

Mining and Protected Areas

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I Background

This paper is intended as a contribution to the Mining and Minerals for Sustainable Development (MMSD) project¹ - an independent two-year project of participatory analysis seeking to understand how the mining sector, as a whole, could make the transition to sustainable development. It has been produced on the recommendation of the Land Use Working Group tasked with debating and identifying next step actions at the first MMSD Mining and Biodiversity workshop, held in London on 11-12 June 2001.

This present paper has been written in a personal capacity. Though it aims to present a conservation viewpoint and reflect IUCN's policies and priorities, it does not purport to be an official IUCN position.

The aim of the paper is to present **a conservation overview of mining and conservation perspectives on mining and protected areas, and to suggest a way forward that would help build trust** between the two sectors of mining and conservation.

2 Structure

The paper is in three parts:

1. Section 1; a vision for mining as a land use in a sustainable world, is presented because, whilst there are some very specific issues about mining and protected areas, these should not be considered in isolation from broader challenges of poverty eradication and sustainable development.
2. Section 2; presents a conservation perspective on the issue of mining in protected areas.
3. Section 3; presents an agenda for building trust that incorporates a suite of actions to could taken up by the mining community and the conservation community independently, and others that could be undertaken jointly.

3 A Vision for Mining as a Land Use in a Sustainable World

Society faces a huge challenge if real improvements in living standards are to be achieved without the collapse of the Earth's biological systems. Raw materials come from biological resources, mineral resources, fossil fuels and non-fossil minerals. It is hard to foresee an end to primary minerals production, although the levels of use could be reduced through the reform of resource consumption patterns and technological developments, e.g. through much more use renewable energy. So mining will remain an important part of global, national and local economies in the foreseeable future. The challenge to the industry is to help make the transition to sustainable development. As recognised in the establishment of the MMSD initiative, mining companies must contribute to a better quality of life for the world population today, while preserving and increasing the ability of future generations to achieve a higher quality of life - and doing so while protecting biodiversity and other natural

and cultural values. In this way, the mining sector will make its contribution to the goals of Agenda 21.

Such a desirable aim is, however, very general: it must be made more specific. One core aspect is the question of mining as a land use, and - in the context of this paper - more specifically the question of access to land to extract minerals. In principle, access should require prior approval by governments, the informed consent of local communities, and a commitment to conservation of biodiversity and of other natural and cultural values.

As the Convention on Biological Diversity (CBD) recognises, protected areas are essential to conserve biodiversity; their existence and the quality of their management are indicators of society's commitment to conservation. Such places are therefore necessary elements in the environmental management of the whole landscape. But conservation and ecologically-sustainable use of biodiversity should not be confined to protected areas, since much 'critical' and 'valuable' biodiversity is found outside them. Moreover, there are many other social and economic considerations to be taken account of in determining land use. Strong, effective and equitable development and land-use plans should therefore be the means of delivering biodiversity conservation objectives over areas much larger than those currently protected. Ideally protected areas should be planned and managed within the context of such plans, as should plans for mineral (and energy) development.

So a vision for a more sustainable approach to mining as a land use involves several components:

- An integrated development or land-use plan for a country or region. Such a plan should aim to maximise the social, economic and environmental objectives for the nation as a whole and for local communities in a sustainable manner. The multiple land uses identified should be derived from participatory assessments of the costs and benefits presented by different land-use activities, taking into account the best available scientific information, and the short and long term consequences of development.
- A set of graded policies that reflect the varying degree of sensitivity of natural values to mining². These would include:
 - Areas in which rules will be relatively relaxed (though mining proposals should always be subject to careful prior examination through Environmental Impact Assessments for their environmental and social impact, and indeed general principles of stewardship).
 - Intermediate zones where higher 'hurdles' would apply. These might include, for example, longer and more costly up-front EIAs, higher stewardship standards, greater investments required for impact mitigation, and putting in place financial bonds to cover closure and emergency costs.

¹See <http://www.ied.org/mmsd> for further information.

²Two well-established, internationally recognised concepts, reflect this thinking:

- Biosphere Reserves are a graded approach, containing a multiple use transition zone surrounding a more sensitive buffer zone in which stronger conservation rules apply, which in turn surrounds a highly sensitive and strictly protected core area;
- The Ecosystem Approach, advocated as the primary framework for action under the CBD, is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

- Finally there would be ‘no-go’ areas, protected by being off limits to mining altogether (the issue addressed by this paper, of course, is in what way these ‘no-go’ areas should relate to protected areas).

