadmap required for evolving Trading license regime and guidelines for Grant of Trading license in SA

# Overall approach

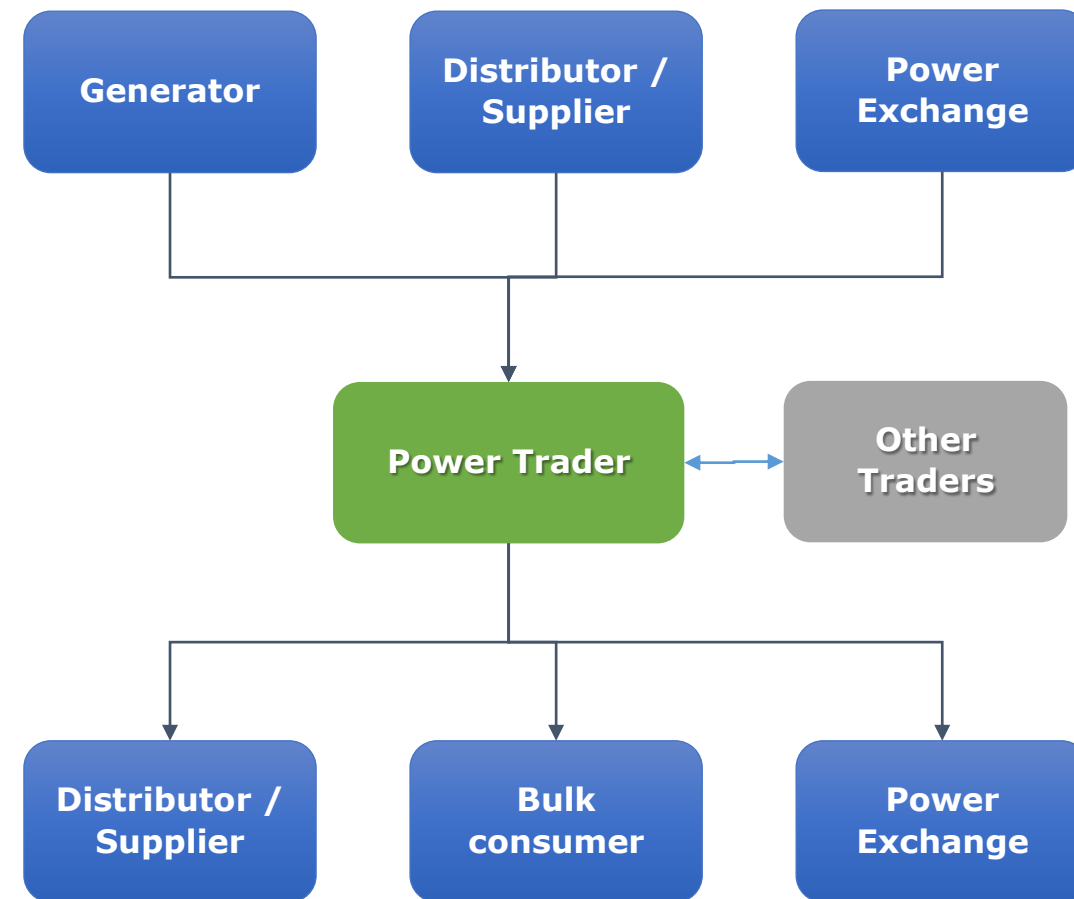


# Introduction to Trading License Framework

# Need for Trading License: Concept of power trader

- Electricity trading by traders plays an important role in the optimum utilization of energy resources and in introduction of competition in power market
- Power traders play a major role in various aspects of the power sector, such as:
  - Act as counter party in the transactions - Providing single window service for market participants
  - Bring in market transparency - Removal of information asymmetry and enabling optimum utilization of generation capacity
  - Introduce market liquidity- Enabling of market discovery of price
  - Facilitate capital mobilization- Encourage private investments
  - Offer risk mitigation options
  - Aiding in wholesale competition and market development
- Power Trading is generally a licensed activity

Concept of power trader



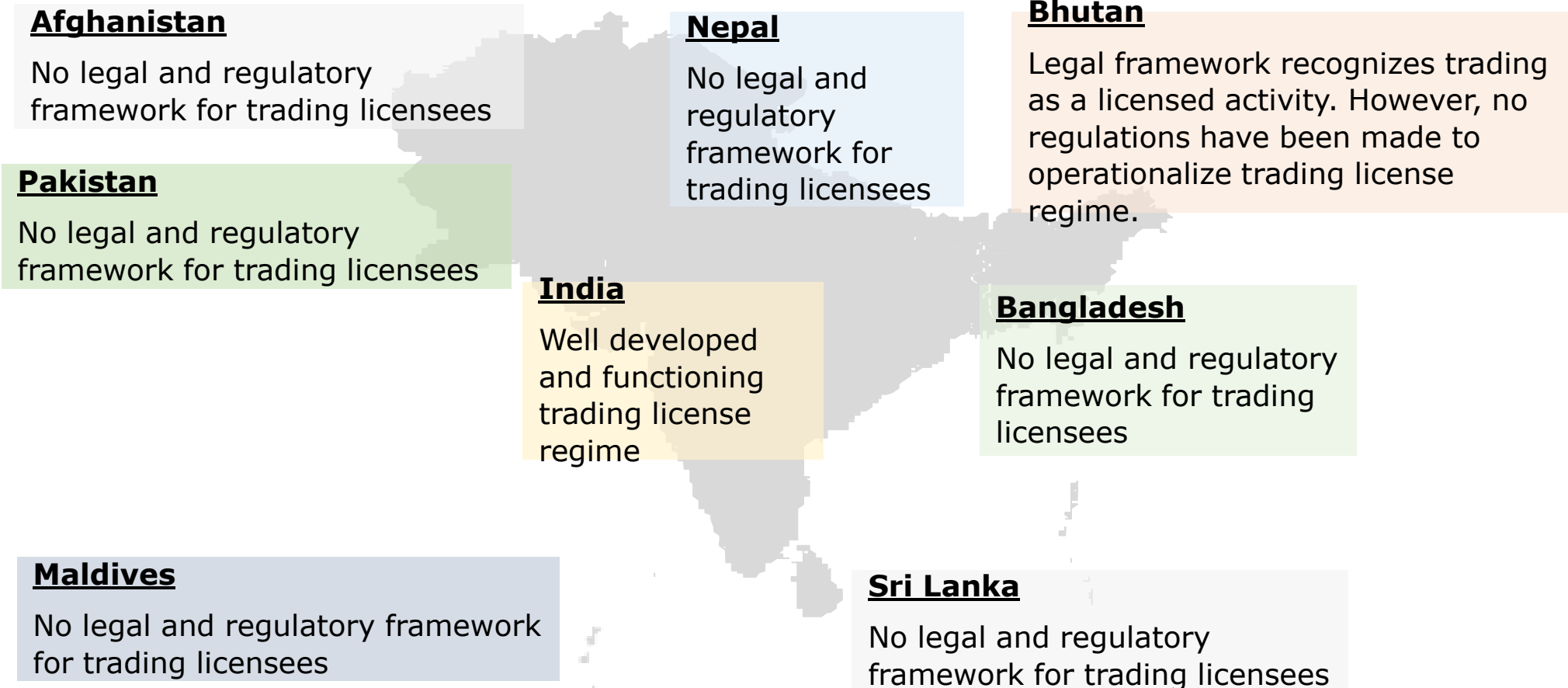
Trading licensee is an entity which is licensed to purchase and resale of electricity

# Key Findings

- Current Scenario in South Asia- Trading License
- Case Study: Indian power trading market

# Current scenario of trading license regimes in South Asia

Other than India, none of the South Asian countries have institutionalized trading license regimes. Except in case of India and Bhutan, trading is not considered as a licensed activity under the legal framework for electricity in South Asian countries

