GLOBAL PARTNERSHIP FOR AN AFRICAN MINERAL GEO-SCIENCE INITIATIVE ('AMGI'): ISSUES NOTE

I. BACKGROUND AND CONTEXT:

The mining sector in Africa has tremendous potential for growth: Africa, the world's second largest continent, comprises of a number of resource-rich countries. The mineral wealth of Africa includes a major portion of the world's reserves of bauxite, chromite, cobalt, diamond, fluorspar, gold, manganese, phosphate rock, platinum-group metals (PGM), titanium minerals, vanadium, and zircon. Africa also contributes to a significant portion of the world's production of these metals. The mining sector in Africa has good scope for growth owing to the likely presence of large deposits of minerals in areas that are still largely unexplored. These resources provide Africa a competitive benefit in industrialization globally.

The mining sector's growth is crucial to social and economic development in Africa: The importance of natural resource revenues to the domestic economies of Africa is well-known, with African countries accounting for a significant portion of the world's mineral output. Effectively leveraging Africa's mineral wealth would enable it to function as an engine of sustained economic growth and development. When managed well, the resource revenues thus obtained can also be used to ensure social development through poverty reduction and strategies for inclusive growth.

Availability of geo-scientific data is crucial to ensuring efficient utilization of mineral resources: Sound knowledge of the existing and potential stock of mineral resources regionally and in countries based on credible geo-scientific data positively impacts ability of States to leverage their mineral resources to maximize sectoral benefits and outcomes. In support of providing more geo-scientific data, there is some evidence to suggest that public investments towards its collection can not only serve to increase the value of mineral tenements through the auction process but can also deliver significant returns by stimulating private investments in adjacent tenements (Auditor General 2010; Reedman et al. 2002). Thus, the availability of geo-scientific data becomes crucial to attaining these direct potential benefits to the State, Investors, as well benefits to an improved planning process:

- ***Availability of adequate geo-scientific data increases investments:*** The demand and buy-in generated among the investors, which signifies their willingness to participate in the mining sector, impacts the efficiency in utilization of natural resources. The ability to generate resource rents from a country's 'balance sheet' of endowments depends on discovery and depletion of its mineral resources. Prospectivity is dependent on a country's geological endowments ('below ground factors'), and is subject to a high degree of uncertainty. The process of discovery and depletion entails a significant number of risks from the investor's and exploration company's perspectives. Such investors will not only assess the quality of the geological endowment of a certain acreage (which is highly uncertain), the efficiency of its exploration and exploitation, but also look for political stability, a well defined mining code or petroleum law, a fair fiscal regime and other factors such as infrastructure ('above ground factors'). For a government/country, the benefit stream will depend on the fiscal regime ('treasury-take') and additional economic impacts (including infrastructure and domestic economic linkages).

  The recent years have witnessed increased sectoral investment in Africa from global operators, paving the way for the introduction of global good-fit practices as well as a competitive market. Increased availability of geo-scientific data positively influences several aspects of investment, such as contributing to an increase in capital invested, increased tolerance to potential risks and encouraging long-term investments.
- ***Availability of adequate geo-scientific data enables a State to maximize its revenues:*** As a prerequisite to enabling the State to earn an equitable portion of revenue from its natural resource wealth, a minimum threshold of geo-scientific data, both in terms of quantity as well as quality, is required. Processes and procedures for grant of licenses and concessions are informed by the available geo-scientific data. Such licenses and concessions in the Africa region have been predominantly allotted on a 'first come-first serve' basis. However, the presence and effective utilization of adequate geo-scientific data would enable countries to maximize the use of competitive

bidding procedures for such allotments, relegating the use of the 'first come- first serve' basis to scenarios where such information is not available, and thereby providing a fillip to the natural resource revenues obtained by the State. Moreover, the competitive bidding process in itself also benefits from the presence of adequate geo-scientific data. While it is free-market competition that decides the pricing in such tendering processes, the process still benefits from the investors making informed bids on the basis of adequate geo-scientific data, which enables them to accurately assess their estimated returns from the license/concession area under consideration.

- ***Geo-scientific data informs the creation of 'development plans':*** In order to capitalize on sudden changes in the business cycle and associated investments that accompany periods of elevated commodity prices, mineral-producing countries require a well considered development plan. The effective execution of these plans requires government coordination of State and market activities, which in turn requires basic information on where such activities are likely to occur and what government services and infrastructure services will likely be required. For a resource dependent economy such a plan would therefore require knowledge of the countries existing stock of resources and where investments would most likely be made if prices changed.
- ***Geo-scientific data may be leveraged for sustainable development:*** Geo-scientific data available to governments also serves to inform overall land-use planning, with a focus on the development of a 'Regional Resource Corridor Approach', whereby neighboring mineral-rich areas across countries, states and districts in Africa can be developed in a holistic manner, thereby addressing supply-side and other infrastructural bottlenecks, maximizing efficient mining, and ensuring greater revenue generation and sustainable development through better governance. The improved spatial planning resulting from such an approach would also enable efficient identification of alternate and strategic land uses of competing resources such as forest, wildlife, water and other natural resource conservation.

Effective collection and dissemination of geo-scientific data in Africa has been prone to commodity cycles and budget constraints: Collier and Gelb's analyses of known subsoil resources by region combined with anecdotal evidence establishes that Africa is significantly "underexplored" in terms of sub-soil assets as a result of lack of geo-data.[1] Faced with budget constraints and pressures to provide critical services to their citizens, governments of developing, resource-rich countries find it difficult to justify expenditure for the collection of geo-scientific data as a public good, given that its pay-offs have a longer gestation period than most other immediate spending needs of the country. This has resulted in many resource-rich countries lacking capacity in their geological surveys for effective geo-data collection, and the domestic repositories possessing old (non-digital), sub-standard or unreliable geo-scientific information, putting them at a disadvantage to benefit from the country's mineral endowments. From an investor's perspective, access to, and availability of geo-data, is often difficult, time consuming and involves a high upfront cost, thus limiting its value.