Commitment by the industry to best practice everywhere it operates, if necessary exceeding the requirements set by the government concerned (‘beyond compliance’) where these fall short of what is internationally recognised as responsible conduct towards the environment and local communities.

The realisation of this vision depends in part upon a shared understanding of the significance of terms like "protected areas" and "strictly protected areas". As the MMSD process has already shown, the issue of whether some kinds of protected areas should be "no-go" areas for mining is perhaps the most difficult one facing the mining industry in its relationship with stakeholders in the conservation community. At the root, problems arise because of different views of the world, even different ethics and sets of values. These differences are exacerbated by misunderstandings and poor communication. The result is a lack of trust. The MMSD process can help address some of these underlying problems.

4 A Conservation Perspective on Mining and Protected Areas

4.1 Introduction

If there is such a thing as the ‘conservation community’, it is diverse and speaks with many voices. Some parts of it will be emotionally hostile to mining under any circumstances; others may be very ready to make accommodation with mining. So any attempt to portray a single perspective is bound to be misleading. However, there are quite widely held views, based on experience, which can be drawn upon in setting out a conservation position on mining and protected areas. This has now been given a degree of recognition through an IUCN Recommendation adopted by the World Conservation Congress in Amman in October 2000 (see Box 3 below).

This section:

- Introduces the idea of protected areas and their categorisation, and shows why they are important;
- Briefly identifies the importance of internationally recognised protected areas;
- Describes the kind of impacts that mining and associated activities have upon protected areas; and,
- Sets out the case for a firm policy to exclude mining from IUCN Protected Area Management Categories I - IV.

4.2 Protected Areas

Protected areas have a long history, and are a feature of cultures around the world. Even in their modern form, based upon national legislation, they can be said to have begun about 130 years ago. But the expansion in the number and extent of protected areas has accelerated rapidly in the past 30 years or so. Nearly every country has now established some protected areas; many indeed have developed a system of them. This is evidence of governments' wish to ensure that future generations will inherit a world which remains naturally diverse and productive. Like policies for pollution control or education, the creation and effective management of protected areas is a mark of a responsible society. In many countries, a government commitment to protected areas is complemented by the efforts of sectors of civil society.

Many protected areas have been and are being created because they are essential for biodiversity conservation. Without them indeed, *in situ* conservation would be impossible, and therefore the UN Convention on Biological Diversity requires each country to develop a system of protected areas (see Article 8 of the convention³). But protected areas provide many other material and non-material values to society, see Box 1. **All these values are increasing in importance as the natural world shrinks and becomes ever more stressed, from climate change, demographic and consumption trends, urbanisation and other factors.**

Box 1: the Importance of Protected Areas to Society

Protected areas are important for many reasons, e.g.:

- Biodiversity conservation;
- Protection of watersheds, soils, coastlines;
- Safeguarding cultural assets;
- Homelands for indigenous peoples;
- Supporting local and national economies;
- Sequestering carbon;
- Providing natural products;
- Research and education;
- Recreation and tourism;
- Lifting the human spirit.

A definition of a protected area was established by IUCN in 1994⁴, which is now being widely used at national levels (e.g. in legislation and policy instruments) and internationally. It has also been adopted for the purposes of this paper:

An area of land and /or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

³ See <http://www.biodiv.org>

⁴ IUCN 1994: *Guidelines for Protected Area Management Categories*

Globally about 44,000 areas meet this definition (source UNEP-WCMC). Taken together, the world's protected areas cover about 10% of the land area of the planet (but less than 1% of the marine environment). Most protected areas have been established under national legislation. This legislation takes many forms: some of it is highly prescriptive, including in some cases a ban on all forms of mining; in other countries, it is much more discretionary.