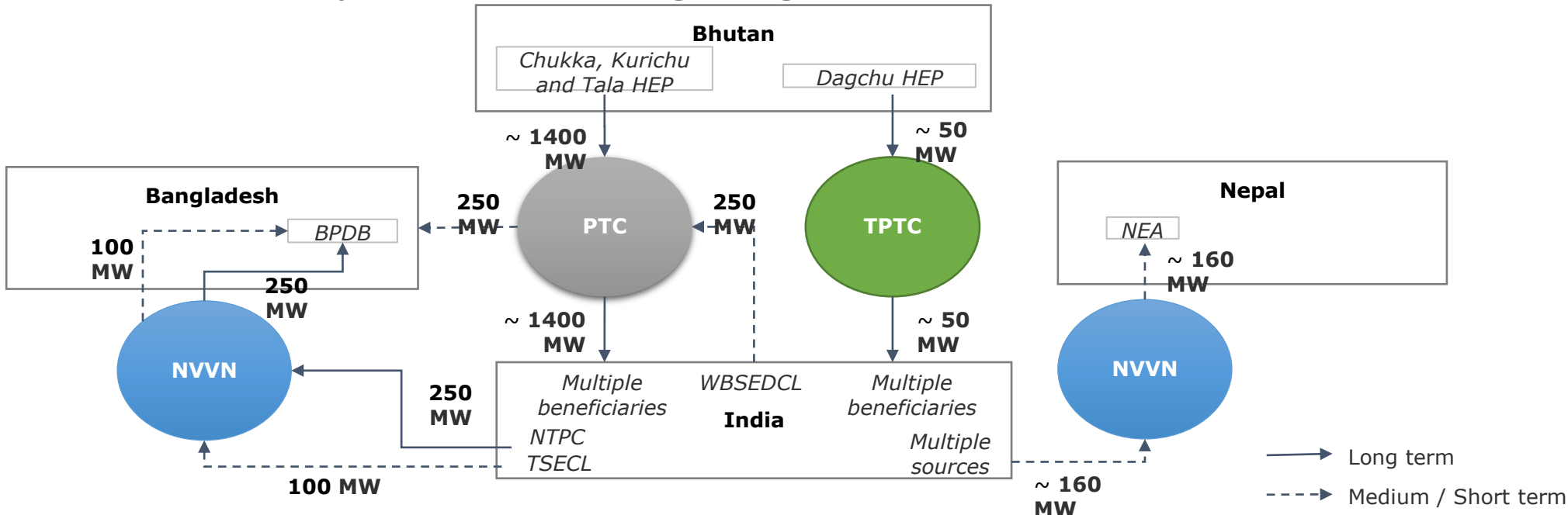




# Power trading licensees and cross-border trade

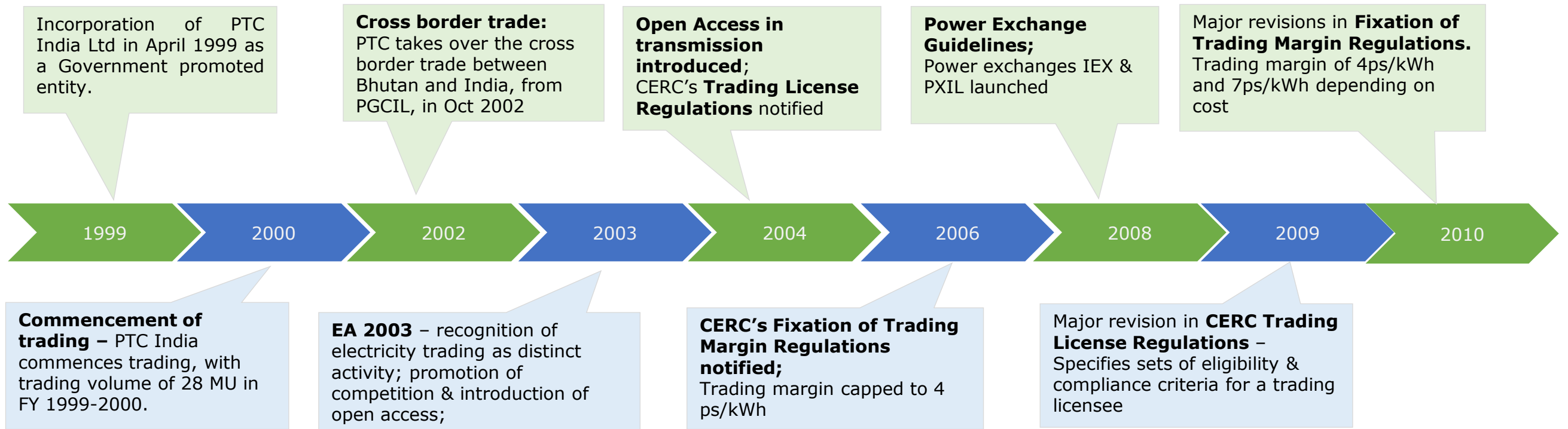
- Presence of trading licensees in a power market can act as a catalyst to the development of cross border trade, as such licensees are expected to have access to a wide portfolio of buyers and suppliers
- Trading licensees are better placed to offer short term supplies that may be needed on seasonal basis
- Trading licensees can participate in CBET through Over The Counter contracts, without the aid of regional power exchanges, the setting up which may take time. This model is followed in South Asia, where India conducts cross border trade with neighboring countries through various trading licensees.

Major cross border trade through trading licensees in cross-border trade

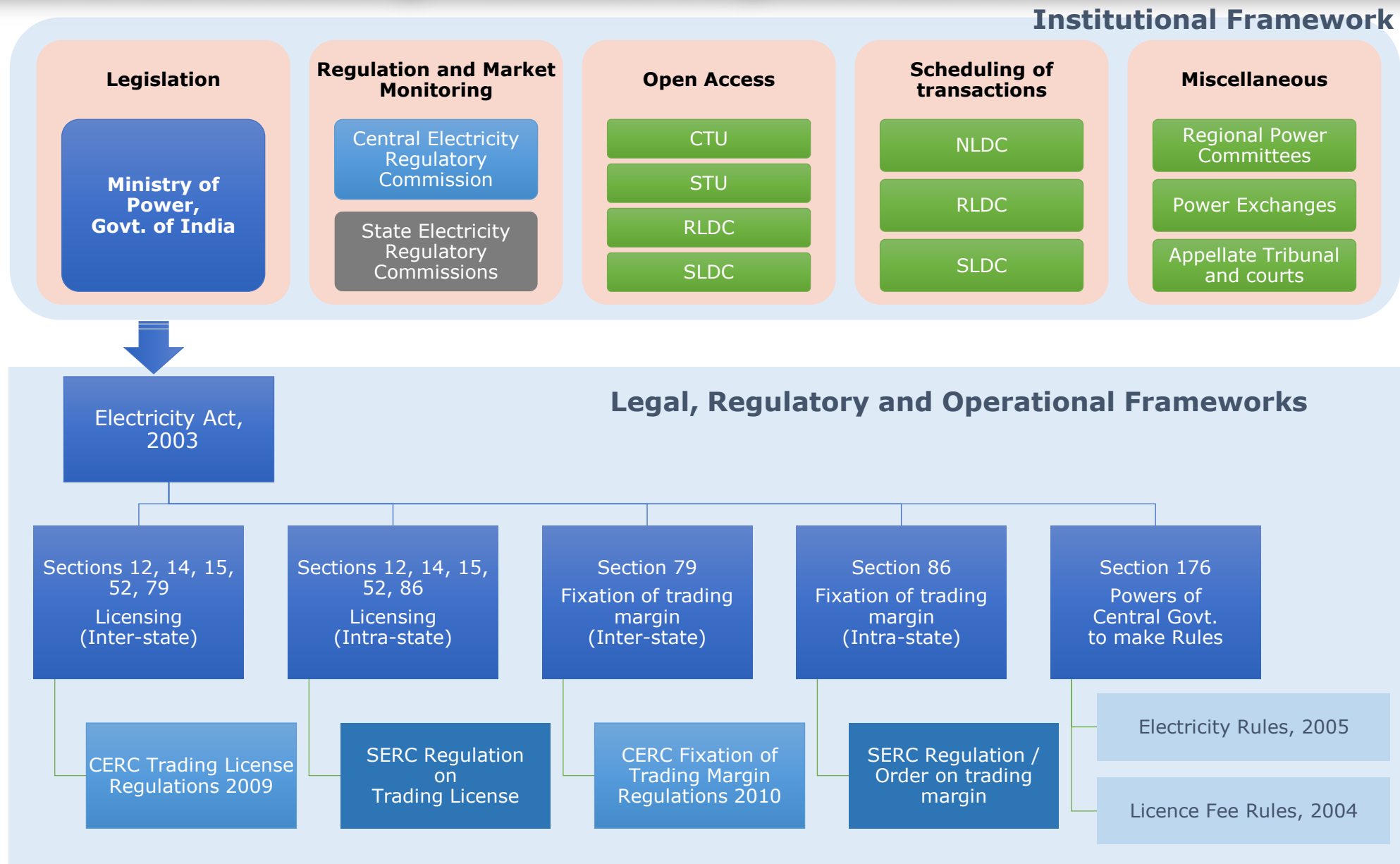


# Evolution of power trading license regime

- It was the market requirement and Government's vision to meet them that acted as the key driver for institutionalization of trading license regime in India.
- The need for a risk mitigation intermediary to encourage private participation in generation, as envisaged under revised Mega Power Policy 1998, led to the establishment of PTC India in 1999.
- A comprehensive framework for trading was provided by Electricity Act 2003 which led to the establishment of a robust trading license regime in India.

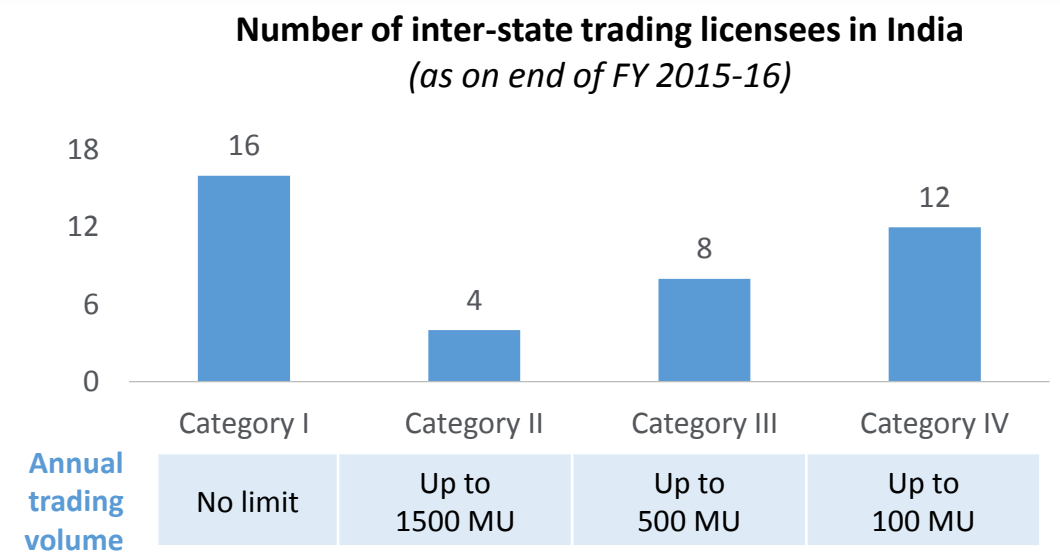


# Framework of trading license regime in India

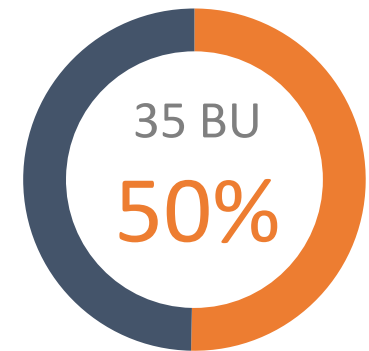


# India Power Trading License Regime - Profile

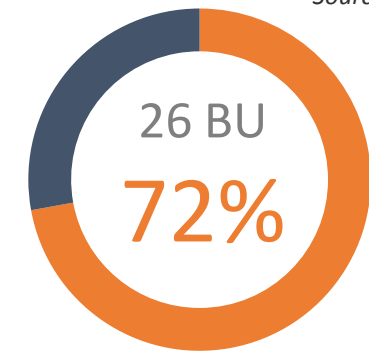
- Trading has become a well-established business in the Indian power sector. As on end of March 2016, there were 40 inter-state trading licensees, as per data made available by CERC.
- Out of the 40 licensees, 16 have Category I licenses, which is the highest category of license, with no limit on annual trading volume.
- Trading licensees in India typically engage in both OTC based trade and trade through power exchanges.
- In FY 15-16, the volume of electricity transacted by the electricity traders was 35.43 BU, which is 50.31% of the total electricity transacted through traders and power exchanges. This is equivalent to around 4000 MW of RTC power.
- The top 5 trading licensees together contribute 72% of the overall trading market volume.