Existing regional and international efforts lay the ground-work for the collection of geo-scientific data in Africa: Recognizing the economic, administrative and strategic importance of geo-scientific data in catalyzing growth in Africa, efforts have been made by developed countries (through their Geological Survey Organizations ('GSOs')), as well as by global partnerships between countries in Africa and Europe and their respective GSOs (e.g.: African-European Geo-resources Observation System ('AEGOS')), to facilitate the collection of (and/or) to collect geo-scientific data. Through its global expertise of good-fit practices and ability to leverage financial resources, the World Bank could add value to, and complement the currently existing national and regional initiatives for the collection of geo-scientific data. By leveraging the World Bank's technical expertise, financial resources and donors, and global outreach capabilities, AMGI would seek to consolidate, digitize, interpret and disseminate geo-scientific data pertaining to the Africa Region. Effective consolidation of geo-scientific data would need

[1] Collier 2010; Gelb et Al., 2011.

an organizational structure with the capacity to address several issues (See Also: Table III below), the preliminary issue being that the Africa- specific geo-scientific data is currently scattered amongst domestic GSOs of the host countries, local governments, and European GSOs that have traditionally collected geo-scientific data in the region, either on a standalone basis or in cooperation with the local geological survey institutions. Such information also currently exists in different formats and languages, making it an onerous task to read and interpret them beyond State boundaries. Any effective system of regional geo-data collection and dissemination would thus have to identify and convene all relevant stakeholders, being the institutions that (i) possess the relevant data, (ii) whose support is required for implementation, and (iii) who add value to such a project through technical and/or financial inputs. Additionally, the geo-scientific data disseminated would also have to meet the demands and requirements of the data-recipients. Specifically, AMGI builds upon and reinforces the following initiatives:

- ***Efforts by Sustainable Energy, Oil, Gas and Mining Unit ('SEGOM'), World Bank:*** SEGOM is currently providing financial support to a joint initiative of the British Geological Survey International ('BGSI') and the University of Dundee for policy research to inform (i) how developing resource-endowed countries pursue an information strategy to promote successful discovery and depletion of their prospective endowments, and (ii) the potential advisory and financing engagement by development partners in this area, with the objective of assessing the potential of collection and use of geo-scientific data as an instrument to enhance the development outcomes and benefits of mineral development in resource-rich settings.

  Surveys and analyses have been conducted (See: Figure I, II and III) to determine the demands of industry, including with regards to the nature and types of geo-data widely used and required, its availability, and the costs of collecting such data.

Figure I (Courtesy BGSI): Industry's perception of currently available Geo-Data

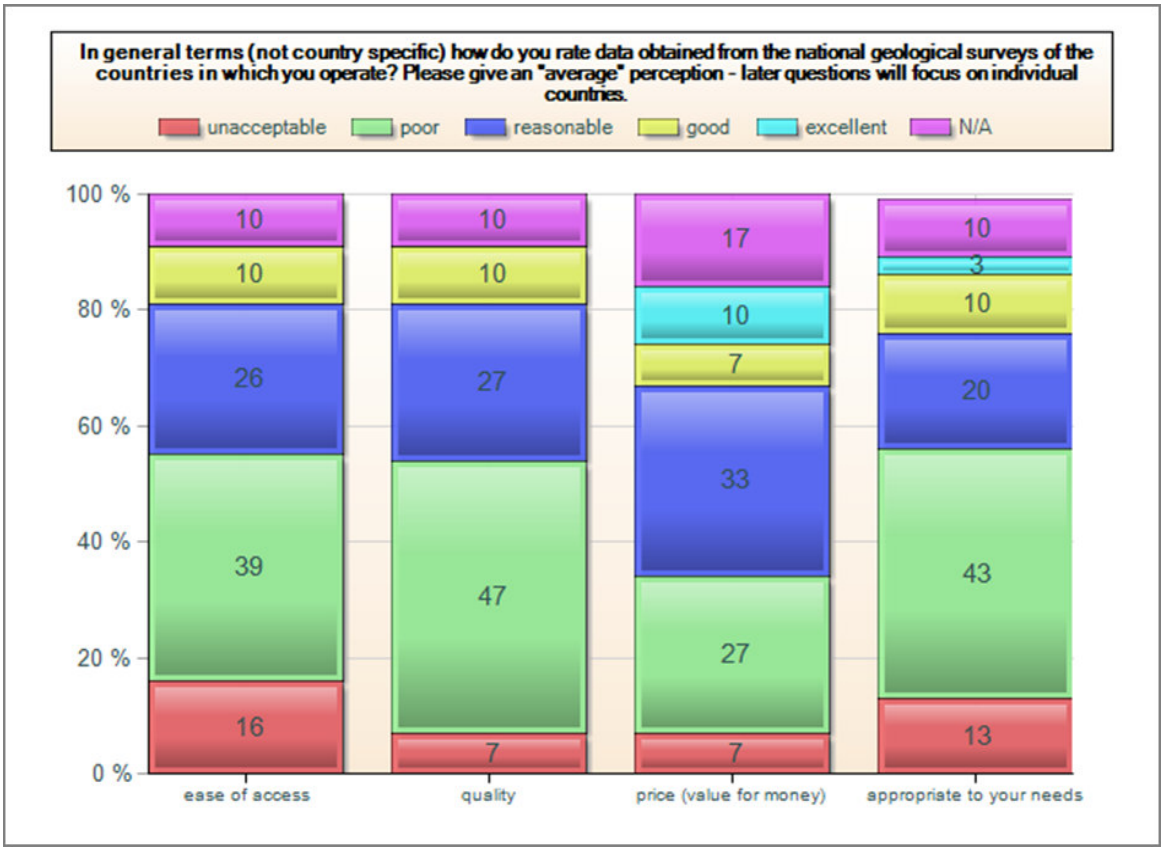


Figure II (Courtesy BGSI): Industry's willingness to pay for additional geo-scientific data

