

Getting to Yes
The Practitioner's Guide to Negotiating Mining Investment Agreements
Lessons from Ecuador

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1. Executive Summary

This paper is somewhat different from others written on the topic of negotiations of mining agreements. First, it is written from a practitioner's point of view. The author has directly participated in negotiations of mining agreements and the paper uses as a case example the negotiations conducted on behalf of a Canadian-Chinese company with the government of Ecuador. Second, this paper is written primarily from a private sector perspective. Most articles written about negotiations are written from an academic, trade association, international financial institution or non-governmental organization perspective.¹ These articles are highly useful and are mostly of excellent quality. However, they are generally written from a government perspective, not the perspective of a private company. Third, this paper is written by a non-lawyer for non-lawyers. This is consistent with the view repeatedly expressed in the paper that negotiations of mining investment agreements are simply too important to be left solely to the lawyers.

There is sometimes the tendency to view negotiations of mining agreements as a completely one-sided affair: the poor victimized developing country pitted against the rapacious multi-national. This characterization is far from the truth, even considering that companies are not angels (neither are governments). As is made clear in the following sections, while companies generally may have better skills and experience in negotiating mining agreements they are far from having the upper hand. In fact, having sunk millions of dollars in risky exploration companies are at a dis-advantage in subsequent negotiations about the conditions of exploitation and are sometimes compelled to accept unattractive conditions in order to have a small chance to recover the sunk costs. This is not best practice. Best practice is for companies to know the rules of the game and the terms and conditions which will pertain to exploitation operations from the very beginning, at least in broad outline. Normally, this is spelled out in the mining law and other regulations. But, in many countries this is not the case. Thus, the mining investment agreement will fill in the

¹ By far the best treatise on general negotiations is: "Getting to Yes", Roger Fisher, William Ury, and Bruce Patton, 1981 and 1991. There are numerous articles and books written on negotiations of foreign investment and mining agreements.

gaps in the legislation and define the terms and conditions pertaining to exploitation. However, the issue is when to conclude the MIA. Ideally, when the existing rules of the game are not sufficiently clear, the MIA should be negotiated before the company begins exploration. Governments sometimes object to concluding important tax and other aspects pertaining to exploitation of the mineral resource without knowing more details about the resource and the economics of the project. This dilemma is not easily solved. Both parties must weigh very carefully the risks involved for the company to invest in costly exploration without clear rules of the road defined beforehand and the risks to the government to agree to terms and conditions which may be too lenient or too severe for the proposed investment.

Companies have learned over the years that a deal too lop-sided in their favor is unlikely to last; but, even deals which are more balanced are often short-lived. The original mining agreements obsolesce with changes in exploitation conditions, increases or decreases in the commodity price, the rise and fall of governments, company mergers and acquisitions, changes in strategic direction, or a number of other events unforeseen at the time of the original negotiations.

Because the conditions prevailing during the negotiations will change it is useful in this article to look at some of the underlying issues with respect to the negotiations. We look first at why mining investment agreements are used at all. It is not best practice. Governments and companies use them because a track record with mining in the country does not exist, the legislation governing the sector is deficient, the project is simply too big to stand its own ground under existing legislation, the company requires the comfort of a special agreement, or the technical specifics of the project are such that it requires special consideration. Mining investment agreements are not new; they have been used for many years. Recently a group of eminent international legal experts have produced a model mining investment agreement (www.mmda.org). The model agreement contains samples and suggested wording on key topics taken from a wide selection of mining agreements. The MMDA is one of the best sources of precise information and language of comparative mining agreements.

Bridging the gap between public and private sector expectations is at the heart of any negotiations of a mining investment agreement. Accordingly, in this paper we organize around salient topics which need to be bridged. In examining these topics it should be quite clear that

negotiations of these agreements require a number of skills-sets to provide expertise on various aspects including: engineering, geology, finance and accounting, economics, politics, sociology and others. This paper looks only at the negotiations process and makes only tangential reference to other important aspects of “getting to yes”, such as: possible “dis-connects with the country’s overall posture on foreign investment and contradictions in fundamental legislation; the pre-negotiations phase and the processes used (tender or sole source exploration) to bring the deposit to the point of negotiation; the imbalances in understanding scientific and exploration information which may exist between the company and the government; and how both parties may follow and monitor the implementation of the agreement and compliance with mutual obligations.

While these issues are important we limit ourselves in this paper to the following:

- Estimation of mineral resources and reserves is an essential first step: without the minerals there can be no mine. However, studies to estimate the mineral resources and reserves are subject to international standards and norms. Unfortunately, many government officials and politicians fail to understand the nature of these estimations. There is often confusion about, for lack of a better term, rocks in the ground with money in the bank.
- The company will model to an exquisite level of detail the economic and financial parameters of the proposed project and these models will serve as an essential reference point in the negotiations. The government would be well advised to construct its own model of the economic and financial parameters. However, in order to advance the negotiations both parties must agree on key variables, such as project specific and technical aspects; government taxation, profit sharing and equity participation, if any; financing conditions; accounting standards and procedures; and, most importantly, the commodity price used throughout the life of the project. It is important that both parties, especially the government, recognize that the economic and financial model is not a prediction of the future or a “business plan”; rather, the model is an estimation of plausible scenarios given the under lying assumptions that permits the negotiations teams to understand the interplay of variables and the trade-offs possible.

- The influence that internal company politics has on the conduct of negotiations is sometimes not sufficiently appreciated. Inter-departmental mandates which conflict or overlap, rivalries between senior managers, disagreements between dominant shareholders, and lack of clear decision making procedures can hinder negotiations.
- The organizational structure and skills sets which the government uses will also influence the conduct and outcome of the negotiations. In particular, most governments are at a disadvantage in the negotiations because they do not have the same highly trained and experienced technical staff as do the companies, especially in scientific, financial and economic skills. There are a number of reasons for this such as poor schooling in general or the inability of the government to offer financial or other incentives to attract and retain high quality talent. The government negotiations team can also be subject to a wide variety of political pressures, hostile public opinion, and inadequate sharing of information among key players.
- The political dimensions influencing both the company and the government negotiations teams and strategies can be assessed through a “political-economic assessment (PEA)”. These assessments seek answers to a common set of questions for the company and government: Who are the key players? What are their core issues? What the chief bottlenecks or impediments to successful conclusion of negotiations? How do the key players influence the final decisions on issues? What are their motivations? Are there countervailing forces which balance the positions of key players? And how can the government or the company influence and change the opinions on core issues of the key players? It is vitally important that the PEA look at various levels of the political context: (1) for the government national, sub-national, local jurisdictions as well as regional and international dimensions; and (2) for the company key managers, shareholders, vendors-suppliers, labor force, and other decision makers in the company as well as the financial and commercial constraints and imperatives the company faces.
- A failing of many mining projects in many countries is lack of an adequate communications strategy, both during negotiations and operations. Lack of proper communications can erode confidence and lead to a breakdown of the negotiations and possibly suspension of operations. Elements of a good communications strategy include: (i) presenting of the main message; (ii) designating the entity or person to deliver the

message; (iii) devising a consultative process to prepare the message; (iv) knowing what to disclose, the relevant level of detail, and when to disclose it; (v) identifying the target audience and the communications methods to reach the audience; and, (vi) developing a monitoring and evaluation plan to assess the effectiveness of the communications strategy. Realistically, even the best efforts of companies and governments to communicate can fail to satisfy the groups which oppose mining development.

- Many mining investment agreements will address infrastructure issues. The availability of, and access to, power, water, transport and other infrastructure is clearly essential for any mining operation. The MIA should discuss whether this infrastructure is to be built and operated by the company, provided by the government, or developed in a public-private partnership. Whatever the option or combination of options chosen the MIA will need to contain provisions regarding details such as pricing, user charges, reimbursement of expenses, operating details, guarantees and penalties, and financing.

This paper uses the case example of negotiations of a “contrato de explotación minera” between the government of Ecuador and Ecuacorrientes SA (ECSA) for the Mirador copper-gold project. These negotiations took place from December, 2010 until successfully concluded in March, 2012. The author, who was personally involved in these negotiations, has the highest degree of respect and admiration for the government and company negotiations teams. All discussions were conducted in a professional, congenial and respectful manner without animosities or rancor and with always the view to “get to yes.”

This is not to say, however, that there were not disagreements, mis-understandings or other handicaps to “get-to-yes”. A principal handicap to the negotiations was the government’s previous [unsatisfactory] experience with the oil industry which not only led to a confusion about the economics and technical specifics of oil versus hard rock minerals but also contributed to a skeptical view in general of the extractive industries. The government (especially the senior political leadership, not necessarily the negotiations team) was challenged to understand the uncertain nature of the estimate of mineral reserves and resources as well as the economic and financial model. Other handicaps during the negotiations were: the tendency of the government to view the estimates as a “business plan”; an over-reliance on a few performance indicators (such as rate of return); and an under appreciation of the risks inherent in the assumptions such

as commodity prices, operating costs, technological factors which could change overtime and dramatically influence the viability of the investment. Because the government chose to believe the best possible commodity price scenario it argued for an excessively generous tax package and did not give adequate consideration to other aspects of importance to the investment, such as international arbitration for caducity and taxation matters and protection of the investment. To its credit, the government has listened to the companies on the high tax package for mining investments in Ecuador and is considering improvements, specifically to the windfall profits tax. Also, issues related to investment protection may be the subject of separate agreements concluded under the Production Code.

The company could have done a better job in the negotiations on two important aspects. First, it could have presented a better mineral resource and reserves estimate and an up-to-date mine plan and feasibility study. The company initially proposed a 30,000 tonnes per day operation of which the government was skeptical because it produced marginal economic returns to the company and would result in exploiting only about half of the resource. However, at the time negotiations commenced sufficient mineral resources had not been identified to justify a throughput rate 60,000 tonnes per day, even though this was the real intention of the company. The feasibility study of 2008 was being updated by a Chinese firm was not finished until late in the negotiations. In any event, numerous difficulties of translation and conceptual compatibility of the parameters used with western standards were encountered. Eventually, the 60,000 tonne per day model was used and additional exploration upgraded the estimates of mineral resources and reserves to justify the higher throughput rate. Nonetheless, many details of the MIA were negotiated without complete information. Second, the Chinese shareholding companies did not have the same objectives for involvement with the project and the two company representatives and senior managers in Quito did not see eye-to-eye on many issues. This resulted in mixed messages sometimes being sent to the government. The most egregious case was when one of the shareholders mobilized the intervention of the Chinese embassy, without the knowledge of the other shareholder and much to the embarrassment of the negotiations team and the annoyance of the Minister.

Finally, both the government and the company could have done, and should do, a better job to communicate with key constituencies and the general public. Given the political sensitivities it

is appropriate that the government take the lead in communications in Ecuador. President Correa as well as the government is very supportive of mining sector development. But, the government could be more systemic and effective in communicating this message than is presently the case. As the Mirador project moves forward to construction and operational phases, ECSA needs to develop a better and more comprehensive communications strategy. While Chinese companies are not noted for communications skills, successfully operating a mine under conditions of national and local political sensitivities will require a more open view on communications and dialogue.

In the final section of this paper we discuss some ideas with respect to the type of assistance, if any, may be required by governments and offered by the international community. This topic is currently of interest and several international workshops have been devoted to the topic over the past three years. However appealing the idea there are some pertinent questions which need to be answered before developing a program of technical assistance. Do governments really need outside experts to advise them on negotiations of mining investment agreements? Do they want such outside expertise? If the answer to both of these questions is affirmative, then who pays: the government or an international donor? How much should be paid, market rates or pro-bono rates? Will outside advice actually help achieve a better outcome of the negotiations? What types of advice is required: legal, financial, technical, and other? What are the reputational risks to the donor organization if the deal goes bad? Are not there already programs to assist governments and, if so, why would we need a new program?

Finally, we explore some ideas which may be alternatives to direct donor support in the negotiations.

- First, a “*fairness opinion*”. This would entail the appointment by both parties of an advisory panel (3-5) members which would review: (i) the basic legal elements of the negotiated agreement and its conformity with international practice and absence of fatal legal; and, (ii) the “fairness” of the deal to both parties given agreed assumptions as to commodity price, discount rate, operating parameters, and other technical assumptions relative to the value of the mineral asset and the revenues streams to be produced from it.

The results of the “fairness opinion” would be published prior to final signature of the agreement.

- The second idea, would involve some sort of validation of the negotiated agreement in accordance with some international standard. Such standards for mining agreements do not presently exist. However, there are some ideas which could be examined further such as industry self-regulation; a good start in this direction could be based on the MMDA project referenced previously. Another variant would establishment of standards by an independent professional body as is done in the financial services industry by the International Accounting Standards Board (IASB). Governments and companies could then use the standards to identify any gaps or short-comings in the agreement.
- A third idea would be to combine the establishment of standards by a professional body with the actual vetting and certification of the contract by an independent body or by a “competent person” which has met the qualifications necessary for recognition by the body. Accreditation of universities in the USA or of accounting professionals by the Accreditation Council for Accountancy and Taxation are examples of independent accreditation bodies. In the minerals industry, the certification of mineral resources and reserves by a “competent person” is a practice required by national legislation. Could not the same principle apply to the content of a mineral investment agreement?
- Fourthly, perhaps an international body could be established along the lines of ISO to establish standards and to certify compliance with those standards for international mining investment agreements. This certification (or some combination of the other ideas noted in this paragraph) could, in turn, become a requirement for listing on a public securities exchange.

The ideas listed above have one important factor in common which may account for their success: they are market driven. In each instance, these initiatives are privately supported and operate with minimum government (national or international) oversight. As in any market driven undertaking, the parties make use of, and are willing to pay for, the service because they see value in it. This is a different approach to trying to legislate or require compliance with a set of

general standards, worthy though they may be, developed by an international body² or mandated by national legislation.³

² One may cite without prejudice, the Rio Declaration, the Global Reporting Initiative, Global Compact, OECD Guidelines on Multinational Enterprises, World Bank Operational Guidelines, OECD Convention on Combating Bribery, ILO Conventions 98, 169, 176, and the Voluntary Principles on Security and Human Rights

³ Dodd-Frank requirements on financial reporting and conflict minerals, for example.

2. Use of Specific Mining Investment Agreements

As we use the term in this paper, a Mining Investment Agreement (MIA) is a contract, agreement, or other legal instrument which is negotiated between a commercial entity (private company or, sometimes, an independent, quasi-public enterprise (parastatal)) and a sovereign government. We refer in this paper mostly to agreements negotiated between the company and the government at the national level. However, there are instances in which an agreement could be negotiated at the sub-national level (state, province, or even municipal levels). We generally exclude from consideration Community Development Agreements which are oftentimes negotiated separately with local communities and governments to address specific concerns at the local level. We are aware, however, that in many instances the main MIA will contain provisions dealing with local issues.

