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# International Conference on **POWER POOLS IN AFRICA: RELEASING THE POTENTIAL OF REGIONAL POWER TRADE**

## **Session 1: Regional organisations and infrastructure planning**

A review of existing approaches and best practice



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## Introduction

Regional power trade

02

## Organisation of Regional Trade

Components and  
Frameworks

03

## Power Trade in Africa

SAPP, WAPP, EAPP

04

## Regional Institutions

Regulation, Planning,  
Operation

05

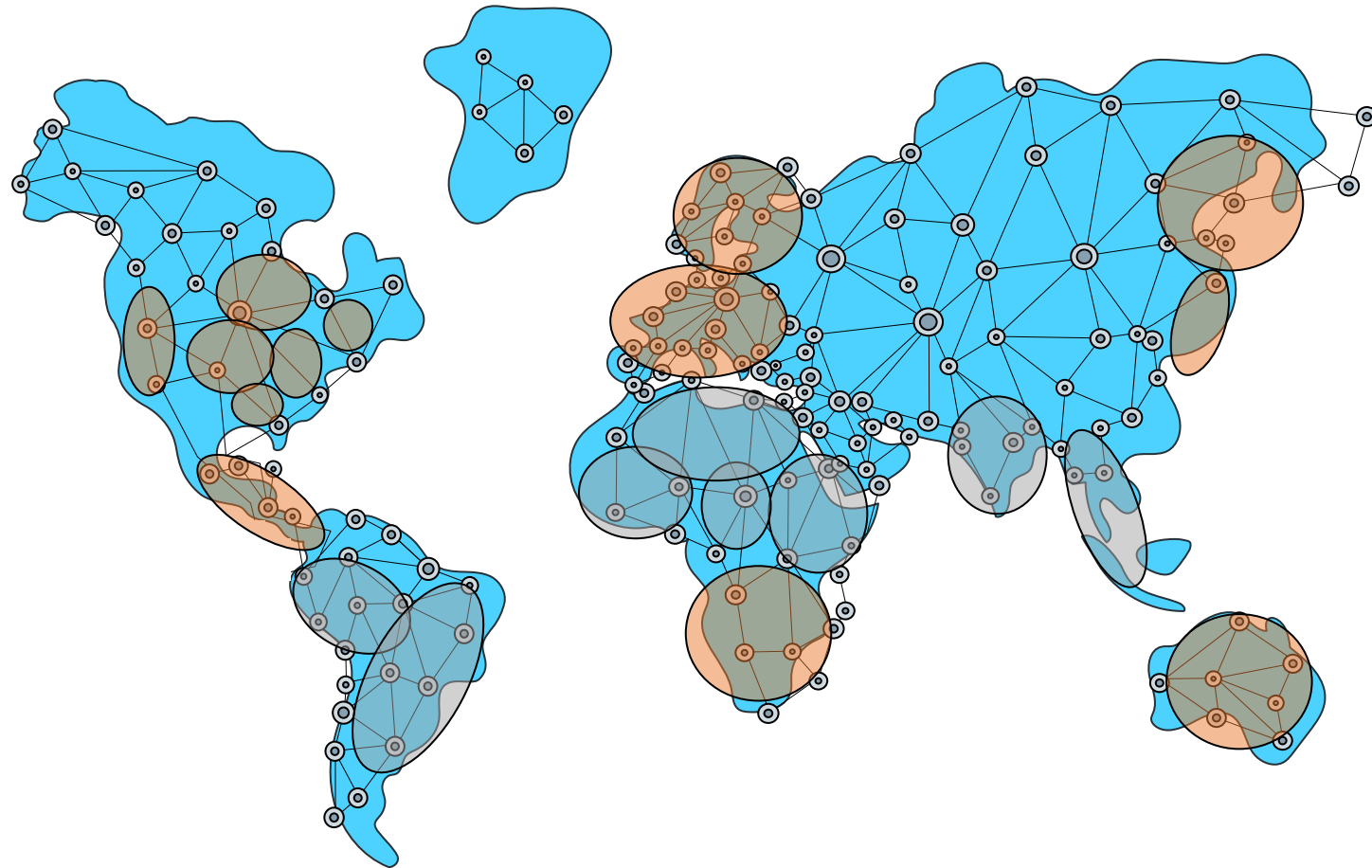
## Development Approaches

Regional Integration

# Introduction

PART 1

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**Cross-border power exchange**

**Regional power pools**

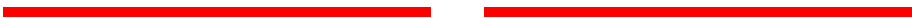
**A group of two or more utilities  
that coordinate their operation  
and planning**

