

## Independent Transmission Projects Suggested Risk Allocation Matrix

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*This suggested risk allocation matrix is part of a series of articles on structuring Independent Transmission Projects (“ITPs”) that can be found at <https://www.huntonak.com/en/africaprojects/>.*

There are many markets where ITPs have been successful in significantly reducing transmission costs. Where ITPs are rolled out at scale in a country, the risk allocation matrix used is likely to be set by Government and tendered to bidders under a centrally managed tender process. In such examples, the host Government will need to invest resources in developing the individual transmission projects to a point where they are capable of being tendered. This will typically take at least 3-4 years to carry out detailed feasibility studies and appoint transaction advisers to design and run a transparent tender process. The competitive market for funding large scale transmission in Africa remains untested and there are therefore no precedents for this yet.

For these reasons, and also because there are many urgent transmission projects which have stalled due to lack of available funding, the authors believe it is likely that the first transmission projects on the continent will be bilaterally negotiated ITP projects that establish a precedent for future investment in the sector. These are likely to give rise to bespoke risk allocations which reflect the specifics of individual projects and financier’s appetite or ability to manage certain risks in comparison to a host national transmission utility. They are also likely to pass more early stage risk and cost to developers than would be possible for a tendered project.

Regardless of the process used to develop the first ITPs in Africa, it is likely that they can be used to improve sector sustainability in many markets by providing a flexible and efficient solution in a market which has not yet received the same level of investment as power generation. Unlocking financially accretive projects which improve system performance and allow more power to be sold is important to sector finances. Significant further transmission investment is also necessary to support increased renewables in the generation mix in most countries as part of a transition to clean energy. ITPs are perhaps the best near term model in many markets for achieving this level of investment since they can be implemented relatively quickly and do not typically require material sector reform.

Risk	Who bears the risk?	Comments
<b>Financial</b>		
Demand risk	State owned transmission	Demand risk is effectively allocated to the state owned transmission company through the use of an availability payment. In a well-regulated sector, the demand risk would be

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	company, Consumers	re-allocated to consumers by the tariff methodology that is used to regulate the state owned transmission company or to establish the rates paid by consumers.
Credit risk	Host government	Unless a state owned transmission company has an investment grade credit rating – which is highly unusual in emerging markets – some form of credit support for the payment obligations of the state owned transmission utility will be necessary. This may take the form of a sovereign guarantee, a partial credit guarantee, partial risk guarantee, or a put and call option agreement combined with liquidity support. Each of these forms of support is likely to have a different fiscal treatment. The more robust the form of support available, the lower the credit risk and therefore it is likely that a lower cost of capital will be available to fund the project. In many African countries sovereign debt capacity is a limiting factor for expansion of transmission networks at present and offering a put and call option agreement with liquidity support to mitigate credit risk may be a good solution to support private investment.
Inflation	Consumers	Inflation is normally reflected in increased power costs to consumers over time. The extent to which it needs to be specifically apportioned to a party under ITP Project Contracts will depend on the structure of payments. The most obvious example of where inflation may become a risk is in the situation where a Project Company is required to carry out O&M of the transmission infrastructure that it owns. If this is the case, the O&M component of the availability payment will typically be adjusted for inflation by a regulator over the term of the contract
Interest rates	Project Company	In most cases, the level of the availability payments will not change depending on changes in interest rates. This may represent a refinancing risk for a project company if the Project Company cannot borrow at fixed interest rates or if the tenor of loans from lenders does not match the length of the Transmission Services Agreement. I  Risk mitigants may include hedging products but the availability and price of these for long term local currency in African markets at present renders it difficult to use them.
Foreign exchange rates	State owned transmission company with risk passed on to Consumers through tariff changes	In markets with strong availability of long-term local currency debt it may be possible to denominate part of the availability payment in local currency.  In practice, long term local currency debt is a challenge in many Africa markets and availability payments are therefore likely to be made in a hard currency or in local currency but with a regular adjustment for exchange rates.