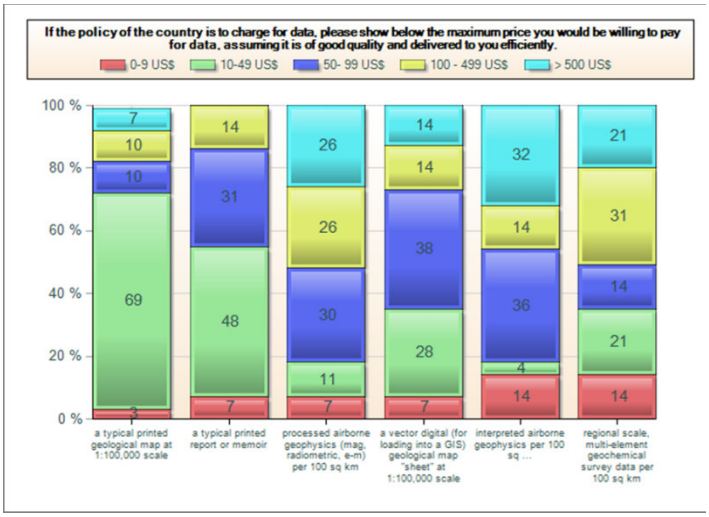
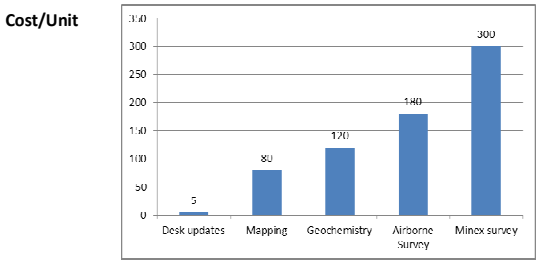


Figure III (Courtesy BGSI): Estimated costs of collecting Geo-data required by Industry



approx. $/km² from recent World Bank and other contracts excluding capacity building and data management

Courtesy: British Geological Survey (BGS)

- ***Similar trans-national initiatives seeking geo-data digitization and collection:*** With reference to the Africa region, the African-European Geo-resources Observation System ('AEGOS') has brought together the European Geological Surveys (which have archives of Africa-related geo-data), implementing governments and their domestic geological survey departments, international organizations, and other repositories of geo-data in order to introduce global good-fit practices in, *inter-alia*, (i) digitizing, storing, managing and disseminating currently existing geo-scientific data through a geo-portal, and (ii) building capacity in domestic institutions for research and development in sustainable development policies. A pan-European initiative, *One-Geology* has also undertaken similar efforts in trans-national geo-scientific data digitizing, mapping and internet-based dissemination by convening GSOs across Europe.

  AMGI would analyze the currently prevailing regional and international practices in geo-data collection and dissemination, including initiatives similar to itself, imbibing good-fit practices where required, and identifying possible gaps in such initiatives (if any), with a view to resolving them through inputs obtained by dialogue between the various AMGI stakeholders as well as other development partners of the World Bank (as applicable).

AMGI plugs gaps in geo-scientific data related activities in the Africa region: In order to mutually benefit their common objectives, as well as with a view to reinforcing its individual goals, AMGI would seek to partner with other similar initiatives at regional geo-data collection. This would enable a mutual reinforcement of the technical and/or regional expertise gathered by these initiatives, as well as facilitate better sharing of geo-spatial information in a scenario where these initiatives operate in the same region. Cooperation between AMGI and similar regional data-collection initiatives would especially prove beneficial while consolidating and digitizing the geo-scientific data, and whole engaging in capacity building measures. A detailed description of the processes wherein cooperation between AMGI and other similar initiatives would be sought is given in Table II (*item-vi*) below.

II. SCOPE, AIM AND OBJECTIVES

AMGI would be a pan-African initiative for the collection, consolidation, interpretation and effective dissemination of national and regional geological, geochemical, geophysical and mineral resource data through a geo-portal (using a single or multiple internet-based servers), thereby increasing accurate and updated geo-scientific data available in public domain. This would be done with the ultimate goal of seeking to facilitate broad-based governance changes in the mineral and other downstream and side-stream sectors, including (i) improved licensing processes and procedures that efficiently leverage the natural resource wealth of countries, (ii) improved spatial planning, infrastructure development, forest and wildlife conservation through the use of regional resource corridors, and (iii) sustainable development policies for efficient management of natural resources. The fulfillment objectives would also depend upon

the adsorptive capacity of institutions, as well as the ability of civil society to effectively use the data disseminated to fuel local demands for good governance, both of which would be enhanced through capacity building measures.

In order to achieve these outcomes, AMGI would engage in (i) digitizing and storing currently existing data in various regional or national repositories, with global accessibility to obtain the information through a geo-portal maintained and managed by AMGI, (ii) interpreting and analyzing the digitized data thus obtained, *inter-alia,* to allow a proper valuation of subsoil resources, (iii) using such interpretations and analyses to identify the areas where geo-scientific data available is insufficient, with a view to recommend and facilitate further collection of data on a national and/or regional basis in such areas, (iv) building capacity in domestic institutions for further, sustained geological research and geo-data collection, processing and interpretation of geo-scientific data, identification of prospective areas, and valuation of sub-soil resources, with a view to informing their policies relating to the mineral sector, and (v) building capacity in civil society for understanding the geo-scientific data disseminated, with a view to enabling their use to fuel local demands for improved governance.

