Cross-Border Oil and Gas Pipelines: Problems and Prospects

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Executive Summary

1. In the near future, the world will need more cross-border pipelines for oil and gas. Two factors explain the reasons for this need:

   • Reserves close to traditional markets are being depleted. Newer, more remote sources of oil and gas will be required. Many of these will require pipeline delivery either because they are landlocked or, in the case of gas, because liquefied natural gas (LNG) projects are less attractive than pipelines, other than for distances in excess of 3,000km.

   • Many gas markets have in the past been constrained by regulatory and institutional factors. In recent years these constraints have been eroded. A potential “dash for gas” furthermore is being reinforced in many areas by a combination of gas sector reform, creating gas-to-gas competition; electricity sector reform, leading to strong demand for combined-cycle gas turbine (CCGT) generation; and concerns about the environmental damage caused by the consumption of other hydrocarbons.

2. The problem is that cross-border oil and gas pipelines have a history of vulnerability to disruption and of generating conflict. While it is true that most operating pipelines have avoided such problems, the minority that have such a history have cast a much greater shadow than their actual numbers might justify. This negative perception inhibits both the operation of existing lines and the building of new ones. In particular, the risks perceived as inherent in cross-border pipelines may increase the cost of finance. In addition to threatening the viability of projects, higher financing costs also seriously impact the delivered cost of the fuel. This is especially true for gas, for which the only viable alternative is LNG; despite some improvements, conversion to LNG remains a costly option and may deliver too much gas for many markets to absorb.

3. All this has serious consequences for the producers and consumers of oil and gas at both ends of the line. The purpose of this report is to seek ways in which such disruption and conflict can be prevented, mitigated, or contained. It especially focuses on the ways in which the various players can contribute to this process, and in particular focuses on the respective roles of the public and private sectors.

4. The starting point is to identify what causes conflict and disruption to throughput. The methodology is simple. Cross-border pipelines have three relevant dimensions: they involve the use of pipelines, the use of cross-border trade, and they may involve the use of transit. Each has certain innate characteristics that lead to consequences (see table 1.1). Various combinations of these consequences lead to three results that in turn create conflict or the potential for conflict (although many of these consequences would exist in many commercial transactions). These are:

   • Different parties, each with different interests, are involved.
• There is no overarching legal regime that can be used to police and regulate activities and contracts.

• The context created by the characteristics invites conflict because profit and rent are to be shared between the various parties and mechanisms exist to encourage one or other party to seek a greater share of that profit and rent.

5. During the course of this analysis, it will be important in many instances to differentiate between oil and gas pipelines since the characteristics, consequences, and results often differ. The main differentiating factors between oil and gas are as follows:

• There is normally much greater rent associated with oil than with gas.

• Security of supply is more important for gas than for oil, because gas outages involve much greater reconnection problems.

• Gas pipeline transportation involves very different technical issues from those of oil; for example, in terms of issues such as grid balancing.

• The environmental threats from oil and gas pipelines differ significantly.

• The extent of competition, in terms of transport methods, differs.

6. Having created this theoretical framework, the report considers practice: that is, the ways in which each characteristic, consequence, and result has been managed (or not) in actual projects. Twelve case studies are contained in Appendix 1. In the light of the experience of these 12 pipelines, the report ends by considering the practices that have been demonstrated to contribute to the minimization of conflict. It also considers what more can be done by all parties to further reduce the conflict associated with cross-border pipelines. There are four overarching conditions of best practice, as follows:

• The rules are clearly defined and accepted.

• Projects are driven by commercial considerations.

• There are credible threats to deter the obsolescing bargain.

• There are mechanisms to create a balance of interest.

7. Each of these conditions is considered in Chapter 4, which concludes with a section on what more can be done.

8. The main findings of the report are as follows:

(a) Where the rules of the game are clearly defined and accepted, cross-border pipelines have succeeded. A context of clear and accepted rules is essential to the creation of an environment in which the commercial drivers of cross-border pipelines are able to resolve issues and problems.

(b) The best practices are those that allow for flexibility of contract, and the best guardian against future uncertainties is the impartial discipline of
competition and the marketplace. (In practice such an environment is difficult to achieve, not least because pipelines involve monopoly elements.) Contracts that have the flexibility to deal with obvious foreseeable changes also are valuable.

(c) Where relationships are governed purely by commercial considerations, differences are more easily resolved. Best practice would seem to be for the state to set the context and then move aside to allow the fullest involvement of the private sector. While it is tempting to argue that state involvement creates problems and therefore should be minimized, the case studies do not support this blanket view. State involvement can cause serious problems in cases where the state lacks a clear framework for private investment. But where the optimal mix of legislation and regulation is in transition, for example, and may be far distant, the state must provide interim support for pipeline projects.

(d) Measures to minimize exposure to the problems associated with the obsolescing bargain are essential. Such measures must include credible threats to counter the temptation that might otherwise lead one party to unilaterally change the terms of an agreement. The process of globalization is important in this regard because of the value it confers on reputation in the securing of investment. One option is for the transit government to subject itself to sanctions.

(e) Pipeline projects need mechanisms to create alignment and a balance of interest between the parties. Such mechanisms include contracts, ownership and joint ventures, concessions, treaties, political relations, and public pledges to civil society.

(f) In no circumstances should a project be left to the mercy of naked bargaining power: this is guaranteed to leave at least one party feeling aggrieved. If all parties feel they are benefiting from the project, they will have an incentive to stay with it and to work out any conflicts or disputes that may arise.

What more can be done?

(g) Strengthen the accepted international norms of investment. The process of globalization will assist in this, but its effect would be reinforced if neutral arbitration clauses were to govern all of the relevant agreements.

(h) Strengthen the international sources of objective, third-party arbitration. The World Trade Organization and the Energy Charter Treaty provide options for third-party arbitration.