Source: CERC



Share of traders in overall OTC and exchange based transactions in FY16

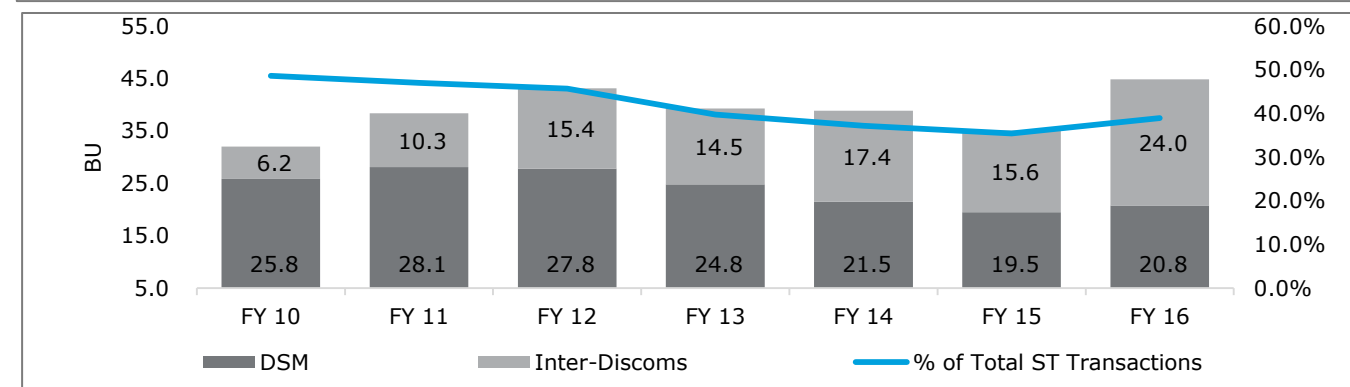
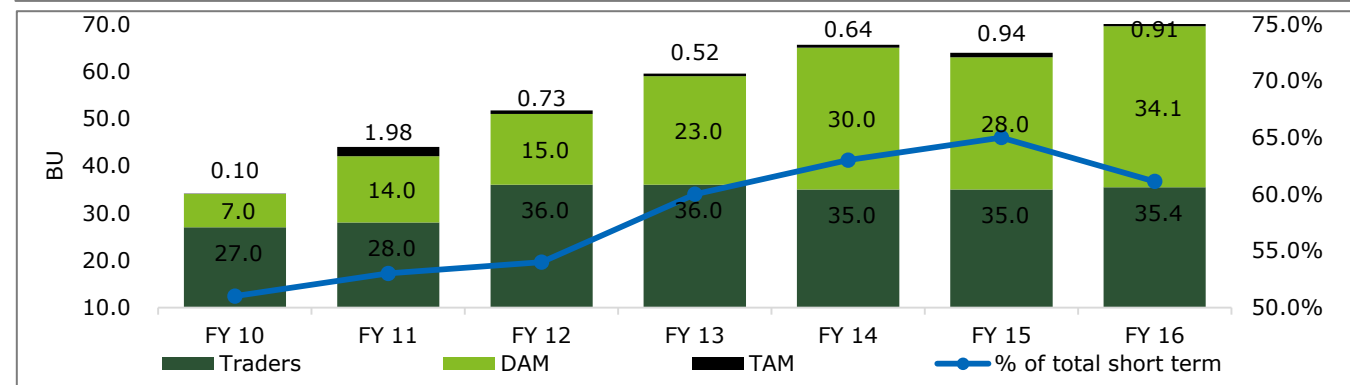
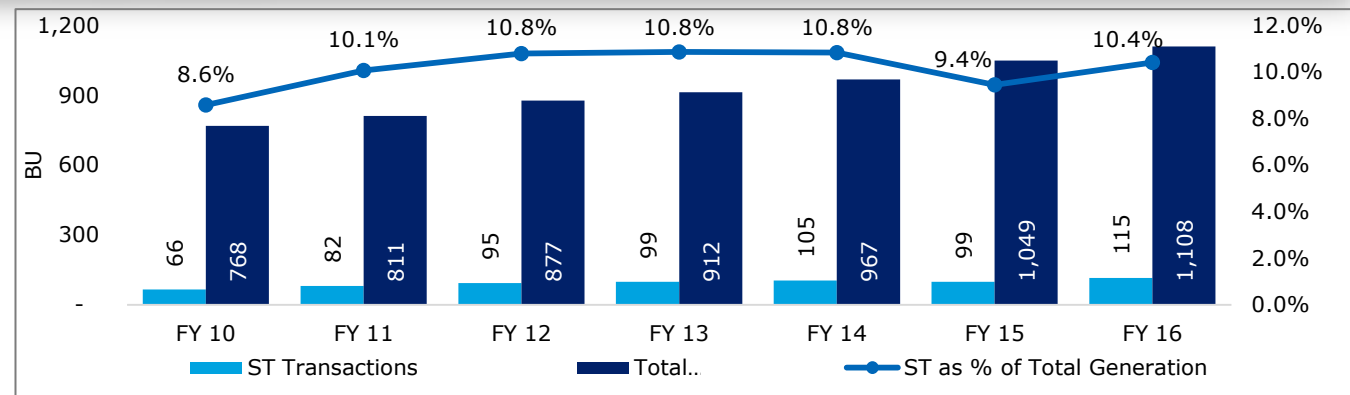


Share of top 5 traders in overall trading volume in FY16

Source: CERC

# India Power Trading Regime - Profile

- ST power market size in FY 2016 was 115.23 BU or 10.4% of total power procured
- This was about 16% higher than market in the year 2014-15 (98.99 BU)
- Overall volume has grown at CAGR of 27% between FY 2008 and FY 2016
- The energy growth in FY 16 (16.24 BU) mainly on account of positive growth in transactions through power exchanges (5.60 BU) and by direct bilateral transactions between the DISCOMs (8.47 BU)
- PX Volumes in FY 16 increased by 19% & comprised 61% of ST transactions
  - Day Ahead Market (DAM): 48.4%, Bilaterals - Traders: 50.3%, TAM: 1.3%
- Volume of transactions between Discoms directly was 21% of the total short term transactions, an increase of 3% over FY 2015
- Volume of energy transaction through DSM was 18% of the total short term transactions



Source: CERC

# Indian Power Market - Pricing trends

## Weighted average price of electricity transacted in FY 2016 through

### Bilaterals - Traders :Rs 4.11/kWh

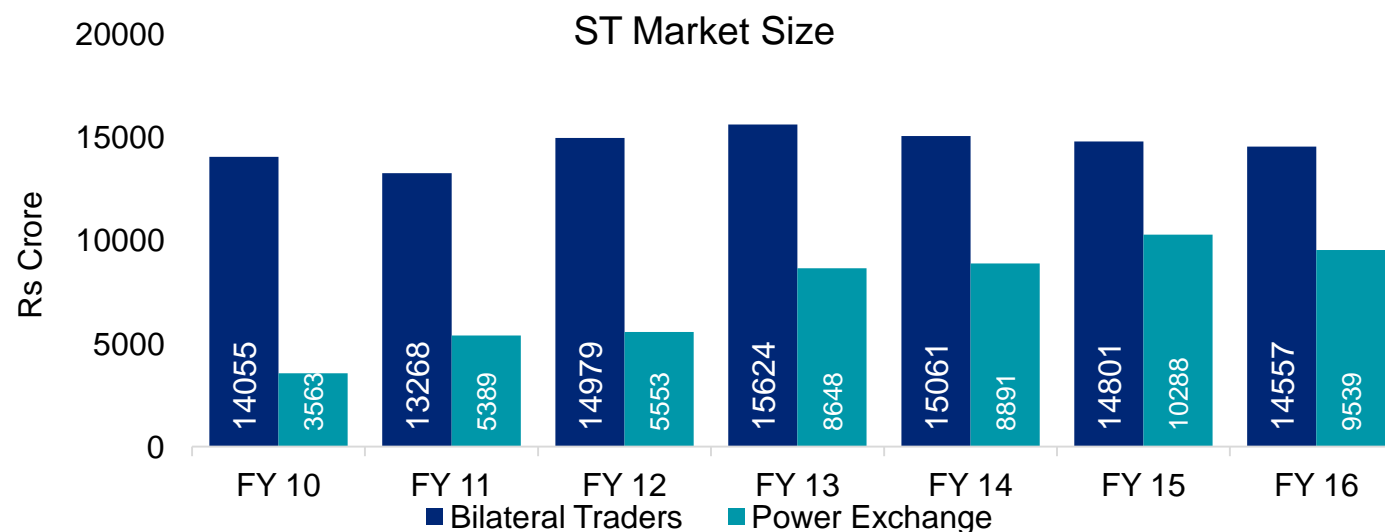
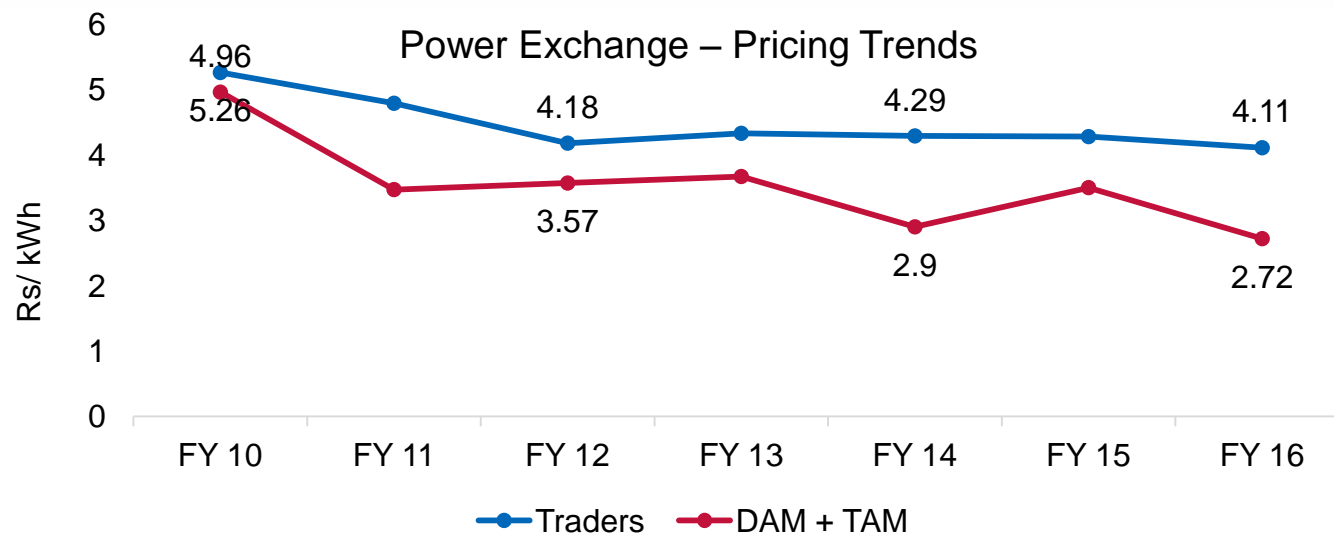
- Round the clock (RTC) basis: 80.68% (Rs 4.24 / kWh)
- Periods other than RTC and Peak (OTP): 17.70% (Rs 3.53 /kWh)
- Peak hours: 1.62% (Rs 3.46 / kWh)