Though protected areas bring many benefits, they also involve costs. These are both the direct costs for their management, and the opportunity costs that may arise in so far as other land uses are constrained by the existence of protected areas. Unless these costs are met, the effectiveness of protected areas will be diminished, and it will be hard to develop local support. It is therefore of concern that funding the management costs of protected areas, and offsetting the opportunity costs (e.g. by promoting alternative economic activity, such as eco-tourism) has proved difficult in many countries. IUCN has produced several recent publications showing how to generate more funds for protected areas⁵. In recent years, many protected areas have received additional outside financial and other assistance (e.g. from the Global Environmental Facility) in recognition of the globally important values that they contain, and to supplement the limited funds which are available to the governments etc. responsible for their management, especially in developing countries.

IUCN has categorised protected areas according to the main objectives of their management, and it is this system of protected areas management categories upon which IUCN's approach to mining in relation to protected areas has been based (see below). The six categories are set out in brief in Box 2 below (summarised from IUCN, 1994).

Box 2: Definitions of the IUCN protected area management categories

CATEGORY I Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection.

CATEGORY Ia Strict Nature Reserve: protected area managed mainly for science.

Definition: Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

CATEGORY Ib Wilderness Area: protected area managed mainly for wilderness protection.

Definition: Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

CATEGORY II National Park: protected area managed mainly for ecosystem protection and recreation.

Definition: Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude

⁵ See IUCN 2000: *Financing Protected Areas – guidelines for protected area managers*; and IUCN, 2001: *Guidelines for Financing Protected Areas in East Asia*

exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

CATEGORY III Natural Monument: protected area managed mainly for conservation of specific natural features

Definition: Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

CATEGORY IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention.

Definition: Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

CATEGORY V Protected Landscape/Seascape: protected area managed mainly for landscape/ seascape conservation and recreation.

Definition: Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

CATEGORY VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems.

Definition: Area containing predominantly unmodified natural system, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

Source: IUCN, 1994

Key points to note about the system are these:

- The basis of categorisation is legal or management objectives;
- But the categories imply a varying degree of environmental modification (natural qualities in Category I protected areas are likely to be the least altered, whereas those in Category V, and to a lesser extent Category VI, are likely to be most modified);
- The categorisation is not a comment on management effectiveness, (i.e. it records the purposes for which protected areas are managed, not how successful they have been in meeting those purposes);
- The names used at the international level may not be the same as those used nationally; for example a “national park” means something quite different in the UK from what it means in the Canada, Kenya or the USA, (hence the need for an international framework for comparison and assessment);

- Protected areas may be managed by many groups apart from central government (e.g. local and regional government, NGOs, indigenous peoples, local communities, private sector);
- Land in protected areas may be in public, private or community ownership.

The categories of protected areas are listed in an international database held by UNEP-WCMC, and published periodically as the UN List of Protected Areas (e.g. IUCN, 1998⁶). The procedure for assignment of protected areas to a category can be summarised thus:

- When the UN List is being compiled, a designated focal point in each country is invited by UNEP-WCMC and IUCN (through IUCN's expert World Commission on Protected Areas [WCPA]), to review the sites on the database and to update them. IUCN's published guidelines (IUCN, 1994) are the basis of assigning protected areas to particular categories. In effect, governments are asked (1) to certify that the area in question meets the basic definition of a protected area, and, if so, (2) to assign it to one of the six categories;
- UNEP-WCMC also send copies of the request to members of WCPA;
- In case of any disagreement over the assignment, WCPA will be asked to adjudicate, but in the vast majority of cases the government's assignment is accepted by UNEP-WCMC.

Though most updating is undertaken at the time of the compilation of the UN List (next due to be published in time for the next World Parks Congress in 2003), *ad hoc* assignments can also be undertaken at a country's request.

Many protected areas everywhere are under threat; in general, threats to protected areas mount year by year. The main dangers are the ever-increasing demands for land and resources, much of it to meet basic human needs in poorer countries. Even though protected areas often provide sustainable livelihoods for local communities, encroachment, poaching, destructive fires and so forth are common in many protected areas, especially in developing nations. Too often protected areas lack political support and are poorly funded. In some countries (e.g. in Central Africa), war and civil conflict make protected areas particularly vulnerable. Pollution, climate change, excessive tourism and commercial exploitation of resources (including mining) add to the pressures.

