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ECONOMIC AND SOCIAL DEVELOPMENT NEEDS
IN THE MINERAL SECTOR: FLOW OF
FINANCIAL RESOURCES, DEVELOPMENT
AND TRANSFER OF TECHNOLOGY TO
DEVELOP THE MINERAL RESOURCES OF
DEVELOPING COUNTRIES AND ECONOMIES
IN TRANSITION

Ways and means of facilitating the flow of financial resources
and the development and transfer of technology to develop the
mineral resources sector of developing countries and economies
in transition

Report of the Secretary-General

SUMMARY

The present report has been prepared in response to Economic and Social Council decision 1993/302. The report provides updated information to a report submitted to the Committee on Natural Resources at its first session (E/C.7/1993/9). Special attention has been focused on meeting the needs of economies in transition for reducing risk exposure and encouraging the flow of private foreign capital into these countries. An update on ways and means of further enhancing the flow of financial resources and transfer of technology is provided. Increasing importance has been placed on developing harmonious environmental standards world wide and on reorganizing appropriate structures to facilitate the long-term transition from closed to pro-private-sector investment, and open-market economics. Developing countries and economies in transition continue to benefit from an inflow of funding and technical

* E/C.7/1994/1.

expertise from the international private sector and from multilateral and bilateral aid programmes. This is a result of three main factors: (a) extremely strong equity markets that, when combined with local disincentives for new investment, have resulted in investment funds and expertise flowing out of some industrialized countries; (b) an increased comfort zone for investment in the developing countries and economies in transition by international mining, exploration and investment companies, owing to the development of more stable and transparent mining and investment codes and supportive administrative frameworks; and (c) the active promotion of individual countries through, inter alia, investment seminars and round-table conferences that enable companies to understand better the country and its risk factors and to develop working relationships with local companies and government officials to facilitate project work. Efforts have been made to undertake or upgrade geological surveys, make the existing geological data more accessible and train national staff in all skills required in mineral resource development.

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
INTRODUCTION	1 - 6	4
I. SPECIAL NEEDS OF ECONOMIES IN TRANSITION	7 - 16	5
A. Policy development	8	5
B. Development of appropriate legal and fiscal regimes	9	5
C. One-stop shopping	10	6
D. Implementation	11	6
E. Investment promotion and publicity	12	6
F. United Nations-sponsored activities	13 - 15	6
G. Regional, bilateral and multilateral funding	16	7
II. CONDITION OF MINERAL RIGHTS	17 - 19	7
A. Mining legislation	18	7
B. Title and security of tenure	19	7
III. BASIC INVESTMENT CRITERIA	20 - 52	8
A. Components necessary to attract and maintain investment	25 - 42	9
B. Government "investor check-list"	43	14
C. Ways to mitigate commercial and political risk ...	44 - 52	19
IV. ENVIRONMENTAL PROTECTION	53 - 59	21
V. RECOMMENDATIONS	60 - 69	22
VI. CONCLUSION	70 - 72	24

INTRODUCTION

1. The present report has been prepared in response to Economic and Social Council decision 1993/302, taking into account the special needs of economies in transition and the growing awareness of the need to formulate global environmental policy.

2. Since the first session of the Committee, in April 1993, developing countries and economies in transition have benefited from a continued inflow of funding and technical expertise from both the international private sector and multilateral and bilateral aid programmes. The funding and provision of technical expertise reflect three factors, namely, (a) strong equity markets that, when combined with local disincentives for mining companies in some industrialized countries, have resulted in outflows of investment funds and technical expertise, (b) international mining, exploration and investment companies are more willing to invest in developing countries and economies in transition owing to the development of more stable and transparent mining and investment codes and supportive bureaucratic frameworks, and (c) the active promotion of individual countries through, *inter alia*, investment seminars and round-table conferences enables companies and financial institutions to understand better the country and its risk factors and to develop working relationships with private and governmental officials to facilitate project work. Direct foreign investment in mineral resources is becoming an important component in the sustainable economic development of many countries. Through this direct link, if it is managed well, will come the continued transfer of technology - the fundamental underpinning of sustainable economic growth.

3. The importance of continued support of the United Nations system and other multilateral and bilateral organizations in the formulation of national mineral sector policies and the enhancement of legal and fiscal requirements in encouraging direct foreign investment in mineral resources in the developing countries and more recently in facilitating interest in the economies in transition cannot be overstated. The consultative and responsive approach has engendered strong support from mining and exploration companies.

4. While national mineral sector policy and legal and fiscal frameworks have received much attention in recent years, environmental considerations are becoming a significant policy issue. The perceived need to begin coordinating global policy development is being led by the international mining community through the International Council of Metals and the Environment (ICME).

5. A major issue for international mining and investment companies is that of human rights and the rights of indigenous people. Companies are dependent upon shareholder support and perception. In the future, this issue may have significant impact on the decisions determining which countries will attract foreign investors.

