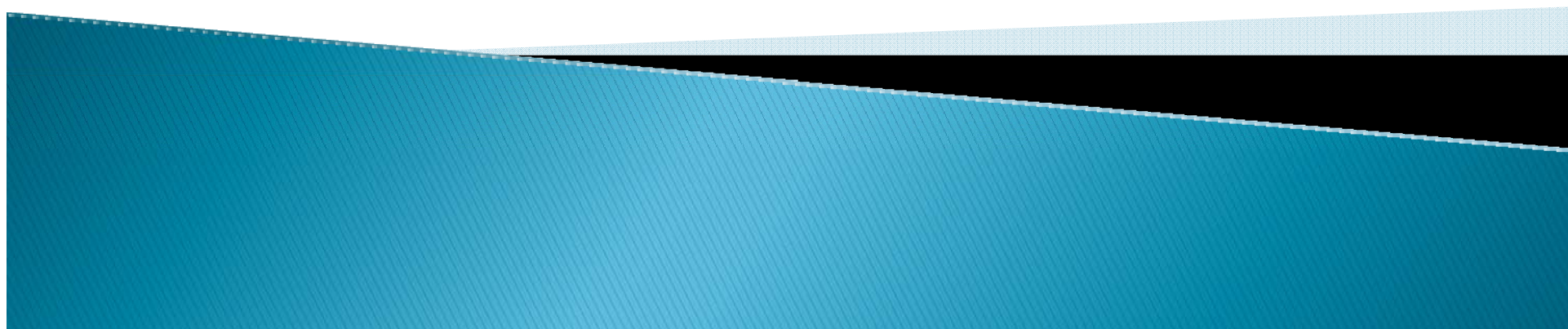




# **Role of Jordan in Electricity Market**

## **Electricity Regulatory Commission**

**Presented by: Dr. Kamal Al-Qudah, Commissioner**





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  - ▶ **The Energy Regulators Regional Association (ERRA)**
  - ▶ **Mediterranean Regulators for Electricity and Gas (MEDREG)**

# **Background:**

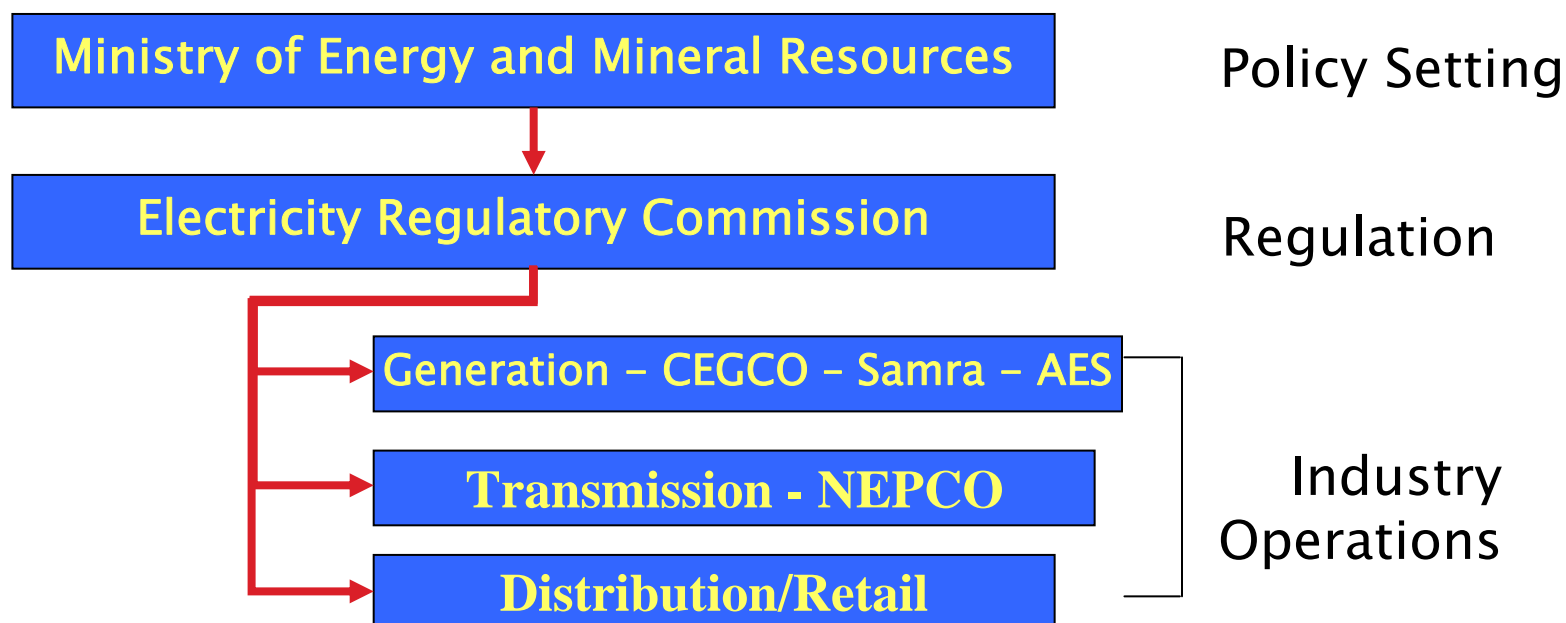
- ▶ In order to improve efficiency and to attract private sector investment to the sector, the government recognized the need to reform the industry structure.
- ▶ In 2002, the new General Electricity Law was issued, this law determined the responsibility of the Regulator (ERC) and the responsibility of the Ministry of Energy and Mineral Resources (MEMR).