Looking to the future, and despite the impressive growth in the number of protected areas in many (but by no means all) countries in recent years, more such areas will be needed in many parts of the world. This is mainly because many key biodiversity areas still lack proper protection (for example, only 1% of the marine environment is currently in a protected area). This expected expansion in the number of protected areas will have to take place in an ever more heavily populated and developed world. Decisions to set up new protected areas are therefore likely to be increasingly challenged by economic uses, such as mining, which would see their opportunities for expansion constrained. **This is not an argument for abandoning the development of new protected areas, but for increasing dialogue between mining and conservation interests.**

⁶ IUCN/WCMC, 1998: *1997 United Nations List of Protected Areas*

4.3 Protected Areas with International Recognition

Some nationally important sites are also recognised under international agreements. The most important of these are:

- The World Heritage Convention, which identifies natural and cultural sites of *outstanding universal value*, (currently, 138 natural sites and 23 mixed natural/cultural sites). Sites are subject to a process of critical evaluation to internationally-agreed criteria before inscription;
- The Ramsar Convention, which provides recognition and protection to internationally-important wetlands;
- The UNESCO Man and Biosphere Programme, under which a network of Biosphere Reserves (see footnote 13) has been developed.

There are also several important regional instruments that support protected areas. In Europe these have been developed into a powerful, legally-backed system of habitat protection (the European Union's Birds and Habitats Directives).

4.4 The Impact of Mining on Protected Areas

Mining, including mining for metals, hard rock, sand and salt, has a range of environmental consequences for protected areas, whether operations are undertaken within them or nearby. The types of impact may be listed as follows:

- Direct land take and loss of vegetation cover in the mined area and other parts directly affected by associated activities such as deposition of tailings, or consequences such as subsidence;
- Pollution affects, especially on water supplies, aggravated by accidents (e.g. to tailing dams);
- Impacts due to access associated with mining (roads, railways, pipelines, power lines etc.), which permit illegal hunting, habitat fragmentation and alien invasions;
- Secondary effects of human immigration in association with real or perceived livelihood opportunities (e.g. on water supplies, illegal hunting, harvesting of vegetation, alien invasions, illegal land settlements);
- Impacts on other protected area values from noise and visual intrusion, arising from both mining and secondary activities, including transportation.

While the environmental consequences may be the most obvious, the indirect social affects may also impact on protected area values, for example if an indigenous population abandons its traditional, sustainable ways of living as a result of contact with a mining economy there may be new threats to biodiversity from unregulated hunting. There are also the unintended "side" effects as a result, for example, of opening up an area by constructing access roads to the mining operations.

It is true that large mining companies often go to great lengths to minimise the potentially adverse environmental and social effects of their operations - but accidents do occur even in the best run operations, and in any case some companies are less conscientious than others. It is true, too, that the adverse effects of mining are usually unintended and sometimes indeed could not have been foreseen, not least because many of the effects of mining are still not fully understood - but, if so, the precautionary principle should then be applied, so as to avoid incurring irreversible damage to the environment. It is acknowledged that some companies have invested in biodiversity research, and conservation - but most have not. It also the case that the prime responsibility for managing secondary pressures (e.g. from immigration) usually lies with the civil authorities in the country concerned. Nonetheless the pressures that arise are the direct result of the mining operations themselves and mining companies cannot disown responsibility for some of these very damaging secondary effects, which often outlast the mining activity itself. It is also recognised that much damage is done by illegal mining and that responsible companies cannot fairly be held to account for actions of this kind - but the existence of illegal or corrupt practices in some mining sectors is no excuse for multinational corporations to lower their own standards.

The scale of these impacts on the world's thousands of individual protected areas is impossible to gauge accurately, but the well-documented experience of World Heritage sites is an indication of how extensively and seriously mines can affect protected areas. If even these - among the most highly prized of the world's protected areas - are subject to such pressures from mining, it must be assumed that the problems of mining in relation to protected areas occur widely. In recent years, a number of World Heritage sites (several of which are also Ramsar sites and/or Biosphere Reserves) have been affected, or thought to be threatened, by mining activities, or potentially controversial mining proposals. These activities (or proposals) have taken place (or been planned) both within or near the designated sites. The World Heritage sites concerned include the following (with the relevant mineral or energy source):

- Canaima NP, Venezuela (gold);
- Doñana NP, Spain (copper);
- El Vizcaino, Mexico (salt, oil);
- Huascarán NP, Peru (copper, zinc);
- Kahiuzi-Biega, DRC (coltan);
- Kakadu NP, Australia (uranium);
- Kamchatka, Russia (gold);
- Lorenz NP, Indonesia (copper, oil);
- Mt Nimba Strict NR, Guinea and Cote d'Ivoire (iron ore);
- Okapi Fauna Reserve, DRC (coltan);
- St Lucia, South Africa (sand);
- Virgin Komi forests, Russia (oil, gas, gold);
- Yellowstone, USA (gold).