A robust, results-based performance framework, including quantitative and qualitative indicators, will be used to evaluate AMGI interventions. Independent evaluations of activities will be incorporated into the AMGI results framework. Table I below shows a list of objectives/results expected from AMGI and indicators against which these can be verified.

TABLE I: RESULTS FRAMEWORK FOR AMGI

Objectives/Results	Indicator	Means of Verification
1. **Development Objective:** To convene the relevant AMGI stakeholders to collect, consolidate, digitize, interpret and disseminate geo-scientific data, while simultaneously building capacity for local geological survey institutions as well as civil society organizations that would lead to the adoption of transparent and sustainable practices in information management.	• Ensuring inclusive participation in the dialogue process. • Outreach campaigns are conducted to facilitate greater buy-in from identified stakeholders. • Each stakeholder contributes to the dialogue process. • Initial time-bound processes and measures for the design of AMGI are established.	• List of representatives present at the meetings/discussions and conferences, and a summary of their interventions. • Minutes of meetings between the AMGI stakeholders and/or other formal documents, establishing the governance structure of AMGI, its membership, and clearly defining the roles and responsibilities of AMGI stakeholders in the process. • List of AMGI processes, objectives and detailed steps proposed to achieve them, are published.
2. **Intermediate Result:** Through the introduction of good-fit practices based on the global experience of the World Bank, to enable a convergence in the responsibilities, functions and administration of AMGI Stakeholders, thus facilitating the introduction of (i) initial time-bound processes for the consolidation, digitization, interpretation and dissemination of geo-data, (ii) a framework to identify, through interpretations and analysis of the geo-scientific data available, the criteria and mechanisms to recommend further collection of geo-data, and to pursue such collection	• Common data template formats are identified for the dissemination of the geo-scientific data. • Particular internet-based servers are operational to store and disseminate the digitized geo-scientific information. • The digitization, storage and interpretation of available data have begun. • Target institutions and required capacity building measures have been identified.	• The geo-portal for storing the digitized data becomes operational, with the data being available for global access (as per AMGI's terms and conditions), in a common language and template format. • Minutes of meetings between the AMGI stakeholders and/or other formal documents, detailing (i) the gaps identified in geo-survey processes across participating geological survey institutions, and (ii) shortcomings of civil society in understanding the data disseminated, and the measures

thereof, (iii) identifying time bound-processes for institutional capacity building of domestic geological survey institutions to facilitate better geo-scientific survey processes and techniques, and to enable interpretation of available geo-data for sub-soil resource valuation, and (v) identifying time bound-processes to build capacity in civil society to understand the information disseminated through AMGI.		taken to address them. • Status report showing that local geological survey institutions have begun satisfactory collection, interpretation and dissemination of geo-scientific data, as well as sub-soil resource valuation along AMGI standards, is published.
3. **Outcome:** Facilitating improved dissemination of geo-data and sub-soil natural resource valuation techniques to facilitate effective leveraging of the national mineral wealth, leading to the adoption of initial good-fit sustainable practices in sectoral as well as broader governance areas.	• Using the AMGI dialogue to define indicators and benchmarks to monitor dissemination and valuation process outcomes.	• The indicators and benchmarks table is published.

III. PROPOSED ORGANIZATIONAL STRUCTURE AND FUNCTIONING OF AMGI

1. Identifying and involving stakeholders in governance and implementation of AMGI:

Stakeholder representation in AMGI is crucial to its success: The processes involved in AMGI would be best served by stakeholder involvement at each stage of the process, each phase of implementation, and in each institutional body. This would not only result in an increased stakeholder buy-in, but also facilitate greater cooperation and agreement on AMGI's formulation and functioning. Since AMGI impacts various stakeholders that might sometimes have conflicting interests, such a structure would be essential to ensuring its success by facilitating mutual reconciliation of differences.

Some 'Stakeholder Constituencies' would be represented by nominated members: Identifying potential categories of stakeholders ('Stakeholder Constituencies') is a precursor to determining AMGI's organizational structure. Each of the Stakeholder Constituencies that are identified as forming a part of the *AMGI Management Board (See Also: Table III, Figure IV)* would be represented through members nominated to the Board. These nominated members would represent the interest of their constituency by reaching out and communicating the issues under consideration and decisions taken, with a view to obtain inputs as well as feedback from constituents who have nominated them. Such a mechanism would help ensure a robust and organic initiative, capable of addressing challenges to formulation and impediments to implementation.

'Stakeholder Constituencies' that are need to be engaged in AMGI: The identification of relevant Stakeholder Constituencies may be done through public outreach, disseminating the broad outline of AMGI, and inviting responses on their perceived (i) interest and (ii) capacity to add value to the initiative. Table II below shows an initial list of Stakeholder Constituencies that would have to be involved in the process.

TABLE II: INDICATIVE LIST OF STAKEHOLDER CONSTITUENCIES IN AMGI

Stakeholder Constituency	Contributions to/benefits from AMGI
(i) **Participating Countries:** These are sovereign governments that implement AMGI.	***Contributions:*** • Sovereign governments are most often the owners of geo-data and related information pertaining to their territories.