## **The fundamental reforms included:**

- ▶ Separation of the responsibilities for policy-making, regulation and industry operations.
- ▶ The Electricity Regulatory Commission is responsible for implementing the policies developed by the Ministry through the regulatory framework.

# Background Cont....:

- ▶ Separation of Policymaking, Regulation and Industry Operations as in the GEL



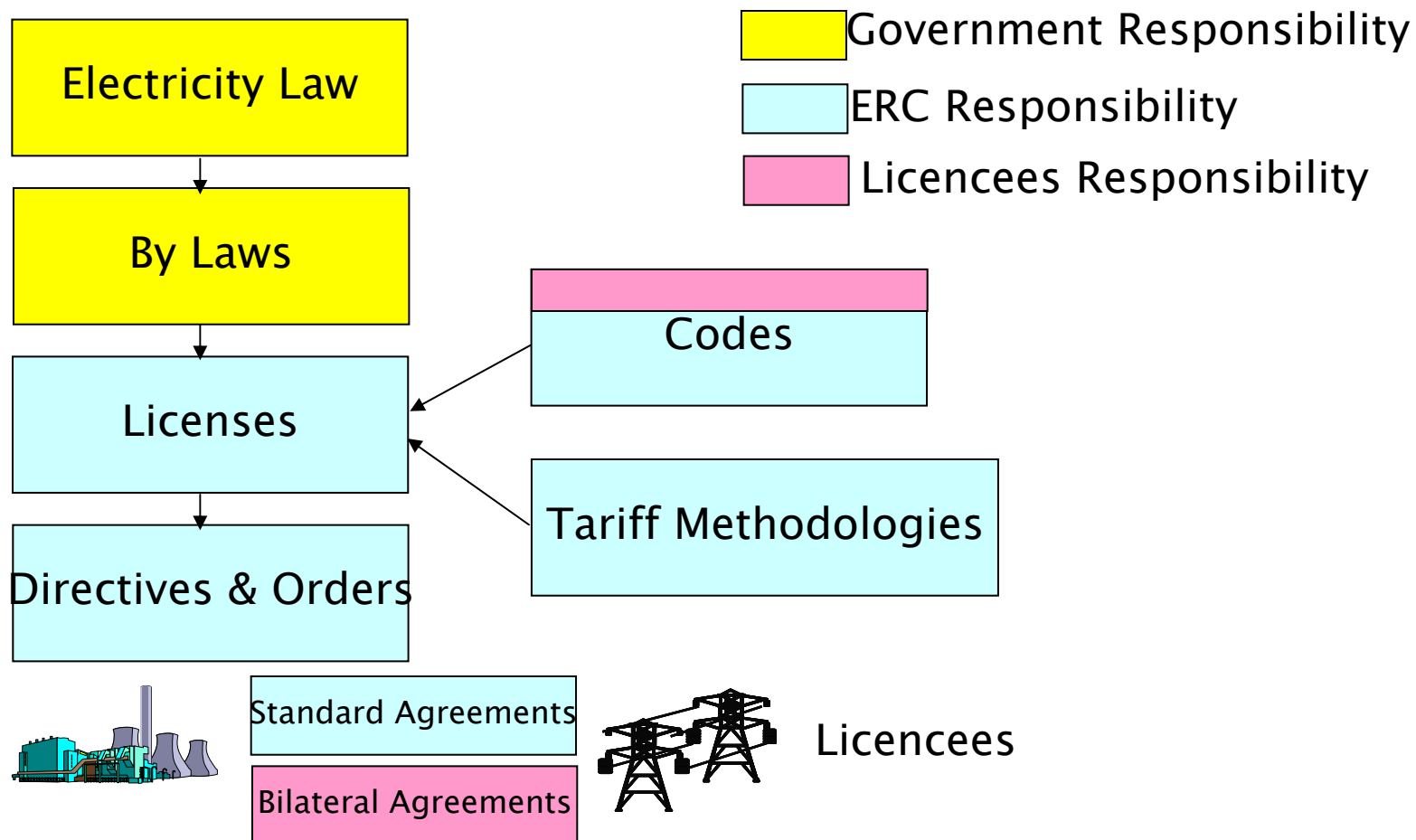
# **Background Cont....:**



- **MEMR is entrusted with setting the general policy of the sector