

Private Investment In Transmission – Concessions (Part 3)
Suggested Risk Allocation Matrix

By Ryan Ketchum and Chris Flavin. Ryan is a partner at Hunton Andrews Kurth LLP. Chris is Head of Business Development at [Gridworks Development Partners](http://www.gridworksdevelopment.com), a development and investment platform principally targeting equity investments in transmission, distribution and off-grid electricity in Africa.

This suggested risk matrix is part of a series of articles on Private Investment In Transmission – Concessions that can be found at <https://www.huntonak.com/en/africaprojects/>.

An appropriate allocation of risks is essential to attracting investment in the form of both debt and equity. The matrix that follows describes how a range of risks might be allocated in a typical concession transaction.

Risk	Who bears the risk?	Comments
Financial		
Demand risk	Consumers	Demand risk is effectively allocated to consumers by the tariff guidelines. The tariff guidelines usually provide that if the concessionaire does not earn revenues equal to the annual revenue requirement during a particular year due to errors in forecasting the demand for transmission service, then the portion of the annual revenue requirement not earned as a result of the forecasting error is added to the annual revenue requirement for the following year, with interest.
Credit risk	Concessionaire, consumers	The risk that purchasers of transmission service may not pay for transmission service promptly is borne by the concessionaire but may be mitigated by (i) the use in the tariff guidelines of a target collection ratio that is less than 100% (typically only suitable in a model with a high number of off-takers), and (ii) a sovereign guarantee of payment by state owned enterprises that purchase transmission service, or another form of liquidity support and/or support for termination payments in the event of non-payment.
Inflation	Consumers	The O&M component of the annual revenue requirement is adjusted for inflation. In general, the regulated asset base is not adjusted for inflation.
Interest rates	Consumers	Rates are typically adjusted for changes in interest rates regularly. The frequency of the adjustment may depend on how the concessionaire raised, or could reasonably be expected to have raised, debt financing. This can be a difficult risk to apportion in a market with variable liquidity such as those found in many African countries. The least cost approach to funding transmission services will usually be to adjust for changes in actual interest rates regularly..

Risk	Who bears the risk?	Comments
Foreign exchange rates	Consumers	Rates are typically adjusted for changes in foreign exchange rates regularly. These adjustments are usually made each quarter.
Land		
Pre-existing environmental conditions	Consumers	The cost of remedying pre-existing environmental defects that are material in nature constitute a capital cost that increases the regulated asset base.
Pre-existing defects in title	Consumers	The cost of remedying pre-existing title defects on behalf of the grantor constitutes a capital cost that increases the regulated asset base.
Land acquisition for expansions	Consumers	The cost of land acquired for new projects is included in the regulated asset base, usually when the asset is placed into service.
Technical		
Construction and commissioning of new assets	Concessionaire	The concessionaire is responsible for constructing and commissioning new assets.
Operations and maintenance, technical performance	Concessionaire	If the concessionaire incurs O&M costs that exceed the O&M component of the annual revenue requirement approved by the regulator, then the concessionaire will not achieve the cost of equity established by the regulator. The risk of underperforming against KPIs (see below) will need to be balanced carefully against O&M cost overruns when a concession is designed.
Key performance indicators, service levels	Concessionaire	If the concessionaire does not achieve the key performance indicators and/or the required service levels, it will incur penalties, which may be used to reduce rates. For transmission concessions, typical key performance indicators include measure of the frequency and duration of outages and measures of technical and commercial losses.
Licenses and permits		
Initial issuance of licenses and permits	Government, grantor, and concessionaire	The concessionaire must apply for and diligently prosecute its applications for all licenses and permits. Significant licenses are granted at the commencement of the concession and usually have a term that is the same as the concession. If a public authority fails to grant a license or permit when the applicable requirements have been met, that failure will be treated as a political force majeure event.
Renewals, modifications	Government, grantor	A failure to renew a license or a modification to the terms of a license that effectively prevents the concessionaire from

Risk	Who bears the risk?	Comments
		performing its obligations or exercising its rights under the concession will constitute a change in law.
Social and environmental		
Social and environmental impacts	Concessionaire	The concessionaire is responsible for conducting social and environmental impact assessments, complying with the stakeholder consultation and environmental laws of the host country, and, if the concessionaire's lenders are party to the Equator Principles, for complying with relevant performance standards issued by the International Finance Corporation.
Occupational health and safety	Concessionaire	The concessionaire is responsible for complying with the occupational health and safety laws of the host country, and, if the concessionaire's lenders are party to the Equator Principles, for complying with relevant performance standards issued by the International Finance Corporation.
Extraordinary Events		
Changes in law	Consumers, government	Changes in law that increase the costs incurred by the concessionaire or decrease the revenues earned by the concessionaire should be addressed through changes to the annual revenue requirement. To the extent they are not, they should be addressed through a change in law clause in the government support agreement.
Changes in tax	Consumers, government	Changes in tax that increase (or decrease) the tax obligations of the concessionaire should be addressed through changes to the annual revenue requirement. To the extent they are not, through a change in law clause in the government support agreement.
Force majeure events	Concessionaire, consumers	The concessionaire must mitigate the effects of force majeure events to the extent possible. Where it is practical to do so, the concessionaire may insure against these risks. The cost of the insurance is included in the operations and maintenance component of the annual revenue requirement. Capital costs associated with the replacement or repair of asset affected by a force majeure event are included in the regulated asset base to the extent they are not covered by insurance proceeds.
Political force majeure events	Consumers, government, grantor	If the concessionaire is prevented from performing its obligations or exercising its rights under the concession 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 concession agreement.
Disputes		

Risk	Who bears the risk?	Comments
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.
Resolution of disputes arising in relation to the tariff methodology	N/a	Disputes arising in relation to the application of the tariff methodology may result in claims under the change in law clauses of the government support agreement. Disputes regarding the proper application of such a change in law clause are then resolved by international arbitration to the extent they are not resolved informally.