It is most often the case that the MIA will supplement existing legislation by filling gaps of substance and interpretation or contain specific provisions which complete or modify existing legislation. However, in some jurisdictions the MIA could be the complete legal framework governing the investment, thus super-ceding all other laws. In both of these instances, investors are quite correct to insist that the legal standing of the MIA be of the highest order possible. In the optimum sense, the MIA should be passed as a law by the legislature, signed and endorsed by the senior most executive, and, in some cases, confirmed by the supreme judicial body. Though most MIAs fail to achieve this level of supremacy, endorsement by the senior executive is generally the least that can be expected.

Even though mining investment agreements have been used for a long time in many countries⁴ they are a second best practice. The best practice option is not using a specific mining

⁴ Mining Investment Agreements (as well as foreign investment agreements in general) have been widely studied. Professors Lou Wells (Harvard Business School - <http://www.hbs.edu/faculty/Pages/>), Raymond Mikesell (deceased, University of Oregon), Peter Rosenblum (Columbia University Law School - http://www.law.columbia.edu/law_school/), and Theodore Moran (Georgetown University - <http://explore.georgetown.edu/people/morant/>), are just four of the academic researchers who have published widely on foreign investment since the 1970s. And, there are many more academic and non-academic research projects on these types of agreements.

investment agreement at all, as is the case in Chile, USA, Australia, Canada and some other countries.

Why do “best practice” countries not use MIAs⁵? First, these countries have a long history and track record in mining. They have established over the years a reputation for treating mining investments in a fair manner and managing and using the benefits streams from mining to best effect. Second, the principles of “rule of law” and “property rights” in these countries are well respected and tested. The *corpus* of legislation (mining code, tax, commercial, labor, environmental, and other laws) governing the mining sector is complete, well developed and litigated. There is ample case law and/or developed regulations which pertain to the rights and obligations of the company, shareholders, communities, and governing bodies. Thirdly, the governments in these countries are reasonably competent and generally viewed as non-corrupt. This is allied to the quality of open political processes in these countries, which processes are orderly, predictable, and allow regular articulation of political demands by the citizens and interest groups. Finally, the international financial markets tolerate risk in these countries, as is reflected in the robust credit ratings and scores. This factor has a significant impact on the ability of private (or quasi-public) companies to mobilize funding for the development of mines and infrastructure (either owned by the company or, more commonly, owned and operated by the government or a public-private partnership).

The countries which use project specific MIAs are generally those countries which do not possess one or more of the qualities above. There is a limited reputation and track record in mining, the laws and regulations pertaining to the sector are incomplete or inappropriate, political processes do not provide for adequate participation of the citizens, and international credit ratings are low making it difficult to mobilize funding for projects. In these countries, the MIA can:

- ✓ provide an essential level of comfort for companies, the members of the board, shareholders, financial backers and home country regulators or stock exchanges.
- Similarly, the project specific MIA can provide reassurance for senior government

⁵ There are some limited exceptions to this statement. Development of a mega project of demonstrable national economic importance has been used in Australia, for instance, to develop a major gas deposit.

officials that they have considered all of the options and have negotiated the best possible deal. This is important since it can provide an element of cover from possible political fallout in future over the project – which is linked to the communications strategy employed by the government during the negotiations.⁶

- ✓ help to fill in gaps in the legislation or to clarify and amplify some critical provisions of the legislation in countries with an incomplete or inadequate basic regulatory environment. These clarifications could address issues including, but not limited to, accounting standards and practices, environmental considerations such as closure and rehabilitation of the mine site, basis and calculation of royalties and taxes, government equity participation (if any), social and community contributions, dispute resolution, and other issues not sufficiently dealt with in the legislation.
- ✓ address project specific technical issues, such as repayment of shareholder loans and advances, valuation of reserves and company assets, provision and use of infrastructure, and site specific issues such as water and soil conservation, rights and compensation of holders of surface lands, involuntary resettlement, preservation of cultural property, treatment of indigenous peoples, and other issues.
- ✓ establish a process and platform for dialogue with civil society organizations and local communities during the negotiations process and beyond. This is oftentimes coupled with the consultative processes (if any) used for the issuance of the exploitation license. Ideally, the negotiations process can help establish a climate of confidence between the local communities and company and national government.⁷

Finally, a more sinister motivation for negotiation of a MIA should be mentioned. In countries with weak governance structures the possibility of corrupt practices could be enhanced during

⁶ This is no minor consideration. The average longevity of a mining investment agreement is 3 – 5 years. When the conditions which prevailed when the original agreement change - which they most assuredly will - the pressures to re-negotiate the contract will build. If the negotiations process has been reasonably open and transparent – and communicated adequately to the interested parties – then the negotiators will in some sense be protected from recriminations. It should also be noted that new governments invariably criticize previous governments for poor contracts, so effective protection from recrimination is limited by the political conditions of the moment.

⁷ This is not to say, however, that CSOs and NGOs should be involved at the negotiations table. MIAs are complicated and complex legal documents, written in legal language, and dealing with arcane financial, economic and scientific concepts. It would not be particularly useful to involve lay persons in the discussions; indeed doing so might prejudice the successful outcome of the negotiations. Rather, a properly devised and well executed communications strategy could help to inform the communities and interested parties without delaying or making more difficult the negotiations.

the negotiations. If the MIA process could be used constructively to provide comfort to government officials it can equally well be abused by government or company officials through bribery, kick-backs, backroom deals, or other corrupt practices.

3. Main Topics Considered In a Mining Investment Agreement

In 2010/2011 a group of eminent international legal experts (from Canada, USA, Australia, Indonesia, and South Africa) undertook an extensive review of recent mining investment agreements from many jurisdictions. The “Model Mining Development Agreement Project (MMDA)” was conducted under the auspices of the International Bar Association, Section on Energy, Environment, Natural Resources and Infrastructure. The MMDA was co-sponsored by the Centre for Energy, Petroleum and Minerals Law and Policy, University of Dundee; the Extractive Industries Technical Advisory Facility, World Bank; and the Prospectors and Developers Association of Canada. The objective was to develop a model agreement to provide examples of how various contracts have dealt with specific issues. The model agreement is not intended to substitute for proper mining, tax or commercial laws; replace a separate exploration agreement if one is required⁸; avoid concluding other agreements such as community development agreements; or eliminate the need for informed negotiations. The model agreement is available online (www.mmdaproject.org) and is possibly the single best source of comprehensive information on mining investment agreements.

⁸ A separate “exploration agreement” is often concluded prior to the mining development and investment agreement. The topics covered in the model mining development agreement are generally related to the development, construction, operations and closure phases of the project. However, sometimes, the exploration and exploitation agreements can be combined since companies will be reluctant to undertake the expense and risks of exploration if they do not have agreement on the main issues related to development and operations. Under the assumption that a combined agreement is used to cover both the exploration and exploitation phases the level of detail for the later phases will be of necessity confined to main principles and not detailed. Companies obviously prefer to “lock-in” the essential details of the exploitation phase before committing to exploration; once the funds have been “sunk” to discover and delineate an ore-body the negotiation advantage shifts slightly in favor of the government. The government, however, would prefer to know as much as possible about the deposit and the plans of the company to develop and exploit it. This information is only available after the ore-body has been adequately explored and a feasibility study produced. Governments have in recent years been more demanding of the scope and extent of information to be supplied by the company and increasingly reluctant to “lock-in” key details of the development and exploitation phases without knowing more about what is eventually planned.

The topics which are in the model mining investment agreement (see annex B) provide a useful starting point to understand what is generally included in such agreements.

- Project specifications: area, permits, existing rights, feasibility study, Environmental Impact Assessments (EIAs) and Social Impact Assessments (SIAs), finance plan, environmental compliance, closure plan, treatment of contractors;
- Financial: surface rents, royalties and calculation thereof, income tax, VAT, personal and property taxes, depreciation and amortization schedules, equity participation of State (if any);
- Obligations of the State: access to foreign currency and off-shore banks, environmental, operating and work permits;
- Obligations of the Company: compliance with applicable regulation, performance on project, local employment and training, local sourcing vendors-suppliers, community contributions;
- Other topics: grievance and dispute resolution, confidentiality, force majeure, surrender and assignment, termination by state and by the company, periodic review, other legal dispositions.

4. Bridging the Gap Between Private and Public Sector Expectations

The essence of successfully negotiating – and operating under - a mining investment agreement is to bridge the gap between private and public sector expectations. A company is clearly and responsibly concerned with enhancing value for its owners, maximizing profits, minimizing costs, and establishing a reputation in the marketplace as a reliable supplier of mineral commodities. Governments, on the other hand, are clearly and responsibly concerned with ensuring best rational use of an exhaustible natural resource which is the property of the nation, distributing the benefits streams in a sustainable manner to current and future citizens and

constituencies with in the country⁹, and stimulating spin-offs and other economic activities because of the mining activity.

During the negotiations of MIAs there is a significant, but bridgeable, gap in the expectations of the company and the government. In the following sections of this paper we examine how this gap can be addressed with reference to specific topics. This also leads us to conclude that several skills sets are necessary in addition to purely legal skills. It is also the case, based on experience that bridging the gap will take considerably more time than originally estimated. Finally, however well the principals at the negotiations table may agree, if they cannot transmit their agreements cogently and coherently to their political and company superiors the negotiations cannot succeed. This means, in the case of a government, ensuring political support at the highest levels; in the case of a company, obtaining support of senior management and (a majority of) shareholders.

The principal issues we identify in the negotiations process are:

- Estimation and valuation of resources and reserves
- Economic and financial projections
- Internal company rivalries
- Government competencies and organization
- Politics: national, local, regional, international
- Communications Strategy, information flows and confidentiality
- Technical project issues

For each of these issues we also provide a case example from negotiations of a mining investment agreement in 2011 between a large mining company and the government of Ecuador.

5. Mining Investment Agreement: the Case of Ecuador

⁹ This, of course, is an idealistic statement. Reality is that all too often the benefits streams from oil/gas and mining are squandered, end up in the hands of a few rather than the many, and rarely are sustained past the immediate natural resources boom.

We will use as an example to illustrate the topics above the negotiations undertaken for a “contrato de explotación minera” (e.g., mining investment agreement (MIA)) between the central government of Ecuador and Ecuacorrientes SA (ECSA) from December 2010 through February 2012. This “contrato”¹⁰ or MIA was signed by the company and the government in March, 2012. These are negotiations with which both the author and Mr. Jeronimo Carcelen have firsthand knowledge. While we are most familiar with the negotiations of the ECSA contract, many of the same issues and themes pertained to other companies, such as Kinross and International Minerals which companies were negotiating mining investment agreements in parallel with Ecuacorrientes. It is noted that separate negotiations have been undertaken in parallel by the ECSA and the government, and continue as of this writing, for a separate investment agreement under the Production Code.

Ecuador has excellent geological potential for base and precious metals mining operations. Yet, in spite of considerable exploration over the past several years, the country does not have any large scale mines in operation. This is because:

- (i) government policies have been inconsistent, in some years favoring mining development in other years not favoring mining investment;
- (ii) active and vocal opposition from non-governmental organizations (NGOs) and indigenous community groups in areas where prospective operations are located;
- (iii) lack of political will and support from the center to over-come the opposition of local groups;
- (iv) over reliance on oil, to the detriment of government policies which could be devoted to solid minerals development; and,
- (v) perceived poor experience with oil companies which contributes to a negative public perception of the extractive industries in general.

President Rafael Correa has a mixed reputation with the foreign investment community. On the one hand, Correa publicly espouses the economic philosophy of “socialism for the 21st century”, a terminology which is met with skepticism by investors. He seems to take impish delight in “twisting the lion’s tail” as, for instance, his expulsion of the representative of the Bretton Woods

¹⁰ See Annex C for a list of the topics considered in the “contrato de explotación” of ECSA.

institutions and the ambassador from the United States as well as granting asylum to Julian Assange at the Ecuador embassy in the United Kingdom. He has also pursued litigation in national and international courts against oil companies for alleged environmental violations and other foreign investments have been delayed or involved in disputes with the government, as for instance the new airport concession at Quito. On the other hand, in respect of investments in mining Correa has been supportive and shows considerable political courage to take on environmental NGOs and indigenous peoples groups who oppose mining. A new mining law was passed in 2009 which is generally favorable for sector development, even though it contains some provisions, such as the windfall profits tax and high royalty rates, which are viewed negatively by the industry.¹¹ The cabinet ministers are highly trained, skilled technocrats who are also supportive of mining development, albeit on tough and sometimes unrealistic terms. To the credit of the government and the senior ministers, they do listen to the views of the companies and, while they may not always agree or grant satisfaction on a particular issue, they can act to change dispositions in the legislation which need to be more realistic in order to attract and retain investment.¹² Government senior ministers and staff are more familiar with the oil sector than with the mining sector. However, they have the good sense to seek expert advice from specialists, as for instance, the involvement of mining experts from Chile to advise the government on various issues.

Corriente Resources (Canada) acquired exploration permits in Zamora Chinchipe province from BHPBilliton in 2000 and began an extensive program of exploration. An initial feasibility study was completed in 2005/05 for the Mirador copper-gold reserve using a cutoff grade of 0.67% copper and 0.22 grams/tonne gold, sufficient for an operation of 25,000 tonnes per day. This initial feasibility study was updated in 2007 by outside experts¹³ which specifies a mineral resource and reserve base of 181 million tonnes for a throughput capacity of 30,000 tonnes per

¹¹ The mining tax environment in Ecuador is complex and effective rates of taxation on mining investments are high by international standards. In addition, the constitution stipulates that the investor will receive “less of the profits from an investment than the State”, the definition of which was subject to much discussion during the negotiations. More details on the Ecuador tax regime applicable to mining and to the ECSA Mirador project are provided in Annex A.

¹² An example currently under consideration is the modification to assess the excess profits tax after the investor has recouped the investment.

¹³ SNC-Lavalin in 2007; and in 2008 by Mine Development Associates (MDA), Moose Mountain Technical Services MMTS), and Knight Piesold. The 30,000 tpd feasibility study was filed with SEDAR and is available to the public.

day and a mine life of 19 years. In 2008 there was a further update of the measured and indicated resources to increase them to 438 million tonnes, enough to justify an expansion of the milling rate to 60,000 tonnes per day. After 2008 there was delay of several years in any new mining investments in the country as the government needed to resolve several political difficulties though the new mining law in 2009.

Corriente Resources became Ecuacorrientes SA (ECSA) and was acquired in May 2010 by CRCC-Tongquan Investment (Canada), a 50%-50% joint venture of the Chinese Railway Construction Corporation (CRCC) and Tongling Non Ferrous Metals Group Company, Ltd. Both companies are owned directly or indirectly by the Chinese central or Anhui provincial governments. When the negotiations began in January, 2011, the local management of the company was transitioning from the Canadian/US management team to a Chinese management team. This process was to continue during the period of the negotiations until the previous Canadian/US expatriate management was completely replaced by Chinese management in October, 2011.

The government negotiating team was spearheaded by the Ministry of Non Renewable Resources, which is responsible for the petroleum and solid minerals sector. However, the Ministry of Strategic Sectors, head by a minister and close confident of the President, was intimately involved with the negotiations. Other ministries on the committee formed to oversee the negotiations included the Ministry of Finance, Taxation Office, Ministry of Environment, and others. Finally, the President's Office, while not involved in the day-to-day discussions nonetheless was fully briefed and gave final agreement to the main terms and conditions negotiated by the government team.

