



Conference Series

INTERNATIONAL ONLINE CONFERENCE

# PRIVATE INVESTMENT IN ELECTRICITY TRANSMISSION IN AFRICA



11TH, 12TH AND 13TH, MARCH 2024



3:00pm - 5:00pm CAT | 2:00pm - 4:00pm CET

WITH THE COLLABORATION OF AFDB & AFUR





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**INTERNATIONAL ONLINE CONFERENCE**  
**PRIVATE INVESTMENT IN TRANSMISSION IN AFRICA**  
March 11, 12 & 13, 2024

**Wrap-up**  
**Open issues and key lessons learned**

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# Outline

- Confirmation of what we already know
- Review what experts have dared to say on days 1 & 2
- Then, why private investment is not happening?
- What are the consequences of "seeing the light"?
- How to address the identified open issues / difficulties?

**We have confirmed what we already knew...**

## We have confirmed that ...

- **T is critical** for the power systems to perform well
- There is practically **no private investment in T** in Africa
- **Much more investment** is needed in T ...
  - most of which must be private investment
- Private investment needs **predictability** in that the **cost-of-service** (*including an attractive return on investment*) will be paid
  - This requires correct, transparent & stable regulation

**During days 1 & 2, experts have dared to say that...**

## This is what experts said...

- The **ITP approach** makes sense & it seems the only reasonable way to go
  - for **critical projects**
  - for a gradual **piecemeal development** of an entire network
- Ryan's principles
  - IPT does not cause loss of **security** or control of the network
  - IPT can be implemented under **any regulation**
  - ITP is similar to well-known **IPP model**
  - **Predictable** revenues

**Why is it not happening now?**



## It is not happening because...

- ... **decisionmakers** (*& their consultants*) **do not understand T**
  - They think that its nature is to buy & sell, being paid for how much **T** transports → mindset to be abolished
  - A personal story leading to a mindset change
- In fact, **T consists in deploying long-lived infrastructure assets & keeping them in good operational condition**
  - **T is a natural monopoly** that must be regulated
- Once this is understood, **courage is needed** to change the mindset & face the consequences