All the kinds of problems associated with mining operations listed above can be found at one or more of these sites. In some cases, a successful resolution has been arrived at as a result of firm action by the government or the mining company, and it is not suggested that all the problems can be laid at the door of responsible mining companies. In September 2000, UNESCO, ICME, IUCN and ICOMOS held a workshop to review the kinds of threats which mining in these areas posed to WH properties, and what should be done about it. The mining representatives were however unable to agree that they should avoid World Heritage sites in future⁷ (IUCN, 2001). This was despite ample evidence of the scale of the real and potential problems that mining can cause to such areas.

4.5 Conservation Attitudes Towards Mining and Protected Areas

As the evidence of the damaging impact of mining on protected areas has accumulated over recent years, the conservation community has become increasingly concerned about the threat that the industry represents to the biodiversity and other values of these places. Sometimes mining in protected areas is done in defiance of national laws (usually smaller companies and artisanal mining); this is especially the case when (as in Central Africa) there is a general breakdown of civil order. More often it is permitted by governments who see mining as an attractive alternative land use that will generate cash; sometimes the opportunity to profit from such development can be persuasive. It is also the case that mining may appeal to some local communities in need of jobs, income and development.

The apparent attraction of mining as an alternative to protected areas often arises because the economic benefits brought by protected areas are either unrecognised (for example, their value as a means of watershed protection) or undeveloped (e.g. their potential value for ecotourism). IUCN has advised on how to identify, measure and capture the many values of protected areas⁸, but it is often also necessary to develop alternative economic enterprises based upon, or developed around protected areas.

Conservation bodies recognise the benefits that mining can bring, but (as the previous section has shown) the downside is often far greater, and the legacy of mining can be a permanently damaged environment and a disrupted community. From a conservation standpoint, there is a growing fear that mining companies, especially when apparently offering the prospect of large investment in a poor region, will be permitted access to any exploitable resource, whatever the environmental or social consequences. In light of this, and because the values represented by protected areas (especially biodiversity) are increasing in importance as the natural world everywhere is put under ever greater pressure, there are now calls for the more strictly protected areas (i.e. Categories I-IV) be treated as "no go" zones for mining. After all, these areas are intended to be protected. They all have a degree of international recognition through inclusion in the UN list, and some are also parts of international systems of protected areas (World Heritage, Ramsar etc.). It is only logical, **therefore, that policies for protected areas should**

⁷ IUCN, ICME, UNESCO 2001: *Technical Workshop – World Heritage and Mining*

⁸ IUCN, 1999: *Economic Values of Protected Areas – Guidelines for Protected Area Managers*

include protection from one of the most damaging land uses of all; this is particularly the case for World Heritage sites.

Mining interests may argue that this critique is unbalanced. However, the fact that some protected areas are poorly managed is no reason to increase the pressures on them still further. Even if some protected areas are not ideally located to safeguard biodiversity, this is no justification for undermining the other values that they protect, such as scenery, especially when the protected area in question has been successfully defended against other threats in the past. And while some governments may be ready to jettison their conservation commitment to attract mining investment, this is no reason for a responsible multinational to take advantage of their weakness. It would be better if governments developed sustainable rural development strategies based on safeguarding the conservation values of the protected areas, (rather than destroying or eroding them), and ensure that these benefits are shared equitably with local stakeholders⁹.

Thus many conservation interests think that if the world's major mining companies wish their protestations of environmental care to be taken seriously, they should be prepared to make a public declaration that they will *not* mine in Category I - IV protected area. **By this action, they would bar themselves from only about 4% of the world's earth surface.**

The IUCN World Conservation Congress is, in effect, the principal international gathering of the world's governmental and non-governmental conservation movement. Meeting in October 2000 in Amman, Jordan, the Congress adopted Recommendation 2.82, which was intended to establish and promote the principle that mining should be excluded from these more highly protected area categories. This recommendation was supported by the many NGOs who are members of IUCN, but also by the great majority of State members of IUCN that were present.

