

INTERNATIONAL ONLINE CONFERENCE

Private investment in electricity transmission in Africa

March 11th, 12th and 13th; 3:00 pm to 5:00 pm, Central Africa Time and 2:00
pm to 4:00 pm Central European Time

Updates on this program can be found at the African School of Regulation website:
<https://africanschoolregulation.org>

The African School of Regulation (ASR) and Gridworks and Hunton Andrews Kurth, with the collaboration of the African Development Bank (AfDB) and the African Forum of Utility Regulators (AFUR), invite you to a high-level online conference on the regulatory environment, business model designs, and financial approaches that are necessary to attract private investment in the transmission electricity infrastructure that Africa needs to develop its power sector. The conference will focus on two aspects: i) independent transmission projects for the reinforcement of existing national transmission networks and the development of cross-border transmission lines; ii) the removal of the current regulatory barriers that impede or create unnecessary risks for the participation of private investment in these projects.

Investment in electricity transmission infrastructure in Africa has relied mainly on public funding, and this trend continues. Looking at key parameters such as the number of kilometres of transmission lines per capita in sub-Saharan Africa, with the exception of South Africa, these countries rank among the lowest in the world. Improvements are therefore urgently needed, in particular by promoting cross-border interconnections between countries.

In contrast, other regions of the world have seen substantial private sector involvement in the development of power transmission infrastructure. The conference will explore the potential in Africa of the Independent Transmission Project (ITP) model, proposed by the World Bank (ESMAP) and other organisations[1], which is based on the financial framework that is frequently and successfully used by independent power producers (IPPs) for electricity generation. The ITP model involves the construction and maintenance of a single transmission line or a package of transmission lines under a long-term contract, generally between the state-owned utility that is responsible for transmission and the private company that is established to undertake the project. This model has already proved its worth in regions such as India, various Latin American countries, the US and Europe, but the experience with ITPs in Africa is practically non-existent.

[1] World Bank Group. 2017. Linking Up: Public-Private Partnerships in Power Transmission in Africa. © World Bank, Washington, DC.
<http://hdl.handle.net/10986/26842>

Other more recent references are:

Gridworks. 2023. Private investments in transmission.

<https://gridworkspartners.com/wp-content/uploads/2023/05/Investment-in-Transmission-Gridworks.pdf>

Power Africa. 2022. Understanding Power Transmission Financing.

https://cldp.doc.gov/sites/default/files/2021-10/Understanding_Transmission_Financing.pdf

However, private investment in transmission will never materialize in Africa while the existing regulation persists in creating unnecessary risks and barriers that ignore the regulatory nature of the transmission activity: a natural monopoly with long-lived infrastructure assets that is amenable to becoming an asset class for low-risk patient capital.

The list of regulatory flaws that hinder the possibility of private investment in transmission infrastructure is very long: i) transmission remuneration that is linked to transaction volumes or usage rather than the actual costs incurred, either based on standards or auction results; ii) regulatory updates of the historical rate bases that are based on concepts such as "replacement costs" or "market value"; iii) failure to segregate or "ring-fence" transmission revenue requirements from end-customer tariffs; the need to securitise the remuneration of ITP projects is very acute in sub-Saharan Africa, due to the absence of creditworthy off-takers, given the financial instability of most utilities; iv) questionable cost allocation methods that result in perceived unfair charges that generate opposition to the investments, particularly for cross-border transmission projects; v) frequent recalculations of network usage charges or changes in the calculation methodology; vi) performance-based incentives that extend beyond the equipment's reliability history; vii) uncertainty regarding the regulatory treatment beyond the economic life of the transmission asset.

Other barriers emanate from beliefs of government officials, regulators and the public opinion, which require proper convincing approaches: i) the reluctance of governments to allow private sector participation in their national transmission networks because of security of supply concerns, even if the power system operation remains the responsibility of a national grid operator; ii) the general perception that private capital is much more expensive than (typically scarce) public funding sources for the construction and operation of transmission lines, because of the (wrongly) perceived high financial risk of the transmission activity; iii) the lack of trust among the nations involved in a cross-border transmission project in the absence of clear cost allocation rules that are perceived as fair.

The conference will identify and assess the regulatory barriers to private sector investment in power transmission infrastructure across Africa, and independent transmission projects (ITP) in particular. It will also examine how sound policies and regulations can mitigate or remove these barriers, thereby fostering an environment conducive to private sector participation.

The conference will bring a limited number of invited experienced participants – from potential or actual private investors in transmission, policy makers, regulatory agencies, development financial institutions, think tanks, and academia – who will debate online under a panel format. The debates will be open free of charge to any interested registered participants, who may send questions and provide comments that will be conveniently used by the moderators of the panels and made available to all participants.

Preparatory reading material will be made available to all participants ahead of the dates of the conference. Following the conference, the ASR team will make public a brief with the summary of the key findings and takeaways, and organise follow up events – interviews, podcasts, debates on specific aspects – to further examine the topics that had been discussed.

CONFERENCE PROGRAMME

ALL TIMES CAT (CENTRAL AFRICAN TIME)

DAY 1. THE PRESENT SITUATION: EXPERIENCES AND CHALLENGES

The first day will be dedicated to presenting an overview of the reality and immediate perspectives of transmission investment in Africa, with a particular focus on private investment. Experiences of successes achieved and failures will be presented, with a view to establishing the underlying factors that resulted in each outcome and extracting the lessons that can be learned.

Day 1 session will begin with the conference opening, followed by two brief introductory presentations on the topics and questions to be discussed during the Conference, and ending by a moderated panel discussion. The panel will focus on the present situation of transmission in Africa, the estimated needs for investment, and the existing experiences and perspectives of private participation.