### Power exchanges: Rs 2.72/kWh

- Day Ahead Market sub-segment of PX: Rs 2.72/kWh
- Term Ahead Market sub-segment: Rs 2.96/kWh

**In monetary terms, short-term market size was Rs 24,096 crore, which was 4% less than in the year 2014-15**

**The pricing trends have shown a downward trajectory in Indian power exchange due to greater competition and increased availability**



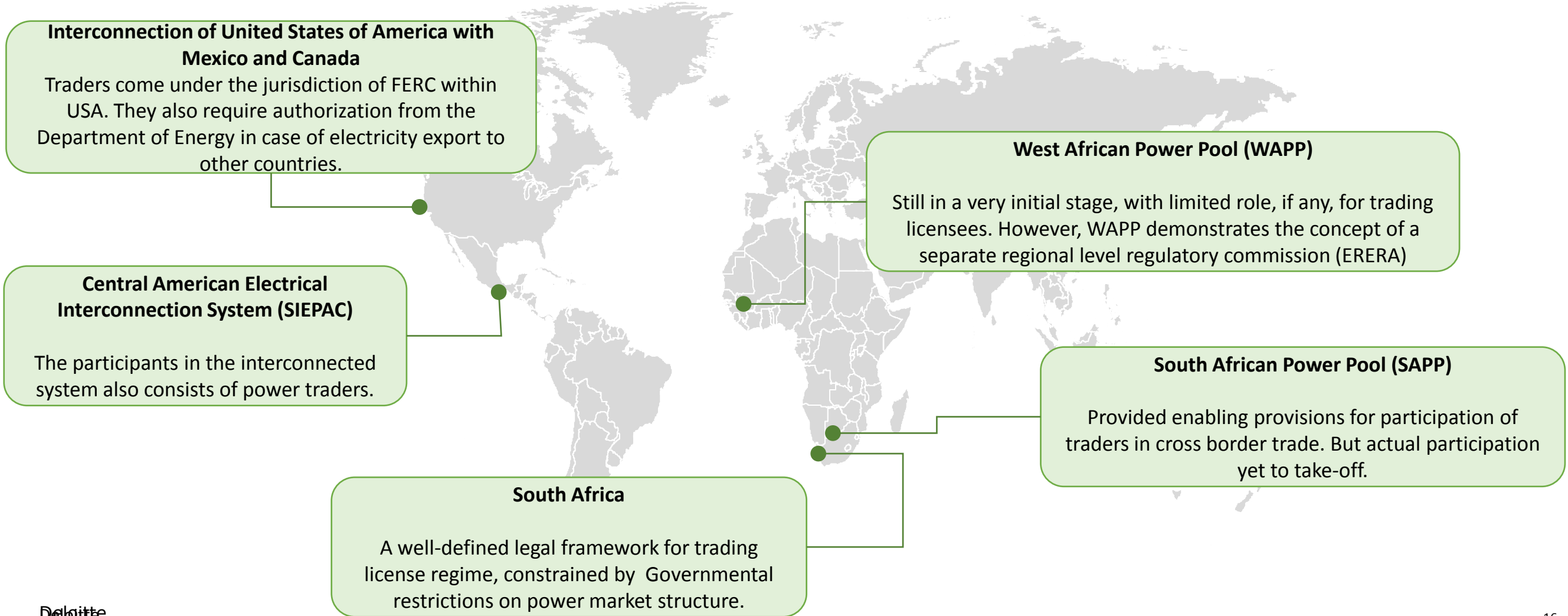
Source: CERC

# International experience

- South Africa, SAPP, WAPP, SIEPAC, USA

# Power traders and cross border trade

Apart from India, lessons can also be drawn from participants of international power pools such as West African Power Pool (WAPP), South African Power Pool (SAPP) and the Central American Electrical Interconnection System (SIEPAC).





# Key lessons from other countries and power pools

## Interconnection of United States of America with Mexico and Canada

- Presence of well-defined guidelines can assist the regulators in granting licenses in a more streamlined manner.
- The trading license regime shall encourage the licensees to constitute effective regulatory compliance programs & to promote self-reporting of market rule violations.
- In rare instances such as national emergencies, there shall be provisions to curtain / control the trading activities.



## Central American Electrical Interconnection System (SIEPAC)

- Maintaining a “trading licensee register” will allow stakeholders easy access to track record of each trading licensee
- In the initial phase of cross border trade, simple transitional mechanisms can be prescribed, while efforts for regulatory harmonization for a more ideal are being put into place.



## West African Power Pool (WAPP)

Harmonization of regulations at regional level is a key component for enabling cross border trade involving non-utility entities such as trading licensees.



## South African Power Pool (SAPP)

The presence of an association of regulators at the regional level, such as RERA of SAPP, can become an enabler for cross border trade.



## South Africa

The abolition of single buyer market model and availability of open access are necessary conditions for a functioning trading license regime.



# Regional framework for trading license regime

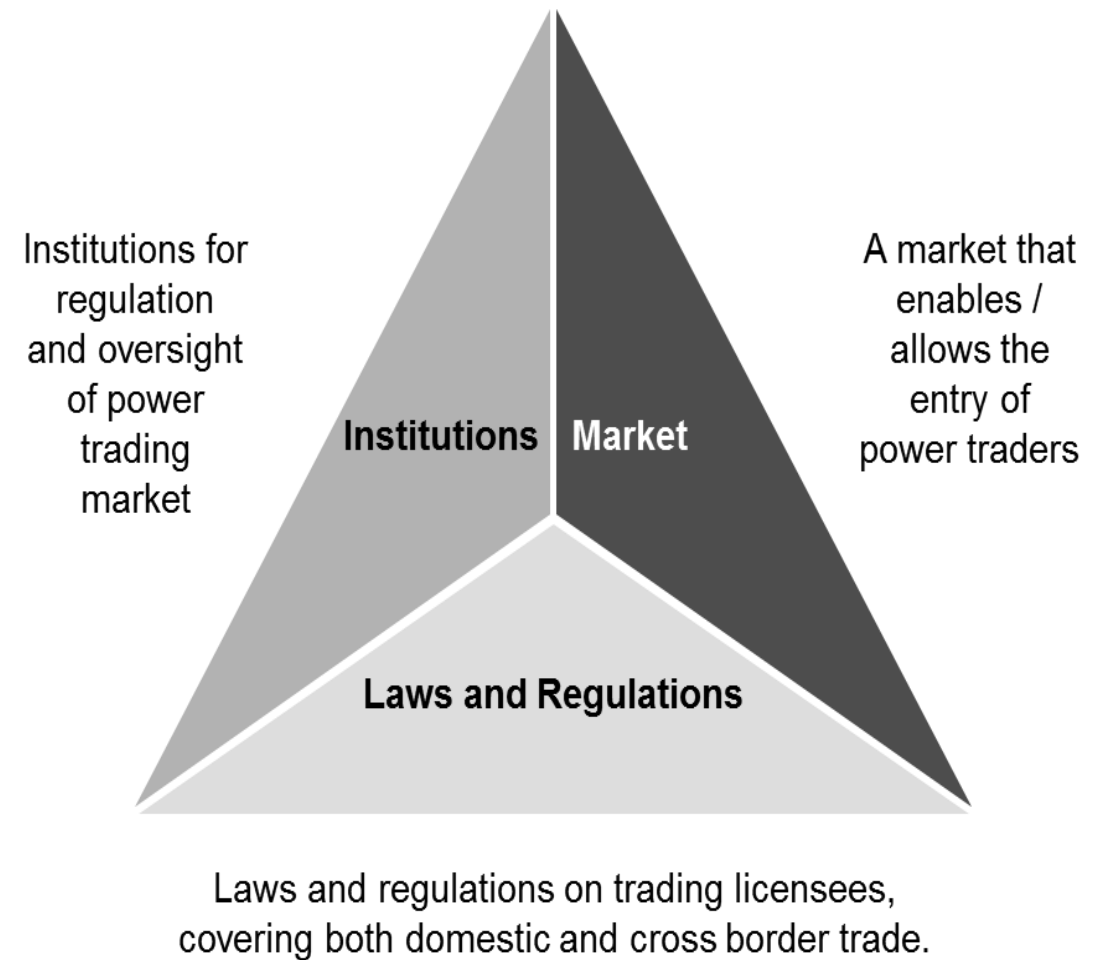
## Guiding principles

The model framework and guidelines for trading license regime in South Asia have been developed keeping in mind the following guiding principles:

<b>Current scenario of trading license regime in South Asia</b>	The present status of trading license regimes in South Asia with respect to both domestic and cross border trade.
<b>International Experience</b>	Lessons from other countries and international power pools, such as South Africa, SAPP and SIEPAC
<b>Previous studies of IRADe</b>	SARI/EI task force 1's report on "Review and Analysis of Electricity Laws, Policies and Regulations of South Asia Countries (SAC) to recommend changes/amendments therein for promoting Cross Border Electricity Trade in SAC (SARI/EI-2014-01)"
<b>SAARC Framework</b>	The SAARC Framework Agreement for Energy Cooperation (Electricity), 2014
<b>India's guidelines for cross border trade</b>	Guidelines for cross border trade issued by the Ministry of Power, Government of India, and the draft regulations on cross border trade published by CERC of India.

# Model framework

- The proposed model framework consists of three basic elements – Institutions, Market, Laws and Regulations.
- The model guidelines have been developed to support these three basic elements, so as to institutionalize a robust trading license regime.
- Once the model framework is put in place, it may be expected that the interaction between the basic elements of the framework will result in further development of the trading license regime, such as development of detailed procedures and the introduction of standardized trading products in electricity.



# **Guidelines for trading license regime in South Asia**

## Preamble

- These guidelines apply to trading licensees in the South Asian countries.
- These guidelines are non-binding in nature and are aimed to provide national governments of SAC with a consistent set of guidelines applicable to trading license regime.
- The guidelines deal only with limited areas where need for such common guidelines has been felt by the SAC and are not meant to be comprehensively dealing with all matters related to trading license regime.
- South Asia Forum of Electricity Regulators (SAFER) shall be the institutional body working towards enabling the guidelines and facilitating required changes to be made in the national regulatory framework. Such entity shall work in close coordination with the SAARC secretariat and various bodies under the same.