The Amman Recommendation (for full text, see Box 3) calls on IUCN's State members to prohibit by law mining in Categories I - IV protected areas. It also calls for tight controls over any mining in Categories V and VI, exacting procedures to govern any changes in protected area boundaries to permit mining, and strict regulations concerning any mining near a protected area which might have an adverse impact on it. It calls on all concerned to adopt best practice to guide every stage of the mining process.

Box 3: Recommendation 2.82, adopted at the IUCN Second World Conservation Congress, Amman, Jordan, in October 2000,

The Protection and Conservation of Biological Diversity of Protected Areas from the Negative Impacts of Mining and Exploration, October 2000

CONSIDERING that protected areas of various definitions and categories are home to a substantial portion of the earth's biological diversity, threatened species, indigenous communities, lifestyles, and cultures;

NOTING that protected areas act as an important natural system for the regulation of the world's climate balance;

⁹ see, for example, IUCN, 1999: *Parks for Biodiversity – Policy Guidance based on Experience in CAP Countries*

RECALLING that a large majority of State members of IUCN are signatories to the Convention on Biological Diversity;

ACKNOWLEDGING that many of IUCN's State members have established national systems of protected areas to guarantee the conservation of biological diversity;

CONCERNED by the negative social and environmental impacts associated with the rapid growth of mining and mineral exploration activities world wide with particular reference to the risks posed to the preservation of biological diversity in protected areas;

RECOGNISING that the positive endeavours of States, environmental groups, and threatened communities require strong legislative instruments to strengthen their efforts for nature conservation;

The World Conservation Congress at its 2nd Session in Amman, Jordan, 4-11 October 2000:

1. INVITES all governments and corporations to promote and implement best practice in all aspects of mining and mineral extraction, from first exploration through to decommissioning and subsequent land use;
2. CALLS on all IUCN's State members to prohibit by law, all exploration and extraction of mineral resources in protected areas corresponding to IUCN Protected Areas Management Categories I to IV;
3. RECOMMENDS that:
 - (a) in categories V and VI, exploration and localised extraction would be accepted only where the nature and extent of the proposed activities of the mining project indicates the compatibility of the project activities with the objectives of the protected areas;
 - (b) authorization for localised exploration and mining require an environmental impact assessment (EIA) of the project and approval by the relevant competent authority and stakeholder groups after public disclosure of the EIA draft document; and
 - (c) authorized exploration and mining projects be subject to strict planning, operating, monitoring, and post-use restoration conditions;
4. URGES that proposed changes to the boundaries of protected areas, or to their categorization, to allow for the exploration or localized extraction of mineral resources, should be subject to procedures at least as rigorous as those involved in the establishment of the protected area in the first place;
5. RECOMMENDS that exploration and extraction of mineral resources and allied infrastructure development work, which is outside of a protected area, but which may negatively affect the values for which the protected areas were established, should be subject to:
 - (a) EIA preparation and approval from relevant competent authority and stakeholder groups after public disclosure of the EIA draft document; and
 - (b) strict planning, operating, monitoring, and post-use restoration conditions.

This Recommendation was adopted by a show of hands. The delegation of the State member United States made a formal Statement for the Record indicating that it had opposed and voted against the Recommendation, noting that mining policy is an internal matter for sovereign states, and reiterating that, "in the US, management of parks and requirements for environmental assessments are based on domestic laws and regulations, not a global framework. In this context, the US Government has acted strongly to limit mining where it is not appropriate". The full Statement is reproduced in the Congress Proceedings

IUCN recognises, of course, that governments are sovereign. Subject to the requirements of national laws, they can allow mining to take place in Category I - IV protected areas. **However, IUCN believes that governments and mining corporations should be aware that in most cases the de-gazetting of a protected area, or a boundary adjustment so as to permit mining within a protected area, would be in defiance of a growing body of international opinion,** for example as reflected among its

membership. It should not in any case be done without the most rigorous investigation of the implications and the adoption of tough, transparent procedures for public and scientific scrutiny.