3:00 TO 3:20 PM: CONFERENCE OPENING

- Welcome by Ignacio Pérez-Arriaga (Interim Director, African School of Regulation, ASR)
- Opening words by Robert Tama Lisinge (Chief of the Energy, Infrastructure and Services Section of the Private Sector Development and Finance Division of the United Nations Economic Commission for Africa, ECA).

3:20 TO 3:50 PM: PRESENT APPROACHES AND CHALLENGES AND BEST WORLDWIDE PRACTICES.

- Situation of the investment in transmission in Africa (Farai Kanonda, Regional Sector Manager, African Development Bank, AfDB).
- Best international practices and current barriers to private investment in transmission in Africa (Ignacio Pérez-Arriaga, Interim Director, African School of Regulation, ASR).

3:50 TO 4:00 PM: BREAK

4:00 TO 4:55 PM: PANEL 1 – THE CURRENT SITUATION AND EXPERIENCES OF INTEREST IN PRIVATE INVESTMENT IN TRANSMISSION IN AFRICA.

Moderator: Marc Goldstein (co-founder and Director at Africa Power Ventures Global)

PANELLISTS:

- Towela Nyirenda-Jere (Head of Economic Integration, AUDA-NEPAD).
- Moshood Abolade (Investment Director, Project Development, Africa50).
- Oumar Bangoura (Principal Legal Expert, ECOWAS Regional Electricity Regulatory Authority, ERERA)
- Chris Flavin (Head of Business Development, Gridworks).

4:55 TO 5:00 PM: CLOSING FOR THE DAY.

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ALL TIMES CAT (CENTRAL AFRICAN TIME)

DAY 2. SURMOUNTING THE CHALLENGES: THE INDEPENDENT TRANSMISSION PROJECT APPROACH

On the second day, the experts will evaluate the potential of the independent transmission project approach to overcome the challenges identified in Day 1 and to develop the transmission networks that Africa needs at national, regional and continental level. Alternative approaches can be also considered.

3:00 TO 3:05 PM: INTRODUCTION AND SCHEDULE OF THE DAY

- Daniella Ngarambe (Research Associate, African School of Regulation)

3:05 TO 3: 55 PM: PANEL 2 – THE INDEPENDENT TRANSMISSION PROJECT (ITP) APPROACH

MODERATOR: Sergio Portatadino (Technical Lead for the Senior Advisors Group, Tony Blair Institute, TBI).

PANELLISTS:

- Ryan Ketchum (Partner at Hunton Andrews Kurth LLP).
- Luiz Barroso (CEO of PSR Energy Consulting and Analytics and former Director of Brazilian Energy Planning Agency).
- Samwel Opana (Programme Officer, Energy Planning & Modelling, EAPP).

3:55 TO 4:05 PM: BREAK

4:05 TO 4:55 PM: PANEL 3 – REGULATORY MODIFICATIONS TO REMOVE BARRIERS AND FACILITATE INVESTMENTS

MODERATOR: Rita Madeira (Africa Programme Officer, International Energy Agency)

PANELLISTS:

- Peter Twesigye (Lead Researcher, Power Market Reforms and Regulation, Power Futures Lab, University of Cape Town).
- Harold R. Obiga (Director Legal Services, Electricity Regulatory Authority)
- Rhoda Limbani Mshana: (Chief Energy Sector Regulations Specialist. African Development Bank)

4:55 TO 5:00 PM: CLOSING FOR THE DAY.

CONFERENCE PROGRAMME

ALL TIMES CAT (CENTRAL AFRICAN TIME)

DAY 3. LOOKING AHEAD AND INNOVATING TOGETHER

Day 3 will start with a summary presentation of the takeaways and highlights of the three preceding panels. The ensuing Panel #4 will focus on the proposal of actionable guidelines to facilitate and attract private investment in the critical transmission investments that African countries need for a sustainable energy development.

3:00 TO 3:05 PM: INTRODUCTION AND SCHEDULE OF THE DAY

- Carol Ofafa (Research Associate, African School of Regulation).

3:05 TO 3: 35 PM: WRAP UP OF DAYS 1 AND 2. OPEN ISSUES AND KEY LESSONS LEARNED.

- Ignacio Pérez-Arriaga (Interim Director, African School of Regulation).

3:35 TO 4: 50 PM: PANEL 4 – A CALL TO ACTION. WHAT WORKS, WHAT CAN BE IMPROVED AND THE NEED FOR A COMPREHENSIVE AND LONG-TERM VISION.

This final session will underscore and consolidate the key messages on the potential of the approaches to attract private capital to the transmission capacity expansion in Africa, the necessary regulatory interventions, the business model design, and the financial instruments, together with the important roles of all actors across the power sector.

MODERATOR: Ignacio Pérez-Arriaga (Interim Director, African School of Regulation)

PANELLISTS:

- Abel Didier Tella (Director General, Association of Power Utilities of Africa, APUA).
- Ifey Ikeonu (Energy Policy, Markets, and Regulation Consultant).
- Elvira Morella (Lead Energy Specialist in the West Africa Energy Unit of the World Bank Group).
- Wale Shonibare (Director of Energy Financial Solutions, Policy and Regulation, African Development Bank).
- Tilana de Meillon (Senior Operations Officer, Infrastructure Upstream Africa, International Finance Corporation, IFC).
- James Manda (Technical Manager, African Forum for Utility Regulators, AFUR).

5:20 TO 5: 30 PM: CONFERENCE CLOSURE

- Closing words by the co-organisers of the conference.