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<b>Land</b>		
Land acquisition	State owned transmission company	The cost of acquiring the rights of way, easements, and other interests in land that are required by the project may be borne by the state owned transmission utility or the project company, regardless of which of them is responsible for acquiring those interests. The acquisition of all of the required interests in land would typically constitute a condition precedent to the first disbursement of the project's loans.
<b>Technical</b>		
Construction and commissioning of new assets	Project company	The project company is responsible for constructing and commissioning new assets.
Operations and maintenance, technical performance	State owned transmission company or Project company	<p>The maintenance of the assets can either be the responsibility of the state owned transmission company or the project company. Factors in determining which is the best approach may include (i) how closely integrated the assets are in the existing transmission network maintained by the state owned transmission company, (ii) how effective the state owned transmission company is with current O&amp;M operations, (iii) the scale of the assets, and (iv) Government policy in this respect.</p> <p>How the payment under the Transmission Services Agreement is calculated (and the extent to which it may be variable) will typically depend to some extent on whether the project company is responsible for maintaining the assets and ensuring their availability or whether its responsibilities are narrower and only pertain to developing, funding and constructing the assets.</p> <p>The variability of payments based on availability/performance are the means through which risk is passed to the project company if it is responsible for maintenance. It is likely that the project company will also take risk on variations of the cost of providing these services over the period of the Transmission Services Agreement, subject to periodic adjustments for inflation.</p>
<b>Licenses and permits</b>		
Initial issuance of licenses and permits	Government, state owned transmission	The project company must apply for and diligently prosecute its applications for all licenses and permits. Significant licenses are granted prior to financial close and usually have a term that is the same as the term of the transmission purchase agreement. If a public authority fails to grant a license or permit when the

Risk	Who bears the risk?	Comments
	utility, and project company	applicable requirements have been met, that failure would typically be treated as a political force majeure event.
Renewals, modifications	Government, state owned transmission utility	A failure to renew a license or a modification to the terms of a license that effectively prevents the project company from performing its obligations or exercising its rights under the concession will constitute a change in law which will normally be dealt with as described below
<b>Social and environmental</b>		
Social and environmental impacts	Project company	The project company will typically be responsible for conducting social and environmental impact assessments, complying with the stakeholder consultation and environmental laws of the host country, and, if the project company's lenders are party to the Equator Principles, for complying with relevant performance standards issued by the International Finance Corporation.
Occupational health and safety	Project company	The project company is responsible for complying with the occupational health and safety laws of the host country, and, if the project company's lenders are party to the Equator Principles, for complying with relevant performance standards issued by the International Finance Corporation.
<b>Extraordinary Events</b>		
Changes in law	Consumers, government	Changes in law that increase the costs incurred by the project company or decrease the revenues earned by the project company should be addressed through changes to the availability payments or by one-time payments, depending on the nature of the change in law. To the extent they are not, they should be addressed through a change in law clause in the government support agreement, which will typically provide certain remedies to the project company in respect of changes in law. Those remedies may include the payment of a termination payment and transfer of the assets to Government.
Changes in tax	Consumers, government	Changes in tax that increase (or decrease) the tax obligations of the project company should be addressed through changes to the availability payments. To the extent they are not, then they should be dealt with through a change in law clause in the government support agreement.
Force majeure events	Project company, consumers	The project company must mitigate the effects of force majeure events to the extent possible. Where it is practical to do so, the project company will be required to insure against these risks.
Political force majeure events	Consumers, government, state	If the project company is prevented from performing its obligations or exercising its rights under the project agreements

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	owned transmission utility	in a manner that is material due to the occurrence of a political force majeure event and the effects of such events continue for a prolonged period of time, an event of default may occur under the transmission purchase agreement and the government support agreement.
<b>Disputes</b>		
Resolution of disputes under contracts	N/a	Disputes arising under the project agreements are resolved by international arbitration to the extent they are not resolved informally.