# Summary of guidelines

1	<b>Operationalization of legal and regulatory framework for trading licensees</b>	<ul style="list-style-type: none"> <li>Introduce trading as a defined and allowed activity under statutory legislation.</li> <li>Empower the respective national level electricity regulators to exercise market oversight and price control in trading market through measures such as trading margin cap and emergency provisions.</li> </ul>
2	<b>Extending the trading license framework in the context of cross border trade</b>	<ul style="list-style-type: none"> <li>Introduce the concept of “authorization for cross border trade”, so that domestic trading license regime can be extended to cover cross border trade.</li> </ul>
3	<b>Categories of trading licensees and qualification criteria</b>	<ul style="list-style-type: none"> <li>Categorization of trading licensees to be based on proposed annual trading volume.</li> <li>Authorization for cross border trade to be given initially to only traders falling in the highest category.</li> </ul>
4	<b>Grant and revocation of trading licence</b>	<ul style="list-style-type: none"> <li>Clearly define the procedures for issue, renewal, amendment and revocation of trading licenses.</li> </ul>
5	<b>Terms, conditions and obligations of trading licensees</b>	<ul style="list-style-type: none"> <li>Trading licensees to be made responsible for fair, transparent and competitive market operations and safe grid operation through terms and conditions and obligations specified in legal / regulatory framework.</li> </ul>
6	<b>Market development</b>	<ul style="list-style-type: none"> <li>Hurdles against the introduction and participation of power traders in the power market may be removed through legal / regulatory changes and institutional restructuring.</li> </ul>
7	<b>Regional forum for coordination of trading license</b>	<ul style="list-style-type: none"> <li>All efforts to operationalize the proposed regional electricity regulatory forum – SAFER may be encouraged and supported. SAFER can issue non-binding recommendations on regulatory harmonization for cross border trade through trading licensees.</li> </ul>

# Guideline 1: Operationalization of legal and regulatory framework for trading licensees

**Context:** In SA countries other than India and Bhutan, trading is not recognized as a distinct licensed activity in their respective fundamental legislations on electricity sector. Even in case of Bhutan, there is no supporting regulatory framework for the legal provisions relating to trading. In the substantially regulated electricity markets of South Asia, it is important to have a defined legal and regulatory framework for trading activity, so that they same may be put to use in the context of cross border trade also.

1

Trading shall be introduced as a distinct licensed activity in the respective country's fundamental legislations on electricity sector.

Basic provisions regarding grant, amendment, revocation and renewal of licenses, and the duties and obligations of licensees shall be incorporated either in the legislative amendments / through regulations, wherever such provisions are not present.

2

The legal framework may aid in providing predictability and may incorporate provisions such as a legally defined license validity period, legally defined ceiling on penalties that can be imposed for contravention of license terms, and a time limit for finalisation of trading license applications after receipt of all clarifications and information.



# Guideline 1: Operationalization of legal and regulatory framework for trading licensees

3

Wherever there are Regulatory Commissions, they may be appointed as the agency to regulate and monitor the trading market and the trading licensees. The agencies shall try to constitute separate market monitoring cells for regular market oversight. The legal framework should make it the duty of the market oversight agency to develop a well-defined market oversight procedure, which shall at the minimum include:

- Formats for regular reporting of transactions by the licensees
- Penalties for failure to file information within the prescribed time
- Power to conduct investigations against a licensee / a group of licensees
- Incentives to licensees to institutionalize compliance programs and self-reporting (of violations)
- Provision to make public, power trade transaction details up to a minimum level of detail

4

The legal framework shall clearly provide for emergency provisions for exceptional circumstances, wherein the Regulatory commission / Government can control / restrict the trading activities, including, but not limited to:

- Curtailment of trading transactions
- Imposition of trading margin cap
- Temporary cap on market prices for purchase and resell of electricity

## Guideline 2: Extending the trading license framework in the context of cross border trade

**Context:** The presence of a trading license regime in the domestic market is not by itself a sufficient condition for allowing the trading licensees to indulge in cross border trade. There are also choices to be considered, such as whether there shall be a separate license category for cross border trading licensees, or whether the national level trading licensees may be allowed to participate in cross border trade subject to authorization.

1

The legal definition for trading may be amended to include cross border trade. This shall be done along with the addition of a new provision in legislative / regulatory framework that shall specify that authorization for indulging in cross border trade shall be granted to trading licensees subject to regulations, rules and procedures framed in this regard.

2

The entity that currently grants generation, transmission and distribution licenses in the respective SA countries may be entrusted with the duty to grant trading license, and the duty to grant authorization for indulging in cross border trade. The Government / Government designated agencies may be provided with the power to over-rule any proposal for grant of authorization for indulging in cross border trade to any entity.

3

In case of trading licenses which have been already granted, wherein the area of trading is defined in the license as the territorial limits of the country, amendment of license terms may be undertaken to allow cross border trade, subject to obtaining authorization for cross border trade.

## Guideline 3: Categories of trading licensees and qualification criteria

**Context:** It is important that there shall be some segregation among the licensees, especially as the same financial and technical criteria cannot be imposed on all traders irrespective of their size, capability and trading volume.

1

An annual trading volume based categorization of licensees, as is the case with India, may be adopted, with only the highest category of trader being allowed to indulge in cross border trade.

2

In case of technical criteria, the following aspects may be prescribed:

- Availability of qualified technical personnel for conducting trading
- Availability of qualified financial personnel for conducting trading
- Availability of software and hardware systems for trading

3

In case of financial criteria, the following aspects may be prescribed:

- Minimum net-worth criteria, based on annual trading volume
- Minimum 1:1 current ratio and liquidity ratio

*Note: The financial criteria may be calculated either with the latest audited financial accounts / based on special audited balance sheet prepared in the recent time period.*

# Guideline 4: Grant and revocation of trading licence

**Context:** International experience shows that notifying a properly defined process for scrutiny of trading license applications, identifying the key stakeholders and listing key timelines and milestones will enable a streamlined process for grant / amendment / revocation of licenses.

1

Regulatory framework for grant of license shall at the minimum consist of the following:

*(For renewal and amendment of license, the same clauses with minor changes may be made applicable.)*

Clause	Description
Identification of the authority which will scrutinize licence application and grant licenses	Either the Regulatory Commission or in its absence, the relevant Ministry / Government Department may be identified as the licensing authority.
Application procedure for grant of licence	Sample application form provided in Annexure 2 Copies of relevant documents such as that of company registration, annual audited accounts etc. may also be collected. Maximum timeline for processing of application at various stages to be specified.
License Application Fee	May be determined by the Regulatory Commission or in its absence the relevant Ministry / Government Department.
Publication of application for comments and objections	Minimum number of newspapers and websites to publish summary, sample summary format, online publication of full set of documents, time for receipt of comments, time for furnishing reply by the applicant to be specified
Scrutiny of application for grant of licence	Timeline for scrutiny to be specified. The authority conducting scrutiny may be empowered to ask for additional information and additional documents, if necessary. A public hearing may be provided before the final decision to approve / reject the license application.
Requirements for grant of licence	Provided in Guideline 4
License format	Sample provided in Annexure 2
Other clauses	Clearance from relevant ministries in case the applicant company has foreign ownership, may be made necessary.

## Guideline 4: Grant and revocation of trading licence

2

Regulatory framework for amendment / revocation of license shall at the minimum consist of the following:

Clause	Description
Procedure to apply for revocation (initiated by licensee)	Similar to procedure for grant of licence
Procedure to initiate revocation proceedings by the regulator (suo-motu / based on any complaints)	Similar to procedure for grant of licence, except for the fact that there will be no separate application made by the licensee.
Publication of revocation proposal for comments and objections	Similar to procedure for grant of licence
Preconditions for licence revocation	<p>In case the revocation is requested by the applicant, the same may be allowed only after existing dues are cleared, and the applicant gives a sworn affidavit that it has terminated all its future commitments / contracts for trading.</p> <p>In case the revocation is not requested by the applicant, transition period after which revocation will come into effect may be specified, if required.</p>

## Guideline 5: Terms, conditions and obligations of trading licensees

**Context:** Among the South Asian countries, only in case of India, a well-developed framework for trading licensees is available, which also specifies terms, conditions and obligations of trading licensees.

1

The terms and conditions for trading licensees shall at the minimum consist of:

- Validity of licence
- Geographical coverage
- Compliance requirements for maintaining the validity of licence

2

The obligations for trading licensees shall at the minimum consist of:

- Payment of annual license fee
- Regular reporting of transactions in the prescribed format
- Comply with price control and other emergency provisions, if any
- Co-operate with the regulatory commissions during investigations
- Comply with planning and technical codes.
- Furnishing of information, as and when demanded by the regulatory commissions

## Guideline 5: Terms, conditions and obligations of trading licensees

3

In addition, the following best practices from other countries may also be adopted as part of terms, conditions and obligations:

- Trading licensees may be encouraged to undertake prudent practices such as institutionalization of compliance programs, and providing options for self-reporting. Such encouragement may be provided by specifying discounts on penalties, which would have been incurred otherwise, or in any other manner as the respective regulatory may deem to be fit.
- Licensees may be required to furnish information required under the reporting and monitoring framework to be only in text converted to PDF format / workable spreadsheet models so as to ensure that the information is legible and that calculations can be repeated and verified.

## Guideline 6: Market development

**Context:** Power market should have progressed from vertical monopoly / single buyer model to whole sale competition, allowing trading licensees to source power from IPPs and other sources for further re-sale.

Enabling market conditions for power traders are not present in many of the South Asian countries. Transmission open access, which is a necessary condition for trading market, has not yet evolved in Afghanistan, Nepal, Maldives and Sri Lanka. The presence of vertically integrated monopoly in Afghanistan is expected to be another barrier in the institutionalization of trading license regime.

1

The power market structure shall not be solely reliant on single buyer model / vertical monopoly. Third party entities such as traders shall be allowed to purchase and resell energy.

2

The respective countries shall also evolve and operationalize transmission open access, in such a way that trading licensees can make use of the same for domestic and cross border power trade. Institutional, legal, regulatory and operational framework for open access will need to be put in place.



## Guideline 7: Regional forum for coordination of trading license

**Context:** Power markets in SAC are at various levels of evolution as far as trading license regime is concerned. In order to bridge this gap, it is proposed to coordinate the efforts through the SAFER. This body will provide a common platform for all SA countries to discuss and decide upon basic requirements and modalities for trading licensees and their participation in cross border trade.

1

To enable smooth functioning of cross border trade through trading licensees, it is necessary to have a regional forum of electricity regulators (South Asia Forum of Electricity Regulators - SAFER). All efforts to operationalize SAFER may be encouraged and supported.

2

SAFER may take up the following responsibilities, in a non-binding manner, so that independence of each constituent member is left intact.

- Make efforts for Regulatory harmonization
- Provide a forum for consultations to evolve policies and model regulations
- Support the efforts for improvement in competition and choice

# Implementation Framework

## Roadmap for trading license regime in South Asia

- It does not seem feasible to complete the institutionalization and operationalization of trading license regime in South Asian countries at the same time, as different countries are at different progress levels with respect to the trading license regimes and market development.
- Therefore the following roadmap is proposed, which may be further refined by the respective countries.