6. Estimation and Valuation of Reserves and Resources

The starting point for development of any mine or mineral resource is the estimation of the quantity, quality, continuity, and extent of the reserves and resources. It is upon this information that the mining plan and methods of extraction and processing are developed. Without an estimate of mineral resources and reserves a mining operation is impossible. And, producing this estimate requires clear standards and procedures which are internationally recognized. How are

mineral resource and reserve estimates produced? How are they verified? And, which standards should apply?

The problem of reserves and resources estimation has been faced by miners, governments, stock exchanges and financial institutions for many years. A number of national and international standards have been or are being developed to address the problem.¹⁴ All of these standards use a combination of physical presence as determined through scientific investigations of the quality and quantity of minerals combined with technical (for instance, metallurgical recoveries) and economic (for instance, costs of extraction and processing and the market price of the mineral) factors. In general, the intent of any code for estimation and valuation of mineral reserves and resources is to provide (paraphrasing the pan-European PERC code) *a minimum standard for reporting to interested parties, and to ensure that such reporting contains all information which these parties and their professional advisers would reasonably require, and reasonably expect to find in the report, for the purpose of making of a reasoned and balanced judgment regarding the exploration results, mineral resources or mineral reserves being reported.* Because important decisions will be taken by governments, investors, and companies on the basis of the estimates of resources and reserves most of reporting codes require certification by a “competent person.” The “competent person” has professional and ethical responsibilities and there may be clear legal liabilities for faulty or negligent certifications of reserves produced by the competent person.

For the purposes of the negotiations, it is important for the government and company to agree on the standards to be used for reporting the estimates of mineral resources and reserves. The most commonly used are JORC (Australasian), CIM (Canadian) and SAMREC (South African),

¹⁴ The most common international standards are listed below. Importantly, Chinese standards are not yet recognized internationally and standards used in the former Soviet Union have only recently been revised to conform to international standards (NAEN code).

JORC - Australasia (www.jorc.org)
SAMREC – South Africa (www.saimm.co.za)
CIM – Canada (NI 43-101) (www.cim.org)
Reporting Code – UK and Western Europe (www.iom3.org)
SME and SEC Guidelines – USA (www.smenet.org) and (www.sec.gov)
Chile and Peru codes (www.minmineria.cl) and www.bvl.com.pe
CRIRSCO – international (www.crirSCO.com)
PERC – pan – European (www.PERC.co - www.PERCreserves.com)

though the PERC (pan-European) standards are relatively new and incorporate most of the concepts of the other standards. In practice, if there is a national standard in the host country this standard will be applied. If not, the default option is to apply the standards of the investor's home country. Though, in some cases, another recognized international standard could be applied, especially if funds are to be mobilized on financial markets outside of the home or host country. Finally, in practice, there is very little difference in the application of the various mineral resource and reserve estimation codes and standards.

In the negotiations it is also important for both parties to recognize, on the basis of the agreed standards, the definition of resources and reserves. Mineral resources are those which are potentially valuable, and for which reasonable prospects exist for eventual economic extraction. Mineral resources are an estimate of the tonnages and grades of a mineralized body based on geological sampling and represent an inventory of minerals which could be extracted in whole or in part given certain technical and economic conditions. Mineral reserves are those that are valuable *and* legally, economically and technically feasible to extract. Calculation of mineral reserves is an estimate of the tonnage and grade that is expected to be mined and delivered to the treatment plant. It is an estimate of the part of the orebody which can be economically mined under assumptions ("modifying factors") which include economic, legal, metallurgical, marketing, and environmental/social conditions. Estimations of mineral resources are critical during the negotiations since these can indicate where the company will conduct additional exploration and the possibilities to expand production.¹⁵ This information will help the government to define the surface areas of the exploitation permit(s) and exploration permit(s). Mineral reserves are used to plan the initial exploitation operations and to mobilize finance for the development of the mine. The reserves base will be essential for the project's management, shareholders and the financiers to the project to give final agreement for the project to proceed. Understanding the estimate of reserves (measured and proven) is equally important for the government for a number of reasons. An important one of these is that reserves could be pledged as collateral for loans to the project, depending, of course, on whether such a pledge of mineral

¹⁵ Many mines, in particular gold mines, begin with sufficient reserves required to justify initial development and operations. Subsequently, the company will plan exploration work to identify additional reserves within the resources previously identified.

reserves is permitted under the country's laws (mining, commercial, tax) and the appetite of international financiers to accept collateralized reserves in the particular jurisdiction.

Mis-understanding of the meaning of mineral resources and mineral reserves, based on the scientific evidence and “contributing factors” which are used to make these estimations, is a frequent problem during negotiations and eventual operations. While most government officials in the technical government ministries will understand the differences between mineral resources and reserves non-technical specialists, politicians, and the public at-large frequently do not understand the concepts used, the interpretations employed, and estimations produced. The confusion frequently encountered is to consider the entire resource estimate as economically exploitable without taking into account the “modifying factors”. In its most elementary manifestation, the gross content of payable minerals is multiplied by the current international market price to produce the assumed value of the deposit. This erroneous conception is frequently seen in the popular press or in pronouncements of political or local leaders. Under these circumstances, arguments by the company that the modifying factors could reduce by half or more the value of deposit which can be economically exploited fall on deaf ears. Even though the technical specialists in the government and involved with the negotiations may understand the nuances they have difficulty to explain them to the senior political leadership and the public at large. Without a proper communications strategy to explain correctly the concepts the government negotiations team opens itself to possible recriminations that it has “sold the country short” or not negotiated the best deal.

An issue encountered during negotiations is how to deal in the MIA with changes over time to the estimates of resources and reserves. In reality, every mining operation will conduct additional exploration within its contract area. This exploration can be planned two or three years in the future which plans can be incorporated into the MIA. However, plans for exploration further into the future cannot be accurately reflected in the MIA and thus a mechanism needs to be incorporated in the MIA to take into account mineral resources and reserves which will be discovered in future. This is critically related to the size and area of the eventual exploitation and/or exploration permits. There is sometimes the temptation with governments to consider only the initial measured and proven reserves within the exploitation

permit area and to require new negotiations and permits for additional resources and reserves which may be discovered. This approach deprives the company of any incentives to continue exploration which should otherwise be a primary objective of the government. It also is at variance with the normal dispositions of mining laws which grant exclusive rights to minerals indefinitely in depth within the boundaries of the permit area, whether currently discovered or not.

Finally, there is the issue of who is to prepare the estimates of resources and reserves based on results of the exploration. This is not necessarily a bad thing since the issues are highly technical and it is unlikely that even in ministries of mines which are well funded and staffed the skills would be available. In these instances, reliance on company produced estimations could be acceptable with the important provisos that: a) the parties agree to the national or international standards to be used; and, b) the estimations are subject to an impartial and reliable audit by competent professionals.

Mineral Resources and Reserves Estimates:
The Case of Ecuador

There was never any question during the negotiations that the CIM (Canadian) standards should apply to the estimation of mineral resources and reserves. The company used the CIM NI 43-101 standard to produce the initial feasibility studies and the government adopted these standards for the purposes of the Mirador project negotiations as well as more generally for other negotiations.

The negotiations began on the basis of the feasibility studies of 2007/2008, using total measured and indicated resources of 181 million tonnes with a throughput capacity of 30,000 tonnes per day. The government view was that the 30,000 tonnes per day scenario would leave approximately half of the resource unexploited and thereby sterilized for future exploitation. The government concern was well founded and one with which the company negotiating team sympathized. The intent of the company from the beginning was to program a 60,000 tonnes per day mine plan. However, at the time the feasibility study was prepared (2008) sufficient mineral reserves had not been proven to justify the higher throughput rate and the company lacked the financial resources to invest in the capital equipment necessary for the higher rate. During the negotiations the exploration team managed to increase the estimate of mineral resources and reserves to 481 million tonnes and the company now had the financial resources to expand throughput capacity to 60,000 tonnes per day. Also, exploration was continuing on adjacent permits held by the company with the considerable promise that the resource and reserves estimate could be greater and justify an even higher mill throughput.

From the early stages of the negotiations it was evident to the company negotiating team that the government side did not completely understand the nature of the mineral resource and reserve estimations and the mine plan which was based on these estimates. There was tendency of the government to consider the estimate and feasibility study as a “business plan” and therefore a commitment by the company to produce exactly what was stipulated in the feasibility study under the economic, legal and financial terms and conditions of the MIA. Any future expansion of the project, even though contemplated in the feasibility study, would be subject to new negotiations and terms and conditions in a new MIA. This view seemed to be driven by the Ministry of Strategic Sectors and the Office of the President, even though neither were directly involved in the negotiations nor experienced with the extractive sector. The staff of the Ministry of Non Renewable Resources (Ministry of Mines) understood the concept and uncertainties. However, much time was spent discussing these issues. In the final agreement as negotiated: (i) the feasibility study is “referencial” (ii) the surface area of the exploitation permit is large enough to accommodate future exploration to prove additional resources and reserves and, (iii) the terms and conditions of the mining investment agreement should pertain to these future expansions.

Well into the negotiations, when the company team had only just begun to make progress in explaining the “referencial” nature of the feasibility study, the representatives of the shareholders and the senior Chinese management now present in Quito, announced that their head offices had no intention of limiting production to 30,000 tonnes per day or even 60,000 tonnes per day. A feasibility study, prepared by a Chinese consultant, was then under preparation for an exploitation throughput of 120,000 tonnes per day and possibly higher. This was welcome news to the government and the negotiations team. However, sufficient reserves to justify the higher throughput rate had not yet been measured or identified and, in any event, the feasibility study would take some months to complete and would not be available in totality for the negotiations. In addition, the Chinese feasibility study was difficult and time consuming to translate and the concepts and calculations used did not correspond to readily recognizable western standards. In the end, the government accepted the company position that the mining agreement pertain to all of the mineral resources identified or eventually identified in the entire area of the exploitation license granted under the Mining Code (the Mining Law stipulates that the license holder has exclusive rights of exploitation for all of the mineral resources identified in the license area).

7. Economic and Financial Modeling

Based on the estimation of the mineral resources and reserves a mining plan and feasibility study are prepared which estimate annual production of ores and wastes, recovery of saleable mineral commodities, longevity of the operations, environmental considerations, the possible areas of future exploration and expansion, and the economic and financial calculations. In addition to the economic calculations in the feasibility study a more complete and comprehensive economic and financial model of the proposed investment is generally prepared. Companies are invariably better at doing this than governments because they have the trained personnel and skills sets to do so (either in-house or sub-contracted). Governments rarely have the requisite skills or the complete information to produce a good economic and financial model. The result is that the government negotiations team more often than not relies on the model prepared by the company. This has obvious disadvantages for the governments because frequently hidden within the models are calculations based on assumptions to maximize the company's benefits streams. Therefore, it is important that the government negotiations team produce its own economic and financial model. Further, if the two parties agree on the parameters, variables, formulas, and ultimate objectives of using the models of the government and company may be harmonized so the negotiations can proceed on the basis of common view of the economic and financial results of the eventual investment.

However, whether using the same or different models agreement should be reached between the company and government as to several factors.

- First, what is the ultimate use of the economic and financial model? Ideally, these models are used during negotiations to assess the interplay of variables and assumptions. The models are not a prediction of the future but rather a construction of plausible scenarios of economic and financial impacts given certain assumptions. As the assumptions will certainly change over time it is essential that both parties use the model as a means to simulate and test the economic and financial impacts under conditions where one variable is changed while others are held constant.

- Second, both parties must guard against “model mania”. With the ease of use of spreadsheet and computer simulations there is often the tendency to run iteration after iteration of the model. While these can be an interesting exercise they reach the point of diminishing returns. Since the model is not a prediction of the future achieving a ¼% or ½% increase or decrease in rate of return (ROI) by multiple simulations is not necessarily the most productive use of the model, especially since it is impossible to know how over time the underlying assumptions will change. Also, it is possible to construct a model with too fine a level of detail. Thus, some level of materiality should be established and used when adding variables and assumptions to the model. Both parties will have to keep their “eye on the ball” and avoid having the economic and financial technical specialists camouflage the essential results through multiple simulations or needlessly complicated models.
- Third, the model is not a “business plan”. Too many variables and assumptions are unknown and, even if reasonable estimates can be obtained initially, these will most certainly change over time. In other lines of business the critical operating variables can be estimated with greater certainty based on past experience¹⁶. This is not the case with a mining project since the fundamental *raison d’etre* of the investment – the mineral resources and reserves - is not known with precision. Additionally, if the investment is to be made in a country without previous experience in the mining business operating costs, labor and infrastructure constraints, local community and environmental issues cannot be estimated with any degree of certainty. While these issues may be self-evident to the company they are not quite as obvious to the senior political leadership or the general public¹⁷ in the country. There is a tendency amongst these non-technical specialists to focus only the “bottom line” and to use, for instance, variations in ROI as the sole basis to judge the value over time of the investment. Patience and

¹⁶ An analogy of a business plan for a fast food restaurant (to take but one example) is useful as an illustration. A business plan can be prepared for this type of investment with reasonable precision based on past experiences with respect to operating costs, market demand, sales forecasts, financing costs, etc. Obviously, even the best prepared business plan can be subject to changes, but the point here is that more of the fundamental variables are known with greater precision and certainty in other types of investments than are known when mining investment agreements are negotiated.

¹⁷ One should add that this is not just an issue with politicians. Financial institutions, stockholders, and even senior company management can fall victim to unwarranted focus on a single indicator of economic and financial impacts of the project.

communications skills are required of the technical specialists of both the company and the government to adequately explain these factors to all of the interested parties.

Any economic and financial model will use some key assumptions. All are important will have impacts on the final outcome of economic and financial impacts for the company and the government.

Project specific variables. These include assumptions relative to:

- ✓ *Annual and cumulative production levels.* The tonnages of ores and wastes extracted from the ore-body, the grade of the ores, the dilution and recovery factors during milling and processing will normally be estimated in the feasibility study and mine plan which, in turn, is based on the estimation of the mineral resources and reserves. The rate of throughput of ores in the mill or processing facility is normally calculated on a daily basis which, after taking into consideration recovery and other factors results in delivery of saleable mineral commodities. The volume of saleable commodities is expressed, depending on the commodity in question, as tonnage of concentrates or, more importantly, as a volume of metal equivalent contained in concentrates. This production level is typically stated on an annual basis and cumulatively over the life of the project.
- ✓ *Operating costs.* These costs will normally be segregated in the feasibility study by mining or extraction costs, beneficiation and milling, and final delivery costs at point of sale. The costs under each category are quite detailed and specific and depend on numerous technical factors which the engineers will have taken into consideration. However, there may be significant unknowns such as the productivity of the labor force (especially important where there is a dearth of available and experienced skills in the country), labor and union relations, costs of environmental remediation and rehabilitation, community costs, cost of fuel, power and reagents, and numerous other factors. These costs will be summed to produce a cost per tonne of ore extracted, cost of material milled, cost of concentrates, and cost to produce the final saleable product. When estimating operating costs it is important to take into account government taxes, levies, and other fees which may

be attached to a particular cost (as, for example, excise taxes on fuel). The importance of accurately predicting the operating costs of the mining operation cannot be overstated. The company will pay particular attention to these costs since the decision to proceed with the investment is often based on where the project is positioned with respect to other international mines on the production cost curve.¹⁸

- ✓ *Cost inflation.* The model should generally include some assumption about how costs may increase due to inflation. There is no easy way to do this and normally a flat percentage (2 – 5%) annually could be used to inflate the overall costs. This will have a significant impact on the project economics and may be the subject of vigorous discussions at the negotiations table. Some commonly accepted rate for the mining industry based on international experience, for example, should be used. If this rate cannot be agreed then a general inflation index in the host or home country or international indicator could be used. However, neglecting to inflate the operational costs is not a good option. Experience with mining investments everywhere demonstrates that costs of production increase over the life of the mine and not to take these inflationary pressures into account would result in significantly overestimating the economic and financial impacts of the project.