and cooperation with the other countries and promoting the introduction of the renewable energy.**
- **ERC implements a regulatory framework that oversees both the financial and economic and technical aspects of the electricity companies. The regulatory framework is designed to provide consumers with quality supply at least cost, while ensuring that the companies are financially viable, licensing and setting the tariff are among ERC's main responsibility.**

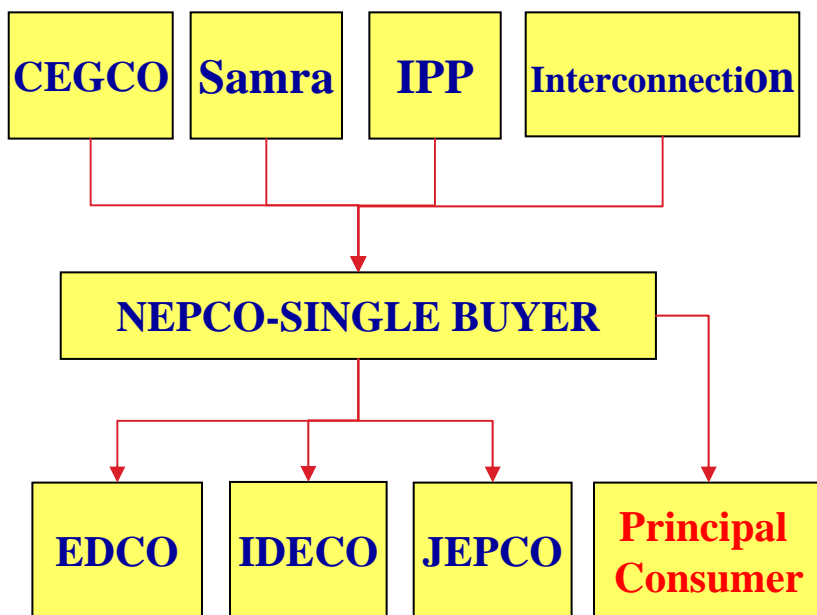
## Background Cont...:

**Distribution of the responsibility between all parties in the sector**



# Current Trading Arrangements

## Single Buyer Model •

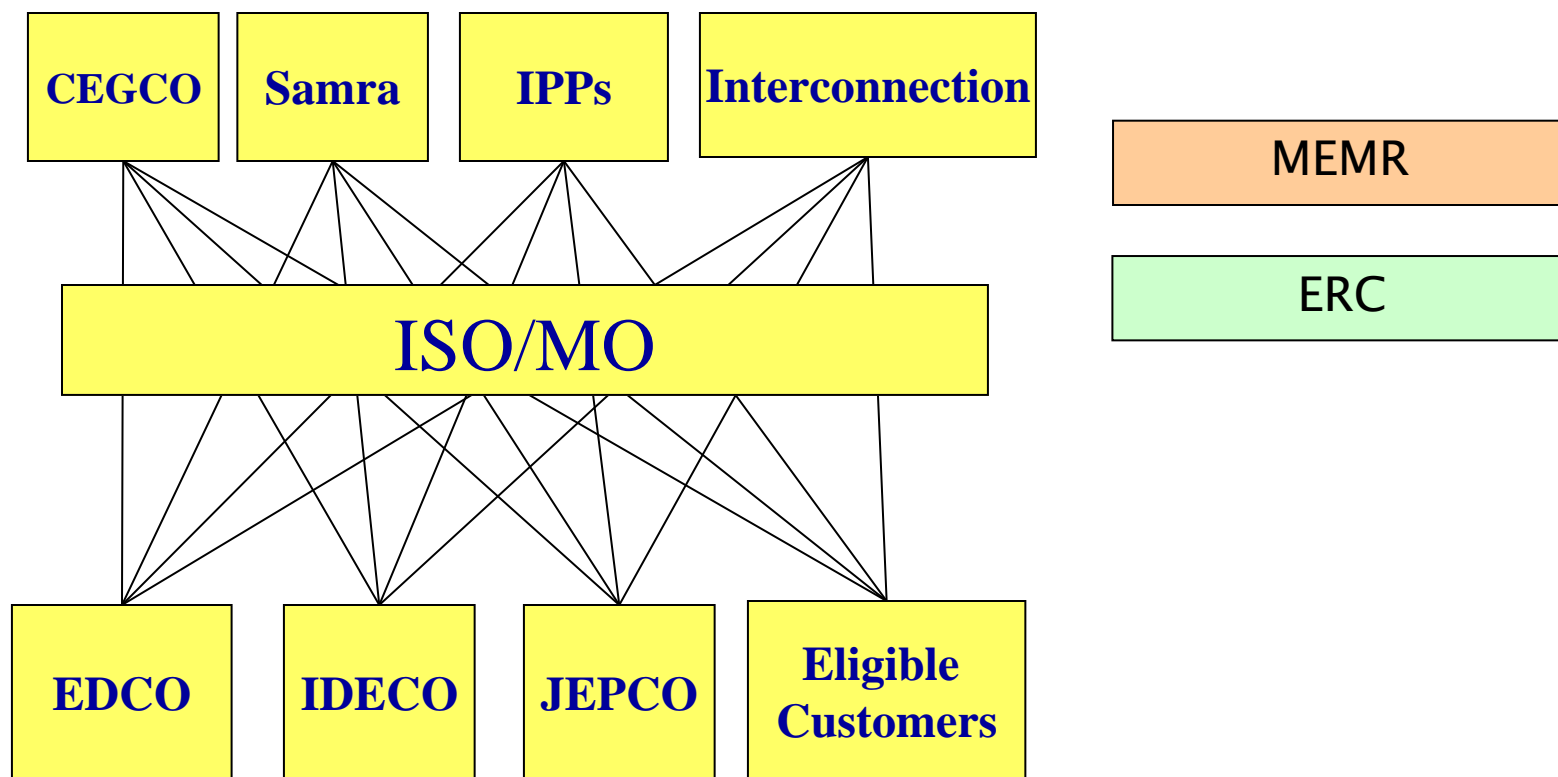


- Current stage is characterised as competition for the Market (competition in the procurement or entry of new generation).
- During this stage, all trading is being carried out through contracts (or Power Purchase Agreements) (PPA).
- Trading arrangements:
  - NEPCO is the only responsible for procurement generation (Single Buyer)
  - Generators sell power to NEPCO through long term PPAs.
  - NEPCO sells power to the Distributors and Principal Consumers at regulated tariffs
  - Distributors distribute and sell power to customers at regulated tariffs