6. Another issue is the long-term sustainability of market-oriented economic policies in countries that do not have a historical background in this area. Because of the long-term nature of mining investments, the question asked by investors is whether the opportunity represented by conditions in a country

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during the exploration stage will be sustained or will be reversed or amended before or during the mining development stage many years in the future. Investors require long-term indicators of sustainable political, economic and social change. These include the institutionalization of market-oriented economic policies through such measures as privatization, secure mineral tenure embodied in mining codes, and democratic systems that have strong internal controls and international linkages, such as the North American Free Trade Agreement (NAFTA). The structure of such agreements reinforces overall policy direction, and the dispute settlement mechanism provides investors with fair and unbiased international arbitration of conflicts with host Governments.

I. SPECIAL NEEDS OF ECONOMIES IN TRANSITION

7. Economies in transition may be defined as those countries in the transitional phase between a centrally administered, closed-market economy and a functioning, open-market, democratically oriented system. The degree of economic development and democratic political influence varies from country to country. It involves the political will for change, a substantial commitment to major policy reorientation and development, the skills necessary to create the supportive legal, fiscal and administrative frameworks, and the capacity to carry out the change successfully.

A. Policy development

8. Major support is required in the development of open-market, investment-oriented policies. Policies need to consider sustainable development, transfer of technology, development of skills, infrastructure, and long-term financial and social policy issues. The extent to which Governments are responsive to social pressures for, inter alia, health services, education, land reform and income redistribution training, and the extent to which the values associated with the change permeate all levels of society, will be indicators of the long-term sustainability of market-oriented, pro-private-sector, investment policies.

B. Development of appropriate legal and fiscal regimes

9. Essential to the support of an open-market, pro-private-sector investment economy is the development of operational legal and fiscal regimes that are simple and complete. Economies in transition often lack the internal capital necessary to build their own infrastructure, and to develop large, capital-intensive, economically sustainable sectors of competitive industry. They may also lack the entrepreneurial skills required to draft market-oriented legislation and codes. To attract investment capital, orderly and complete sets of laws and operating codes are required. Companies are more interested in investing in countries that have legislative frameworks that are complete, internally consistent and competitive with other countries. Countries will therefore require skilled assistance in the development and subsequent negotiation of mining and related agreements.

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C. One-stop shopping

10. In developing the mineral sector and increasing its attractiveness to foreign investors, information regarding all laws, regulations, mineral potential, support services, the ability of the skilled workforce, and key government contacts is essential. It must be readily accessible, preferably in a central location and in a format familiar to the foreign investor. Mining companies have often had great difficulty in locating basic information. The essential task for any investor is to obtain a clear understanding of the geological potential, policies, legislation and regulations governing the mining sector before committing time and money to fieldwork. While in practice it may be complicated and expensive, actions designed to develop a central government office capable of providing comprehensive information would be well received by the mining investment community.

D. Implementation

11. Economies in transition have been receiving and continue to receive substantial assistance in formulating policy and the attending legal and fiscal frameworks necessary to attract foreign investment. However, the efficient achievement of such frameworks is critical to attracting and maintaining the confidence of outside investors. Implementation takes place in a specific cultural, political and bureaucratic context. These factors will decide whether a new mineral project will proceed on time and on budget or become a victim of delays, cost overruns or similar disruptions. Countries that develop a reputation for efficient implementation procedures, supported by committed professionals, hold a strong competitive position over others. Development of entrepreneurial skills is essential for economies to make the transition.

E. Investment promotion and publicity

12. Mining companies, Governments, aid agencies, including non-governmental organizations, and industry professionals stress the need for economies in transition to promote their commercial interests effectively by advising potential investors about changes, inter alia, in policy, mining investment codes and geological potential. This necessarily involves assistance in the design of brochures, and participation at trade shows and conferences. Economies in transition in Eastern Europe and the Commonwealth of Independent States have organized well-publicized international conferences outlining their new investment frameworks. Examples of United Nations support to investment promotion activities are given below.

F. United Nations-sponsored activities

13. The Interregional Seminar on Foreign Investment and Joint Ventures in the Mining Sector was held at Haikou City, China, during the period 7 to 12 December 1992. It was organized by the Department of Economic and Social Development of the United Nations Secretariat, with the collaboration of the Department of Foreign Affairs of the Hainan Provincial Government.

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14. The format of the Haikou seminar is an example of how to provide another opportunity for the decision makers of developing countries and economies in transition to become better acquainted with current issues related to foreign investment and to consider the views of the industry during a period of global economic recession.

15. Other examples of United Nations support to investment promotion activities are outlined in the report of the Secretary-General on technical cooperation activities of the United Nations system in the mining sector (E/C.7/1994/3).

G. Regional, bilateral and multilateral funding

16. For many economies in transition, baseline funding from regional, bilateral and multilateral agencies will be an ongoing requirement in the development of appropriate policies, legal and fiscal frameworks, upgrading geological information and databases, and the active promotion of foreign investment opportunities. Foreign investors still perceive great investment risks in some countries and welcome the participation of multilateral financing agencies, such as the International Finance Corporation (IFC), to reassure commercial bankers participating in project financing and to mitigate country risk of expropriation and currency inconvertibility.

II. CONDITION OF MINERAL RIGHTS

17. Political, regulatory, investment, fiscal, environmental and monetary issues have emerged as significant in encouraging direct foreign investment in mineral exploration. With respect to mineral rights, two components are critical: mining legislation and title and security of tenure.

A. Mining legislation

18. Mining legislation must be clear and concise and explain the basic legal framework within which exploration and mining can take place. Companies invest in exploration expecting to go on to development, if warranted. Stability of exploration and mining terms is therefore crucial.