Government mandated variables. These are generally related to government taxes or fees and may include, but not limited to:

- ✓ *Levies, fees and taxes on output and inputs.* The principal levy on output is royalties. Revenues from royalties are oftentimes the main and only revenue streams the government will receive in the early years of the project and are thus of critical importance to the government. At the same time, for the company royalties have direct implications on the overall cost of producing the saleable mineral product and, more important, are insensitive to levels of profitability since they are assessed directly on the value of the minerals produced.¹⁹ There may be a number of government levies on inputs

¹⁸ A rule of thumb is that the project production cost should be in the bottom third of the cost curve of international projects producing the same commodity.

¹⁹ Mining royalties is a vast subject. Much has been written on international practice relative to the levels and assessment of royalties. One of the best works on this topic is: "Mining Royalties: A Global Study of Their Impact www.craigandrewsllc.com

such as, excise taxes on fuel and power (or differential pricing for the local market, individual or industrial usage, etc) and/or customs duties on imported plant, equipment, and reagents, and/or local sales taxes. The model should take all of these taxes and levies into account so their impact on overall costs can be estimated and to provide guidance to the negotiations team on whether or not to consider an exemption or waiver of these taxes.

- ✓ *Taxes on profits and income and profit sharing.* The “tax package” for any mining investment will normally include taxes on profits and income. Best practice would suggest that these should be the same as provided for in the tax code for any commercial enterprise. Yet, it is sometimes argued by companies that the taxes on profits should be less²⁰ than for other commercial activities in order to attract and retain investment given the high capital costs and risks involved with a mining venture. Governments frequently argue the opposite – or even that a higher rate of taxation should apply to extractive projects. They argue that: (i) companies can and do use many accounting manipulations and deductions to reduce profits and the effective tax rate; (ii) the resource is state owned and should make a larger contribution to government revenues; and, (iii) in any case, the project’s financial impact on government revenues is hugely disproportionate in relation to the taxes it collects from other sectors and that a special “sweetheart” deal is politically impossible. Increasingly, governments view graduated taxes on profits – such as an windfall profits tax which is triggered when a certain commodity price level is exceeded or where an agreed threshold rate of return is surpassed – are fair means to generate additional revenues from a mining investment. The respective views of the companies and governments have merit and must be resolved at the negotiations table.

Other issues to be discussed are the accounting procedures, standards and conventions which will pertain to the project and which will have significant ramifications for the financial returns of the project. These are discussed more fully below. Finally, in certain jurisdictions, the legislation mandates sharing of profits with third parties, as for instance

on Investors, Government, and Civil Society,” James Otto, Craig Andrews, et. al., World Bank, Washington DC, 2007”.

²⁰ A waiver of income tax (“tax holiday”) has been used frequently in past contracts, but is less common in more recent contracts. Some contracts provide for a reduction of the normal income tax rate for a fixed period.

profit sharing with the company workforce or with local communities. For the purposes of constructing the economic and financial model it is essential to take into account whatever the agreed taxation mechanism on profits, the agreed accounting provisions, and the sharing of profits with third parties.

- ✓ *Government equity participation, if any.* Many governments desire an equity participation in the project. There are a number of advantages and disadvantages to a government of such equity participation which are beyond the scope of this paper. For the purposes of negotiations and the construction of the economic and financial model whatever arrangements are agreed to need to be accurately reflected in the model. In particular, items to take into account include (but not limited to):
 - the timing of any advanced/delayed dividends or share of profits accruing to the government (after, for instance, the investor has achieved payback or cumulative cash flows turn positive);
 - reimbursement or deductions for shareholder loans or other advances for government “carried interest”;
 - timing of call for funds if the government has a “working interest”;
 - any interest or financial charges which must be paid in relation to advances from the company to the government to acquire shares.
- ✓ *Property and infrastructure use taxes.* Sub-national governments frequently charge property (mortmain) taxes on built up property or land. National or sub-national governments may also charge user fees, road taxes or tolls, or water usage levies. The impact of these taxes, fees and user charges needs to be taken into account in the model. It is important to decide whether the national government accepts that local taxes and fees should be included in the overall “government take”. The impact of these types of charges is generally not significant in terms of the overall economics of the project but could produce substantial benefits for local and provincial governments.
- ✓ *Mine title holding taxes and surface rents.* These generally are paid at the national level and are not normally significant in terms of the overall economics of the project. Nonetheless, the model should accurately reflect these charges.
- ✓ *Taxes on value added.* This may be a critical issue during the negotiations, depending on whether or not the government refunds the value added tax. Normal tax practice is that

VAT is assessed as a fixed percentage on the value of inputs to the production process and debited to the account of the company. The same percentage is assessed on the value of exported products and is credited the account of the company. This results in a refund of the value added tax and thus does not put the company at a competitive dis-advantage by raising the price of its exported mineral commodities. The debit – credit mechanism could be incorporated into the model or, more commonly, the VAT would simply not be recorded in the model. Note, however, that there are a few exceptions from the general rule on refund of VAT on exported mineral products, as is the case of Ecuador as explained below.

- ✓ *Community taxes and local fees required by statute.* Local regulations and/or sub-national laws sometimes contain special taxes or fees to be levied on mineral companies. These are, in general, of minor importance to the overall economic valuation of the project but should be taken into account in the model nonetheless if they meet the materiality threshold
- ✓ *Recovery of pre-paid taxes, shareholder loans or advances of funds from the company.* The model should also reflect the scheduled recovery of any pre-paid taxes, shareholder loans or other advances from the company to the government (or vice versa). An example would be royalties or income taxes paid to the government by the company in advance. This is not a common practice but is required in some countries. The model will have to take into account the scheduled repayment by one party to the other party of these pre-pays, with or without interest.

Financial Variables. Factors relative to the cost of finance generally included in the model are interest charges and maturity of any loans to the project. Governments sometimes have restrictions on the amount of interest that may be charged to a project (or which may be deducted for the purposes of calculating income tax), especially if these loans are inter-company or affiliate loans. The model must carefully calculate these charges consistent with the regulations or agreement in order to properly ascertain the impact of financial charges on the economics of the project.

Accounting Variables. These principally concern allowable deductions for depreciation and amortization. International Financial Reporting Standards (IFRS) can provide some guidance on accounting standards and provisions for mineral projects and are used by the mining industry and accepted by an increasing number of host countries. Key parameters to consider in the financial model are straight line versus accelerated depreciation, varying rates of depreciation depending on asset type, and when the depreciation starts and ends. Valuation of assets is also a key variable to be considered as “fair market value” may not be a concept readily understood by some governments. The valuation of company assets is especially important in the event of take-over or expropriation of the assets. The best valuation from the company standpoint would be “fair market value of the business as a going concern” in which case compensation would be based on some sense of lost future earnings or revenues. Governments, however, would probably prefer “book value” which would be minimal since the assets have been depreciated.

Sunk Costs. These include the amounts spent by the company and government on exploration which is carried over to the accounts of the exploitation operations. Imputation of interest charges to these amounts may be appropriate. The government may be concerned about limiting the amount of home office expenses and any interest charges to finance the exploration since these were funds not directly invested in field exploration. It should be determined in the MIA whether these previous expenses and sunk costs are amortized in the initial years of the project or are they amortized over the life of the project or under a “units of production” amortization schedule (see IFRS requirements in this respect). If the company has paid to acquire another company are the costs of the acquisition to be included in the project accounts? If so, how are these acquisition costs to be recovered and over what period? If a private royalty has been paid as part of the acquisition cost of the mineral asset is this private royalty a deductible expense? If so, how is it to be amortized? The model will have to take into account these variables as they could have a material impact on the economics of the project.

External Variables. The principal variable outside of any control by either of the parties is the international price for the mineral commodity. The price of the commodity(ies) to be

mined during the life of the project is the most important variable in the model and is used to calculate gross revenues. Predicting the long term price of a mineral commodity is no easy task. The only true thing that can be said of long term price forecasts (longer than 18-24 months) is that they are invariably wrong. What price is to be assumed for a project with a life of 25 years? In practice, for simplicity a single price for the principal and secondary mineral commodities to be produced is assumed and carried through the life of the project. Sensitivity analyses are then used to determine the impacts on the economics of the project for an assumed percentage increase or decrease in the commodity price. These sensitivity tests can at least alert the government and the company to the main impacts of variations in the price. If a sliding scale royalty or profits tax is based on an assumed threshold price of the mineral commodity then the sensitivity tests can determine what would be the increase or decrease in tax revenues under different commodity price scenarios. Sophisticated models can use probability and other statistical analyses to calibrate in the model the likelihood of price movements up or down. Even though these are rarely precise enough to be of much use to predict price movements they can highlight the risks the project would face under low price scenarios.

The Case of Ecuador:
Economic and Financial Model
Project Specific, Accounting, Finance and Tax Variables

The company constructed its own economic and financial model of the proposed operations as part of the feasibility studies and refined the model during the negotiations. The model was an essential point of reference for the company negotiating team and senior management since the models could pinpoint the impacts of changes in one or two variables with respect to other variables. The government negotiating team also constructed their own model. The company and government models were harmonized during the negotiations; agreement was reached on the overall architecture of the model, the formulas used, the key variables to be considered, the sequence and timing of the variables over the years of the model, and other key attributes. Even though the company and government continued to use separate models, having a common model assisted in focusing discussion on the key points of the negotiations without suspicions about how the other side was manipulating the model.

Agreement on the model was easily reached on the project specific variables such as production levels and operating costs. Agreement was more difficult on cost inflation which, even at the modest rate of 1% or 2% per annum could have a significant impact on the economic and financial results of the project. The inflation issue was not completely resolved during the negotiations. Government mandated variables were fully taken into account in the model, such as royalties, taxes, government equity (none), use and property taxes, surface rents, statutory local taxes, value added taxes, and reimbursement of pre-paid taxes and advanced royalties (see annex A for more description on the Ecuador tax package). Having these government mandated taxes clearly stated in the model helped to advance the discussions on various options and trade-offs in the tax package applicable to the project. Other variables were taken into account in the model: financial variables such as, treatment of interest expenses; accounting variables such as amortization and depreciation (according to IFRS); and the treatment of sunk costs such as previous exploration expenses and acquisition costs attendant the purchase of Corriente Resources by CRCC-Tongquan (Canada). Many of the government mandated variables as well as treatment of financial charges and accounting standards were a matter of national legislation. Changing these, even if agreed by the respective negotiating teams, would be difficult and time consuming. However, certain definitional issues were extensively discussed by the negotiations team as, for instance, the calculation of net smelter return; the calculation of the respective company and government “take” for the purposes of compliance with Article 408 of the constitution (the so-called 50-50 rule); and the calculation of the excess profits tax. The economic and financial model helped to focus and crystalize discussions of these issues for both parties.

The Case of Ecuador
Economic and Financial Model
Objectives of the Model and Commodity Price Considerations

Dis-agreement and extensive discussions of the model were centered on: (i) the ultimate use and objectives of the model; and (ii) the copper and gold prices to be used in the model. On the first issue, as with the estimates of mineral resources and reserves, there was a tendency on the part of the certain parts of the government to view the model as a “business plan”. This led to an over-reliance on financial indicators such as rate of return (IRR) and net present value (NPV). The company also paid much attention to these indicators as well as (most importantly) the number of years required to pay back the investment). However, the company position clearly explained to the government was that these indicators are only valid under the assumptions of the model and are not predictions of the future. The second point of contention and considerable debate was the copper price to be used in the model. Industry practice is to take a conservative approach when using a commodity price (in this case, primarily copper and secondarily gold). Initially, the company model used USD 2.00 per pound for the life of the mine; the copper price during the negotiations period was USD 3.50 – 4.25. This price, combined with the high rates of government mandated taxes, resulted in a minimal and sub-investment grade rate of return. The government quite logically concluded that the price used in the company model was deliberately low and not consistent with market price so the company could argue for more lenient terms and conditions, particularly in respect of the tax package. The company argument in defense of the low copper price was the “tsunami” scenario: the project needed to survive in times of very low commodity prices, thus the very conservative approach in the model. Information was supplied to the government from a variety of sources relative to the historical performance of copper prices over the past 10 and 20 years as well as predictions (12-18 months) of future copper prices. In the end, the government insisted and the company shareholders agreed (against the best advice of the company negotiations team) to use a copper price of USD 4.00 per pound for the life of the project. In the opinion of this author, this price has led to a significant over estimation of the robustness of the project and does not significantly take into account the risks to the viability of the project during a down market in the copper price.

8. “Las Historias de la Familia”: Internal Company Rivalries

Internal company politics may seem to be a topic too self-evident, simplistic and elementary as to merit much attention in an article on negotiations. However, this would be an erroneous view. From the practitioners’ point of view, negotiating the labyrinth of egos and personalities, organizational responsibilities and mandates, head and local office vested interests, “us versus them” mentalities, and other internal corporate political dimensions is a key ingredient of successfully concluding negotiations for a mining investment agreement.²¹ The government side will have its own political issues which are considered separately in the next section.

²¹ Successfully negotiating this internal company labyrinth is, of course, a key to getting anything done in a company, as it is with any group.

We consider below some considerations to manage internal company politics during the negotiations process.