*Note: However, it may be noted that the roadmap is not perfectly sequential with respect to the South Asia region, as countries that have already completed some of the stages above, can start with the implementation of subsequent stages.*

**Thank You**



## Guideline 1: Operationalization of legal and regulatory framework for trading licensees

### 1 Current practice in South Asia

Only in case of India, a well-developed legal and regulatory framework for trading licensees are available. In Bhutan, trading licensee is defined under the Electricity Act of Bhutan, 2001. However, there is no supporting regulatory framework for the legal provisions relating to trading. The legal and regulatory framework for electricity in rest of the South Asian nations does not refer to trading as a distinct licensed activity.

### 2 International experience

Electricity trading, and its licensing / registration, and subsequent regulation may be defined as part of statutory legislation so as to institutionalize a well-defined and predictable trading license regime. This is the case with South Africa (*Electricity Regulation Act 2006*), El Salvador (*General Electric Law 1996*) and Guatemala (*General Electric Law 1996*).

In almost all the countries, Regulatory commissions are appointed as the institution for receiving, analyzing and approving the applications for grant of license / registration / authorization for undertaking trading, and for the subsequent regulation and monitoring of trading activity. (*Example: NERSA in South Africa, FERC in United States, SIGET in El Salvador*).

The Regulatory commissions are also typically entrusted with market *monitoring* (*United States of America – Online filing of information through FERC's systems*) and maintenance of "agent register" / "trading licensee register". (*Agent register maintained by CRIE under the provisions of Regional Energy Market Regulations*)

There shall also be emergency provisions that empower regulatory agencies / government entities to curtail trading activities, which can prove useful in crisis situations. (*Section 202 of Federal Power Act, as utilized by the Department of Energy, USA in events such as the California energy crisis, Section 11 of Electricity Act in India*)

## Guideline 1: Operationalization of legal and regulatory framework for trading licenses

### 3 Recommendations for South Asia

Trading shall be introduced as a distinct licensed activity in the respective country's fundamental legislations on electricity sector.

Basic provisions regarding grant, amendment, revocation and renewal of licenses, and the duties and obligations of licensees shall be incorporated either in the legislative amendments / through regulations, wherever such provisions are not present.

The legal framework may aid in providing predictability and may incorporate provisions such as a legally defined license validity period, legally defined ceiling on penalties that can be imposed for contravention of license terms, and a time limit for finalisation of trading license applications after receipt of all clarifications and information.

Wherever there are Regulatory Commissions, they may be appointed as the agency to regulate and monitor the trading market and the trading licensees. The agencies shall try to constitute separate market monitoring cells for regular market oversight. The legal framework should make it the duty of the market oversight agency to develop a well-defined market oversight procedure, which shall at the minimum include:

- Formats for regular reporting of transactions by the licensees
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The legal framework shall clearly provide for emergency provisions for exceptional circumstances, wherein the Regulatory commission / Government can control / restrict the trading activities, including, but not limited to:

- Curtailment of trading transactions
- Imposition of trading margin cap
- Temporary cap on market prices for purchase and resell of electricity



## Guideline 2: Extending the trading license framework in the context of cross border trade

### 1 Current practice in South Asia

In South Asia, even in the case of India, legal and regulatory framework for cross border trading through trading licensees is yet evolving. The Guidelines for Cross Border trade, finalised by the Government of India is currently being used as the basic building block for the proposed regulations on cross border trade by the CERC.

In some of the other South Asian countries such as Bhutan, there is provision of import and export licensees. However, such provisions seem to cater to cross border trade by generation companies, and import by the distribution utility instead of catering to transactions involving resale.

### 2 International experience

In case of South Africa Power Pool, RERA's guidelines and SAPP requirements stipulate that any entity that is authorized to undertake cross-border trade can participate in the SAPP market. RERA's guidelines stipulate that subject to national legal requirements, the Regulator at national level will issue licenses for importing and exporting activities for cross border power trading

An alternative model is also available (Regional Energy Market Regulations of Central American Interconnection System) wherein the application for cross border trade authorization may be submitted through the system / market operator at the country level to the regional level regulator and system operator. However this mechanism can work only when treaty mechanisms are in place to set up regional level regulatory commissions and system operators.

Central American Interconnection System's Regional Energy Market Transitional Regulations point to the concept of having simple transitional mechanisms in the initial phase of cross border trade. This will be important especially in case of non-compatibility in regulations of participating nations in cross border trade. While the transition mechanism is in place, efforts may be made for regulatory harmonization and development of final mechanisms for cross border trade.



## **Guideline 2: Extending the trading license framework in the context of cross border trade**

### **3 Recommendations for South Asia**

The legal definition for trading may be amended to include cross border trade. This shall be done along with the addition of a new provision in legislative / regulatory framework that shall specify that authorization for indulging in cross border trade shall be granted to trading licensees subject to regulations, rules and procedures framed in this regard.

The entity that currently grants generation, transmission and distribution licenses in the respective SA countries may be entrusted with the duty to grant trading license, and the duty to grant authorization for indulging in cross border trade.

The Government / Government designated agencies may be provided with the power to over-rule any proposal for grant of authorization for indulging in cross border trade to any entity.

In case of trading licenses which have been already granted, wherein the area of trading is defined in the license as the territorial limits of the country, amendment of license terms may be undertaken to allow cross border trade, subject to obtaining authorization for cross border trade.



## Guideline 3: Categories of trading licensees and qualification criteria

### 1 Current practice in South Asia

Only in case of India, a well-developed framework for trading licensees are available, which also specifies the different categories of trading licensees, based on the envisaged annual trading volume. The annual license fee is also linked to the annual trading volume.

### 2 International experience

In the United States of America, segregation of power traders are done based on their market power (Category 1 and 2 wholesalers in USA), with lesser reporting requirements in the case of traders who do not have any market power. This allows the regulator to focus on the section of traders who are most likely to effectively indulge in unfair practices.

### 3 Recommendations for South Asia

An annual trading volume based categorization of licensees, as is the case with India, may be adopted, with only the highest category of trader being allowed to indulge in cross border trade.

In case of technical criteria, the following aspects may be prescribed:

- Availability of qualified technical personnel for conducting trading
- Availability of qualified financial personnel for conducting trading
- Availability of software and hardware systems for trading

In case of financial criteria, the following aspects may be prescribed:

- Minimum net-worth criteria, based on annual trading volume
- Minimum 1:1 current ratio and liquidity ratio

*The financial criteria may be calculated either with the latest audited financial accounts / based on special audited balance sheet prepared in the recent time period.*



## Guideline 3: Categories of trading licensees and qualification criteria

### **Notes:**

#### Definition of net-worth, current ratio and liquidity ratio

“**net worth**” means aggregate value of the paid up equity capital and free reserves (excluding reserves created out of revaluation) reduced by the aggregate value of accumulated losses, deferred expenditure (including miscellaneous expenses) not written off and loans and advances to the associates;

“**liquidity ratio**” means the ratio between the liquid assets and current liabilities, where

liquid assets include the current assets less inventory, and

current liabilities include sundry creditors, provisions and other liabilities to be discharged within a period of one year;

“**current ratio**” means ratio between the current assets and current liabilities, where

current assets include cash or cash equivalent of money, accounts receivables, inventory, marketable securities, and pre-paid expenses, and

current liabilities include sundry creditors, provisions and other liabilities to be discharged within a period of one year;

#### Definition of Special balance sheet

A special balance sheet is prepared for a date, which falls within 60 days prior to the submission of application for grant of trading license. This is required to be furnished, with certification by the applicant’s Chartered Accountant as the basis for financial qualification.



## Guideline 4: Grant and revocation of trading licence

### 1 Current practice in South Asia

Only in case of India, a well-developed framework for trading licensees are available, which also specifies the procedure for grant and revocation of trading licence

### 2 International experience

International experience shows that notifying a properly defined process for scrutiny of trading license applications, identifying the key stakeholders and listing key timelines and milestones will enable a streamlined process for grant / amendment / revocation of licenses. Apart from India, this aspect has also been witnessed in the case of power trading framework in South Africa, United States of America, and Central American Interconnection.



## Guideline 4: Grant and revocation of trading licence

### 3 Recommendations for South Asia

Regulatory framework for grant of license shall at the minimum consist of the following:

*(For renewal and amendment of license, the same clauses with minor changes may be made applicable)*

Clause	Description
Identification of the authority which will scrutinize licence application and grant licenses	Either the Regulatory Commission or in its absence, the relevant Ministry / Government Department may be identified as the licensing authority.
Application procedure for grant of licence	Sample application form provided in Annexure 2 Copies of relevant documents such as that of company registration, annual audited accounts etc. may also be collected. Maximum timeline for processing of application at various stages to be specified.
License Application Fee	May be determined by the Regulatory Commission or in its absence the relevant Ministry / Government Department.
Publication of application for comments and objections	Minimum number of newspapers and websites to publish summary, sample summary format, online publication of full set of documents, time for receipt of comments, time for furnishing reply by the applicant to be specified
Scrutiny of application for grant of licence	Timeline for scrutiny to be specified. The authority conducting scrutiny may be empowered to ask for additional information and additional documents, if necessary. A public hearing may be provided before the final decision to approve / reject the license application.
Requirements for grant of licence	Provided in Guideline 4
License format	Sample provided in Annexure 2
Other clauses	Clearance from relevant ministries in case the applicant company has foreign ownership, may be made necessary.



# Guideline 4: Grant and revocation of trading licence

## 3 Recommendations for South Asia

Regulatory framework for revocation of license shall at the minimum consist of the following.

Clause	Description
Procedure to apply for revocation (initiated by licensee)	Similar to procedure for grant of licence
Procedure to initiate revocation proceedings by the regulator (suo-motu / based on any complaints)	Similar to procedure for grant of licence, except for the fact that there will be no separate application made by the licensee.
Publication of revocation proposal for comments and objections	Similar to procedure for grant of licence
Preconditions for licence revocation	<p>In case the revocation is requested by the applicant, the same may be allowed only after existing dues are cleared, and the applicant gives a sworn affidavit that it has terminated all its future commitments / contracts for trading.</p> <p>In case the revocation is not requested by the applicant, transition period after which revocation will come into effect may be specified, if required.</p>

## Guideline 5: Terms, conditions and obligations of trading licensees

### 1 Current practice in South Asia

Only in case of India, a well-developed framework for trading licensees are available, which also specifies terms, conditions and obligations of trading licensees.

### 2 International experience

In South Africa, as per section 14 of the Electricity Regulation Act 4 of 2006, the Regulator may specify licence conditions such as information reporting, price approval, performance targets, restrictions etc. As per Section 18 of the Act, In case of allegations of contravention of licence condition or provisions of the Act by the licensee, the Regulator may sit as a tribunal to decide on the allegation.