B. Title and security of tenure

19. Companies active in exploration and mining must be assured that they will have legal title and security of tenure to mining concessions or properties. This requires an established mineral title system, the support of an organized government infrastructure, good local mineral-resource lawyers and a minimum of discretionary practices.

III. BASIC INVESTMENT CRITERIA

20. The decade of the 1990s holds great potential for the resurgence of mining investment in developing countries and economies in transition. The rapidly growing interest in overseas opportunities arises not only from improvements in investment conditions in some of these countries but also from adverse trends in certain industrialized countries that are the home base of many international mining companies. There is criticism that the total tax burden on mining is high and the cost of conforming to the regulatory system is increasing. Of utmost concern is the fact that mineral tenure appears increasingly less secure in Canada and Australia because of land claims made by native people, park and wilderness land-use designations, and new approaches to resource evaluation in case of expropriation. In the United States, the Federal Government has proposed a 12.5 per cent royalty on hard-rock mining on federal lands and appears inclined to expand, rather than contain, the regulatory cost burden on the industry.

21. Many developing countries and economies in transition have restructured, or are in the process of restructuring, their administrative systems, economic policies, investment laws, regulatory apparatus and taxation policies with the intention of reducing risks for investors. On the political level, democratic government is being instituted more extensively than ever before in some countries. The trend, particularly in Latin America, is towards government that is more open, more responsive and more accountable. Reasons for the trend towards democratic government are multiple and vary from country to country. However, the very existence of democratic institutions in a country is important to investors for several reasons: (a) well-structured democratic forms of government can channel public pressures within the system, and thus reduce the likelihood that public discontent will encourage rebellion and lead to radical change; (b) the laws affecting investors, if enacted by democratic governments, carry an aura of legitimacy, unlike those decreed by autocratic regimes; and (c) the freedom that communications media normally enjoy under democratic systems helps the public revelation of corrupt practices, generating public pressure on the Government, and on the judiciary in particular, to reduce and ultimately eliminate corruption in the system.

22. On the economic level, the growing opportunities for investors arise from the trend towards greater fiscal responsibility, less State intervention and more openness to international trade and investment. The reasons for market-oriented pro-private-sector investment trends vary from country to country, but some general factors include the long-term low performance of closed economies, debilitating foreign debts and pressures from major international lenders such as IMF, the World Bank and certain Governments to introduce economic reforms, the world-wide failure of the socialist economic model, and the rise to high office of a new governing elite, largely educated in economic theory at universities in the industrialized countries.

23. These political and economic trends translate into such risk containment policies as (a) legislated protection for investors against expropriation, currency inconvertibility and other risks; (b) bureaucratic reform and simplification of investment approval processes; (c) reduction of taxation burdens on foreign investors, and sometimes guarantees of long-term tax

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stability; (d) modernization of mining codes, including strengthening of mineral tenures; and (e) privatization of State-owned mines or mineral properties.

24. The resulting change in the political and investment climate makes it attractive for private capital. A recent report showed that Latin America attracted more than US\$ 40 billion of private capital in 1991: \$15.7 billion was in borrowing, \$1.4 billion in direct foreign investment and privatization inflows and a further \$6.4 billion in portfolio investment. That compared to a total of \$13.4 billion in 1990. The report noted that flight capital was returning, and the Government of Mexico has estimated that nearly US\$ 5.5 billion of such capital was repatriated to that country in 1991. 1/ Mining companies have always known that there is excellent resource potential in Latin America. With proper regulatory regimes in place, they now have the opportunity to use the resources both for their own benefit and for the benefit of the host countries. The 1990s should continue to see a surge in mining investment away from the industrialized countries. Multinational mining companies are attracted by these expanding opportunities and, simultaneously, are driven by higher risks in their home jurisdictions.

A. Components necessary to attract and maintain investment

25. Mining investments are by nature capital-intensive, long-term, immobile exposures to variable tax, regulatory and business operating conditions. Companies, on behalf of their shareholders, make investment decisions based not only on geological criteria, but also on political, marketing, regulatory, fiscal, monetary, environmental, administrative, operational and profit criteria. Management of mining companies and investment or funding institutions are charged with the responsibility of providing value to shareholders within the confines of good corporate governance and stewardship of resources. Mining and investment institutions are attracted to jurisdictions where the rules are simple and complete, the bureaucracy is efficient, mineral tenure is secure, and the general positioning of the mineral resource is competitive on a world-wide scale.

26. The following criteria were most highly ranked by companies when making exploration and mining investment decisions: 2/

Exploration investment decisions

Geological potential
Political stability
Security of tenure
Mining law
Mining law stability
Tax stability/level of taxes

Mining investment decisions

Profit potential
Political stability
Repatriation of profit
Tax levels/tax stability
Market
Cost
Deposit characteristics
Mining law stability

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1. Geological potential

27. Companies explore to locate economic mineral deposits and mine to extract ore. Geological criteria are considered by investors and financiers when assessing investment potential. In a competitive environment, opportunities are not assessed individually and in isolation, but rather as choices between other projects competing for funding and time commitment. Exploration and mining companies focus their attention on areas that their geologists advise have good potential for economic mineral occurrences. Thus, the most important criterion used in assessing the investment environment is the perceived geological potential of the country compared with alternate exploration sites in other countries.