- Managing company staff. Local company staff sometimes do not recognize the value and contribution of experts brought in from outside. Even though the company, as noted previously, may have in-house technical experts, skills and resources it may still opt to name an outside expert(s) to head-up or participate in the negotiations. The experts brought in from the outside – legal, financial, engineering, geology, social and environmental – ideally will complement and work well with the in-house specialists. However, this is oftentimes not as easily accomplished as might be desired. In-house staff may be resentful or suspicious of outsiders, especially if the outside experts are paid significantly more than in-house staff. Further, outside experts may report to or have better access to very senior management than in-house staff, in effect jumping the hierarchy and breeding resentment. Finally, local company national staff may be conflicted in terms of loyalty to the company position and loyalty to the country. In most cases, these impediments can be overcome through proper communication, courtesy, and respect. And, it is essential that these issues be resolved or the risk exists that dissension within the company negotiating team could send mixed signals to the government or lead to mis-representation of the company position.
- Managing senior company management, various departments, and the head office. Company officials in the headquarters and local offices have different responsibilities and mandates. These sometimes come into conflict when defining negotiating positions, priorities and strategies. For example, the legal and finance departments may have different views on priority issues and trade-offs, for instance on tax stability versus international arbitration. The geology department may have a different view from that of the engineering department on the priority to be given to continued exploration outside of the main mining area. The environmental department may have different views on water usage and discharge than the engineering department or on the costs of the rehabilitation and closure than the finance department. The public affairs department (and social specialists) will have to manage delicately local community consultations and this may

conflict with the views of the engineering department (who want to get on with the job) or the company senior management who may wish to downplay the local issues because of concerns of repercussions on the stock market or with shareholders. The local office may frequently be in disagreement with the headquarters office and be of the view that the headquarters office simply does not understand the local context and conditions. On the other hand, headquarters office sometimes feels the local office has lost touch with overall corporate objectives and has, in effect, been “captured” by the host country. These points of internal corporate irritation can be exasperated through the interplay of individual egos, rivalries and conflicting personalities. A common negotiating position can be developed through consultation with all of the relevant departments. However, this position will evolve during the negotiations as trade-offs are made and thus continual involvement and consultation with the departments is necessary to achieve proper balance.

- Managing the decision making process. Companies will generally have well defined and developed decision making processes so that positions are properly reviewed and evaluated by various departments and may be decided upon in a relatively short time period by management.²² However, depending on the experience of the company these decision making mechanisms may be more or less efficient. In a large organization, it may take an inordinately long time to arrive at a decision through multiple layers of review. Ideally, in order to avoid delays in the negotiations, the broad parameters of the deal should be decided upon and made known to the negotiations team. Trade-offs can be made in principle at the negotiating table within these broad parameters without awaiting a decision of senior management²³. However, while this would be an ideal situation in practice senior management sometimes wishes to retain a more active and direct role in the negotiations. This involvement in the negotiations could under-cut the

²² Companies are not democracies. Communication with various departments is necessary and consensus desirable. But, the senior company management has the ultimate responsibility – and will be accountable for – critical decisions.

²³ A “term sheet” is very useful to chart these trade-offs and considerations. If discussed and agreed with senior management beforehand the negotiations team will have clear guidance on what can be negotiated at the table without reverting to senior management for a decision. This said, the wise company (or government) negotiator will keep senior management continually informed and refrain from final agreement until permission is received, even though the outlines of a compromise are in the term sheet. Reverting to higher authority can be an effective tool in negotiations.

authority of the team and will require careful attention. In small organization, or those owned by a family or individual, the decision may be a one-man affair. The consultative process with other departments may, in the end, be less important than a conversation the owner had on the golf course with a senior government official.

- Managing shareholders. Managing and communicating with shareholders of a publicly quoted company is an extensive topic well outside of the subject area of this paper. Nonetheless, the negotiations team in the host country must be aware of the strategy and objectives of the headquarters management which is typically responsible for managing shareholder relationships. In the same manner, for smaller companies which are closely held by a few shareholders, the concerns and views of shareholders must be made known to the negotiations team so these can be reflected in the positions taken at the negotiations table. It is important that the negotiations team develop a strategy to communicate with shareholders the positions and decisions taken at the negotiations table, especially if these diverge from the original positions taken by the company.

Finally, management by the negotiations team of company official representing joint venture partners can be especially time consuming and confusing. First, the companies may not have the same vision and business model. This leads to confusion on the terms and conditions of the mining investment agreement. Second, the officials of the companies may not get along or have significant egotistical issues or personality conflicts with each other. For the negotiations team, this can complicate arriving at a common position. Finally, in the worst possible case, the joint venture will not have a managing company. If managing a single dominant shareholder is difficult, then managing two or three equally dominant shareholders – without a clear leader or ultimate decision maker²⁴ – is nearly an impossible task for the negotiations team.

²⁴ The conventional wisdom that there is no such thing as a 50-50 joint venture is correct. There also must be a leader, normally with a superior percentage interest in the undertaking.

**The Case of Ecuador:
Internal Company Politics**

This author has the highest respect and admiration for the local and expatriate (Ecuadorian, Canadian, US and Chinese) of Ecuacorrientes. They are highly professional, well trained and experienced, and enthusiastic about achieving positive results. The company organization was reasonably effective at making decisions at the local level in a timely fashion. The outside experts brought into to manage the negotiations took care to create a cooperative and inclusive atmosphere: regular meetings and information sessions were held with the members of the negotiations team, company senior management and relevant company departments and shareholder representatives. Reports and minutes of each negotiation session with the government were prepared by the negotiations team, distributed to senior management and shareholder representatives, and discussed in a meeting, usually within hours of the conclusion of the negotiations session. The negotiation team was given considerable latitude to devise the negotiations strategy within the broad outlines determined by senior management. The strategy and company position was thoroughly discussed and agreed upon within the negotiations team so that the team would speak with one voice at the negotiations table.

However, as with any organization, there were some issues that affected the conduct of the negotiations. The most important issue was the transition from the Canadian/USA management to Chinese management. In January, 2011 shortly after the commencement of the negotiations the management team as well as numerous staff from the two Chinese shareholding companies took up residence in Quito. During the course of the negotiations the previous management relinquished control so that by October, 2011 only the Chinese management and local staff remained. This transition did not materially affect the negotiations but it did entail significant efforts to bridge language barriers and overcome conceptual differences. A greater issue with respect to the negotiations was that the two Chinese shareholding companies had differences of opinion which were not easily resolved at the local level. The 50%-50% joint venture arrangement resulted in inability to make decisions on a timely basis. Also, there were some unfortunate instances of one of the shareholders, without the knowledge of the other shareholder or the negotiations team, involving the Chinese embassy in Quito. These incidents were much to the embarrassment of the negotiations team and to the annoyance of the Minister of Non Renewable Resources.

9. Government Organization and Competencies: Are They Up to the Job?

The asymmetries in negotiations competencies and skills between the government and the company negotiations teams have been noted previously in this article and by numerous other commentators. But, what exactly are the skills deficiencies? Why do these occur? What impact might they have on the negotiations? And, what other problems exist on the government side to disadvantage their negotiations positions and strategy?

The most apparent and important deficiency on the government side is lack of numerate skills. Many government negotiations teams are unable to construct financial and economic models. Neither are these team members in many cases able understand a model constructed by the company and/or outside parties. In addition to suffering from generally poor training in arithmetic and mathematics in the local school system the government team members may not have had adequate training and exposure to computer based software programs such as excel which is the spreadsheet application which is the most commonly used to construct the economic and financial model. Government members typically have little or no training in elementary or advanced financial and/risk management concepts. These include commonly used discounted cash flow indicators²⁵ used to evaluate the financial viability of the project, concepts related to options theory and acquisition of assets, financial risk assessment models, and stochastic probability methodologies used for commodity pricing forecasts.

There are many inter-related reasons why the government's negotiation team and organization are weaker than the company's. In many countries, the general school system, from primary through tertiary and university, is simply not good enough when it comes to numerate and literary skills. If graduates have numerate and literary skills they are more likely to opt for careers in the private sector than the government. Civil servants are generally not well paid in comparison to private companies and non-monetary compensation or even recognition for excellence is limited. Thus, governments have difficulty to retain the best (often educated outside of the country) personnel. The middle tier of reasonably seasoned professionals, at the top of their career, in positions of increasing responsibility is missing. This puts the government at a significant handicap.

The impact these deficiencies have on the negotiations of a mining investment agreement (as well as other duties performed by the ministries and government services) can be significant. Government technical specialists are frequently insecure and ill-at-ease across the negotiations table from the company specialists. They may compensate for the insecurity by being overly

²⁵ The two most important indicators related to the time value of money include Net Present Value (NPV) and Return on Investment (ROI). But, given the political risks of investments in extractive industry projects in frontier countries, many investors are even more concerned with the time required to achieve pay back of the original investment.

hostile, suspicious, or resentful when faced with company specialists with better mastery of the technical details. Moreover, the insecurity and the responsibility placed on their shoulders by the government frequently means that the government specialists do not admit what they don't know. To a certain degree, the government can contract to outside specialists to fill-in the skills gaps. But, getting the best from outside technical advice is also subject to the same limitations born of insecurity: the government specialists may be overly defensive and not willing to work with the outside specialist so as not to expose their own internal lack of knowledge.

To compound their discomfort, government technical staff involved with the negotiations may come under intense political pressures. The well-educated technical staff is part of the governing elite in many countries. Even though they may not be involved in politics directly the technical specialists are part of a relatively small group of educated elites that have deep family, school, ethnic, and other ties with each other. Seeking favors or exerting influence outside of the formal lines of control and communication using the "old-boy" network is common. A successful investment in a large mine produces cash – and a lot of it. Negotiating an agreement with an international company is glamorous, prestigious and may give rise to international travel or other perks. The negotiations could also present an inviting opportunity to peddle influence or extract bribes and kick-backs. Politicians²⁶ could be sorely tempted to interfere and pressurize the technical staff during the negotiations.

Finally, there are the elements of internal rivalries between ministries, egos of ministers and senior staff, and information sharing amongst government offices and departments. Negotiations of a mining investment agreement are generally headed up by the senior ministry in charge of mines (Ministry of Mines). But, this ministry will rarely be the only government agency involved. Typically, other government ministries could be involved including, but not limited to: the Executive's Office (Office of the President or Prime Minister), Ministry of Finance, Department of Taxation, Ministry of Economy and Planning, Ministry of Environment, Ministry of Internal Affairs, Foreign Ministry, State Owned Mining Company (if any), and other departments. Most governments would form a committee of representatives of these ministries

²⁶ This could apply equally to technical staff, who may frequently be tempted by non-monetary rewards or illicit monetary compensation.

to advise the Ministry of Mines in the negotiations and to review the draft agreement at various stages. Yet, in spite of the care with which the government may organize the involvement of the relevant ministries there may be stronger or weaker champions for the project within each of the ministries. Egos of ministers and senior officials as well as rivalries between ministries²⁷ can be difficult to control. Knowledge is viewed as power by many and there is an unfortunate tendency to curtail information sharing between ministries and ministry staff. By definition, governments must be attuned to public opinion and, in many countries, public opinion is against mining. This can further exacerbate the rivalries between ministries as, for instance, between the Ministry of Interior (which is aware of public opinion) and the Ministry of Mines (which is not). Finally, in most countries, the Office of the President (or senior executive or, in some cases, the legislature) will be the ultimate arbiter for the ministerial rivalries, dealing with public opinion, and approving the mining investment agreement. Knowing this, some companies may be tempted to circumvent the agreed process of negotiations and try to negotiate directly with the office of the executive. This strategy could still work in a few countries in the short term²⁸ assuming the office of the executive was receptive to company overtures to negotiate directly. But, this strategy could backfire badly if the office of the executive sensed an “end-run” for ulterior motives. It could backfire in the longer term since working with the line ministries during operations of the mine will be the more difficult for having excluded these ministries during the negotiations.

²⁷ In many countries, a typical rivalry is between the Ministry of Mines and the Ministry of Environment.

²⁸ Back room negotiations with the executive’s office which by-pass involvement of the government specialist ministries is an unfortunate practice in many African countries.

The Case of Ecuador:
Government Competencies in Negotiations

The government negotiations team was highly competent, professional, and responsive to the needs of the negotiations, within the mandate conferred upon them by senior management of the government. The negotiations, especially the economic and financial aspects, benefitted immensely from the involvement of senior specialists from the Ecuador oil sector. On other technical aspects where the government team was less experienced assistance expertise was solicited and obtained from Chile. By the end of the negotiations the government team had an excellent understanding of the technical, financial, and economic issues in the mining investment agreement.

The Ministry of Non Renewable Resources was the lead government entity. However, a steering committee was formed to advise and provide guidance. In particular, the Ministry of Strategic Sectors and the Department of Taxation under the Ministry of Finance were particularly active in the negotiations. Behind the scenes, senior advisors at the President's Office were also involved and the final terms and conditions were approved by President Correa. This organizational arrangement worked reasonably well to produce government decisions in a timely manner, even though some delays occurred as the nuances of the mining investment agreement were explained by the government negotiations team to the senior political leadership. The Ministry of Non Renewable Resources was helpful to intervene with the ministries of energy and transport relative to ensuring power supply to the mine and transportation (including a dedicated mineral port) infrastructure.

Though not related to the Ecuacorrientes contract, it is a credit to the government that they listened and took into account the concerns of the shareholders and financial institutions of Kinross related to the high rates of taxation and the excess profits tax. As a result, the government is now considering revisions to the legislation to improve the financial conditions of the Kinross "Fruta del Norte" gold project.

10. Political Dimensions: National, Local, Regional, International

Negotiations of a mining investment agreement, especially in countries where the investment is large and will have a major impact on the national or provincial economies, will attract much political attention. Both the company and the government should evaluate the overall political context in which the investment will take place. This evaluation should take place on the national, sub-national and local levels in the country. Also, there could be important regional and/or international political dynamics in play which should be evaluated. This will help the government and company negotiating teams to better understand which issue means the most to whom and thereby helping to create approaches in the MIA which will address these concerns.

The constitution of most countries stipulates that mineral resources are the property of the nation and managed on behalf of the nation by the central government. This creates an inherent conflict

in the mandate of the central government to manage the resources for the entire nation and the sub-national jurisdiction (province, state, and municipality) where the resource is exploited and which bears a disproportionate share of the disturbances such exploitation occasions relative to the benefit streams it receives. How do the government and the company manage these relationships between the central and sub-national governing bodies?

For instance, in many countries in Latin America indigenous peoples sometimes vigorously oppose granting exploration or exploitation licenses by the central government without adequate consultation or consideration of local political issues and processes. Politicians or other leaders at the local level sometimes make a *cause celebre* about opposing anything from the central government. In the USA, for instance, politicians in western states, where much of the coal and oil exploitation takes place, make a regular habit of berating Washington for decisions on energy and mining matters. In Iraq, decisions and policies of the central government relative to oil exploitation are often over-shadowed or super ceded by decisions at the local provincial level, for instance in Kurdistan. It is neither the company's prerogative nor in its best interest to insert itself in host country politics. But, determining which jurisdictional level makes decisions on key issues, and how such decisions are made, is a real conundrum for companies. Oftentimes, clear and binding legislation and regulations are lacking or incomplete and the vacuum of guidance thus created can cause needless frustrations and animosities. The political context is sometimes further complicated by regional political issues²⁹, by international trade treaties³⁰ and/or free trade zones³¹, standards and trends³², or involvement of official international financial

²⁹ Pipelines, access to water and power, rail and road evacuation routes, trade relations, demarcation of land or offshore resource zones and boundaries are just a few of the issues which generally require some level of regional cooperation. A good example in Latin America which has been resolved successfully is the treaty to govern the Pasqua de Lama copper-gold deposit on the Argentina-Chile border.

³⁰ General Agreement on Trade and Tariffs (GATT) and World Trade Organization (WTO). See GATT Article XX (General Exemptions), paragraph "g", relating to the conservation of exhaustible natural resources.