	• Cooperation of implementing governments is required to ensure the removal or legal and regulatory impediments to AMGI processes, including (i) the collection of geo-data, (ii) transfer of geo-data to a digital repository/ies, (iii) interpretation of such digitized and available geo-scientific data, and (iv) dissemination of such geo-data through a geo-portal. • Play an integral role in consensus formation required to establish common template formats in which the data shall be displayed, setting up servers, coordinating regional geological surveys and other processes crucial to AMGI. ***Benefits:*** • Being one of the recipients of the geo-data information, the implementing countries would stand to benefit by using it (i) to formulate informed licensing policies, (ii) to adopt a regional resource-corridor based approach to improve spatial planning as well as enabling ecological conservation, (iii) to create informed sustainable development policies with increased efficiency in the ability to leverage natural resource wealth. • The geo-scientific data disseminated through AMGI, especially when used to facilitate broader governance reforms, increases sectoral investments due to greater investor confidence. • Governments would benefit from AMGI's integration of public and private sector exploration activities through common regulated approaches for reporting exploration activities by private sector players (i.e. common reporting templates and timelines).
(ii) **GSOs in implementing countries ('Domestic GSOs'):** These are GSOs of Participating Countries.	***Contributions:*** • State and non-state actors mandated with the task of collecting and storing geo-data, such as Domestic GSOs, act as existing repositories of information. Their involvement is required in order to obtain and convert the data already available into the agreed template format. • They can provide valuable technical inputs while establishing common template formats for dissemination of data. ***Benefits:*** • Geological survey institutions in implementing countries would benefit from the increased capacity to collect geo-scientific data through technical and financial inputs from the AMGI process.

(iii) **Donor Countries:** These are sovereign governments that, though not implementing AMGI within their own borders, contribute to AMGI though technical and/or financial inputs.	***Contributions:*** • Provide financial assistance for AMGI through donations channeled through a trust-fund. • Liaise with their domestic geological survey institutions to provide technical assistance to AMGI. ***Benefits:*** • An increase in reliable geo-scientific information available would enhance the favorable investment climate in implementing countries. • The donor countries also stand to benefit from the consequential broader governance reforms in the areas related to the mineral sector, as such reforms would lead to increased stability of investments and certainty of returns.
(iv) **GSOs in Donor Countries ('Donor GSOs'):** These are GSOs of Donor Countries. Due to the colonial legacy of some African countries, Donor GSOs are often repositories of vast amounts of geo-scientific data cutting across nations.	***Contributions:*** • Their involvement is required in order to obtain and convert the data already available into the agreed template format. • Donor GSOs have supported geo-data mapping in Africa in the past, and are continuing to improve access to, and availability of geo-scientific data through initiatives such as AEGOS. These institutions have technical expertise and at times financial resources to assist in formulating and implementing AMGI, and enable the adoption of global good-fit practices. • They can provide valuable technical inputs while establishing common template formats for dissemination of data. ***Benefits:*** • The benefits accruing to Donor GSOs from AMGI are directly related to the benefits that their respective governments receive.
(v) ***Financers:*** These include various corporate donors (with donations forming a part of their Corporate Social Responsibility activities), and other debt and equity based financers such as Venture Capitals and Private Equity funds. This category does not include Donor Countries and Donor GSOs.	***Contributions:*** • They contribute to AMGI by providing it financial assistance through donations and/or other innovative financial products. ***Benefits:*** • Corporate donors would get increased visibility and global publicity when they finance AMGI as a part of their CSR activities. • Financers/Investors from both the debt as well as equity markets have the opportunity to lend to/invest in a

	promising large scale initiative with the change of global publicity and assured returns.
(vi) **Extractive Industries/Companies:** These are companies engaged in the extraction of Oil, natural gas or in mining.	***Contributions:*** • Companies engaged in the extractive industries and related sectors are one of the final recipients of the geo-data. • They are one of the interest groups that help inform the direction and processes involved in AMGI, and typically have to be balanced with concerns of confidentiality expressed by governments, and with the costs associated with data extraction and dissemination, among other issues. • The AMGI process would benefit from making non-confidential information pertaining to individual extractive companies and their specific activities available for public access, and it is the extractive industries that facilitate such a transfer. • Being one of the final subscribers of the information, they help support the continuation of the initiative though their donations, as well as membership fees. ***Benefits:*** • Being the investors, extractive companies have an interest in increasing the reliable geo-data information available prior to investment, which helps their risk portfolio by enabling them to take informed decisions on investments. • The extractive companies, similar to donor countries, also stand to benefit from the consequential broader governance reforms in the areas related to the mineral sector.
(vii) **Other regional initiatives:** This refers to other initiatives at geo-data collection, digitization and dissemination that are done on a regional (trans-national) basis, especially in Africa, but also elsewhere (e.g: Europe).	***Contributions:*** • AMGI would also seek to involve other similar initiatives (e.g.: AEGOS, *One-Geology*) as a potential stakeholder in the process. AMGI as well as the other regional initiatives would mutually benefit from each other's technical inputs. • Other regional initiatives can contribute effectively to AMGI in all its processes ranging from design to implementation, especially contributing to (i) the creation of a common template to collect and store digitized data, (ii) in case of regional initiatives in the Africa region, providing AMGI with digitized data already in its possession, and coordinating with AMGI to carryout data digitization of a region-wide basis to avoid duplication of activities, and (iii) providing technical inputs on implementation of AMGI based on its prior regional experience, including with regard to

	addressing any legal or regulatory impediments to the AMGI process. ***Benefits:*** • Regional initiatives comprising of only European GSOs (either in the capacity of donors or implementers) would benefit from technical inputs that AMGI would be able to provide to it through AMGI's association with other foreign geological survey institutions such as US and Canadian geological survey institutions, that are not a part of the former process. • AEGOS would also benefit from coordinating with other regional initiatives in Africa for dividing data digitization responsibilities on a country/region-wide basis, so as to ensure increased efficiency, avoid duplication of activities, and ensuring reduced costs in data dissemination. • Through its association with AMGI, other regional initiatives would also benefit from the World Banks technical inputs with regard to its capacity building measures, based on its global and specialized expertise.
(viii) **Civil Society**	***Contributions:*** • Civil society organizations and non-governmental organizations ('NGOs'), both national as well as international, contribute to the AMGS initiative by ensuring the maximized use of the disseminated data in fuelling local reforms for improved governance. • Not-for-profit environmental databanks such as World Wildlife Fund and others can enable deeper and more widespread dissemination of the information made available to civil society through AMGS. ***Benefits:*** • Through the use of the disseminated geo-scientific information, Civil Society would benefit from being better informed about their national mineral resource wealth, enabling them to make informed and justified demands for changes in governance policies.