28. Another important criterion is the availability of geoscientific information. To acquire geological information requires time and money. Usually, it costs much less to get information from others who have already done exploration, rather than to begin anew. Therefore, the availability of reliable geoscientific information (from a government organization such as a geological survey or from private sources) reduces the costs, time and risk of exploration. The international mining community supports programmes that result in the increased availability of reliable geoscientific information.

29. It is responsive to jurisdictions that can provide a quick and efficient response to concession applications and other inquiries. If a developing country or an economy in transition wishes to be competitive in attracting foreign investment for mineral resource development, it must be capable of providing reliable geoscientific information efficiently and in a manner with which the international mining community is familiar.

30. Computerized geoscientific information services help considerably. The capacity for companies to use computers to search and display data, including geoscientific map data, improves the cost-effectiveness of the search. Computerized data are compact, easily transportable, and can be analysed at the home base of the potential investor. The format is equally appealing both to large international mining companies and to junior exploration firms and thus forms an essential part of any framework to attract investment.

31. Historical or previous production can also be considered a positive factor. Exploration and recovery technologies have improved over time and, for some minerals, previous discoveries and past production may be an important indicator for the discovery of new mining potential. It is also an indication of possible additional resources available, such as trained personnel and minor infrastructure.

2. Political criteria

32. There are many risks associated with investing in an exploration or mining project. Some of these risks relate to inherent natural characteristics over which a Government has no control, such as geology, but others may be influenced or induced by the political system.

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33. For companies and financial institutions to be comfortable in making a decision to invest, risk factors need to be assessed. These include:

- (a) Long-term national stability;
- (b) Regime stability;
- (c) Consistency and constancy of mineral policies;
- (d) Internal security for workforce;
- (e) Possibility of hostile borders;
- (f) Availability of foreign investment insurance;
- (g) Form of government and existence of democratic institutions;
- (h) Open versus closed market economies.

34. The movement by some countries towards market-oriented pro-private-sector investment policies has meant that investors are keenly interested in indicators of long-term stability. Mining is long term, therefore the concerns of any investor in mining, particularly one at the early or mid-term exploration stage, must be focused on a future many years hence. The question is whether the opportunity represented in a country during the exploration stage will be sustained or will be reversed during the mining stage. Long-term indicators of the institutionalization of market-oriented political, economic and social policies can include:

- (a) Privatization of major State-owned enterprises;
- (b) Institutionalization of secure mineral tenure;
- (c) Extent to which the democratic political system is structured to resist dramatic swings;
- (d) Extent to which values consistent with market-oriented pro-private-sector investment policies are broadly and deeply internalized in society. These need to be widely held, not confined to the political leadership;
- (e) International linkages, such as the European Union and NAFTA, which provide assurance as to the long-term irreversibility of market-oriented pro-private-sector investment policies. Not only do such structures reinforce a general policy direction, but the dispute settlement mechanisms provide investors with fair and unbiased international arbitration of conflicts with host Governments;
- (f) Extent to which a Government is responsive to social pressures for health services, education and land reform. Countries where discontent and frustration of the poorer half or two thirds of the population is growing will not inspire confidence with respect to either the long-term confirmation of

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power of the governing elite or the long-term sustainability of a market-oriented economic policy thrust.

3. Regulatory and fiscal environment

35. A pro-mining policy influences the whole approach of government to mining investment and affects the regulatory and fiscal framework. Governments with a clear policy statement that encourages mining find it easy to harmonize their actions and to develop regulatory and fiscal frameworks that attract investment. Such policy dispels uncertainty among investors by giving priority to mineral resource development. Mining law should be based on policy, not the reverse. Conflicts between law and policy send confusing signals about a Government's real intentions. Investors are responsive to:

(a) Regulatory and fiscal frameworks that are complete and consistent. Investors prefer the security of rules that make operating conditions clear. Incomplete and inconsistent laws and regulations often allow greater ministerial or administrative discretion which can be highly erratic and detrimental. Investors are attracted to jurisdictions where the regulations under which a mine is initially brought into production will apply throughout the life of the project;

(b) Regulatory and fiscal regimes concentrated in a mining and tax code;

(c) Regulatory and fiscal regimes supported by an efficient and professionally oriented administration;

(d) Regimes that provide for long-term tax stability and offer clear and concise methods of taxation. Companies favour profit-based taxation to those that are not profit-based;

(e) Regimes that provide for rights of mineral tenure that are clearly defined in law. Security of tenure, quality of the mineral titles system, right to transfer ownership, duration of exploration rights, surface/land access, mineral ownership, stability of exploration/mining terms, dispute resolution and procedural efficiency and clarity are all of concern.

4. Monetary criteria

36. When making a choice between alternative investment projects, monetary criteria are likely to be considered. The key ones include realistic foreign exchange regulations and allowance for external accounts, the ability to repatriate profits and the ability to raise external financing to fund projects. Countries with restrictive practices in these areas will discourage potential mineral sector investors.