³¹ MERCOSUR in Latin America; NAFTA in North America

³² International standards are too numerous to cite. One of the most important is the adoption of international financial reporting standards (IRFS) in many countries. There are numerous United Nations, OECD, and international standards (EITI) for many issues dealing with indigenous peoples, human rights, trade liberalization, health and safety, labor relations, and many others.

institutions,³³ such as the World Bank, Inter-American Development Bank, the International Monetary Fund, and others.

This political context at all levels can be assessed prior to negotiations by the company through a “political-economy assessment” (PEA) of the host country. Similarly, it is useful for the government to undertake an assessment of company internal political and commercial conditions, include analysis of objectives of shareholders (especially dominant ones), commercial imperatives, strategic options, and financial constraints. Both studies could be conducted prior to and during the negotiations to map the government’s and the company’s strategy and objectives, assess the impacts that these might have on the project, suggest how and what to propose as alternatives to satisfy the objectives of the other side, and, ultimately, to determine the “walk away” positions of both parties.

Any study should focus on themes common to both the company and government. For instance, the study should identify: (i) the key issues and bottlenecks; (ii) the main players and their core concerns; (iii) the influence these players could have on the issues and bottlenecks as well as on other key players; (iv) the countervailing forces, balances and influences among the players on key issues; and, (v) how the company and government could interact with the key players to influence their opinions.

For the first point, a simple matrix can be useful to identify key issues by their level of importance to the company (vertical scale, low - medium – high) with the assumed level of difficulty to achieve positive outcome on the key issue (horizontal scale, easy – medium – hard – extremely hard). This analysis will be useful to the company negotiations team to focus on issues where results can be achieved of importance, rather than waste time on other issues which either cannot be changed or which are of minimal importance. Similarly, the same matrix can be constructed by the government team, though obviously with different levels of importance and difficulty attached to each issue.

³³ These quasi-diplomatic institutions are frequently the “whipping boys” for everything that is wrong with everything. In terms of the extractive industries, even though a small proportion of their overall lines of business and responsibilities, the institutions frequently define “best practice”, as for instance the adoption by many countries and companies of the environmental standards of the International Finance Corporation, an affiliate of the World Bank.

The key players on the government side should be identified, including individual political figures, ministries (or ministers) and government departments, civic and trade associations. On the company side key players may include the senior management, dominant shareholders or financial backers, the company work force and key vendors and suppliers, the embassy of the home country, and the local mining or trade association. The studies will assess:

- the strength of each of the players;
- their core issues;
- their capabilities to influence the negotiations on one or more of the core issues;
- what motivations and internal propensities to promote a core issue the player may have;
- what alliances may be formed amongst key players around certain issues; and,
- what incentives could be effective to change the position of a player.

For instance, the primary players in a typical negotiation are the Ministry of Mines, the Ministry of Finance, and the Chief Executive's office. These ministries will likely not consider gender equality in the hiring practices of the company a core issue. For the Ministry of Women's Affairs, however, gender equality is presumably a core concern. Yet, since this ministry is a secondary player in the negotiations it will not be able to prevail on this issue. However, players need not act alone; they may form alliances with other players on a common cause or key issue. In the example above, the Ministry of Women's Affairs may be the junior ministry in the negotiations but if gender equality is a hot political issue, if female voters in the electorate are significant, or if alliances can be built with women's associations on this issue then the capability of the Ministry of Women's Affairs to affect a positive outcome on this particular issue is significantly enhanced. For the company, key players are oftentimes large shareholders, financial institutions, and stock market analysts and commentators. An assessment of the internal political dynamics of the company must include the constraints imposed on the company management by these key players. For instance, these key players could react negatively to financial or tax provisions in the MIA which are deemed too favorable to the government, even

though the company management may have agreed to them in principle in order to get the deal through.³⁴

Understanding the countervailing and balancing forces at work in the government and the company is important. For instance, non-government organizations and groups of local activists frequently object to development of large mining and infrastructure projects on environmental or social grounds. But, within the local community there could be groups with a different point of view which could serve as a balance to the views of the activists groups. A political – economic assessment should:

- try to map the balance of opinions and forces on critical issues within the local community, provide guidance to the negotiations team,
- indicate how the company may interact with key players to influence their opinions on the key issues, and
- assess the likelihood of success in changing opinions and/or behavior.

Though companies are typically disciplined and tight lipped about internal differences of opinion these can and do occur. If the government can detect a major schism or disagreement within the company, or home country or international pressures which are at variance with the official company position, it may use this information to develop an approach to its advantage. For instance, the Extractive Industries Transparency Initiative (EITI) has been used by some governments to force greater disclosure of taxes and revenues paid by companies operating in the country. The EITI is a voluntary initiative but it has served as inspiration for the Dodd – Frank Act which has recently mandated fuller disclosure of financial payments made to governments for companies listed on stock markets in the USA.³⁵

³⁴ This happened in the Kinross negotiations for the Fruta del Norte gold deposit in Ecuador. The company management had agreed in principle to the government's position relative to the excess profits tax (mandated by the legislation), the sliding scale royalties, and the split of "beneficios" with the government. However, when details of the deal were disclosed the stock market reacted negatively and downgraded the price of Kinross stock. The company management was obliged to raise the issue again with the government. As of this writing, it appears that the Ecuador government has understood the financial realities facing the company and is willing to reach an accommodation on some of these issues.

³⁵ The European Union will adopt similar reporting requirements in the near future.

The Case of Ecuador:
Political – Economic Considerations

Ecuacorrientes did not conduct a formal political – economic assessment in Ecuador. To the best of the author’s knowledge, the government did not conduct a formal assessment of the internal political dynamics of the company. However, this is not to say that the politics in back of the government’s positions were not discussed by the company. Likewise, it is presumed that the government would take into account what is known of the internal political dynamics in the company, particularly the two principal shareholders.

In the deliberations on the political – economy in Ecuador, the company was acutely aware of the difficulties the Correa government faced with local NGO and indigenous peoples groups in the area who opposed the planned mining operations. Understanding these political dimensions made it easier for the company to accept the concept of an advanced royalty. By Ecuador law, 60% of mineral royalties are passed through the central government to local governments and/or local indigenous peoples resident in the zone where operations are to take place. The government explained that a payment in advance of part of the royalties would help to demonstrate quickly the benefits of the project and build support in the local community.

The government perhaps understood the internal political and commercial dynamics of the shareholders. One of the motivations for the Mirador project of Tongling Non Ferrous Metals was the prospect of a secure source of concentrate feed for its Chinese smelters. As well, the government had extensive dealings with Chinese companies in the oil sector and was the recipient of large amounts of Chinese loans and financing on attractive terms. China is one of the few sources of off-shore funding for the Ecuador government because the country defaulted on previous loans in 2008. The government would understand that granting access to Chinese companies to Ecuador natural resources was a *quid pro quo* for the financing extended by China to the government.

Early in the negotiations (December 2010) the company negotiating team constructed a matrix of key issues, ranked by their importance to the company and the likelihood of achieving satisfaction from the government. The table reproduced below is a ranking of the issues from the company’s point of view at the beginning of the negotiations. By the end of the negotiations a reasonably successful outcome (at least an outcome that was tolerable) from the company’s point of view had been achieved on most of the issues. Where a satisfactory outcome had not been achieved the company nonetheless decided to take the risk and accept the government’s position. This was the case for international arbitration. The MIA specified international arbitration at the Chamber of Commerce in Chile (which was good for the company) for ever issue except tax and caducity, which was not so good for the company.

Matrix of Importance and Satisfaction on Selected Issues

Very important	- Arbitration - Change control	- Treaty with China - Tax stability - Production code	- Arbitration of tax and caducity - Fines - Performance bond - Escrow accounts	- 50%-50% rule
Medium Importance	- Contract term - Pol risk insurance - Extension of production - Modification - Force Majeure - Publication of contract - Accounting regulations - Operational issues	- Economic stability - Legal stability - Supervision by authorities - Social issues - Anticipated royalties - Streamline procedures	- Environmental liabilities - Termination - Suspension and compensation - Expropriation	
Low importance	- Confidentiality - Bank accounts			
	Easy	Medium	Hard	Very hard

11. Communications Strategy and Information Disclosure

Managing the information flows during negotiations and over the life of the project is essential. Bad, inaccurate, conflicting, incomplete and/or leaked information can produce needless misunderstandings and conflicts between the key constituencies: the company, government, regional and local leaders, shareholders and financial institutions, labor force, embassies and foreign governments and the local community. During negotiations and mining operations, the lack of an effective communications strategy can erode confidence and possibly lead to a break down in discussions or suspension of operations. It is of vital interest to both the government and the company that all constituencies are informed with complete and accurate information on a timely basis.

While the communications strategy during negotiations and the life of the project is properly viewed as a joint company-government responsibility, in practice the lead for disclosure of information, especially during negotiations, is the government. In view of the ramifications that the proposed investment will likely have on internal country politics this is perhaps the best option. Generally, the government entity leading the negotiations (most often the Ministry of Mines; also, possibly, the Ministry of Finance or Office of the Chief Executive) should take the primary responsibility for developing and implementing the communications strategy. A committee could be formed comprised of other involved government departments to advise the principal government entity on the development and implementation of the communications strategy.

The government communications strategy during negotiations and continuing through operations should include the following elements:

- Main messages: why the mine is important to the country and what the government is doing to minimize risk and maximize benefits;
- What types of information and level of detail should be disclosed and/or not disclosed?
- Who provides inputs for the messages and when do they provide it; various government departments, the company, and other involved stakeholders;

- Target audience and public: where and for whom is the communication message destined; should the message or delivery method be modified in view of the target audience?
- How will the messages be delivered: press statements and media reports, conferences and seminars, webpages, audio visual presentations, printed media?
- Timetable for delivery of messages during the negotiations on a continuous basis;
- Who is to take the lead to implement the strategy, make the public statements and disclosures?
- Monitoring and evaluation of the effectiveness of the communications strategy; conduct a baseline survey prior to negotiations on attitudes and opinions; follow up on the survey to determine whether the communications strategy has been effective in informing the public and target audience.

The company should develop its own communications strategy during negotiations and operations. As noted, during negotiations it is advisable that the government take the lead in disclosure and information about the progress of the negotiations. However, the company does have a duty to inform its shareholders, financial institutions and general public in its home country of its operations. The nature of the information to be disclosed and the level of detail are oftentimes governed by regulations in the home country or, more frequently, the rules and regulations of the stock exchange or financial market if the company is a listed entity. Clearly, the company should comply with the disclosure requirements in its home country as well as the host country³⁶. In practice, unless the negotiations for a mining investment agreement are particularly high profile or long lasting the company may provide a summary statement of the salient provisions of the agreement after it has been initialed. It is also becoming more of a practice to publish the mining investment agreements once they have been signed. Company proprietary and confidential information in the contracts is generally quite limited and can be easily expunged from the publicly released copy of the agreement.

During operations, however, the company should be more vigorous in releasing information of the operations and the benefits it is bringing to the country and local communities. The communications strategy would have the same essential elements as outlined above. However, it

³⁶ This is particularly the case with financial payments and taxes made to foreign governments which are now subject to stringent disclosure requirements of USA and (soon) European Union legislation.

is also important that the strategy rely on information and feedback from relevant target audiences, especially the local community and civic organizations. This will help the company identify issues and points of contention early and help in devising mitigation measures before the issue takes on a life of its own. It should be recognized, however, that whatever the company does in terms of disclosure and communications it will never be enough or entirely satisfactory to some.

The Case of Ecuador
Communications Strategies

Given the importance of a well-executed communications strategy both during the negotiations and during the operations of the project it is surprising that neither the Ecuador government nor the company developed a complete and effective communications strategy.

During negotiations, the government made it quite clear that the company and the members of the negotiations team were not to discuss publicly the progress of the negotiations or issue press or other media releases. The company scrupulously respected the government's wishes in this respect. Also, because the principal shareholders were not public companies no reporting according to the rules of a stock exchange was necessary. The government was parsimonious in releasing information on the negotiations but public announcements were made from time to time, especially when the Minister of Non Renewable Resources or other senior government officials visited the province where the project was located.

It is to be lamented that ECSA has not developed a more elaborate and effective communications strategy which is especially important now that construction and operations of the mine will begin. Controversy over the project continues and better communications could help to alleviate fears of the indigenous communities in the area. In spite of the best efforts of the Ecuadorean vice president for public affairs of the company, ECSA has not issued many press announcements, updated its website, or taken other elementary steps to improve communications on the national or provincial level. External communications of Chinese state owned enterprises is not a strong suit. Yet, lack of proper communications strategy could eventually cause the company great harm.

12. Infrastructure Issues: Power, Transport, Water

The mining investment agreement frequently will deal with access to, and/or development and operations of power, transport, and water infrastructure required by the mine. This can be a complicated issue and the following section only touches upon some of the main considerations.

If the company is to build the infrastructure then:

- ✓ How are the capital and operating costs to be taken into account in the economic and financial analysis of the project? Are they to be imputed onto the project itself or onto a separate, free standing commercial entity owned by the company? How to account for the capital and operating costs if the infrastructure is built and operated by a sub-contractor?
- ✓ Who owns the infrastructure? What is the relationship to the State monopoly suppliers, if any? Is the infrastructure to be turned over to the State monopoly? If so, how are the costs to be attributed and what are the financial consequences to the project?
- ✓ Who operates the infrastructure, the company or State? Under what set of standards, guidelines and practices? What are the guarantees the company requires in terms of service and priority of use? Are there to be user charges and, if so, how are these calculated? What are the liabilities of the government and the company in the event of an accident or contract default to supply the required service on a timely, cost efficient basis?
- ✓ Is the infrastructure included in the definition of “project area”? If it is included, then does it benefit from same guarantees and obligations under the mining investment agreement? If the infrastructure is not considered part of the project area how will it benefit from the mining investment agreement?

If the government provides some of the infrastructure then a number of considerations need to be discussed in the negotiations.

- ✓ Can the government satisfy the company’s requirements for timely delivery of service on a cost efficient basis? What guarantees can the government provide? What are the penalties in the case of default?
- ✓ Which government entity operates the infrastructure? A line ministry, parastatal or some other entity?
- ✓ How will the user charges be calculated? Will the company benefit from a reduced unit rate, for instance for power or water? Is wear and tear to be charged to the company for use of public highways? If so, how are these charges to be calculated?

- ✓ If the government builds the infrastructure especially for the company then how is it to recoup its investment cost and over what time period? Is use of the infrastructure to be shared with other users? If so, what priorities does the company have?

Some mining investment agreements contemplate “public-private” partnerships to supply necessary infrastructure. These forms of arrangements generally entail formal agreements between the government and private company(ies) (sometimes not the mining company) and financial institutions to define the terms and conditions pertaining to the construction and operation of the infrastructure. Some considerations include:

- ✓ What are the financing arrangements and guarantees? Does the project guarantee financing or the mining company?
- ✓ What are the responsibilities of the government and the private parties? Have risk assessments and default possibilities been sufficiently taken into account? What are completion guarantees and operating guarantees?
- ✓ In addition to the mining investment agreement, what separate agreements are necessary, such as usage, tolling charges, take or pay contracts?
- ✓ When can the arrangements be put into place? How to sequence development tasks so the infrastructure is ready on time? Are there permit or other government licensing issues to consider?
- ✓ When the mine ceases operations what becomes of the infrastructure? Who bears the cost and liabilities for eventual shut down, dis-mantling, clean-up and rehabilitation charges?