2. Determining the Organizational Structure of AMGI:

The Organizational Structure must ensure a division of roles and responsibilities: Considering the varied, and sometimes conflicting responsibilities and activities that the AMGI is involved with, an organizational structure that creates a clear division of roles and responsibilities is required. Given the inherent nature of AMGI's activities (See Also: *Part II*, *Scope, Aims and Objectives*), conflicts of interest are likely to arise when they are performed by the same body.

Figure IV below shows the hierarchical structure of AMGI, and its relation with stakeholders, while Table III below shows a description of the various bodies involved in the initiative and their corresponding roles and responsibilities.

TABLE III: GOVERNANCE AND EXECUTION OF AMGI ROLES AND RESPONSIBILITIES

I. AMGI Management Board

Description:

- The AMGI Management Board would be the body responsible for strategic steering of AMGI activities. It would meet on a specified number of occasions every year (at least twice).
- The stakeholder constituencies represented in the AMGI Management Board would be (i) Participating Countries, (ii) Domestic GSOs, (iii) Donor countries and (iv) Extractive Companies.
- Each stakeholder constituency would be entitled to elect its own representatives to the AMGI Management Board, with considerations being given to the following factors: (i) the differing roles, concerns and importance that each stakeholder constituency has in the initiative, (ii) the level of involvement required from each stakeholder constituency to successfully formulate, implement, evaluate and reform (if necessary) the initiative, and (iii) the possibility of increased value added to the initiative in terms of assistance (technically, financially, outreach etc.) by a greater proportion of representation.
- The proposed representation of each constituency in the AMGI Management Bard is as follows:
  - Participating Countries: 3 Members
  - Domestic GSOs: 2 Members
  - Donor Countries: 2 Members
  - Extractive Companies: 2-3 Members
- The AMGI Management Board would also be presided by a Chair which shall be determined by the African Union.
- The detailed working procedures of the AMGI Management Board would be determined by itself.

Functions (Inclusive and indicative list):

- Strategic steering of the AMGI initiative, including periodically addressing intricate issues in AMGI policy formulation and implementation, and establishing work -program priorities with a pan-Africa vision.
- Establish and approve of staffing plans, and periodically approve (*ex-post facto*) of individual appointments to the AMGI Technical Advisory Committee
- Organize ***Annual AMGI Meetings*** in order to engage Civil Society and Financers along with other AMGI stakeholders, and to disseminate information about the specific activities, developments, direction and results of the initiative.

II. AMGI Technical Advisory Committee

Description:

- The AMGI Technical Advisory Committee would be comprised of technically qualified members (appointed by the AMGI Management Board) that would meet on a specified number of occasions every year (two-three times).
- The appointment of the AMGI Technical Committee members would be transparent, and approved by the AMGI Management Board.
- Stakeholder categories of 'Donor GSOs' and 'Other Regional initiatives' would be

represented in the AMGI Technical Advisory Committee through their members.

Functions (Inclusive and indicative list):

- Establish and/or review, and agree on technical standards and build partnerships with other global and regional initiatives.

III. AMGI Secretariat

Description:

- The AMGI Secretariat would be housed in the World Bank for the first 3 years of the initiative, subject to the World Bank's rules and procedures. Subsequently, it would be transferred to a suitably identified African institution.

Functions (Inclusive and indicative list):

- Providing program management and detailed technical support to implementation of AMGI in individual countries.
- Administering the AMGI multi-donor trust fund and allocation of funds for country-specific programs within the broad procedures set by the World Bank, in consultation with the AMGI Management Board.
- Liaise with the geological surveys of other countries for the performance of activities such as digitization, storage and interpretation of available geo-data, and further data collection activities (where required).
- Determine the user fees and terms for subscribing to the geo-data portals created under AMGI.
- Support and coordinate for the AMGI Management Board and AMGI Technical Advisory Committee in organizing their meetings.
- Where required, administer the issuance of contracts for various activities proposed as a part of the AMGI process, including: (i) digitization of geo-data, (ii) creation of common data templates, (iii) creation and maintenance of geo-portal servers, (iv) interpretations of data available/obtained, (iv) analysis of geo-scientific data obtained in order to recommend for future geo-data collection through surveys (where necessary), and (v) carrying out such further surveys. While issuing such contracts, precautions would be taken to ensure that conflicts of interests do not arise in terms of either the performing agencies or the functions to be performed.

IV. AMGI Donor Trust Fund

Description:

- All donations and financing made to, and fees collected from the operation of AMGI shall be deposited in designated accounts (depending on terms and conditions of such advances) in the AMGI Donor Trust Fund, a multi-donor trust fund created for the purpose of pooling together resources and financing AMGI. If required, the advances from loans/equity investments would be kept separated from monetary contributions through donations and fees collected through AMGI.
- The AMGI Donor Trust Fund would be administered by the AMGI Secretariat which would be housed in the World bank for the first 3 years of AMGI and subsequently transferred to an African institution.
- Corporate Donors who cross a threshold contribution to AMGI of above U.S.D. 5 Million per year would be offered participation in the AMGI Secretariat as observers during the

allocation of funds against activities selected from the work-plan.