# Future structure of the Electricity sector

## Wholesale Competition





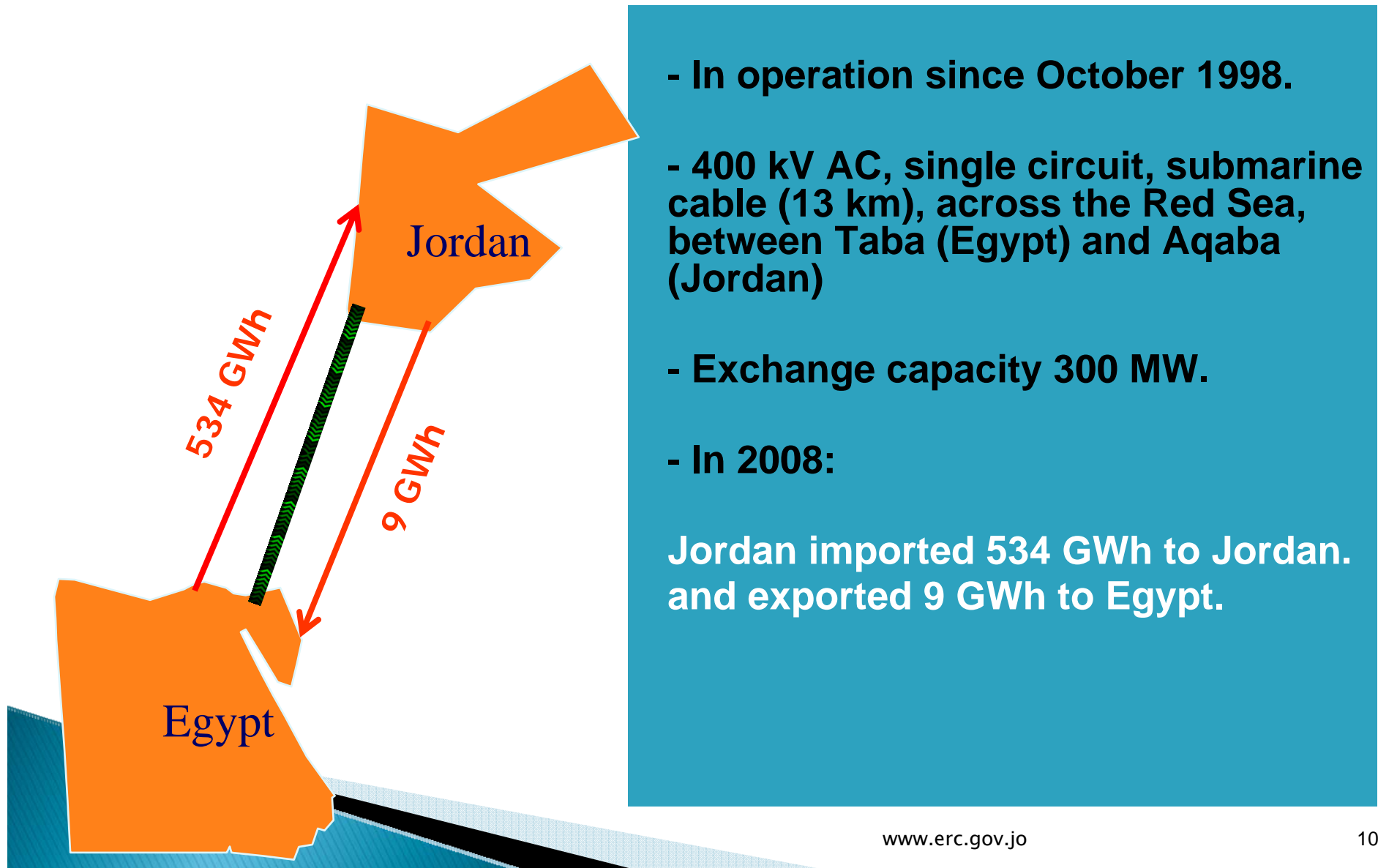
## **Interconnection Tie Line**

- ▶ **The interconnection with Egypt started in 1998 and with Syria in 2001.**
- ▶ **Jordan uses the interconnections to provide reliability and to maximize the benefit of the power exchange among all parties.**
- ▶ **Imports have been increasing over time as shown in next slide and when Jordan becomes part of the MEDRING