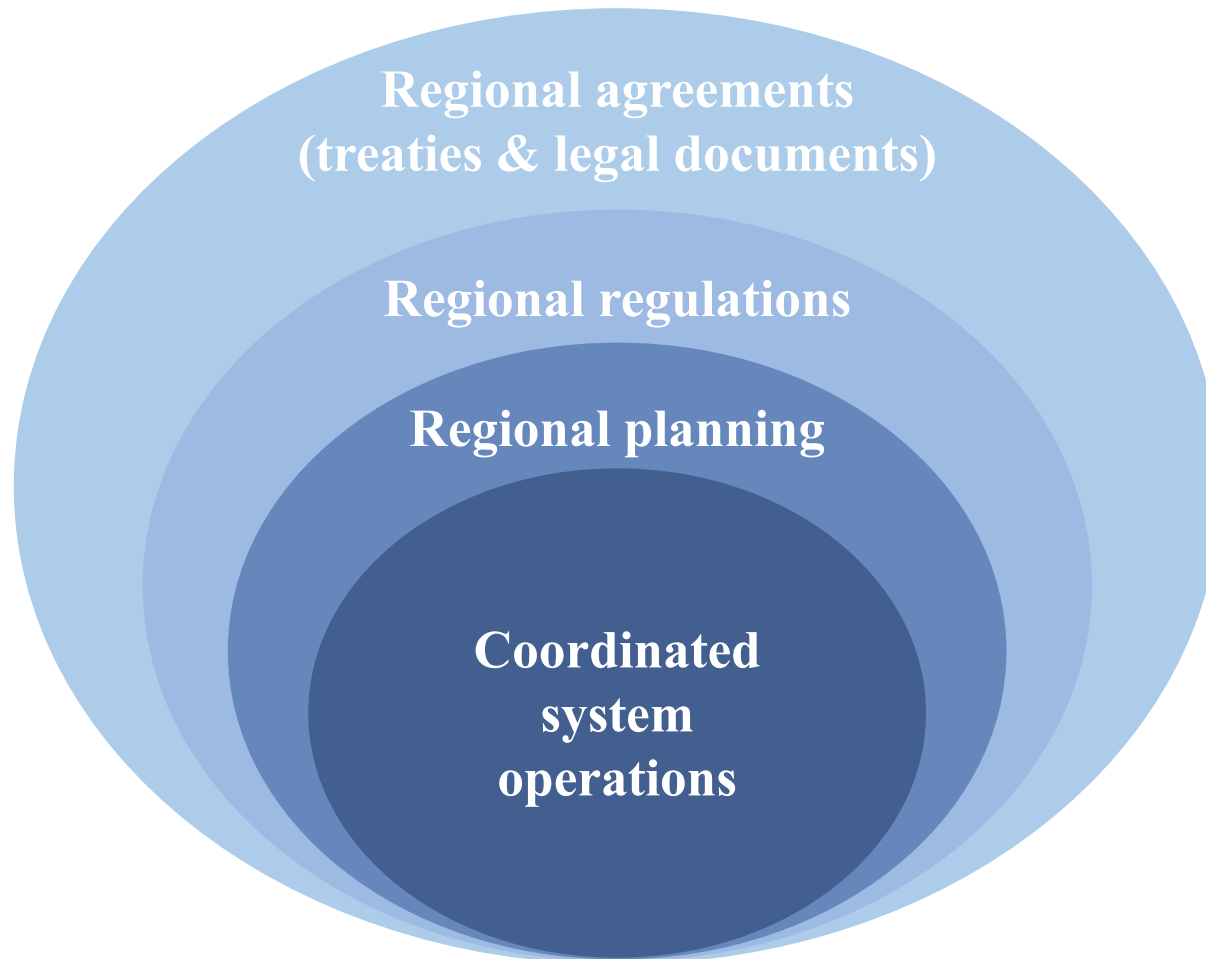
## Benefits of regional power trade

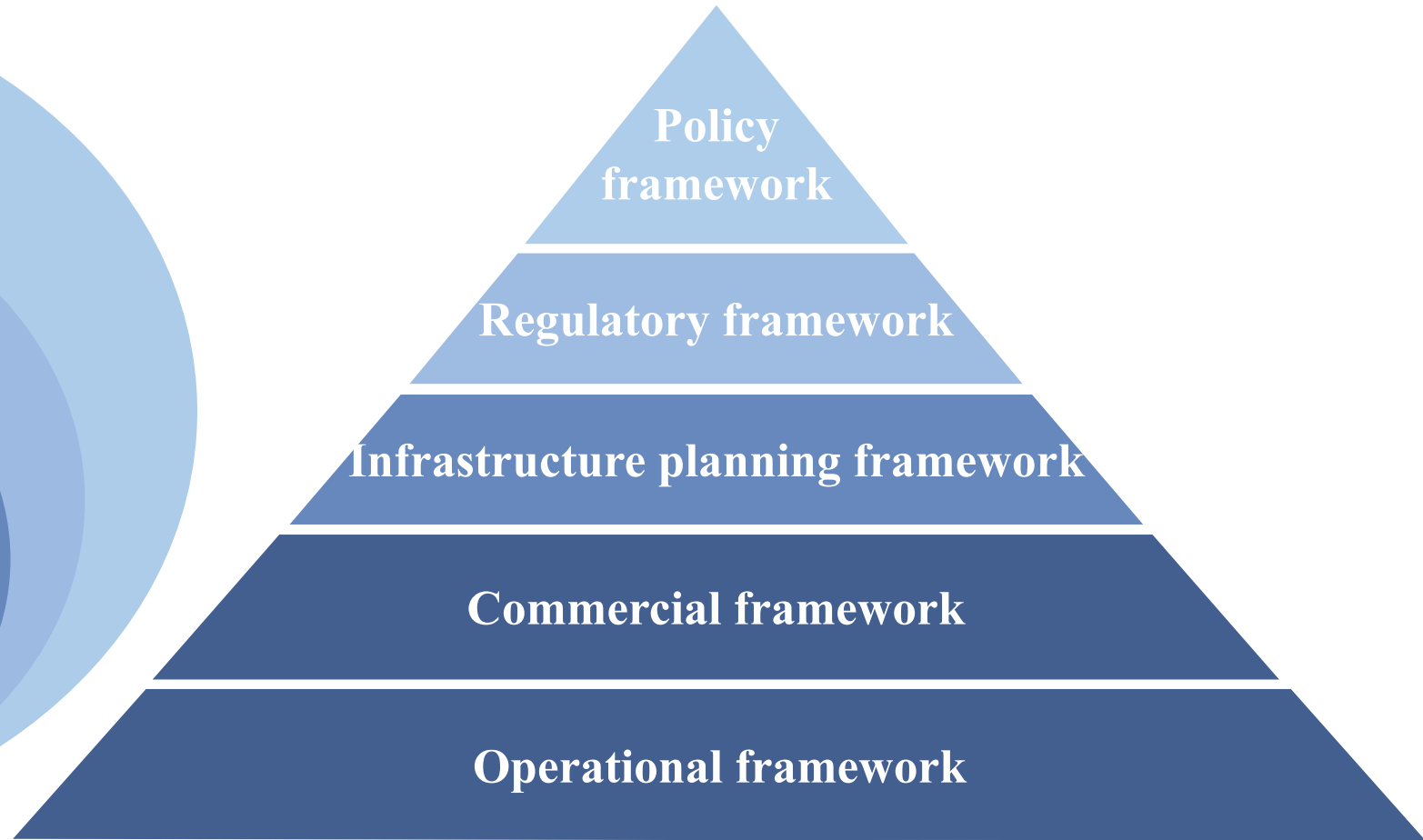
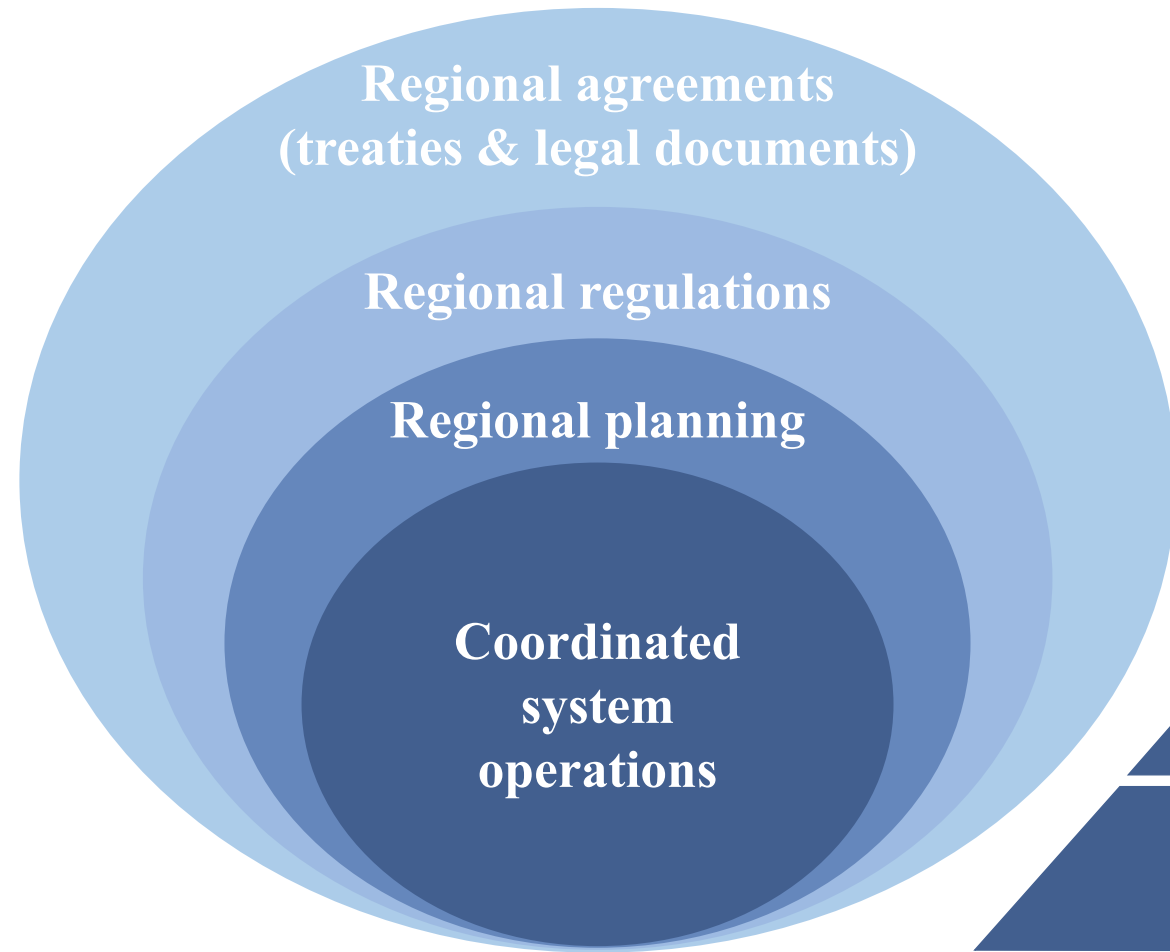
- Allows investment in large-generation projects that are not viable for a single country.
- Lowers system operation costs through efficient regional dispatch.
- Lowers power generation cost through competition and increasing private sector participation.
- Increases system security by sharing generation reserve.
- Enables a higher renewable energy penetration by providing a larger balancing area.
- ...etc