V. Domestic GSOs

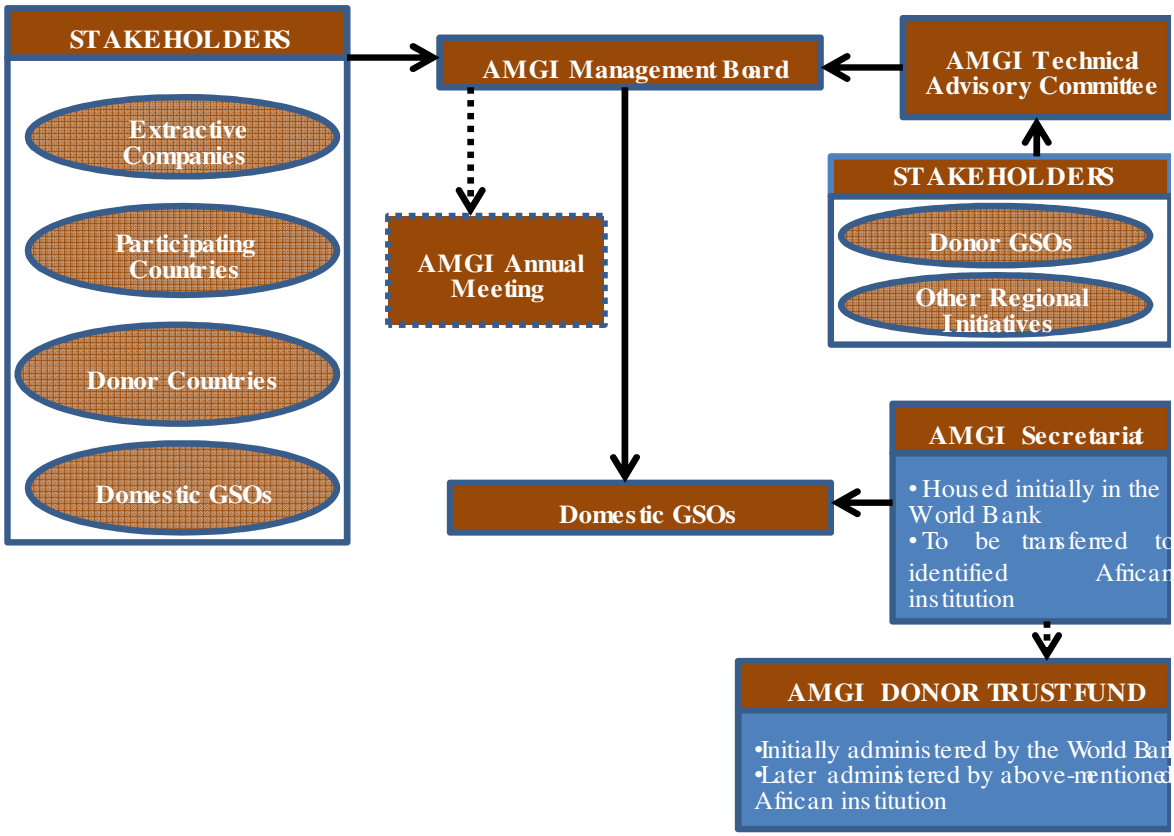
Description:

- In order to oversee the implementation of AMGI in their specific countries, and to provide effective stakeholder feedback and program management, a national ownership of the process is also required.
- Domestic GSOs in Implementing Countries would, using the domestic infrastructure and institutions already existing in implementing countries, perform this role.

Function (Inclusive and indicative list):

- Functions as the counterpart institution for AMGI implementation within its country, and liaisons with the AMGI Secretariat and AMGI technical Advisory Committee to provide technical support locally during each stage of implementation.
- Receives the capacity building measures of AMGI, as well as assists in further capacity building in domestic civil society organizations so as to assist in an understanding on the geo-data.

FIGURE V: Organizational Structure of AMGI



The AMGI stakeholders would accede to an AMGI Charter, describing the rights and obligations of each stakeholder, so as to remove impediments to implementation of AMGI.

3. Funding AMGI and its institutions:

Except as may otherwise be agreed in each Donor's Memorandum of Understanding (MOU) or Administration Agreement, all Donor Countries would be required to make a minimum contribution to AMGI of US$ 1,000,000 per year. Financers would also be leveraged to fund the initiative. The payment of subscription fees to access the geo-data disseminated through AMGI would ensure that the initiative is able to maintain itself on the long-run. Each year would correspond to the IBRD fiscal year, i.e. from July 1 – June 30 of each calendar year. The World Bank may meet the required minimum annual contribution to the AMGI Donor Trust Fund through a combination of administrative budget and in-kind contributions.

Initial funding would be met by the AMGI Donor Trust Fund: Donations to the AMGI initiative, which mainly comprise of contributions from (i) implementing countries, (ii) donor countries, (iii) Financers, including donor companies, (iv) international organizations, and (v) any other not-for-profit organization, would be deposited in an *AMGI Donor Trust Fund,* initially managed by the World Bank. This trust fund would help augment national resources available for implementing AMGI, and its corpus would be used for supporting the organizational structure as well as implementation activities of AMGI. The regulation and management of the AMGI Donor Trust Fund would initially be in compliance with the World Banks internal working procedures. After the completion of the initial three years of AMGI implementation, the administration trust fund would be handed over to the identified African institution which would house the AMGI Secretariat transferred from the World Bank.

Domestic sources of funding also need to be sought: AMGI should also ideally be funded by the implementing countries, keeping in mind the long-term profits that the initiative can generate, given the increase in investments cause due to AMGI implementation. This holds true especially for the working of the national AMGI cells.