In taking this position, IUCN recognises that many countries, especially the least developed, are desperate to boost their national income. In asking governments to respect the existence of protected areas in taking decisions on mining, IUCN acknowledges that more needs to be done through international or market mechanisms to make biodiversity and protected areas pay. In fact, conservation bodies like IUCN and WWF – as well as many international donors – are supporting projects of this kind, which link protected areas and sustainable rural development.

IUCN also recognises that there are situations where trade-offs (offsets) may offer an apparently attractive solution, under which mining is permitted where it adversely affects a protected area, in return for funds for an extension to that area or for other conservation purposes. But such a strategy is a challenge to an important characteristic of a protected area, and the principles underlying the IUCN Amman Recommendation, that protected areas are intended to be permanent. So while offsets may, on rare occasions, represent a real win/win situation for the area in question, they always involve a degree of compromise which will make it more difficult to defend other protected areas in future. Not surprisingly therefore they are regarded with some suspicion by many conservationists.

The mining companies should be aware that the issue of how to deal with protected areas is seen by many as *the* test of their willingness to embrace a more responsible policy towards the environment and a sustainable approach to human well-being. **Nothing would do more to improve the climate of trust and co-operation with conservation stakeholders than a firm declaration from industry leaders that they will adopt a policy of respecting Category I - IV protected areas in future.** If such a declaration were made by the industry sponsors of the ICMM, there would be far less danger that one major company would break ranks and try to steal a march on the others, since this would in effect be an industry-wide policy.

5 An Agenda For Action

5.1 Context

There is clearly a deep gulf between the mining and conservation interests over the “no go” issue, and about the restrictions over mining activity within protected areas. The arguments presented by the mining and the conservation communities may be individually persuasive in the context within which each community finds itself. The conservation community remains hopeful, nonetheless, that the mining community will make a formal pledge that certain areas (e.g. Categories I-IV protected areas) will become off limits for mining. Yet the mining community has so far been extremely reluctant to do so, focusing instead on the need to establish an ‘enabling framework’, within which policy, planning and legislation, even the market, will determine the ‘rules of the game’ with regard to land access for mining.

So despite the best intentions all round, there remains a lack of trust and mutual understanding between the two sectors. The MMSD process will have achieved little if it does not make some progress here.

The approach in Section 3 is intended to be a process which mining and conservation interests might follow, giving each party greater confidence in the good faith of the other. Conservation interests would hope that, at the end of this process, the major mining companies would feel sufficiently confident about protected areas, and the way that they are categorised etc., that they would be able to sign up to a policy which would involve avoiding Category I - IV protected areas in future. It is however acknowledged that in practice governments are a key factor in determining what areas are opened to mineral exploration and mining and what are not, and in setting the conditions that should apply to any mining operations. Therefore, though governments are not officially involved in the MMSD process, both mining and conservation interests need to bring them into the dialogue as soon as possible.

The agenda is in three parts: what mining companies could do immediately to begin to acquire greater trust in the conservation community (section 3.2); what the conservation community could do to begin to build confidence among mining interests (3.3); and an initial set of joint activities (3.4) which would be first step towards a programme of co-operation that might culminate in time in a commitment by mining companies to avoid Category I - IV protected areas.

The politics of this agenda are very sensitive. The mining corporations are being asked to indicate the direction in which they are travelling, even if at present they resist making the commitments asked of them by conservationists. The conservation community is being asked to be patient, but would nonetheless achieve far more than is currently available from the mining sector. Neither side is being asked to abandon current positions, however.

5.2 A Proposed Agenda for the Minerals and Mining Sector

The mining companies should embark on a step-by-step journey towards the eventual acceptance of the principle that Category I - IV protected areas should be off limits for all aspects of mining. The initial components of this agenda would be:

- A joint declaration by all the major mining companies that:
 - they explicitly recognise that mining is inappropriate in some rare, fragile and unique ecosystems, (i.e. that they recognise the validity of the "no-go" concept),
 - they will not seek to open new mines, or expand existing ones, in existing and new World Heritage sites, recognising that such areas have outstanding universal value and are only inscribed on the World Heritage list after a critical, scientifically-based process to determine their qualities,
 - they recognise that the existence of protected areas creates a special "duty of care" on mining companies,
- A public welcome by the mining industry for the programme of work that the conservation bodies will enter into as their part of the agenda (see below);

- Support by the mining industry for the co-operative programme of work that will form the third part of the agenda (see below);
- Participation by the mining sector in the World Parks Congress (September 2003) (WPC), including sponsorship of a workshop(s) on mining and protected areas.