Trading business requires continuous market monitoring and oversight on the part of the regulatory commissions, which may be enabled through mechanisms for periodic information dissemination and reporting. In the United States, information reporting is done by online filing using FERC's systems. Wherever spreadsheet models are to be submitted, it is required to submit workable spreadsheet models.

FERC in the US also provides incentives to power traders to institute compliance programs, to promote self-reporting of violations and to extend support to investigative agencies. (FERC's penalty guidelines with defined credits on overall culpability score for compliance, self-reporting and support)

### 3 Recommendations for South Asia

The terms and conditions for trading licensees shall at the minimum consist of:

- Validity of licence
- Geographical coverage
- Compliance requirements for maintaining the validity of licence



## Guideline 5: Terms, conditions and obligations of trading licensees

### 3 Recommendations for South Asia

The obligations for trading licensees shall at the minimum consist of:

- Payment of annual license fee
- Regular reporting of transactions in the prescribed format
- Comply with price control and other emergency provisions, if any
- Comply with planning and technical codes.
- Co-operate with the regulatory commissions during investigations
- Furnishing of information, as and when demanded by the regulatory commissions

In addition, the following best practices from other countries may also be adopted as part of terms, conditions and obligations:

- Trading licensees may be encouraged to undertake prudent practices such as institutionalization of compliance programs, and providing options for self-reporting. Such encouragement may be provided by specifying discounts on penalties, which would have been incurred otherwise, or in any other manner as the respective regulatory may deem to be fit.
- Licensees may be required to furnish information required under the reporting and monitoring framework to be only in text converted to PDF format / workable spreadsheet models so as to ensure that the information is legible and that calculations can be repeated and verified.



## Guideline 6: Market development

### 1 Current practice in South Asia

Enabling market conditions for power traders are not present in many of the South Asian countries. Transmission open access, which is a necessary condition for trading market, has not yet evolved in Afghanistan, Nepal, Maldives and Sri Lanka. The presence of vertically integrated monopoly in Afghanistan is expected to be another barrier in the institutionalization of trading license regime.

### 2 International experience

Power market should have progressed from vertical monopoly / single buyer model to whole sale competition, allowing trading licensees to source power from IPPs and other sources for further re-sale. The necessity of this condition is evidenced especially in the case of South Africa wherein, an executive order mandating all purchases to be done by the Government owned monopoly – Eskom is stifling the growth of trading industry.

### 3 Recommendations for South Asia

The power market structure shall not be solely reliant on single buyer model / vertical monopoly. Third party entities such as traders shall be allowed to purchase and resell energy.

The respective countries shall also evolve and operationalize transmission open access, in such a way that trading licensees can make use of the same for domestic and cross border power trade. Institutional, legal, regulatory and operational framework for open access will need to be put in place.



## Guideline 7: Setting up of a regional forum of national level electricity industry regulators of South Asia

### 1 Current practice in South Asia

In South Asia, currently there is no established forum of electricity regulators at the regional level. Within India, there is a Forum of Regulators, which consists of both National and State level Regulatory Commission. The Forum of Regulators meet regularly, and issue non-binding recommendations and Model Regulations, that can be adopted by the respective regulatory commission after necessary customizations.

### 2 International experience

In regional power pools, in case of presence of regional regulator, such entities may under-take efforts for regulatory harmonization and indulge in dispute resolution related to cross-border trade.

There are regional level regulatory forums in case of Central American Interconnection System (CRIE) and South African Power Pool (RERA).

The existence of a Regional Electricity Regulator (instead of a forum of regulators), with legal mandate on issues related to cross border trading across the region can be a key enabler for harmonization of trading licence regimes across regions. In the West African region, such a regional regulatory - ECOWAS Regional Electricity Regulatory Authority (ERERA) was established by the member states of the Economic Community of West African States (ECOWAS) in January 2008.

### 3 Recommendations for South Asia

To enable smooth functioning of cross border trade through trading licensees, it is necessary to have a regional forum of electricity regulators which can take up the following responsibilities, in a non-binding manner, so that independence of each constituent member is left intact.

- Make efforts for Regulatory harmonization
- Provide a forum for consultations to evolve policies and model regulations
- Support the efforts for improvement in competition and choice

# **Illustrative sample formats**



## Application form for grant of licence

No.	Particulars
1	Name of the applicant
2	Address Registered office address Address for correspondence Website address
3	Name, Designation and Address of the contact person
4	Contact Telephone numbers
5	E-mail ID
6	Status of the applicant (Citizen / type of firm)
7	Place of Incorporation/Registration
8	Year of Incorporation/Registration
9	Clause of the Memorandum of Association / any similar legally valid incorporation document which authorizes undertaking trading in electricity
10	Whether the Memorandum of Association / any similar legally valid incorporation document authorizes undertaking transmission of electricity.
11	Share Capital Authorized share capital Issued share capital Subscribed share capital Paid up share capital
12	Category of licence applied for
13	Whether authorization for cross border trade is required
14	Volume of power intended to be traded in each year (in Million Units)
15	Area of Trading

No.	Particulars
16	(i) Net worth as per the last year's audited accounts prior to the date of application (ii) Net worth* on the date of preparation of the special balance sheet ** accompanying the application
17	(i) Current Ratio* as per the last year's audited accounts prior to the date of application. (ii) Current ratio on the date of preparation of the special balance sheet accompanying the application.
18	(i) Liquidity Ratio* as per the last year's audited accounts prior to the date of application. (ii) Liquidity ratio on the date of preparation of the special balance sheet accompanying the application.
19	Details of shareholding as on the date of making application
20	(i) Annual turnover as per the audited accounts for the past one year prior to the date of application (if applicable). (ii) Turnover on the date of preparation of the special balance sheet accompanying the application.
21	Organizational and Managerial capability of the applicant
22	Approach and Methodology for the trading business

No.	Particulars
23	Other Information Whether the applicant or any of his associates, or partners, or promoters, or Directors has been declared insolvent? If so, the details thereof and whether they have been discharged for not; Details of cases resulting in conviction for moral turpitude, fraud or economic offences of the applicant, any of his associates, or partners, or promoters, or Directors during the year of making the application and three years immediately preceding the year of making application and the date of release of the above person from imprisonment, if any, consequent to such conviction; Whether the applicant or any of his associates, or partners, or promoters, or Directors was ever refused licence. If so, give the details of date of making application, date of refusal and reasons for refusal; Whether the applicant holds a transmission licence. If so, give the details thereof; Whether an order canceling the licence of the applicant or any of his associates, or partners, or promoters, or Directors was ever passed; Whether the applicant or any of his associates, or partners, or promoter, or Directors was ever found guilty of contravention of any of the provisions of the Act or the rules or the regulations made thereunder or an order made by the Electricity Regulatory Commission, in any proceedings. If so, give the details thereof.



## Trading licence

**<<Name of authority granting the license>>**  
**License to trade in electricity as an electricity trader**

**License No:**

**Date:**

1. The <<authority>>, in exercise of the powers conferred under Section <<section number>> of the <<Name of relevant legislation>>, hereby grants this license as a Category <<Category code / number>> trader to <<Name of licensee>> to trade in electricity as an electricity trader in the whole of <<Country name>>, subject to the terms and conditions contained in the <<Relevant legislations and regulations>>, including statutory amendments, alterations, modifications, re-enactments thereof, which shall be read as part and parcel of this license.
2. The <<authority>> hereby also confers its authorization to <<Name of licensee>> to indulge in cross border trade, subject to the terms and conditions contained in the <<Relevant legislations and regulations>>, including statutory amendments, alterations, modifications, re-enactments thereof, which shall be read as part and parcel of this license. (Remove if not applicable)
3. The licensee shall abide by the measures for control of prices, trading margin and any other restrictions imposed by the <<authority>>.
4. The license is not transferable, except in accordance with the provisions of the <<Relevant legislations, regulations and rules>>
5. The licensee shall not, without the prior approval of the <<authority>>-
  - a. Undertake any transaction to acquire by purchase or take over or otherwise, the utility of any other licensee; or
  - b. Merge its utility with other licensee.
  - c. Assign its license, or transfer its utility, or any part thereof, by sale, lease, exchange or otherwise
6. Any agreements relating to any transaction referred to in the previous clause/unless made with the approval of the <<authority>>, shall be void.
7. The grant of this license to the licensee shall not in any way hinder or restrict the right of the <<authority>> to grant a license to any other person within the same area for trading in electricity as an electricity trader. The licensee shall not claim any exclusivity.
8. This license shall commence on the date of its issue and unless revoked earlier, shall continue to be in force for a period of <<number of years>> years from the date of its issue.
9. The licensee may with prior intimation to the Commission, engage in any business for optimum utilization of its assets;
10. Provided that the licensee shall not engage in the business of transmission of electricity.
11. The licensee shall pay annual license fee, as specified by the <<authority>>. License fee for part of the financial year shall be paid on pro rata basis.
12. The licensee shall supply such information and documents as may be called for by the <<authority>> from time to time.

**Signature of authorized signatory**



# Trading licensee register

The following fields, at the minimum may be captured, updated periodically and displayed as a consolidated “Trading Licensee Register” in the website of the regulator / concerned ministry. The presence of such a consolidated database will help the trading counterparties to assess the trustworthiness and track-record of the trading licensees, before entering into agreement for trading.