# Organisation of Regional Trade

## PART 2

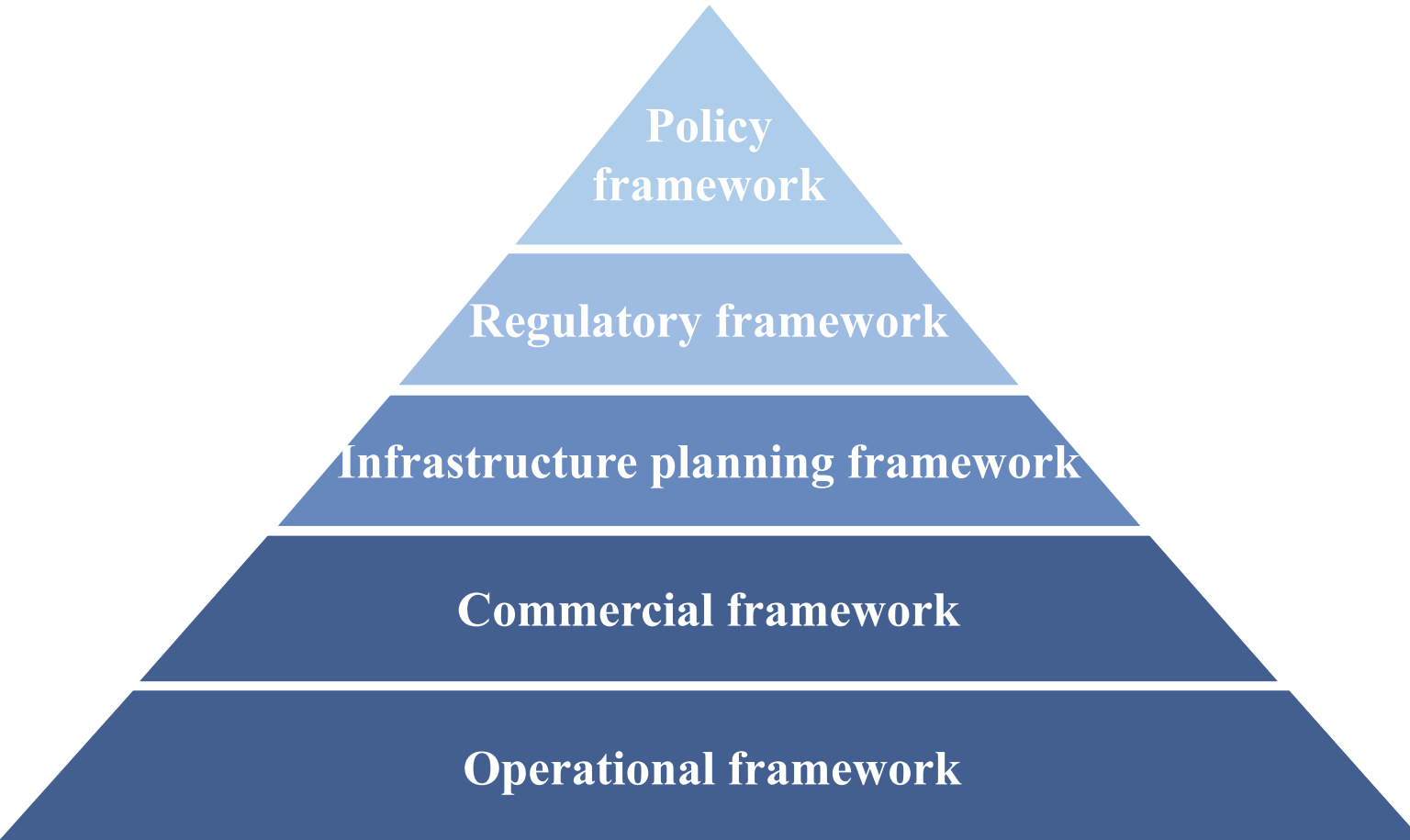








*Power & Authority*



# Power Trade in Africa

## PART 3



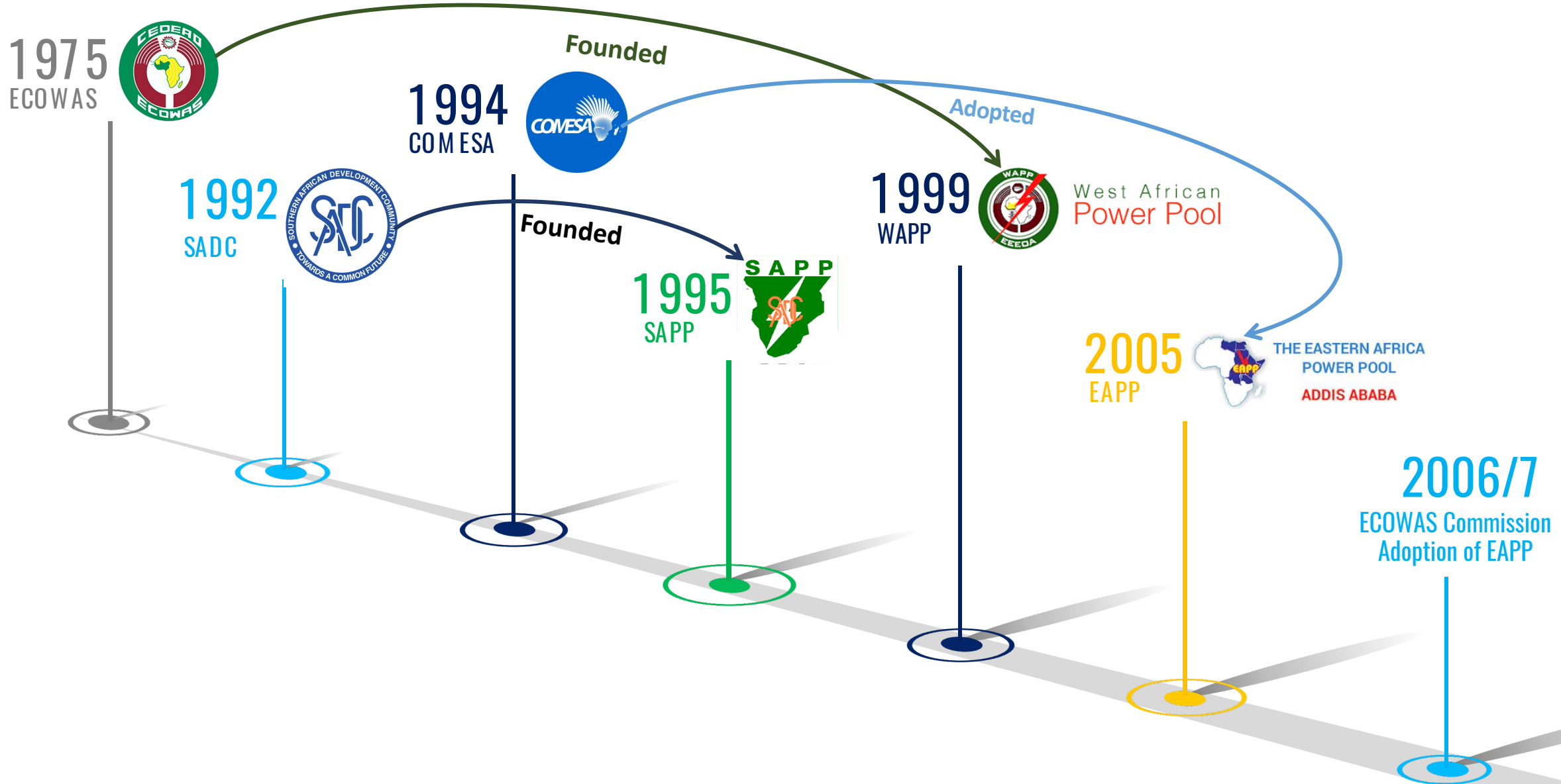
**Five power pools to create a competitive market**

**Regional Economic Communities (RECs)**

- **UMA**
- **COMESA**
- **ECCAS**
- **ECOWAS**
- **SADC**
- **Maghreb Electricity Committee (COMELEC)**
- **Eastern African Power Pool (EAPP)**
- **Central African Power Pool (CAPP)**
- **West African Power Pool (WAPP)**
- **Southern African Power Pool (SAPP)**



# Historical Timeline: SAPP, WAPP, EAPP



# Regional Regulatory institutions



The EAPP Regulatory Forum  
The Independent Regulatory Board (IRB)

2007-08

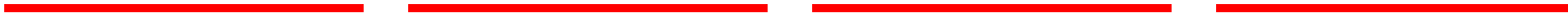
2002-05

2012-???