37. Outside investors require realistic foreign exchange regulations and external accounts, particularly from countries whose currencies are not freely convertible internationally, to repay loans, purchase equipment and supplies and pay other expenses that require hard currency. The ability to repatriate a

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large portion of profits is essential to meet project rate-of-return criteria and provide a return to the investors who provided the initial risk capital. In many jurisdictions local project financing is unavailable.

5. Operational criteria

38. Majority equity ownership and management control are the two key components in a decision to invest, and can be pivotal decision criteria. Many companies will not consider investing in a project in which they do not hold majority equity ownership. Countries that have a policy or legal requirement for greater than 50 per cent local or government participation lower their investment potential for two reasons: (a) companies that have majority ownership decision criteria probably would not invest, and (b) other companies may stay away anticipating that the 50 per cent requirement is unrealistic because of limitations in the availability of local investment capital and expertise.

39. Minority equity ownership requirements are more acceptable and many companies find local partners can often offer valuable assistance. Availability of established infrastructure, utilities, an experienced local workforce, fabrication, maintenance services and foreign investment insurance are also viewed as supportive components towards attracting and maintaining investment.

6. Marketing criteria

40. International mining companies look globally for competitive mining opportunities. Careful analysis is made of the marketing factors that affect the project economics in each jurisdiction. Companies and financing institutions look at the following criteria:

(a) Proximity to end markets. For low-value high-bulk commodities, transportation costs may be a significant factor in project economics;

(b) Transportation infrastructure. The degree to which reliable infrastructure, such as roads, rail and deep water ports, is available may be an important criterion, particularly for base metals and industrial minerals;

(c) Restrictions on exports. More external financing packages are being structured to accommodate commodity-based lending and concentrate sales financing. Under these arrangements, the ability to export concentrate or doré is critical to securing such finance. Countries that impose export restrictions and require companies to process concentrate internally or sell the product to the central bank place a great disincentive in front of foreign investors. Such countries may find investors will look to countries that show a greater understanding of the critical components of investment decisions.

7. Environmental criteria

41. The 1990s have seen an increasing trend towards the globalization of environmental legislation and standards in both industrialized and developing

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countries. There has also been an increase in anti-mining interest groups and other non-governmental organizations. In many home jurisdictions of international mining companies, environmental liability is now directly attachable to a company's directors. They become personally liable for any environmental problems associated with the company. Therefore, international companies and financial institutions are more comfortable working within a regulatory system that clearly defines the obligations and requirements of the environmental protection measures, or at least has a method for indicating a clear mechanism for determining such obligations. There is a need for a supporting administrative structure to complement the regulatory system. The United Nations system, particularly the Department for Development Support and Management Services of the United Nations Secretariat, has recently provided capacity enhancement workshops addressing environmental management for mid- and senior-level government managers.

8. Other factors

42. Other factors for economies in transition and developing countries to consider in attracting financial flow and foreign investment include the following:

(a) Investment promotion. Providing mining companies and financial institutions with up-to-date information on changes in government, administration, fiscal, regulatory and country regimes and geological information and an opportunity to meet and understand key individuals;

(b) Creating an environment under which personnel in government offices give easy assistance. Attitude is an important component of the mineral sector environment. Lack of assistance by officials can lead to the perception that the regulatory system and its administration are difficult and unworkable and that the actual administration of law may not be efficient, fair or reasonable.

B. Government "investor check-list"

43. The following "investor check-list" itemizes the major criteria used for private sector appraisal of mining investment conditions abroad. It is based on a global survey 2/ and augmented from subsequent additional research.

(a) Geological potential:

(i) General mineral abundance;

(ii) Perceived geological potential compared with competing jurisdictions;

(iii) Availability of reliable geoscientific information (e.g., topographic maps, geological maps, air photo coverage, airborne geophysics, geochemical data and geological reports);

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- (iv) Organization and accessibility of geoscientific information, reports in common form, preferably in English, centralized database, readily available;
- (v) Historical production;
- (vi) Ability to apply geological assessment techniques;
- (vii) Availability of local trained personnel;
- (viii) Mines survey department;
- (ix) Availability of local laboratories;
- (b) Political criteria:
 - (i) Long-term national stability;
 - (ii) Regime stability;
 - (iii) Consistency and constancy of mineral policies;
 - (iv) Internal security;
 - (v) Hostile borders;
 - (vi) Availability of foreign investment insurance;
 - (vii) Form of government (democracy, socialist, communist, authoritarian);
 - (viii) Open versus closed market economy;
 - (ix) Indicators in place to formalize open market economy:
 - a. Privatization;
 - b. Institutionalization of secure mineral tenure embodied in mining code;
 - c. Democratic linkages;
 - d. Dispute settlement mechanisms such as international arbitration of conflicts;
 - e. Development of social policy, i.e., health services, education, land reform, income redistribution, training;
 - f. Entrepreneurial skills in place;
- (c) Regulatory criteria:
 - (i) Modernized mining code;