The Case of Ecuador
Infrastructure Issues

Issues related to infrastructure were not part of the core issues discussed during the negotiations or included in the mining investment agreement. However, these issues, particularly supply of electricity from the State monopoly energy company, road transport and maintenance of infrastructure, and construction/operation of a dedicated port facility were critical elements of the company’s project. The Ministry of Non Renewable Resources and the government negotiations team understood the importance of these issues to the success of the project and were very helpful in arranging interactions with the relevant government ministries.

13. Professional Advisory Services to Governments for Negotiations

Should governments receive technical assistance from outside to help in the negotiations of mining investment agreements? This question is currently under consideration by a number of national and international donor agencies. For instance, the Vale Center for Sustainable Development at Columbia University (together with the Humboldt-Viadrina School of Governance (Berlin, Germany)) has convened three seminars on this topic since October, 2010.³⁷ The seminars brought together eminent experts from academia, law firms, extractive industry companies, trade associations, NGOs, and representatives of donor organizations. The aim of the workshops and the considerations on providing support to the negotiations process is to help countries reach a better bargain for extractive industry projects, ensure that companies get what they bargained for, limit the potential for disputes, and to provide some sort of mechanism to resolve disputes if this should (as they inevitably will) occur. Some consider that providing assistance for negotiations of mining (or oil/gas) agreements is a natural extension and should part of the mandate of the Extractive Industries Transparency Initiative or that a separate multi-donor facility modeled on the EITI should be set-up. We examine below some of the questions and issues that should be considered in the context of providing technical assistance to governments for negotiations of mining investment agreements.

- *Do governments need assistance from outside experts to help in the negotiations of mining investment agreements?* YES, most definitely. The asymmetries between the company's and the government's negotiating teams have been noted previously in this paper. Government negotiations teams rarely have in-house experts on all of the skills (finance, accounting, economic modeling, geology and engineering) necessary for negotiations of these agreements. But, oftentimes there are obstacles to recruiting outsiders to help in the negotiations. This observations leads to the second question.

³⁷ For more information on the Vale Center work on negotiations see: <http://www.vcc.columbia.edu/content/contract-negotiation-support-developing-host-governments>
The website contains information on the various seminars conducted as well as background and other papers of interest to the topic.

- *Do governments really want outside expertise to help in the negotiations?* The response to this question is mixed. Some governments do recognize this need and are willing to use government funds to pay for the outside expertise. In Botswana, the government has for years recruited and paid top quality London law firms to assist in negotiations. As noted above, the government of Ecuador recruited experts from Chile and the USA to provide certain skills which it lacked internally. These are but two examples but there are others which could be cited where governments have used public funds to bring in outside experts for negotiations.

However, there are other cases where governments have not brought, or will not bring, outside experts for a number of reasons. Perhaps they do not have the funds and are reluctant to approach donors to fund or solicit *pro bono* advice. It may be difficult for the senior members of government to identify the gaps in the skills within the government negotiations team and the members of the negotiations team cannot be counted upon to admit where skills are deficient. If the government has not used outside experts before (or even if they have) they may not know how to identify the experts or how to ensure proper quality control. Is advice from one source enough or should governments solicit second opinions, with consequences on the cost of outside experts? Are there ministerial rivalries which get in the way of recruiting outside support, e.g., a critical ministry not be willing to admit that it needs outside assistance. Finally, the government may be concerned with confidentiality and be reluctant to have outside eyes looking in on backroom negotiations.³⁸

- *Who pays for the advice (if wanted by the government)?* Governments will often approach international organizations, such as the World Bank, Regional Development Banks (such as the Africa Legal Support Facility of the African Development Bank), United Nations Development Programme, International Monetary Fund, European Commission, and others) to pay for outside (mostly legal) expertise. National

³⁸ This implies the possibility of corrupt practices, which is a definite risk in any negotiations. However, governments may have other concerns such as national security, economic and financial planning, or other legitimate reason to limit the access by outside advisors to confidential government information.

governments may also provide assistance as, for instance, the Norwegian Oil for Development program through NORAD or the US Department of Defense advice to the government of Afghanistan on the tender and negotiations of various mining contracts. Law firms may be in a position on a selected basis to provide attorneys and other specialists on a *pro bono* basis, but this has limitations and oftentimes a commercial motive in the background. Professional associations (such as the Rocky Mountain Mining Law Foundation (www.rmmlf.org) or the International Bar Association (www.ibanet.org), will probably not provide legal advice directly but could provide references to qualified legal specialists (but probably not other specialists). Governments should recognize that law firms need to make money by charging fees for their services and professional associations are not in the business of providing project or negotiations specific advice. Other potential sources of support include non-government organizations such as Revenue Watch Institute (www.revenuewatch.org) or the International Senior Lawyers Project (www.islp.org). Note that some of the sources above provide funding primarily for legal advice; we have noted previously the need to fund a broader range of outside experts in other relevant disciplines. A final source of funding for advisory services to governments should be mentioned: private companies. The companies seeking to negotiate an agreement may be happy to provide the funds necessary for the government to acquire expertise. This can be done in a transparent way, even though the accusation of biased and tainted advice will also be present. In Canada, many natural resource companies have funded technical expertise to First Nations (indigenous peoples) to negotiate Benefits and Impacts Agreements. The company agrees to pay market rates for the expertise and only intervenes with preparation of terms of reference, required qualifications and experience of the consultant, and the procedure and criteria used to select the consultant.³⁹ For the company, the principal advantages of this approach is that it: i) provides good and well qualified advice to the First Nation; and, ii) accelerates the negotiations process since other sources of funding do not need to be accessed.

³⁹ In effect, this is nearly identical (but less bureaucratic) to World Bank procedures for the selection of consultants.

- *How much to pay?* The answer is dependent in some measure on the first question. Most international agencies, national governments, and non-government associations impose ceilings on the daily rates paid to legal and other experts. These ceilings are, in most cases, well below the prevailing market rates for specialists in the skills categories needed with adequate experience. The divergence in rates of the international agencies for key legal, finance, and accounting specialists can be substantial: US\$ 1,900 per day for a senior attorney who could charge at least US\$ 3,000 – 5,000 per day to a private sector client. National governments and NGOs similarly do not pay prevailing market rates for most specialty services. While prudential management of the funds from public and tax sources which have been entrusted to these donors is to be commended, the result for the recipient government is to get what was paid for. In some cases, but not all, the consultants hired are junior and relatively inexperienced and may not give the government the best possible advice.⁴⁰ Given the amounts of the investments, taxes and royalties, and other financial consequences at risk it is difficult to understand the “penny-wise, dollar-stupid” policies of many sources of funding. To complicate matters further, when donors fund the outside experts the loyalties of the expert may be implicitly or explicitly compromised. In the case of USAID consultants supplied to a government, for instance, there is a dual reporting relationship to the local government and the in-country USAID office. Similarly, international funding sources will rarely adopt a complete “hands-off” posture with respect to consultants funded to support negotiations. For the World Bank, for instance, while the project is ostensibly executed by the country recipient, in reality a Bank staff member will oversee the execution of the project and ensure compliance with various Bank regulations. These limitations are not necessarily and not universally a bad thing. Having proper oversight from the donor organization can help prevent abuse and defalcation of the funds as well as giving some comfort on quality control issues. Finally, private companies generally pay market rates for any advisory services for negotiations provided to governments. It would be counter-productive to pay

⁴⁰ There are clearly exceptions to this statement. First rate and top quality consultants frequently do participate in negotiations, even though they may be paid lower than market. There may be many personal, commercial or social reasons for this.

lower than market rates for the government consultants and market rates for its own consultants during the negotiations.

- *Will the outside advice really affect for the better the eventual outcome of the negotiations?* This depends, obviously, on one's definition of "for the better". Even the most hard-nosed company negotiator understands that if the government side feels it has been "steam-rolled" then the agreement will not be signed or, if it is, will be short-lived. In order to prevent this from happening most companies would be very supportive of the government receiving the best possible advice. This is a practical approach for concluding the negotiations within a reasonable timeframe. Additionally, if the funding for the government's technical assistance during the negotiations comes from an international donor such as the World Bank, a large national government or a reputable and well known international NGO, there is at least the implied "seal of good practice". The international and some national donors take great pains to distance themselves from any notion of approving or dis-approving of a contract due to the significant reputational risks (discussed in more detail below). However, from the company point of view, having the involvement of outside experts can not only facilitate coming to terms but also at least the patina of a fair deal.

There is another outcome of outside involvement in the negotiations which, depending again on one's point of view, may be positive or negative. From the corrupt government's⁴¹ point of view having outsiders at the negotiations table or even advising from a distance will complicate, but not render impossible, shady dealings. This would be a negative outcome in terms of the ability government or government officials to extort extra-legal payments from the company. On the other hand, from the company's point of view and that also of international, national or NGO donors, having an independent presence at the negotiations table might prevent shady dealings or corrupt practices.

- *What are the reputational and other risks to the donor organization if it funds technical assistance for negotiations?* This is a pertinent question since no donor wants to be associated with a deal gone bad. Mining agreements obsolesce with the passage of time

⁴¹ This reference is to officials and to the leaders of the government.

or changes to key variables, such as the commodity price, which prevailed at the time of the negotiations. Thus, an agreement which is deemed “fair” today may not be “fair” in future. It is impossible to guess or know the outcome of the negotiations over the long term at the time the decision is made to fund technical assistance. Because of the risk of the unknown many donors will not provide or fund directly technical assistance to governments during negotiations. There are, of course, ways around this. Sometimes, donors will support generic training or capacity building in “negotiations skills” which can be highly useful to the government without directly involving donor support to the negotiations of a specific project. The World Bank, for instance, eschews direct funding of technical assistance for mining investment agreements⁴² but provides significant support for generic capacity building in negotiations skills. There is also the risk that donor involvement could be used by the government (or the company) to lend an air of legitimacy to a process that is deeply flawed and highly political from the beginning. For instance, Belgium, the United Kingdom⁴³, and the Carter Center (USA) either provided or proposed providing technical assistance to the Democratic Republic of Congo in 2008 for the revisitation (review) of mining contracts. The advice of the experts and the good offices of the Carter Center were abused when the government claimed to follow the recommended advice but in reality did not.

- ***Are there alternatives to direct support by donors and others for assistance during negotiations?***

There could be several alternatives to providing direct assistance to governments to recruit outside specialists to assist in negotiations. To be clear, the two alternatives discussed below focus on *ex post* review of agreements, not *ex ante* actions to help prepare for or to help negotiate the mining investment agreements. There can be no substitute for the best possible advice on all relevant topics – from inside or outside – to governments and companies in the negotiation of these important agreements. But, if this advice has not been engaged, or even if it has, there are two alternatives which could

⁴² This is only partly because of the reputational risk. The other reason is a fundamental conflict of interest since the Bank’s shareholders are the countries are both the recipient of the investment and the home countries of the investing company.

⁴³ The UK government proposed technical assistance of outside experts but was turned down, perhaps because of the watchful eye issue.

serve to “validate” the contracts as negotiated, at least in their broad contours and consequences.

- ✓ *Fairness Opinion.* The government and the company would jointly select a panel of 3-5 internationally recognized experts before the negotiations begin to review the final draft contract (e.g., just before signature) which review and findings would be published in the local media several weeks prior to signature. The review of the international experts would be related on two aspects. The first is the conformity to international best legal practice for this type of mining agreement, given variables such as size of project, type of mineral commodity, anticipated investment requirements, and other salient variables.⁴⁴ The objective of the legal analysis of the mining investment agreement will be to detect “fatal flaws” or gross divergences from international practice, not to nit-pick details or to renegotiate the deal. Examples of these fatal flaws could be an excessive length of the mining agreement (e.g., in perpetuity) or exclusive rights to a monster deposit which could not be reasonably developed by one company within a reasonable timeframe. The second aspect is the fundamental “fairness” of the deal for both parties, given assumptions about commodity price, discount rate (taking into account not only industry standards but also country risk factors), operating costs, and other technical and operating factors. The review team would not necessarily reconstruct or question the economic and financial models used to negotiate the agreement. Rather, the review team would be expected to compare results of the project analysis to other projects recently presented to the market. This review would include some valuation of the deposit in question, using standard industry mineral deposit evaluation techniques consistent with International Financial Reporting Regulations.⁴⁵ Also, the review team would assess the tax package and projected revenues stream to the government and the company in order

⁴⁴ Recognize that not all mining projects are equal. A mining investment agreement for a small or medium sized gold project will be different from an agreement for a large copper or iron ore mine. However, there are many common principles and issues to be considered no matter the specifics of the project so the iterations and permutations of the agreement contract is, in reality, quite limited.

⁴⁵ The IFRS regulations with respect to the valuation of mineral properties is presently under review. Existing practice is to use a three tier approach: comparable sales price to other mineral deposits, DCF-ROI evaluation of projected cash flows, and company historical investment information.

to deliver an advisory opinion as to whether the split in benefits streams to both parties is “equitable” or “fair”.

- ✓ *Validation of Agreements According to International Standards.* An idea which merits further consideration and discussion by the professional international community is validation and quality control for mining investment agreements. At present, there is no international body which provides an opinion on whether mining agreements conform broadly or in detail to international standards. In part, this is due to the fact that there are no international standards when it comes to such agreements. Perhaps the closest approximation is the Model Mining Development Agreement Project (MMDA) discussed above, but this project was a collection of clauses and language used in a sample of worldwide contracts. The MMDA project specifically abstains from any notion of setting international standards. The other reason validation of these agreements is difficult is that, to date, no internationally recognized authority has expressed an interest in such validation. It has been suggested, for instance, that the World Bank or United Nations or possibly the IMF should review and validate these contracts. So far, none of these organizations have shown any inclination to seriously consider the idea. Moreover, validation by these organizations of the contracts would not be the best solution for companies, governments or the validating body due to bureaucratic delays and reputational risk.

Any alternative which could merit consideration and discussion by the professional international community a recognized mechanism to: 1) establish the standards and criteria; and, 2) actually under the review and validation of the contract. At present, there are four models that provide some inspiration to accomplish one or both of these tasks.