interconnection, it is expected that the levels of imports and exports will increase.**
- ▶ **An interconnection with the Egyptian electrical grid from the south using the 400 kV submarine cable (13 km) crossing the Aqaba Gulf, and with the Syrian electrical grid from the north using the single 400 kV OHTL connecting Amman North S/S with Der Ali S/S in Syria.**

# Interconnection Tie Line



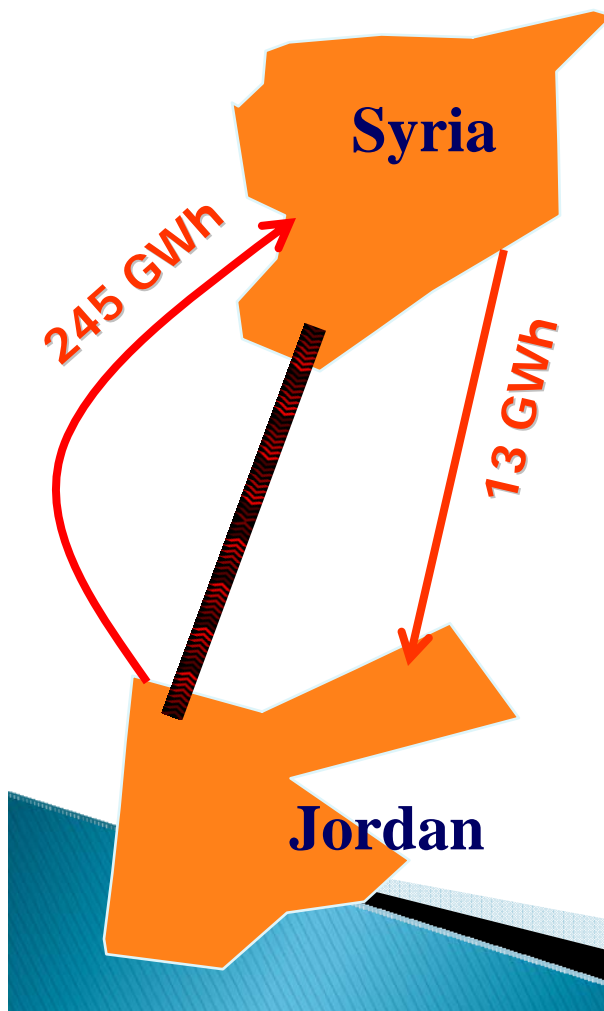
## Existing Interconnections **Jordan - Egypt**