ECOWAS Regional Electricity  
Regulatory Authority (ERERA)

# Regional Institutions

PART 4



# The Power Pool Organs



**Operation Committee**



**Planning Committee**



**Coordination Centre**



**Market Committee**



**Investment Facilitation**



**Regional Market Operator  
Regional System Operator**



***Versus***

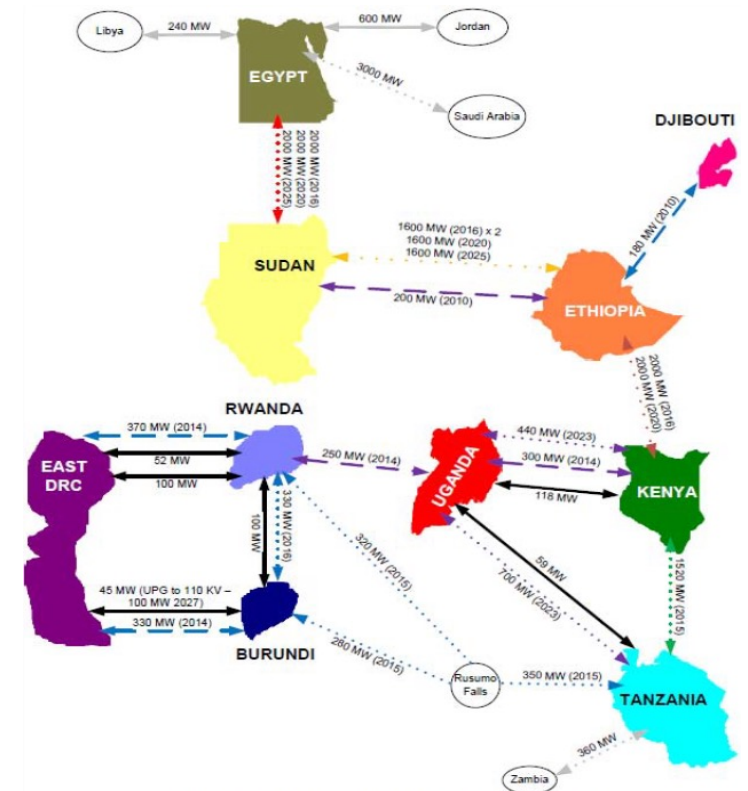
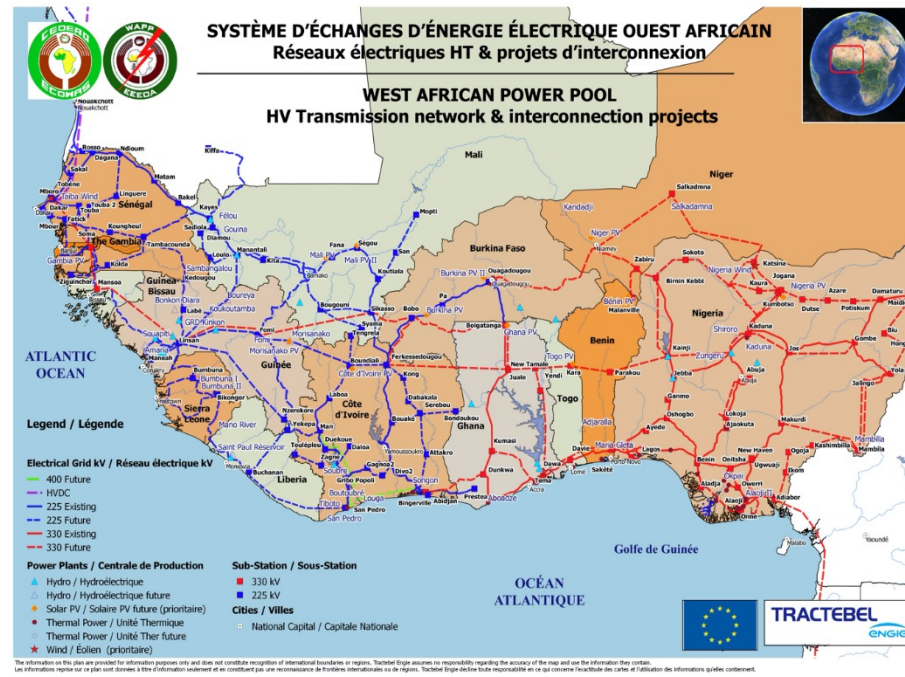
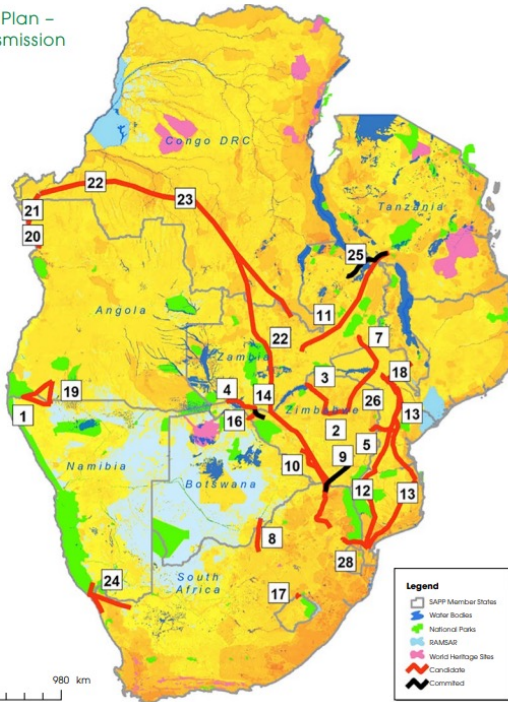
**Regional Market and System Operator  
(Joint operations)**