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- (ii) Workable mineral legislation;
- (iii) Stability of exploration/mining terms;
- (iv) Mineral ownership;
- (v) Surface/land ownership;
- (vi) Security of tenure, length of tenure exploration and mining;
- (vii) Quality of mineral titles system;
- (viii) Ability to track private deals on top of original tenure;
- (ix) Right to transfer ownership;
- (x) Availability of a mineral agreement to supplement or in place of mining code;
- (xi) Dispute resolution such as international arbitration;
- (xii) Level of bureaucracy;
- (xiii) Procedural efficiency and clarification of administrative competency;
- (xiv) Duration of permitting process(es);
- (xv) Numbers of permits required;
- (xvi) Rating for overall simplicity;
- (xvii) Rating for consistency;
- (xviii) Rating for completeness;
- (xix) Availability of good local mineral resource lawyers;
- (d) Fiscal criteria:
 - (i) Tax method and level of taxes (profit-based or not, fixed or not);
 - (ii) Ability to predetermine tax liability;
 - (iii) Availability of tax holiday;
 - (iv) Availability of accelerated depreciation;
 - (v) Availability of investment tax credits;
 - (vi) Availability of reinvestment credits;
 - (vii) Deduction of exploration costs;

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- (viii) Export-import credits;
- (ix) Stability of fiscal regime (embodied in mining legislation);
- (x) Tax treaty with home country;
- (xi) Expatriate tax treatment;
- (xii) Competitiveness with other jurisdictions;
- (e) Monetary criteria:
 - (i) Realistic foreign exchange regulations;
 - (ii) Allowance for external accounts;
- (iii) Ability to repatriate profits;
- (iv) Ability to raise external financing to fund projects;
- (v) Presence of strong local stock exchange;
- (vi) Presence of global banking institutions;
- (vii) Efficiency in monetary transfers;
- (f) Operational criteria:
 - (i) Majority equity ownership held by company;
 - (ii) Company has management control;
- (iii) Degree of established infrastructure and utilities;
- (iv) Experienced local workforce availability;
- (v) Climatic conditions;
- (vi) Physical lay of land;
- (vii) Altitude;
- (viii) Availability of support services such as fabrication/maintenance/local geotechnical services;
- (ix) Common language spoken;
- (x) Constraints on use of expatriate staff;
- (xi) Restrictions on hiring, firing and negotiating wages;
- (xii) Technology required;

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- (xiii) Government corruption;
- (xiv) Strength of labour unions;
- (xv) Additional support services;
- (xvi) Effective communications system, internal/external;
- (g) Marketing criteria:
 - (i) Geographic location - proximity to end markets;
 - (ii) Presence of internal markets;
 - (iii) Presence of local competitive smelting and refining capability;
 - (iv) Transportation infrastructure, e.g., roads, railway, air, river, deep sea ports;
 - (v) Export/import policies and restrictions, e.g., mandatory sales of product to central bank;
 - (vi) Regional trade agreements;
 - (vii) Outlook for demand/price;
- (h) Environmental criteria:
 - (i) Legal requirements for environmental protection;
 - (ii) Ability to predetermine environment-related obligations;
 - (iii) Anti-mining groups;
 - (iv) Relative sensitivity of environment;
- (i) Profit criteria:
 - (i) Measure of profitability (internal rate of return, net present value, payback periods);
 - (ii) Competitive cost position;
- (j) Other criteria:
 - (i) Prior company experience;
 - (ii) Company employee prior experience;
 - (iii) Specialized company expertise;
 - (iv) Experience of other firms, joint venture, partner experience;

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- (v) Helpfulness of government offices (geological survey, department of mines, ministry for lands, finance offices, central bank);
- (vi) Availability of information on government, administration, fiscal, regulatory policies, geological information;
- (vii) Availability of key government personnel locally and abroad;
- (k) Risk containment strategies available:
 - (i) Availability of political risk insurance (debt and equity portion);
 - (ii) Bilateral/trilateral protection treaty in place or negotiable;
 - (iii) Mine development agreement;
 - (iv) Degree of World Bank involvement in project, in country;
- (v) Legislated protection for investors against expropriation, and currency inconvertibility.

C. Ways to mitigate commercial and political risk

44. There are several strategies available for mitigating the impact or reducing the probability of various risks. These include, inter alia, political risk insurance, investment protection treaties, mine development agreements and World Bank involvement. One realistic method of reducing risk is careful positioning of the mining company within the host country's society.

1. Political risk insurance

45. Political risk insurance is available from several institutions to cover high-profile risks such as expropriation, blockage of the transfer of funds, and war and insurrection. Primary providers of such insurance are the Multilateral Investment Guarantee Agency of the World Bank, and national agency insurers such as the Export Development Corporation of Canada and the United States Overseas Private Investment Corporation. However, the amount of insurance available from these agencies to cover any one project may be limited and insufficient to cover all of a mine's capital exposure. Insurance may sometimes be available to cover only the debt and not the equity portion of an investment. For very high risk countries, insurance may not be available.

2. Bilateral/trilateral investment protection treaties

46. A bilateral or trilateral investment protection treaty may be negotiable, if one does not already exist, between the investing company's home country and the host country of the investment. For example, Canada has signed such treaties with Argentina, Uruguay, Hungary and Poland and is negotiating treaties with the Russian Federation and Venezuela. The North American Free Trade

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Agreement will have the effect of an investment promotion and protection treaty between Canada, the United States and Mexico.

47. Under a treaty, adverse treatment of an investment may trigger country-to-country discussions, and disputes may be referred to binding international arbitration. Investment protection treaties reduce the probability of occurrence of those risks that are covered. To the extent that a host country values its relationship with the investing company's home country, the host country can be expected to think carefully before taking actions that might trigger the arbitration provisions of the treaty.