# Interconnection Tie Line



## Existing Interconnections **Syria - Jordan**



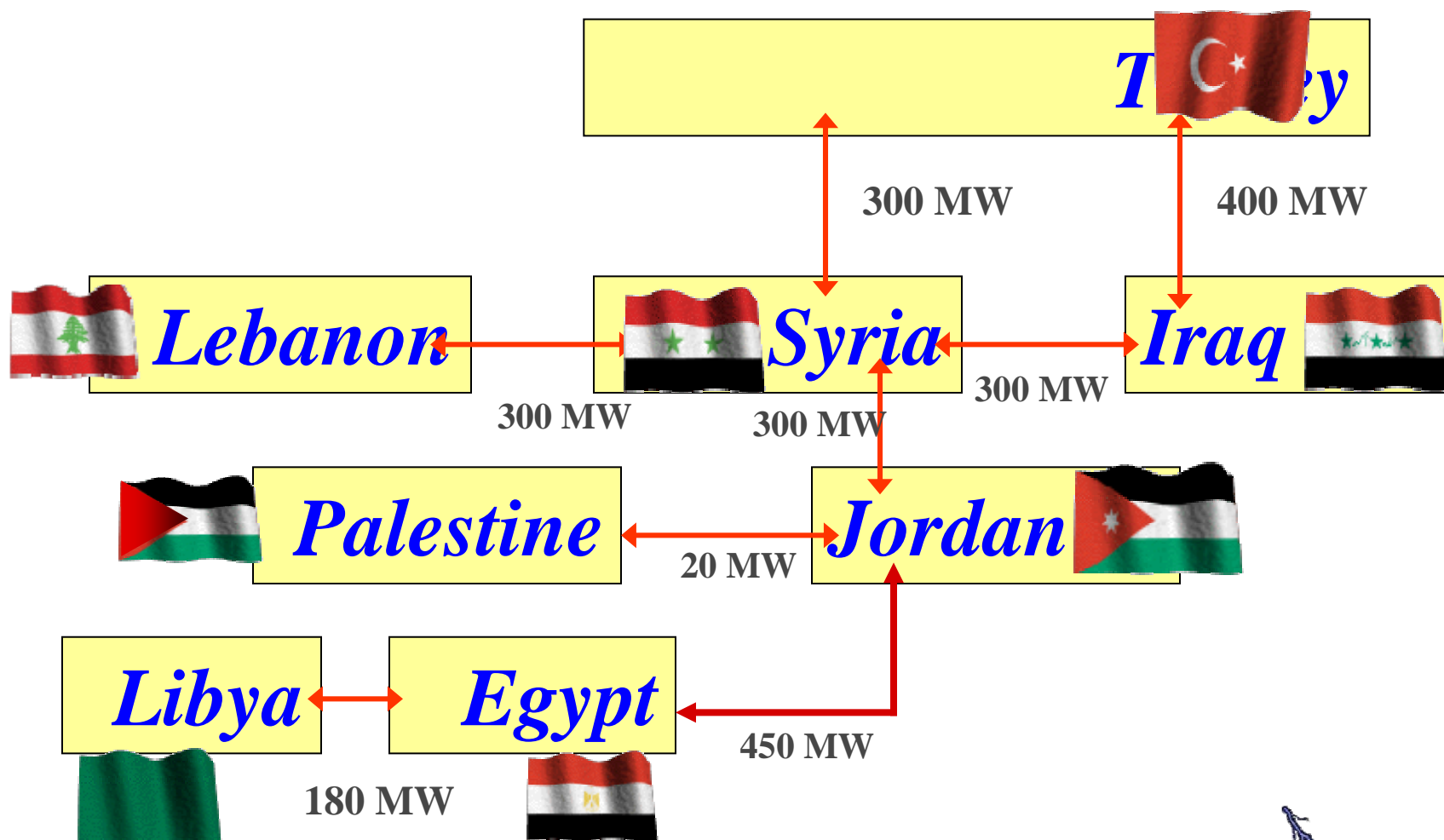
- In operation since January 2001
- 400 kV AC, single circuit OHL, 217 km, between Amman North (Jordan) and Der Ali (Syria)
- Exchange capacity 300 MW
- In 2008:  
  
Jordan exported 245 GWh to Syria  
And imported 13 GWh from Syria

## Interconnection Tie Line

### Import and Export from the Tie Line

Year	Imports (GWh)	Exports (GWh)
2004	Egypt 750	Egypt 101
	Syria 23	Syria 0
2005	Egypt 740	Egypt 0
	Syria 241	Syria 0
2006	Egypt 472	Egypt 0
	Syria 42	Syria 0
2007	Egypt 213	Egypt 0
	Syria 24	Syria 0
2008	Egypt 534	Egypt 9
	Syria 13	Syria 245

# *Eight countries Interconnection Project*



## Regional Cooperation Among Regulators:



### **The Arab Electricity Regulatory Commissions Forum (AERCF):**

The forum has members represent the following countries: Egypt, Saudi Arabia, Abu Dabe, Jordan, Lebanon, Bahrain and Algeria.