IV. ADDRESSING ISSUES IN IMPLEMENTATION OF AMGI

Apart from organizational issues, a number of other issues also need to be addressed while implementing AMGI. Some of the most significant issues that need to be addressed while implementing AMGI are as follows:

1. ***Arriving at Common Templates for data dissemination:*** An initial process would be to arrive at common templates for data dissemination through mutual discussion at the AMGI Management Board. Establishing such a common template is required for effective data dissemination and allowing for easy readability of data.
2. ***Performance of functions through a 'contract-for-services':*** Where certain functions of AMGI, such as geo-data mapping and analysis are required to be performed by a specialized institution/company, the recommended method to establish a legal relationship with such external players is through a ***'contract for services'***. In other words, these functions would be performed through independent contractors, who work based on contracts issued to them through a tender process overseen and approved by the AMGI Secretariat. Considering that no initial investment is sought from companies who perform such duties, a legal relationship in the nature of a Public-Private Partnership ('PPP') in the legal sense of the term is not feasible.
3. ***Confidentiality Requirements:*** Sometimes, legislative and/or regulatory challenges might exist to carrying geo-data and related information out of the country of origin, or sometimes, of creating copies of it that are retrievable out of the country without prior permission. Such confidentiality requirement could also be mineral-specific, i.e. exist only with respect to certain minerals. This could be an impediment especially to the creation of a central repository, but is likely to be less of a concern when the internet-based data servers are located within the country of origin of the geo-data. The

organizational structure of AMGI, which involves government representatives, must be leveraged to address this challenge. The Participating Countries must **c**onduct an initial review of their legal and regulatory frameworks prior to implementation to identify any challenges to AMGI implementation. If such challenges exist, the Participating Countries, by liaison with the AMGI secretariat, must take satisfactory action to remove them.

4. ***Division of responsibilities:*** Just as conflicts of interest scenarios have been analyzed with regard to the organizational structure of AMGI, similar situations might also arise with respect to contractual performance of work allocated to the external company/institution. In order to avoid such scenarios, 'contracts for labor' are best divided on a function-wise, as well as on a country-wise basis. Such a process would also offer a competitive climate and prevent the monopolization of the performance by a single entity. For instance, each of the functions such as data analysis, recommending further data collection, actual data collection, data digitization and server maintenance etc. should be co***n***tracted out to different, unrelated entities.
5. ***Maintenance, accuracy, updating and accessibility of data:*** The AMGI secretariat must take steps to ensure that the geo-data displayed is updated and accurate, and also establish clear ownership for data and data interpretations in order to ensure accuracy.

V. IMPLEMENTING AMGI

1. *AMGI consists of certain key components:*

The key components of AMGI would include:

- Making an inventory of available data
- Conducting an assessment of the information, with a subsequent gap-analysis to identify the shortcomings and possible impediments to the implementation of AMGI.
- Coverage of prioritized areas through airborne geophysics, geology and/or geochemistry and mineral resources assessment
- Sharing of actual geo-data at regional scales = or < 1:250,000 through the internet, hosted in the identified geo-portal server/s, and linked to independent national data banks and websites.
- Conducting a Resource Assessment of selected areas
- Providing modular technical assistance to governments, institutions and civil society related to the understanding, processing, interpretation and use of the geo-scientific data.

The detailed steps proposed in AMGI are listed in Table IV below:

TABLE IV: STEPS INVOLVED IN IMPLEMENTATION OF AMGI

- ***Stakeholder Identification and Promotion:*** Identify the initial AMGI Stakeholders and promote AMGI with a view to ensuring increased buy-in from African countries. The initial responsibilities for promoting AMGI would be spearheaded by the World Bank, and be shared amongst all AMGI Stakeholders as the initiative progresses.
- ***Establish the AMGI Governance and Management Structure:*** The World Bank would convene the various AMGI stakeholders, and facilitate a mutual dialogue so as to finalize and put in place, the Organs of AMGI and provide for their funding mechanisms, governance and management structures.
- ***Agreements for Participation:*** Signing of agreements regarding the participation conditions, as well as for the sharing of, and access to the geo-scientific information obtained under AMGI.
- ***Complement currently existing geo-scientific data*** *inventory:* To complement the inventory of available data and existing databases based on the presently available version of the EI Source-Book.

- ***Gap-Analysis and subsequent scoping:*** Perform a gap-analysis which would provide the basis for initial recommendations for a work-program, as well as the scoping for:
  - the geo-portal infrastructure, including archiving and dissemination of the information in and through the geo-portal,
  - future data acquisition programs/packages to complete the coverage of selected areas,
  - identification of needs for adding value through the assessment and interpretation of existing data and training.
- ***Geo-Portal Infrastructure:*** Designing the geo-data portal infrastructure and formulating its implementation plan.
- ***Implementation of the geo-scientific data portal***,
- ***Complete coverage in prioritized areas***, and
- ***Resource Assessment of selected areas***.

2. *AMGI's Project Selection*

AMGI activities would be bank executed, as well as recipient executed, depending upon the nature of the activity and prevailing situation at the time of the grant/request for grant. Appropriate confidentiality provisions and conditions for discharge of liability would be devised to protect both the beneficiaries as well as the AMGI Donor Trust Fund administrators, as and when required.

In considering funding proposals that draw from AMGI resources, the Program Manager based in the AMGI Secretariat will have regard to the following criteria:

- Consistency of the proposal with the AMGI's established threshold eligibility criteria;
- Consistency with indicative work plans approved by the AMGI Management Board, or in the case of a single donor sponsoring the AMGI Donor Trust Fund, with criteria specified by such relevant Donor;
- The capacity of the applicant to implement AMGI, and the merits of the grant request.
- *Co-financing:* AMGI resources may cover the entire costs of an eligible activity. However, contribution by beneficiary countries in the form of counterpart funds will be sought to ensure country ownership. Co-financing from other sources is also encouraged.
- *Value for Money:* activities should aim to ensure value for money, including adopting the lowest cost strategies consistent with appropriate standards of quality.