3. Mine development agreements

48. A mine development agreement contracted between the investing company and the host country Government may help reduce exposure to some risk factors. Some provisions common in such contracts include the following: the rate of taxation for the project may be guaranteed for a specified period; the free repatriation of capital and free remittance of interest and dividends may be guaranteed and provision may be made for an off-shore account for hard currency transactions. The freedom to market the mine product outside the country may be assured. Whether a mine development agreement will hold up over time is a critical question to any investing company. Endorsement of a mine development agreement by a country's legislature may in some countries lend a particular aura of inviolability.

4. Reducing the risk of blockage to financial transfers

49. World Bank involvement in project financing, particularly by the International Finance Corporation in syndicated loans for mining investment, may help reduce the probability of blockages to financial transfers. Countries dependent on World Bank lending are likely to be reluctant to block remittances of interest or dividends owed to a World Bank agency, given the potential implications of such actions for the overall relationship of the country with the World Bank.

5. Mining company positioning within society of host country

50. Broad-based public support for a foreign-owned and operated mine is ultimately the greatest security that any company can hope to achieve against country risk. Therefore, how a mining company positions its investment within the society of the host country can affect risk. Host country nationals need to feel that they are participating fully in a major cash flow generator such as a mine, whether through equity participation, training and employment, or spin-off business activities.

51. If the mine's financial contribution to a country consists only of its revenue stream to government, with little distribution of mine-generated revenue to society generally, the public in the host country may justifiably feel that they are not receiving adequate benefits. Mining companies are thus challenged

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to make their investments catalysts for economic support, through training, spin-off industries and indirect job creation. Laws provide little security to a mine should the public become thoroughly antagonistic.

52. Mine management needs to remain constantly aware of the attitudes and expectations of the public, particularly in local communities. The sensitivity of mine management in dealing with people in the region where the mine operates is important to commanding broad popular support.

IV. ENVIRONMENTAL PROTECTION

53. The 1990s have seen the trend towards the globalization of environmental legislation and standards in industrialized countries, developing countries and economies in transition. This trend has been led by the international mining companies and financial institutions, multilateral organizations and lending agencies, the developing countries and the economies in transition themselves.

54. A significant policy shift was seen at the Rio de Janeiro Earth Summit. The most important result of this United Nations-sponsored Conference was the world-wide change in environmental awareness, leading to a de-emphasis on constant economic growth because of its accompanying unlimited pollution. This concept has been the prevailing government policy since the start of the industrial revolution. The Rio de Janeiro Conference aimed at building and furthering the global partnership towards taking a balanced and integrated approach to environment and development questions. Many essential human needs can only be met through goods and services provided by industry. The integration of environment and development concerns and greater attention to them should lead to the fulfilment of people's basic needs, their improved living standards, better protection and management of the ecosystem and a safer more prosperous future for all.

55. Governments of developing countries and economies in transition are addressing the need for standards by developing and implementing environmental regulatory systems. Assistance for this is being given through various channels, including bilateral assistance, resulting in further homogeneity of standards world wide. For example, for the first time and directly because of NAFTA, three countries will work together to improve the North American environment. Canada will provide technological expertise, training and funding to Mexico. A process of ongoing trilateral cooperation is expected.

56. Concurrent with the development of policy through multilateral institutions was the formulation of the International Council on Metals and the Environment, comprising the majority of the major companies involved in the international mining community. The group is a resource base for government and multilateral institutions on issues relating to developing and coordinating world-wide environmental standards for the mineral resource industry. ICME, jointly with the World Bank and the United Nations Conference on Trade and Development (UNCTAD), will host a workshop in Washington, D.C., in June 1994. The focus will be on environmental issues facing mining in developing countries.

57. The Department for Development Support and Management Services of the United Nations Secretariat has organized workshops aimed at increasing the consideration of the environmental aspects of mining activities. For example, a workshop sponsored jointly with Carl Duisberg Gesellschaft of Germany, which was held at Windhoek in April 1993, was a contribution to the practical implementation of the guidelines adopted in Berlin at the International Round Table on Mining and the Environment, held in June 1991. Another example of capacity-building is the workshop organized in cooperation with the Government of Zambia and Zambian Consolidated Copper Mines Ltd. on environmental management at mining sites, held in Kitwe, Zambia, in December 1993. Topics addressed included pollution-control technologies, waste disposal and air-quality monitoring, site reclamation, environmental legislation, environmental management planning and environmental auditing.

58. These developments have served as a basis for recent changes. Environmental legislation is rapidly becoming more homogeneous, more focused and more site-specific. Increasingly, international standards are being adopted by developing countries. This is related to the fact that where mining and metals producing ventures are owned and operated by multinational mining companies, the companies are using the cleanest available production technology - in response to good corporate management, meeting project financing investment guarantees and in response to the global pressures of highly organized environmental groups.

59. While enforcement and execution are outstanding issues, it is important to focus as a priority on formulating specific legislated policy and guidelines to ensure that companies will be attracted. The lessening of or the removal of a factor such as environmental exposure, is critical to investment decisions and rate of return.