**What are the consequences of understanding T?**

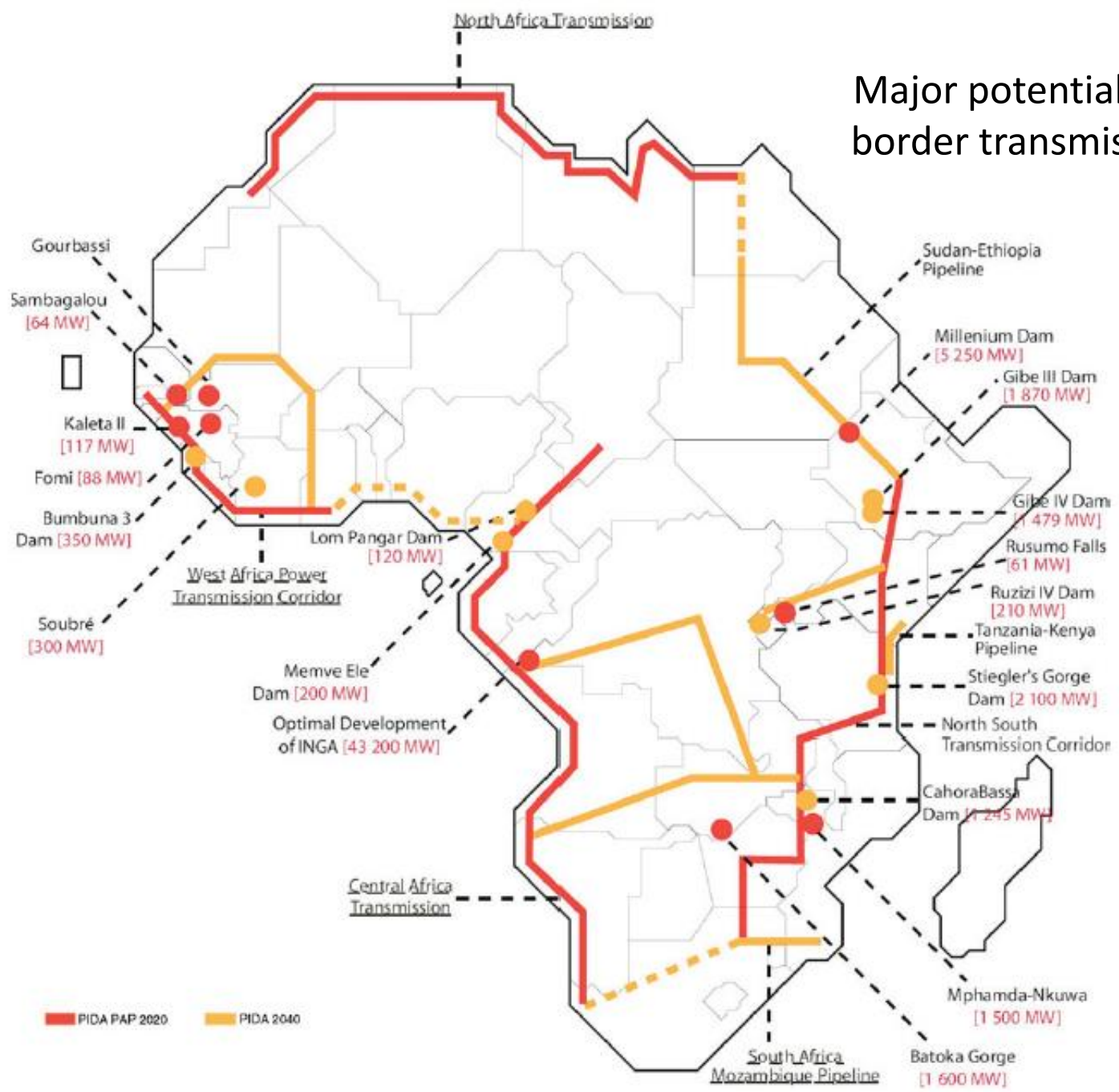


SOURCE: <https://nerc.gov.ng/index.php/home/nesi/404-transmission>

# What to do with one or a few national T projects?

- **STEP1.** Define the physical asset that is needed
- **STEP2.** Define a long-term T service contract & conduct an auction (*in general better than a bilateral deal*) to find the firm offering the least annual revenue requirement for the contract duration
- **STEP3.** Give priority to the payment in STEP2 from the revenues collected in the tariff paid by end customers
  - Note that the cost of one T project adds a small fraction to the total T cost which is about 10% of the tariff.
  - The project does not need to be “viable”. Wrong mindset.
  - This is a measure of the commitment of the Government & regulator, with no impact on sovereign debt.

# Major potential generation and cross-border transmission projects in Africa



Source: Figures sourced from African Development Bank (2013), Annex 1.

# What to do with a cross-border T project?

- **STEP1.** Define the physical asset that is needed
- **STEP2.** Define a long-term **T** service contract & conduct an auction (*in general better than a bilateral deal*) to find the firm offering the least annual revenue requirement for the contract duration
- (new) **STEP3.** Countries adopt a method (including negotiation) to split the annuity among them (e.g. 17% country A, 43% country B & 40% country C)
- **STEP4.** In each country, give priority to the payment established in STEP3 from the revenues collected in the tariff paid by end customers in that country.
  - There is no need to harmonise the regulations of the countries.
  - This is a measure of the commitment of the Government & regulator of each country, with no impact on sovereign debt.