5.3 A Proposed Agenda for the Conservation Community

The conservation community in general, and IUCN in particular, is called upon to adopt an action plan to improve the application of the categories system. While this may take several years to implement, there is a need to state unequivocally the direction in which the protected areas categories system is intended to evolve. The main elements of this would be:

- Steps to improve the quality of the decisions which are made about how to assign protected areas to management categories, and the transparency with which such decisions are made. This would involve a significantly improved process for gathering the next and future rounds of UN List entries. For example:
 - building national capacity to make use of the categories system,
 - better advice on completing returns,
 - encouraging a national and regional peer review process which would enable a broader range of national stakeholders to contribute to the recommendations on protected area assignments, and
 - greater transparency over the determination of any disputed cases by IUCN/WCPA;
- Easier access by all interests to protected areas data, through the refinement of the UNEP-WCMC data base and the production of more informative UN Lists of Protected Areas (including maps, and better source data to explain how sites were categorised);
- A review of the impact of the protected areas categories system recommended in 1994 (report in draft by the WPC);
- Production of thematic and regional guidance on the application of the categories system, e.g. supplementary advice contained in (i) regional guides for different parts of the world, and (ii) guides on its application in forest and marine environments (drafts ready by the time of the WPC)
- Development of IUCN/WCPA policy positions on other controversial land uses in protected areas, e.g. forestry and infrastructure, so as to avoid the apparent "singling out" of mining (drafts ready by the time of the WPC);
- Further development and promotion of WCPA work on management effectiveness, focussing in the first place on World Heritage sites and the threats to them;
- Encouraging the Secretariats of the Ramsar Convention and the UNESCO Man and Biosphere to promote dialogue with the mining sector, with the aim of developing policy positions regarding mining and Ramsar sites and Biosphere Reserves;
- Development, for review by the WPC in 2003, of a proposal for a system to certify, or verify, that a protected area has been correctly assigned to a certain category, and is effectively managed;

- A workshop or workshops at the WPC to examine the above reports and progress made in applying the categories system since 1994, and to determine future directions in this area of work, including recommendations to the 7th. Conference of the parties to the CBD (May, 2004).

Note – some of the above has resource implications going beyond that which is presently available and these would need to be addressed before the work could be undertaken.

5.4 Tasks to be Embarked Upon Forthwith by the Mining and Conservation Sectors

While the foregoing sets of action could eventually lead to the building of confidence between the two sectors, it should be possible for the mining industry and conservation interests (notably through IUCN) to embark now upon a short term programme of co-operative action. This would:

- Produce helpful material to address vexed problems;
- Help to build trust further;
- Provide the foundation for more far-reaching co-operation over the medium term as the first two elements of the trust building agenda begin to deliver results.

The areas where co-operation could best be established are around those limited aspects of the IUCN Amman Recommendation where there is not a fundamental difference of view between the two sides. Therefore the following tasks might be addressed jointly by mining and conservation interests:

- A package of published guidance that might be reviewed at the WPC, on:
 - mining in Categories V and VI, dealing especially with the criteria for determining if mining is appropriate, and if so how it might best be conducted,
 - mining near protected areas, dealing with the considerations which should be addressed in deciding if mining (including exploration) is possible and the conditions that should then be applied to it,
 - the ground rules that mining companies and conservationists should follow in a situation where there is neither a protected area nor a mining activity, but both groups have an interest in the area as a potential mine *and* as a potential protected area,
 - “inherited mines” in protected areas (i.e. those that were in existence there before the protected area came into existence);
- Case studies and best practice on offsets or trade-offs, giving examples of good, and not-so-good, practice in this sensitive area, perhaps leading to the development of principles to guide this practice in future;
- The development of an agreed set of demanding principles, pre-conditions and strict procedures that should be applied where it is proposed to de-designate a protected area, or adjust its boundaries, in order to enable mining to go ahead.

This programme too has obvious resource implications, but it should be possible to find the necessary finance if mining and conservation interests work together to identify appropriate sources.