1. First, industry self-regulation. An industry supported body, such as the International Council for Mining and Metals (ICMM), a group which is supported by some of the largest mining countries in the world, could undertake to produce a code of standards and practice with respect to mining investment agreements. Company members of the ICMM would agree to abide by the standards and practices and set the example for other (non-member) companies to follow. Companies and governments could

- claim that the contracts are compliant with ICMM standards and this compliance could be verified by the public and other companies and companies on the basis of the published contracts.⁴⁶
2. Second, establishment of standards by an independent professional body, generally supported by private industry. The accounting profession has for years used standards and practices as determined by (industry supported) professional bodies. Examples are the Financial Accounting Standards Board (FASB - USA) and International Accounting Standards Board (IASB – Europe). Other nations have similar accounting and financial management standards which are devised by professional associations with the support of the industry. In many instances, the standards are endorsed by the securities and exchange commission of the country in question, a stock exchange, a major financial market or other government regulatory body. These standards are then used by outside auditors of the company to examine and certify the financial accounts of the company.
 3. Another variation is to combine the establishment of standards by independent professional bodies together with the accreditation by these bodies of practitioners in the field. An example is accreditation of institutions of higher education in the USA and other countries. Professional bodies coordinated by accreditation commissions of member institutions set standards by which the quality of services provided by member institutions may be judged. In this process, which is similar to peer review, if the standards are met the institution is granted “accredited” status.⁴⁷ Similarly, the Accreditation Council for Accountancy and Taxation, sets the standards and is responsible for accrediting accounting and tax practitioners in the USA. For experts in mine development agreements it may be possible to adopt this accreditation model through a professional body of specialists, such as the International Bar Association,

⁴⁶ This type of self-policing will only work if the contracts are published, which should be the first standard to be complied with. As previously noted, very few mining investment agreements contain information which is prejudicial to the company’s commercial interests. And, any information in the agreement which is deemed by consensus to be company (or government) confidential can be redacted.

⁴⁷ In the USA accreditation of higher education is carried out by peer groups of universities or the private sector, under the auspices of the US Secretary of Education which publishes a list of “recognized accrediting agencies”. In other countries and through international agencies the government is more actively involved in accreditation. For instance, in Europe under the auspices of UNESCO the International Council on Educational Credential Evaluation (ICECE) performs these services.

Rocky Mountain Mineral Law Foundation or similar group. Governments and companies would then be able to identify and engage “accredited” legal specialists for assistance for mine investment agreement negotiations.

The bodies referenced above would accredit only legal practitioners. There is no “one-stop” accrediting body for all of the professional specialists needed in negotiations. At the present time it would be possible to identify the professional associations and accrediting agencies (if these exist) for the other skills necessary in negotiations, such as geology, engineering, accounting and finance, taxation, social and environmental, communications, and infrastructure. A useful service which could be provided by an international donor agency would be to make available to governments and companies a list of the accrediting agencies and professional associations for these specialties. Also, to the extent that a company or government were to engage a senior legal firm, investment bank or senior consulting firm to assist on a particular transaction or negotiations this firm would generally be responsible to recruit the various specialists required. For instance, this has frequently been the experience when a transactions advisor has been recruited to assist in the tender of a mineral property in various countries.⁴⁸

4. Fourth, a senior international body, preferably not affiliated with a government or international agency, could establish standards for mine investment agreements and validate or certify the conformity of the negotiated contract to the standards. Inspiration for this approach could be the standards and certifications done by the International Standards Organization (ISO) or various stock exchanges which also establish standards to which companies are obliged to conform in order to be listed on the exchange.⁴⁹

⁴⁸ An excellent description of the tender process is: Michael Stanley and Ekaterina Mikhaylova, “Mineral Resource Tenders and Mining Infrastructure Projects: Guiding Principles”, World Bank, 2011

⁴⁹ The difference with stock exchange and ISO is that the latter actually certifies conformance with the standards while the stock exchange will require the certification of the auditor or other registered professional.

**ANNEX A:
TAX PACKAGE: ECUADOR (Ecuacorrientes)**

Table Comparing Legal Requirements with “As Negotiated” Agreement

Tax	Law	Agreement	Comment
“Ajuste Soberano”	Constitution Art 408: Government receives no less benefits (“beneficios”) than the investor; so called “50-50 rule”	State: 52% ECSA: 48%	Definition of government benefits is only taxes; does not include value of social infrastructure, physical infrastructure or other benefits streams
Royalties	-At least 5% on NSR - Anticipated royalty as negotiated	- Sliding scale (6 – 8% on NSR) according to Cu price (USD 2.50 – 4.00) - USD 100 million	-Royalties on copper are high by international standards -Anticipated royalty payment proposed by ECSA in 3 installments
Income Tax (IR)	22 – 24%	same	Reduction of general income tax rate as per Production Code and separate investment agreement
Value Added Tax (IVA)	12% (not zero rated and not creditable)	same	Only the extractive industries are penalized in Ecuador from non reimbursement of IVA
Profits participation of the State	Art 93 of mining law: 12% of profits (“utilidades”) to local communities	same	Not negotiable;
Profit sharing employees	3% of profits to employees	Same	Not negotiable
Windfall profits tax	-70% of amounts over base price for Cu and Au -Base price adjusted monthly by US consumer price index	same	Highly punitive tax since it removes any upside potential. ECSA accepted this tax; but, Kinross did not; government is now re-considering how make this tax operative, perhaps delaying assessment until after payback of the investment
Tax on capital outflow transactions	2% tax on value of loans and other financial transactions with non-financial institutions outside of Ecuador	Benefit from some relief in Production Code and separate investment agreement	
Customs duties	0-35% on value of imported goods	Some relief provided in Production Code and separate investment agreement	
Other taxes	Various taxes, fees and imposts as provided in national or provincial laws	same	Most of these are minor

Ecuador is a high tax mining country. The effective tax rate for the royalties, value added taxes, income tax, profit sharing, windfall profits tax, “ajuste soberano”, and other taxes calculated using a copper price of USD 2.00 per pound and with the original 30,000 tonnes per day throughput capacity was as high as 73%. When a higher throughput of 60,000 tonnes per day is used and the copper price varies between USD 2.50 to 4.50 per pound the effective tax is between 52% and 57%.

There are several anomalies of the Ecuador mining tax regime when compared to international practice.

- First, the value added tax is not reimbursed for exported products for the extractive industries. This is not international practice which, as previously explained, reimburse the net of the credits and debits on the value added taxes paid by any company.
- Second, the “ajuste soberano” is mandated by the Ecuador constitution which states that the government shall receive no less “beneficios” than the investor from a mineral exploitation. Several considerations were pertinent during the negotiations.
 - ✓ What is meant by “no less?” The company proposed a 50.1% (State) 49.9% (company) split of the beneficios. The government initially countered with 55% - 45%. In the MIA, a split of 52% - 48% for the purposes of the “ajuste soberano” was agreed meaning, in effect, the government would receive no less than 52% but could receive more.
 - ✓ Another issue discussed was whether the ajuste soberano was calculated on a yearly basis or cumulatively over the life of the mine. The legislation was unclear on this issue. The government argued for a yearly calculation. The company suggested that a cumulative or “life of mine” calculation would be more correct. However it was quickly realized that the government would not wait until the mine was finished to receive any “ajuste soberano”. The MIA specifies a yearly calculation and payment of the ajuste soberano.
 - ✓ Another issue was whether the calculation of the “ajuste soberano” should be on a current or discounted basis. The negotiations team of the company argued that economic theory would hold that the time value of money should be taken into consideration and that the calculation should be discounted. The government was adamant that the calculation be on a “current” basis. The MIA specifies that the “ajuste soberano” be calculated on a current basis.
 - ✓ For the calculation of the “beneficios” only the following are taken into account: royalties, windfall profits tax, income tax, value added taxes, and mandatory profit sharing of the State. The company negotiations team argued, unsuccessfully, that this definition be expanded to include other benefits from the investment as, for instance, other taxes paid to local and municipal governments, employee social security taxes, and the value of social and physical infrastructure developed because of the project.

- Third, the “windfall profits tax”, mandated by the legislation, effectively deprives the investor of any upside potential from the investment. A 70% surcharge is levied on profits when the price of the principal commodity mined exceeds a certain threshold as agreed between the parties during the negotiations and noted in the mining investment agreement. In the case of Ecuacorrientes, USD 4.00 per pound was agreed as the threshold price for copper. The windfall profits tax did not affect the economic and financial model of the project since this same price was used throughout the mine life. In any event, the shareholders of Ecuacorrientes were not too concerned with the issue of upside potential since the parent companies are state owned and have other strategic objectives for the investment, such as securing access to concentrate feed. However, for other companies which are publicly quoted, mine gold, and whose shareholders are primarily interested in upside potential (such as Kinross) the windfall profits tax was a critical issue. The government has recognized the impact that the windfall profits tax has on the ability of companies to mobilize stock market funding and is considering modifications to the tax to soften its potential effects on potential project economics.
- Fourth, the State profit sharing of 12%, also mandated in the legislation, in effect increases the income tax from 22% - 25% to 34% - 37%. On top of this, employees receive an additional 3% share of profits, increasing the income tax to nearly 40%. There has been a tendency with many governments over the past ten years to reduce taxes on company profits in order to stimulate new investment and creation of jobs. While the government of Ecuador has also provided for a reduction (from 25% to 22%) in the income tax rate (generally applicable or for companies with separate investment agreements under the Production Code) the cumulative effect of the State and employee profit sharing is to increase taxes on income through the back door.
- Fifth, the base royalty of 5% of Net Smelter Return specified in the mining law is relatively high, even though many governments in recent years have been increasing royalty rates. However, the government argued for higher royalties, as much as 12%. Eventually, after much discussion, a sliding scale royalty linked to the copper price was agreed in the MIA: 8% of NSR when copper price was greater than USD 5.01 per pound; 7% when copper price was USD 4.01 – 5.00 per pound; and 6% when copper price was less than USD 4.00 per pound.
- Sixth, other taxes on operations (customs duties, financial transactions tax) or income (dividend withholding) can have a significant impact on the economic and financial results of the proposed mining investment. Some of these taxes and fees were reduced or waived in the mining investment agreement or the Production Code agreement (presently at this writing under negotiations).

The tax package in Ecuador was “hard wired” in the legislation which left very little to be discussed. The income tax, value added tax, and profits participation were specified in the law and could easily be changed. The “ajuste soberano”, the windfall profits tax and the royalties

were also specified in the law but definitions could be discussed. Since the parties agreed that the State should receive no less than 52% of the “beneficios” as defined in the “ajuste soberano” the task of the negotiators was to minimize the impact of royalties and the windfall profits tax so that these did not significantly increase the 52% in a single year. The floor price of the windfall profits tax was set at USD 4.00 per pound which provides some level of comfort to the company that the windfall profits tax will not be applied, at least under the base conditions outlined in the economic and financial model. The royalty of 6% will apply at prices lower than USD 4.00 per pound but the higher royalties (7% and 8%) would not apply using the price assumptions in the economic and financial model. A 6% royalty on NSR, while high, was considered by the company as a reasonable compromise. Based on the assumptions in the economic and financial model, the percentage of gross income the taxes comprising the “ajuste soberano” are on a yearly basis varies between 52.5% and 54%.

ANNEX B

MMDA 1.0

Model Mine Development Agreement
A Template for Negotiation and Drafting
April 4, 2011

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TENURE

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Insurance
Taxation

TAXATION - GENERAL

Income Tax

Deductions in the Computation of Company Income Tax

Value-Added Taxes and Project Activities

Property Taxes

Taxes on Expatriate Employees

Taxes on Non-Resident Contractors

Withholding Tax Obligations

Provisions Relating to Other Taxes and Levies

Local Government Taxes and Levies

Financing

Security Interest

Debt-Equity Ratio

Foreign Currency Remittance and Availability

Role of State in Financing

State Guarantees

Financial Records and Statements, Accounting Standards and Currencies

Payments and Exchange Rates

Financial Records and Financial Statements

RIGHTS AND OBLIGATIONS

Mutual Obligations

Information to Local Government

Applicability of IFC Performance Standards and Equator Principles

Parties' Commitment to Protecting Human Rights

Prevention of Corruption

Obligations of the Company

Obligations of the State

Other Applicable Norms

Understanding of the Parties

State Access to Project

Inspection of Books, Records and Information, Independent Audit

State Assurances and Obligations

Legislation to Approve Agreement

Tax Stabilization Clause

Fair and Economical Project Operation

Permits

Expatriates

Infrastructure

Availability of Existing Infrastructure

Access to Infrastructure

State Obligations Re: Local Governments and Landowners

Company Rights

Affiliated Company Transactions

Company Hiring Decisions

Security

Development Obligations
Use of Local Goods and Services
Local Community Development
Community Development Agreement
Relationship of This Agreement to Community Development Agreement
Local Business Development Plan
Community Health
Employment and Training of Local Citizens
Minimum Employment Levels
Investment in Skills of Local Work Force
Labor Training and Capacity Enhancement
Management Training and Capacity Enhancement
Labor Standards
Labor Standards
Health & Safety
Mining Closure/Post-Closure Obligations
Closure Plan and Closure Obligations
Guarantees for Closure Expenses
Post-Closure Monitoring
Rights of Citizens of the State
Company Grievance Mechanism
Forum for Claims and Disputes Involving Natural Citizens of the State
Obligations of Contractors and Subcontractors
Applicability of Obligations to Contractors and Their Subcontractors
Applicability of Obligations to Parent Company, and Affiliates
Assignment
Affiliated Company Assignment
Third Party Assignment
Capacity of Successors and Assigns
Release
No Assignment by State
Availability of Information
This Contract a Public Document
Certain Information Confidential
Force Majeure; Suspension of Operations for Market Conditions
Obligations of Party in Event of Force Majeure
Extension of Agreement
Negotiation in Event of Force Majeure
Suspension of Operations for Market Conditions
Cooperation, Dispute Resolution and Arbitration
Cooperation
Arbitration
Surrender and Termination
Surrender
Termination by the State
Termination on Certain Events

Termination on Breach
Termination by the Company
Retention of Assets on Surrender, Expiration or Termination by the State
Retention of Books and Records
Access following Expiration or Termination
Obligations Following Expiration, Surrender or Termination
Notices
General
Change of Address
Delivery Methods
Effective Time of Delivery
Applicable Law
Periodic Review
Modification and Review
Ancillary Provisions
Entire Agreement
Survival of Certain Provisions
Amendment
Severability
Limitations on Waiver
Indemnification by Company and by the State
Indemnification for Breach of Agreement
Indemnification of the State by Company
Conflicts of Interest
Governing Language
Further Acts
Duplicate Originals
Representations and Warranties
Good Faith

ANNEX C

ECUADOR CONTRATO DE EXPLOTACIÓN MINERA

Capitulos

1. De los antecedentes y declaraciones
2. Del Objeto, Plazo y Modificaciones
3. De los Derechos y Obligaciones de la Partes
4. Del Inicio de Ejecucion de Actrividades Mineras de Explotacion
5. De la Gestion Ambiental
6. De la Relacion con Las Comunidades
7. De las Garantias y Seguros
8. De lo Economico, Financiero y Tributario
9. Del Plan General y Planes Anuales de Trabajo e Inversiones
10. Del Cierre de Operaciones
11. De las Inspecciones, Control y Auditorias
12. De la Cesion y Transferencia de la Concesion Minera
13. De la Terminacion de Este Contrato y la Caducidad de la Concesion Minera
14. De la Solucion de Controversias
15. Disposiciones Generales

ANNEX D:

Ecuacorrientes Mirador Copper-Gold Mine Location