The forum held a number of meeting during the period 2002 and 2009, covering quite a wide range of issues, such as;

- ▶ **Decreasing Electricity Cost.**
- ▶ **Protecting Environment.**
- ▶ **Protecting Consumers Interest.**
- ▶ **Facilitating interconnection in the region and with the medetrain countries.**
- ▶ **Studying ways & Means of enhancing the forum activities.**

## Regional Cooperation Among Regulators Cont...:



### **The Energy Regulators Regional Association (ERRA)**

#### ▶ **Purpose:**

The Association's main objective is to increase exchange of information and experience among its members and to expand access to energy regulatory experience around the world.

- ▶ The Energy Regulators Regional Association (ERRA) is a voluntary organization comprised of independent energy regulatory bodies primarily from the Central European and Eurasian region, with Affiliates from Asia the Middle East and the USA.

#### The founding members identified the purpose of ERRA as follows:

- ▶ to improve national energy regulation in member countries,
- ▶ to foster development of stable energy regulators with autonomy and authority and to improve cooperation among energy regulators.
- ▶ In addition, the Association strives to increase communication and the exchange of information, research and experience among members and increase access to energy regulatory information and experience around the world and promote opportunities for training.



## Regional Cooperation Among Regulators Cont...:



### **The Energy Regulators Regional Association (ERRA)**

ERRA began as a cooperative exchange among 12 energy regulatory bodies. The U.S. National Association of Regulatory Utility Commissioners ([NARUC](#)), through a Cooperative Agreement with the US Agency for International Development ([USAID](#)), has been providing technical assistance, meetings and study tours for the energy regulators of the above region since 1999. During these meetings, the participants expressed the need for an association similar to NARUC that could offer a more formal platform for exchanging experiences and ideas to better learn from each other's experiences. In 1999, an ad-hoc Steering Committee began development of the structural and operational elements of the future association, including its [purpose and objectives](#).

- ▶ To date ERRA lists 24 Full, 2 Associate and 4 Affiliate Members. The Association was legally registered in Hungary in April 2001 and its Secretariat operates in Budapest. NARUC and USAID have been providing continuous support for the operation of the Association.

## Regional Cooperation Among Regulators Cont...:



### **The Energy Regulators Regional Association (ERRA) cont....:**

#### ▶ **Affiliated Members**

Affiliated Members must comply with one of the below conditions:

- ▶ (a) Energy Regulators and Associations of Energy Regulators from countries located outside the Region.
- ▶ (b) Organizations that qualify as Associate Members but choose Affiliate Membership status.

#### ☐ **The Affiliated Member are:**

- ▶ Jordan: Electricity Regulatory Commission (joined in 2007)
- ▶ Saudi Arabia: Electricity and Co-generation Regulatory Authority (ECRA) (joined in 2008)
- United Arab Emirates: Regulation and Supervision Bureau of United Arab Emirates (joined in 2008)
- ▶ USA: National Association of Regulatory Utility Commissioners (NARUC) joined in 2001

## Regional Cooperation Among Regulators Cont...:



### **Mediterranean Regulators for Electricity and Gas (MEDREG):**

- ▶ **MEDREG, was Established in May 2006 as a working group, is today a non-profit Association under the Italian law, established in Rome in November 2007 and it is supported by the European Commission. It currently gathers energy regulators from the following countries:**

**Albania, Algeria, Bosnia-Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Malta, Montenegro, Morocco, Palestinian Authority, Portugal, Slovenia, Spain, Tunisia and Turkey**



## **Regional Cooperation Among Regulators Cont...:**

### **Mediterranean Regulators for Electricity and Gas (MEDREG):**

- ▶ **The main objective of MEDREG is:**

**To promote a stable, harmonized regulatory framework in the EU-Mediterranean energy market, providing the maximum benefits to energy consumers in both regions.**

- ▶ **Moreover, MEDREG will foster co-operation, information exchange and assistance among members providing a framework for discussion.**

.....**THANK YOU**.....