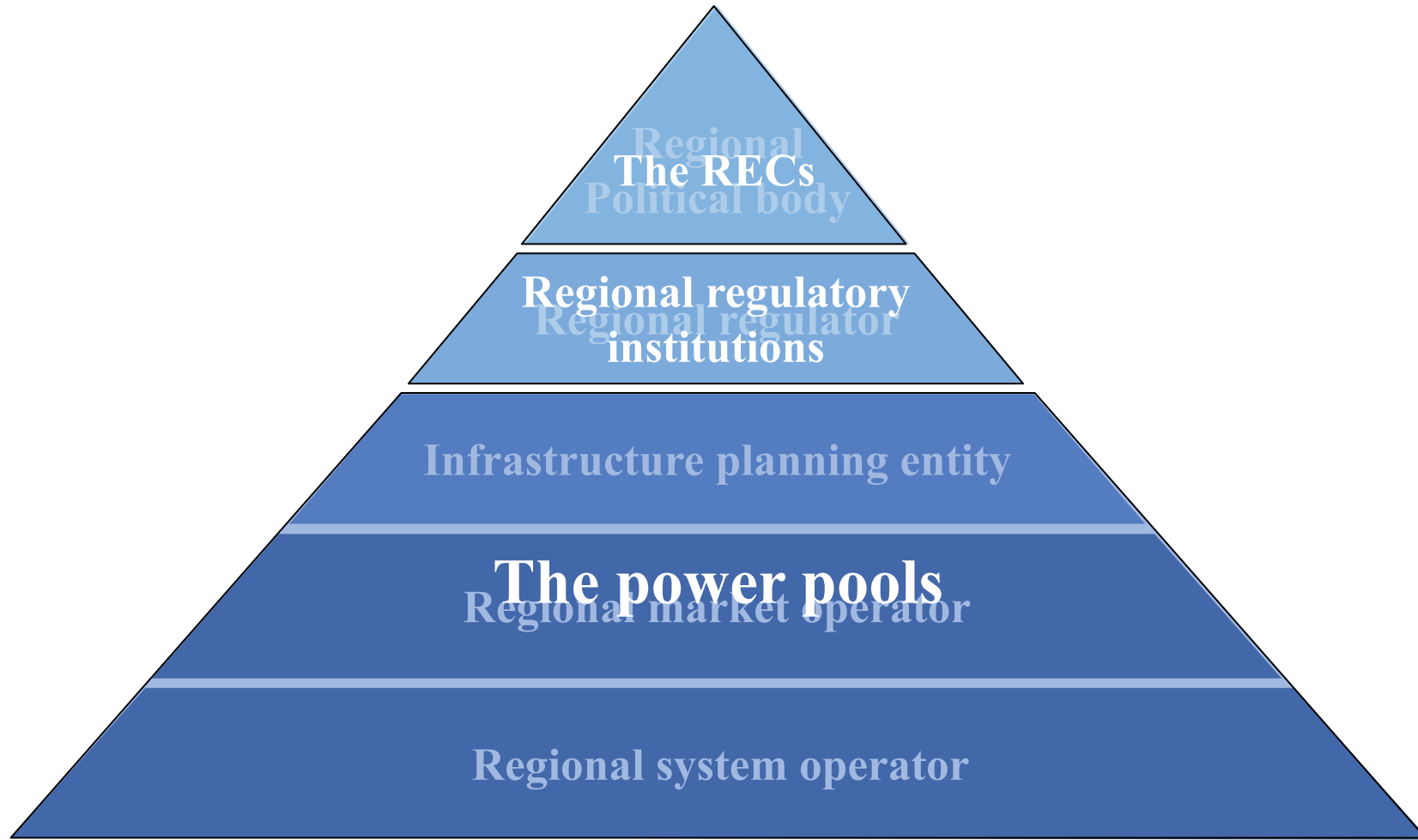




SAPP Pool Plan – Main Transmission Corridors



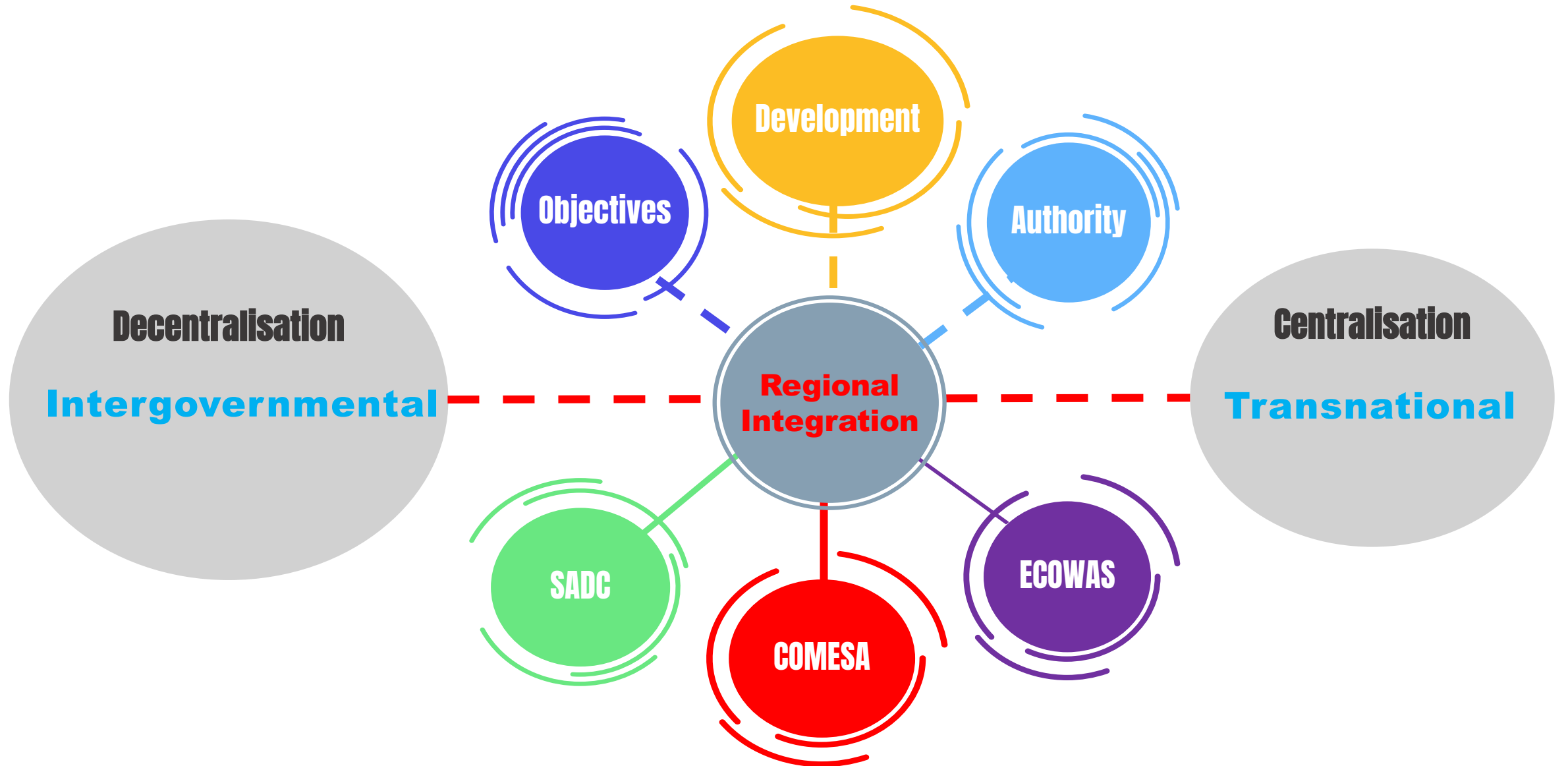
<b>Mandate</b>	<b>RERA - SAPP</b>	<b>ERERA - WAPP</b>	<b>IRB - EAPP</b>
<b>Regulation of cross-border exchanges</b>		✓	✓
<b>Regulation of regional transmission tariff</b>		✓	✓
<b>Regulation of bilateral contracts</b>		✓	✓
<b>Regulation of organised markets</b>		✓	✓
<b>Dispute resolution</b>		✓	✓
<b>Enforcing capabilities (applying regulations, standards and procedures)</b>		?	



# Development Approaches

## PART 5





- The power of the regional political bodies
- Internal mode of governance (self-regulation) vs. external regulation
- Implementing regional master plans
- Regional dispatch and system operations



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**Thank you!**



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