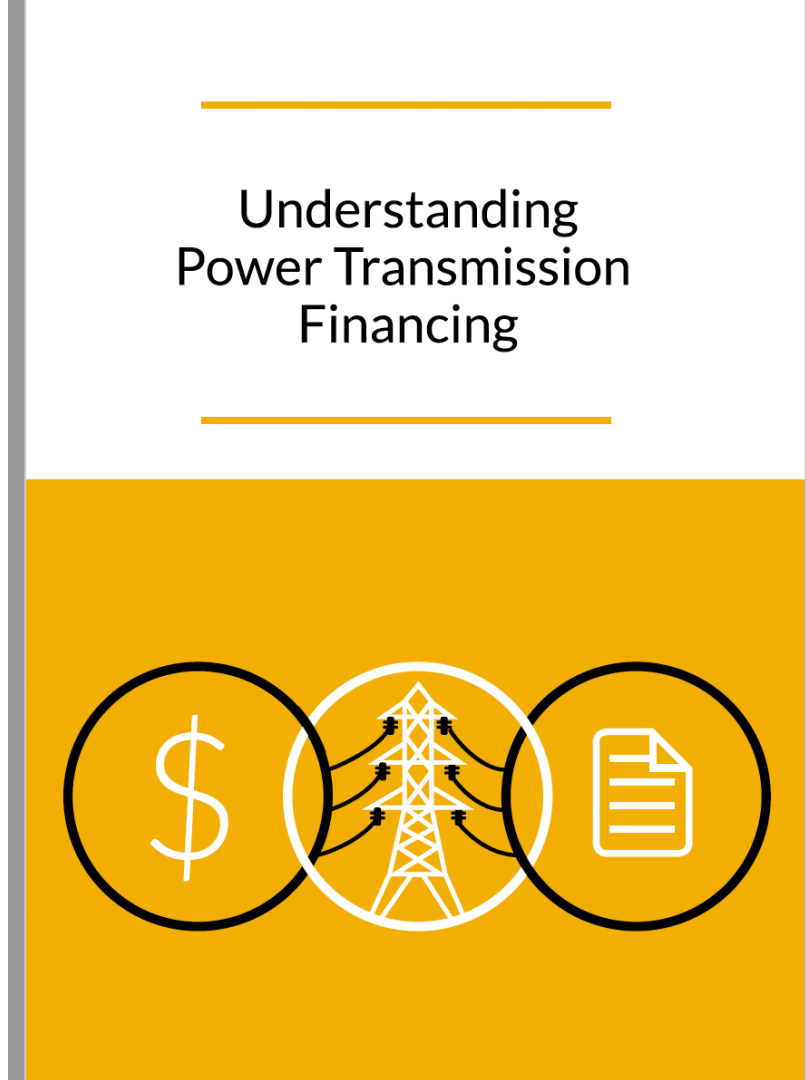
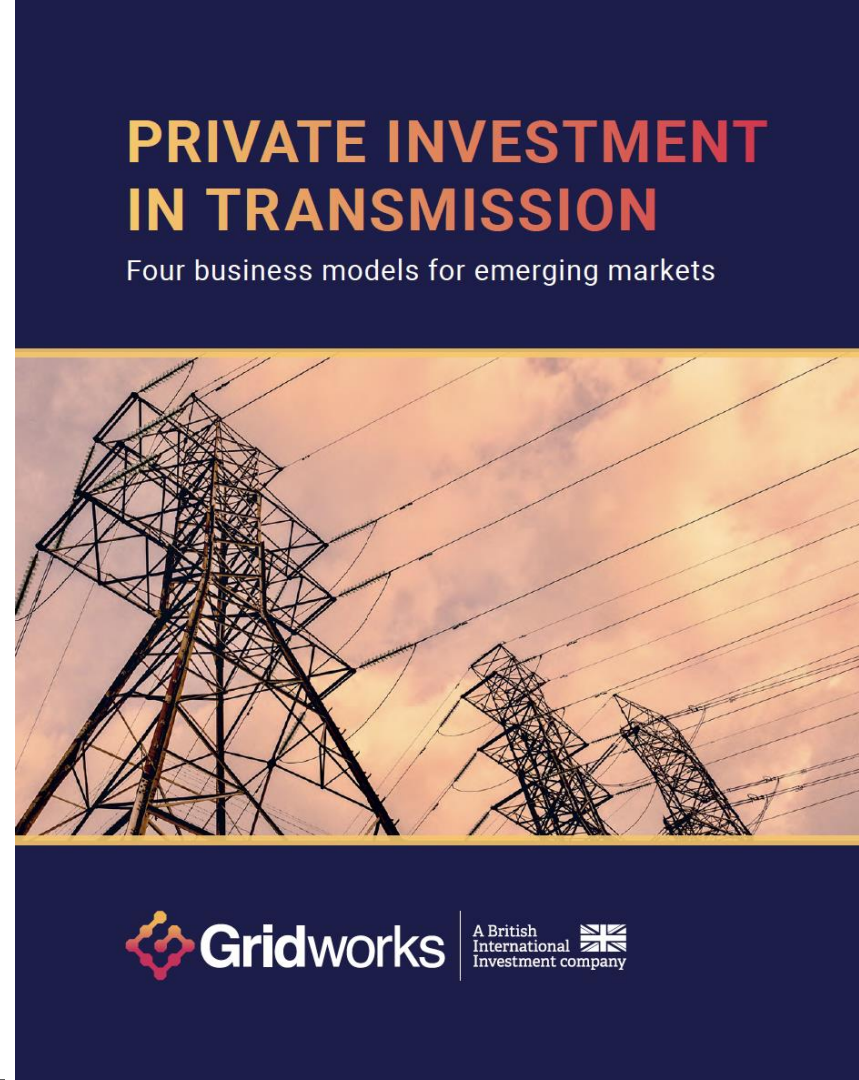
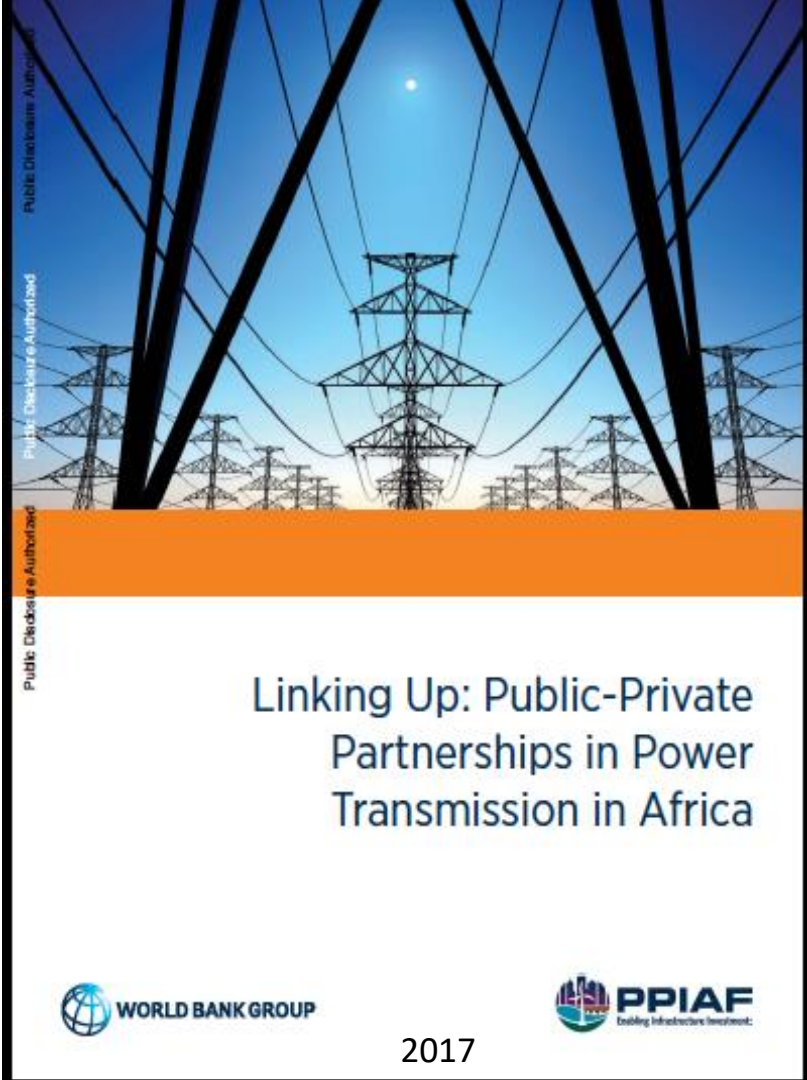
**Some difficulties that were identified**

## Can these difficulties be overcome?

- Guarantee that the necessary fraction of the revenues from end consumer tariffs will be **ringfenced** for this purpose.
- The organisation of the **auctions**, if adopted.
- Accounting for several non-trivial implementation topics that are common to all other approaches (*rights-of-way, environmental permits, etc.*)



**And for details...**



<https://www.worldbank.org/en/topic/energy/publication/linking-up-public-private-partnerships-in-power-transmission-in-africa>

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

[https://cldp.doc.gov/sites/default/files/2021-10/Understanding\\_Transmission\\_Financing.pdf](https://cldp.doc.gov/sites/default/files/2021-10/Understanding_Transmission_Financing.pdf)

## Questions for the panellists

Focusing on action...

If the ITP model is a promising option, what can be done to make it possible?

## Making ITP possible, in terms of...

- ... **ringfencing the remuneration** of critical transmission projects
- ... **educating decision makers** (*e.g., the wheeling mindset must be abandoned, or private investment of some assets does not interfere with security*)
- ... **eliminating unnecessary or incorrect regulation**, not adapted to the true nature of transmission
- ... **simplifying cost allocation** of cross-border projects



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