V. RECOMMENDATIONS

60. Because of the capital-intensive, high-risk nature of mining, developing countries and economies in transition are highly dependent on attracting and maintaining foreign investment and expertise to help in the development of their mineral resource potential. Investors are largely answerable to shareholders, who seek a fair return compared with the risk undertaken. They are also keenly interested in understanding and minimizing their exposure to risk. The Committee may wish to consider the relevance of the following recommendations, which are put forward to assist developing countries and economies in transition to position themselves in a competitive way to encourage long-term foreign investment.

61. Mining and investment institutions are attracted to jurisdictions where the rules are simple, complete and stable, the bureaucracy is efficient, mineral tenure is secure, the total fiscal and legal regime is competitive on a world scale, and there is assurance that management and operations can be conducted commercially.

62. The tax system in place should be competitive with other jurisdictions, allow an acceptable rate of return on investment, concentrate on profit-related

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taxes rather than duties and royalties, and be applicable to foreign, domestic and state enterprises.

63. The regulatory environment should be such that investors have certainty of long-term rights to minerals that are to be developed, there is a dispute mechanism in place to provide investors with fair and unbiased international arbitration in case of conflicts, with emphasis on a streamlined permitting process and provisions for stability within the regulatory framework. Within this framework, the opportunity for majority equity ownership and management control must be addressed, both of which are important criteria for international companies contemplating large-scale capital investment.

64. When making a choice between alternative investment projects, certain monetary criteria are likely to be considered. The key ones include realistic foreign exchange regulations, allowance for external accounts, the ability to repatriate profits and the ability to raise external financing to fund projects. Countries with restrictive practices in these areas may find they will discourage potential mineral sector investment.

65. Part of encouraging foreign private sector investor interest is the availability of reliable, well-organized geoscientific information. Having information readily available will serve to reduce the cost, time and risk of exploration. The collection and organization of such information in a central location would serve the host Government well.

66. Environmental protection and guidelines are increasingly becoming an important focal point for foreign investors. Continued emphasis on working towards universal, realistic standards would be supported by the international mining community.

67. Private sector investors seriously study ways to mitigate or reduce risk and carefully analyse the long-term trends for increasing or decreasing the risk of political, social and economic factors. Many developing countries and economies in transition have made substantial gains in opening markets and establishing pro-private-sector investment policies. A question facing foreign investors is whether the opportunity represented in a country during the exploration stage will be sustained throughout the mining stage. Companies are concerned about the long-term indicators of stability of the newer market-oriented policies. These might include privatization of major State-owned enterprises, institutionalization of secure, long-term mineral tenure, international linkages that contain fair dispute-settlement mechanisms, and the extent to which government is responsive to social pressure for health services and education.

68. Underlying the major policy change towards encouraging foreign investment for developing a sustainable mineral sector is the need to communicate the changes to potential investors. Investment promotion is seen as a critical component in opening up and encouraging companies to look seriously at new opportunities beyond their traditional horizons. Round-table discussions and conferences have been well received. Conferences sponsored in home jurisdictions which include field trips, discussions regarding legal and fiscal

framework changes, and the opportunity to meet key people and to assess the geological potential are very important.

69. Opportunities to work together to develop mutually beneficial relationships are increasing. Horizons are expanding and the willingness to invest and increase the transfer of technology and skills are present. Those countries that can work effectively to reduce the risk for investors stand to gain from changing world circumstances.

VI. CONCLUSION

70. Modern mining, processing and infrastructure requirements are capital and technologically intensive. Developing countries and economies in transition wishing to develop a sustainable mineral resource sector will rely increasingly on international investment to assist in the development process. To attract and maintain foreign capital and expertise, the Governments of developing countries and economies in transition will need to pay particular attention to their investment policies and procedures. Every attempt to reduce perceived risk and to increase competitiveness and simplicity will be well received.

71. There are bilateral, multilateral and private sources that can assist countries in establishing ways and means of attracting foreign capital and expertise and in the financing of the development of their mineral resources. Tremendous advances have been made in policy and procedural development over the past 18 months in many developing countries and economies in transition. New investment and mining codes have been adopted in many countries and are currently being drafted in others. The consultative approach involving international mining companies, financial institutions, professional bodies, multilateral and bilateral agencies and host country officials have been beneficial in providing information and laying the foundation for good working relationships and methods of understanding and managing country risk.

72. To attract and maintain foreign investment and expertise over the longer term, appropriate legal and fiscal regimes are essential. Establishing and maintaining good geological information systems oriented towards both the large international mining firms and the smaller exploration companies is also essential to attract the initial interest and inflow of investment. Most developing countries and economies in transition require assistance in both the technical and the management aspects of carrying out successful geoscientific information systems. The feasibility of successfully establishing an efficient, workable system will depend on the project design and the care with which it is carried out. The consultative approach in addressing the matters of investment and mining code revision should be applied to establishing appropriate geological information systems for each country. The United Nations and its agencies may be called upon to provide complementary expertise with a view to strengthening the investment attractiveness of developing countries and economies in transition.

Notes

1/ David Williamson, "Latin America's mining industry - global perspective", Investing in the Americas Conference, Miami, April 1992.

2/ James Otto, "Criteria for assessing mineral investment conditions" (Dundee, Scotland, University of Dundee, Centre for Petroleum and Mineral Law and Policy, 1992).