No.	Field Name
1	Licensee Name
2	Licensee’s address and contact details
3	License number and date
4	License category
5	Licensee’s authorization for indulging in cross border trade
6	Order reference number and date of grant of license
7	Order reference numbers and date of all subsequent amendment / revocation of license
8	Order reference number and date of any penalties imposed on the licensee so-far

# **Summary of international experience**



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Legal framework for licensing and regulation of trading activity</b></p>	<ul style="list-style-type: none"> <li>Electricity trading, and its licensing / registration, and subsequent regulation may be defined as part of statutory legislation so as to institutionalize a well-defined and predictable trading license regime.</li> </ul> <p>(India – Electricity Act 2003, South Africa - Electricity Regulation Act 2006, El Salvador – General Electric Law 1996, Guatemala – General Electric Law 1996)</p>	<ul style="list-style-type: none"> <li>In SA countries other than India and Bhutan, trading as a licensed activity will need to be introduced in their respective fundamental legislations on electricity sector.</li> <li>Basic provisions regarding grant, amendment, revocation and renewal of licenses, and the duties and obligations of licensees shall be incorporated in the legislative amendments, wherever such provisions are not present.</li> <li>Initial license validity period may be specified in the legislation itself, as is the case with India.</li> <li>The legal framework may aid in providing predictability and may incorporate provisions such as a legally defined ceiling on penalties that can be imposed for contravention of license terms, and a time limit for finalisation of trading license applications after receipt of all clarifications and information.</li> </ul>



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Extensibility of trading license regime to cover cross border trade</b></p>	<ul style="list-style-type: none"> <li>▪ The licensing of trading licensees for the purpose of cross-border trade can be left to the respective national level regulatory commissions. Association of regulatory commissions at regional level can make non-binding recommendations for harmonization of regulations. <i>(RERA’s guidelines for authorizing import and export, qualification requirements for participation in day ahead market of SAPP, India’s proposed guidelines for cross border trade)</i></li> <li>▪ An alternative model is also available wherein the application for cross border trade authorization may be submitted through the system / market operator at the country level to the regional level regulator and system operator. However this mechanism can work only when treaty mechanisms are in place to set up regional level regulatory commissions and system operators. <i>(Regional Energy Market Regulations of Central American Interconnection System)</i></li> <li>▪ In case of non-compatibility in regulations of participating nations in cross border trade, simple transitional mechanisms may be initially prescribed, and in the meantime efforts may be made for regulatory harmonization and development of final mechanisms for cross border trade. <i>(Regional Energy Market Transitional Regulations of Central American Interconnection System)</i></li> <li>▪ Definition of trading in statutory Acts / Regulations may be amended to cover cross border trade of electricity also. <i>(India)</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ In SA countries including India, the legal definition for trading may be amended to include cross border trade. This shall be done along with the addition of a new provision in legislative / regulatory framework that shall specify that authorization for indulging in cross border trade shall be granted to trading licensees subject to regulations, rules and procedures framed in this regard. (The existing provision for import and export licenses available in some of the countries may not be effective for this purpose as these were included mostly to cater to cross border trade by generation companies, and import by the distribution utility instead of catering to transactions involving resale)</li> <li>▪ The entity that currently grants generation, transmission and distribution licenses in the respective SA countries may be entrusted with the duty to grant trading license, and the duty to grant authorization for indulging in cross border trade. The Government / Government designated agencies may be provided with the power to over-rule any proposal for grant of authorization for indulging in cross border trade to any entity.</li> <li>▪ In case of trading licenses which have been already granted, wherein the area of trading is defined in the license as the territorial limits of the country, amendment of license terms may be undertaken to allow cross border trade, subject to obtaining authorization for cross border trade.</li> </ul>





# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Power market structure that allows for competition</b></p>	<ul style="list-style-type: none"> <li>Power market should have progressed from vertical monopoly / single buyer model to whole sale competition, allowing trading licensees to source power from IPPs and other sources for further re-sale.</li> </ul> <p>The necessity of this condition is evidenced especially in the case of South Africa wherein, an executive order mandating all purchases to be done by the Government owned monopoly – Eskom is stifling the growth of trading industry.</p>	<ul style="list-style-type: none"> <li>Efforts shall be made to ensure progress in institutionalization of transmission open access in countries such as Afghanistan, Nepal, Maldives and Sri Lanka. Some sort of restructuring will also be needed in the case of vertical monopoly structure of power sector in Afghanistan.</li> </ul>
<p><b>Institution for grant of licenses, and for regulation and monitoring of the licensees</b></p>	<ul style="list-style-type: none"> <li>Regulatory commissions may be appointed as the institution for receiving, analyzing and approving the applications for grant of license / registration / authorization for undertaking trading, and for the subsequent regulation and monitoring of trading activity.</li> </ul> <p><i>(Example: CERC in India, NERSA in South Africa, FERC in United States, SIGET in El Salvador)</i></p>	<ul style="list-style-type: none"> <li>The entity that currently grants generation, transmission and distribution licenses in the respective SA countries may be entrusted with the duty to grant trading license.</li> <li>For regulation and monitoring of licensees, the respective regulatory commissions / electricity authorities may be empowered. In countries such as Afghanistan where both regulatory commissions and electricity authorities are not present, the respective Govt. department may be entrusted with this job as a transitional mechanism, till a separate regulatory body is set up.</li> </ul>



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Segregation of licensees into different categories</b></p>	<ul style="list-style-type: none"> <li>Defining different categories of trading licensees based on trade volume, with different qualification criteria allows for lower barriers of entry and prevents concentration of market power. <i>(Example: Category I to IV licensees in India)</i></li> <li>Alternatively, segregation of licensees can be done based on their market power, with lesser reporting requirements in the case of licensees who does not have any market power. This allows the regulator to focus on the section of traders who are most likely to effectively indulge in unfair practices. <i>(Example: Category 1 and 2 wholesalers in USA)</i></li> </ul>	<ul style="list-style-type: none"> <li>In the interest of regulatory harmonization, the categorization of trading licensees based on volume limits as per the CERC Regulations in India may be adopted in the case of the other South Asian countries also.</li> </ul>
<p><b>Technical requirements for grant of license</b></p>	<ul style="list-style-type: none"> <li>Technical qualification criteria to be kept at a minimum, with requirement specified for the competence of staff to undertake trading. <i>(India)</i></li> </ul>	<ul style="list-style-type: none"> <li>In the interest of regulatory harmonization, the technical qualification requirements as defined by CERC in India, may be adopted in the other South Asian countries also.</li> </ul>
<p><b>Financial requirements for grant of license</b></p>	<ul style="list-style-type: none"> <li>Financial qualification criteria based on net-worth linked with volume of trading, and minimum current ratio and liquidity ratios. <i>(India)</i></li> </ul>	<ul style="list-style-type: none"> <li>The financial qualification requirements such as net worth may be linked to the trading volume as is the case with CERC in India. However, for obtaining authorization to indulge in cross border trade, stricter financial requirements may be prescribed, which may be determined separately for each of the South Asian countries.</li> </ul>



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Frameworks governing grant, amendment, renewal or revocation of licenses</b></p>	<ul style="list-style-type: none"> <li>Notifying a properly defined process for scrutiny of trading license applications, identifying the key stakeholders and listing key timelines and milestones will enable a streamlined process for grant / amendment / revocation of licenses.</li> </ul> <p><i>(India, South Africa, United States of America, Central American Interconnection)</i></p>	<ul style="list-style-type: none"> <li>In the initial phase of cross border trade, authorization for indulging in cross border trade may be granted only to Category I and Category II licensees. This will be sufficient to allow entry of traders with firm portfolio of more than 57 MW.</li> <li>A minimum annual trading volume may also be prescribed in the case of trading licensees with authorization to indulge in cross border trading, so as to prevent the entry of non-serious traders, and traders with only short term profit goals.</li> <li>Detailed procedure for grant of trading license, and their amendment, revocation and renewal may be specified, either as part of the regulations or as a separate guideline document.</li> </ul>
<p><b>Funding</b></p>	<ul style="list-style-type: none"> <li>Funding for administering trading license regime can be procured by the regulators through license application fees and annual license fees (<i>India</i>), or by annual registration fee (<i>Guatemala</i>).</li> <li>An alternative is the model adopted in United States wherein the costs of administration of the electric regulatory program as it applies to Power Marketing Agencies are assessed against each power marketing agency based on the proportion of the megawatt-hours of sales of each power marketing agency in the immediately preceding reporting year to the total megawatt-hour of sales of all power marketing agencies. (<i>US Code of Federal Regulations, 18 C.F.R. Part 382</i>)</li> </ul>	<ul style="list-style-type: none"> <li>License application fees and annual license fees may act as the key sources of funding, with the respective fees being determined by the regulatory authorities in the respective South Asian countries.</li> </ul>



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Market monitoring arrangements</b></p>	<ul style="list-style-type: none"> <li>Trading business requires continuous market monitoring and oversight on the part of the regulatory commissions, which may be enabled through mechanisms for periodic information dissemination and reporting. <i>(India – CERC’s information reporting forms as per trading license regulations, United States of America – Online filing of information through FERC’s systems)</i></li> <li>Incentives provided to the traders to institute compliance programs, to promote self-reporting of violations and to extend support to investigative agencies can play a significant role in prevention, identification and resolution of instances of abuse of market power and other unfair trading practices. <i>(FERC’s penalty guidelines with defined credits on overall culpability score for compliance, self-reporting and support)</i></li> <li>A well maintained “agent register” / “trading licensee register” detailing information such as affiliates, penalties imposed by regulators if any, validity of license, category of license etc. can be a useful tool for the stakeholders to ascertain the track-record of trading licensees. <i>(Agent register maintained by CRIE under the provisions of Regional Energy Market Regulations)</i></li> </ul>	<ul style="list-style-type: none"> <li>Trading licensees shall be legally mandated for provide information regarding their trading activities in a form and manner as the respective regulatory authority may prescribe.</li> <li>Market monitoring cells may be established within the regulatory commissions / other regulatory authorities who may be entrusted with the scrutiny of information submitted by the trading licenses, and detection of incomplete disclosure of information and instances of market abuse.</li> <li>A trading margin ceiling, similar to that prescribed by CERC in India, may be adopted in other countries also, with the ceiling value being determined separately for each country.</li> <li>The authority which grants trading licenses shall be required to maintain a publically accessible license register, which tracks information such as affiliates, penalties imposed by regulators if any, validity of license, category of license , authorizations granted for cross border trade etc.</li> <li>Regulatory provisions may be incorporated to consider the actions of trading licensees which are in line with prudent practices such as institutionalization of compliance programs, self-reporting and providing co-operation in investigations, in a favorable manner while determining the penalties.</li> </ul>



# Summary of international experience

Key ingredients of trading license regime	Lessons from other countries and power pools	Recommendations for South Asia
<p><b>Emergency provisions</b></p>	<ul style="list-style-type: none"> <li>There shall be emergency provisions that empower regulatory agencies / government entities to curtail trading activities, which can prove useful in crisis situations.</li> </ul> <p><i>(Section 202 of Federal Power Act, as utilized by the Department of Energy, USA in events such as the California energy crisis, Section 11 of Electricity Act in India)</i></p>	<ul style="list-style-type: none"> <li>Emergency provisions may be provided to curtail cross border trade, to handle emergencies and unforeseen situations.</li> </ul>
<p><b>Other provisions</b></p>	<ul style="list-style-type: none"> <li>Licensees may be required to furnish information required under the reporting and monitoring framework to be only in text converted to PDF format so as to ensure that the information is legible. <i>(India)</i></li> <li>Licensees required to submit workable spreadsheet models as party of information reporting and monitoring framework. <i>(USA)</i></li> <li>Licensees may be allowed to submit regular market operation information over online systems. <i>(USA)</i></li> </ul>	<ul style="list-style-type: none"> <li>Licensees may be required to furnish information required under the reporting and monitoring framework to be only in text converted to PDF format / workable spreadsheet models so as to ensure that the information is legible and that calculations can be repeated and verified.</li> </ul>

# Process for Grant of Trading license in India

